IDS3010 Network Recovery and Configuration Tutorial

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Overview

After relocation of the interferometer (IDS3010-A02-0191), the device was reachable only via IPv6 but with all TCP/UDP ports closed. The following steps document the complete recovery procedure performed to restore IPv4 communication, reset network settings, and update firmware.

Procedure Summary

Step 1: Factory Reset using Reset Dongle

- Connect the **Reset Dongle** to the IDS3010's dedicated port.
- Connect the IDS3010 directly to a laptop via **Ethernet cable**.
- Power on the IDS3010 and wait approximately 10 seconds until the LED turns green.
- Open a web browser and navigate to `http://192.168.1.1`.
- The web interface should now be accessible with factory default settings.

Step 2: Identify Network Range (Before Configuration)

- Press `Windows + R`, type `cmd`, and then press `Ctrl + Shift + Enter` to open Command Prompt as Administrator.
- Run the command:

$$\texttt{ipconfig /all}$$

- Under the **Ethernet Adapter** section, note the following:
  - IPv4 Address (preferred)
  - Subnet Mask
  - Default Gateway
- Keep only the first three octets (e.g. `147.197.221.x`). Choose a unique last digit (1–255) for the IDS to remain within the same subnet range.

Step 3: Reconfigure Network Settings (Static IP)

- In the web interface, go to `Configuration → Networking`.
- Change **IP Mode** from `DHCP Server` to `Static`.
- Set the following parameters:
  - IP Address: `147.197.221.6`
  - Subnet Mask: `255.255.255.0`
  - Default Gateway: `147.197.221.1`
  - Device Name: `IDS3010-A02-0191.local`

- Click **Apply** and power-cycle the IDS3010.

Step 4: Configure Host PC Network (for communication)

- On the PC connected to the IDS3010 via Ethernet:
  - Set IP Address: `147.197.221.10`
  - Subnet Mask: `255.255.255.0`
  - Default Gateway: `147.197.221.1`
- Verify connectivity using:

$$\texttt{ping 147.197.221.6}$$

- Once the ping replies successfully, open:

$$\texttt{http://147.197.221.6/}$$

- The web interface should load, confirming proper communication.

Step 5: Firmware Update (optional but recommended)

- Download the latest firmware package from Attocube: `https://wittenstein-group.filecloud`
- Extract the ZIP file and locate the firmware (.ids or .fw) file.
- Copy the firmware package to a USB drive for backup.
- In the web interface, go to `Configuration → Firmware Update`.
- Upload the firmware file and wait for the update to complete.
- The IDS will automatically reboot; wait until the LED remains solid green.
- Reopen the interface at `http://147.197.221.6/` and confirm the new version under `About → Firmware`.

Step 6: Verification

- Device reachable on `147.197.221.6` (IPv4) and `IDS3010-A02-0191.local`.
- Web interface operational with all services accessible.
- LED indicator remains solid green, confirming successful configuration.

Notes

- The initial IPv6-only response occurred due to a static network mismatch after relocation.
- The Reset Dongle restores default network parameters, enabling IPv4 access via `192.168.1.1`.
- The static IP ensures consistent and direct access within the laboratory network.