

## NA-9189, IP-Address setting with ARP and IO Guide Pro

Uppdaterad: Språk: Informationstyp:  
2013-06-27 EN Knowledge

### Factory settings

IP-adress 192.168.123.1  
Subnet mask 255.255.255.0  
Default Gateway 192.168.123.254

### IP adress change:

The address can be changed in two ways.

- The basic way is by "arp" commands from the old dos command prompt. This is explained further down.
- The most intuitive way to change the addresses is probably to use the "boot server tool" in the software "IO Guide Pro"

### Step by step (use Windows XP):

Start the IO Guide Pro

In the "tools" menu, select "bootp server"

Click "add new device" button at the bottom of the interface

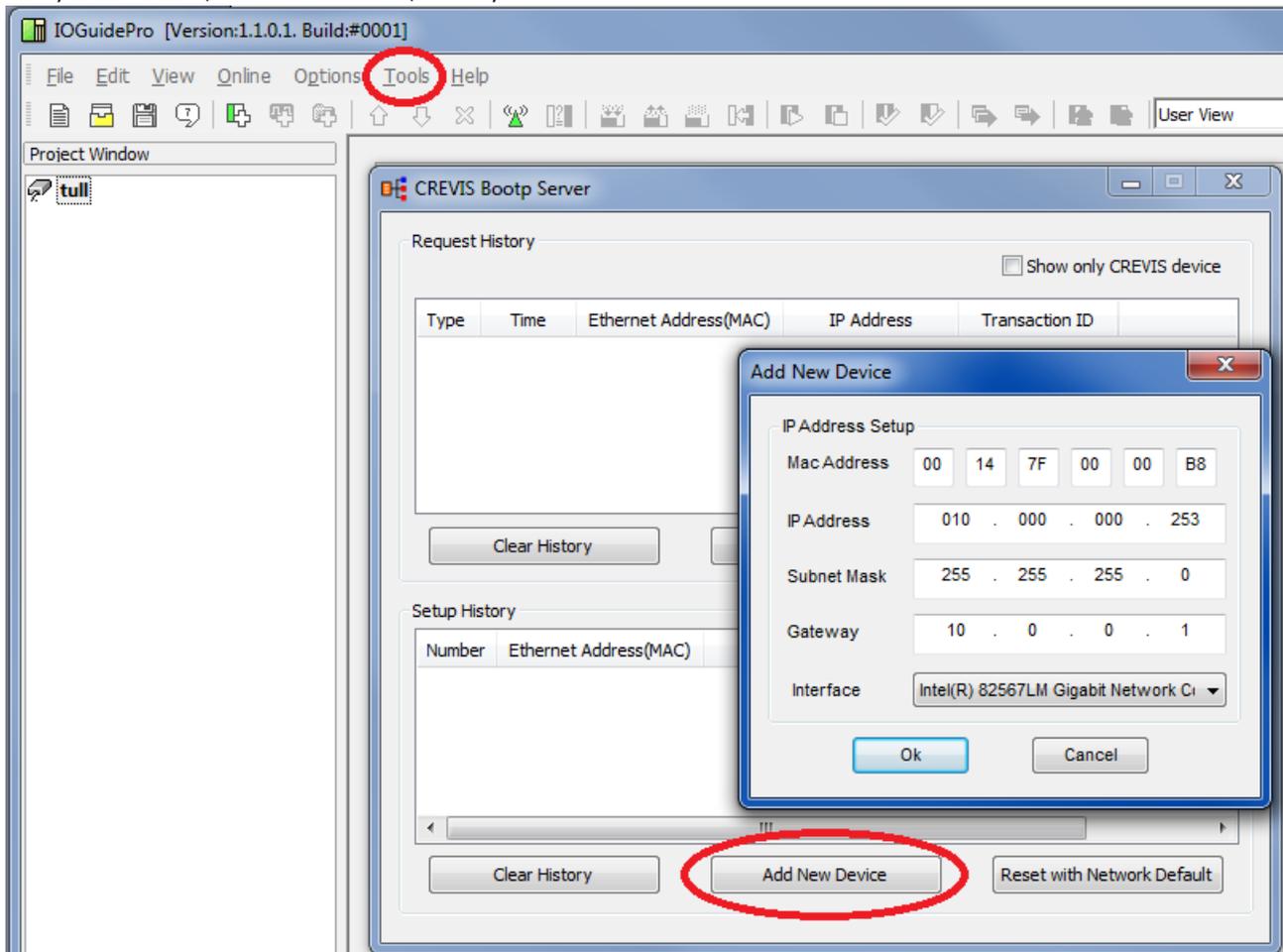
Fill in the requested parameters. (the mac adress is printed on the node module)

Click Ok, close down the Bootp tool, and try to ping the unit :)

Now you can create a new project in the IO guide with the correct node type.

Then run "autoscan" in IO Guide PRO to acquire the node i\o configuration (the green "antenna" icon shown below)

Now you can check \ monitor the nodes i\o directly in the IO Guide Pro.



### Setting of the IP address via the ARP table

An easy method to change the addressing is using the DOS window.

Only addresses in the same network class can be changed!

The new address will be stored and kept even when the module is powered down.

### DOS Prompt

```
>ping 192.168.123.236 // current IP address (only for checking the connection to node)
>arp -a // view Ethernet physical address
>arp -d 192.168.123.236 // Delete the IP in arp table
>arp -s 192.168.123.237 00-14-F7-00-00-00
// assign static arp table with new IP address
//"00-14-F7-00-00-00" is MAC id (See Adapter Label on modul)
>ping -n 1 -l 741 192.168.123.237 // assign new IP address (-l are the letter l)
>arp -d * //clear all arp table
>ping 192.168.123.237 // Check response of adapter new IP address
```

#### **If you don't know the modules IP address**

```
>arp -d * //clear all arp table
>arp -s 192.168.123.237 00-14-F7-00-00-00
// assign static arp table with new IP address
//"00-14-F7-00-00-00" is MAC id (See Adapter Label on modul)
>ping -n 1 -l 741 192.168.123.237 // assign new IP address (-l are the letter l)
>arp -d * //clear all arp table
>ping 192.168.123.237 // Check response of adapter new IP address
```

#### **After IP-Address setup using ARP.**

IP Address = 192.168.123.237

Subnet Mask = 255.255.255.0

Gateway = 192.168.123.254

Example:

Change Ip 192.168.0.227 to 192.168.0.228

```
C:\W>ping 192.168.0.227
```

```
Pinging 192.168.0.227 with 32 bytes of data:
```

```
Reply from 192.168.0.227: bytes=32 time<1ms TTL=128
```

```
Ping statistics for 192.168.0.227:
```

```
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

```
C:\W>arp -a
```

```
Interface: 192.168.0.196 --- 0x2
```

Internet Address	Physical Address	Type
192.168.0.29	00-00-f0-79-a5-1b	dynamic
192.168.0.227	00-14-f7-00-01-3e	dynamic

```
C:\W>arp -d 192.168.0.227
```

```
C:\W>arp -s 192.168.0.228 00-14-F7-00-01-3E
```

```
C:\W>ping -n 1 -l 741 192.168.0.228
```

```
Pinging 192.168.0.228 with 741 bytes of data:
```

```
Request timed out.
```

```
Ping statistics for 192.168.0.228:
```

```
    Packets: Sent = 1, Received = 0, Lost = 1 (100% loss),
```

```
C:\W>arp -d *
```

```
C:\W>ping 192.168.0.228
```

```
Pinging 192.168.0.228 with 32 bytes of data:
```

```
Reply from 192.168.0.228: bytes=32 time<1ms TTL=128
```

```
Ping statistics for 192.168.0.228:
```

```
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```