QUICK start NAT-MCH

General Setup

1. Connect the MCH to your network using the Management Ethernet connector (named **GbE, GbE1 or GbE Uplink** depending on the MCH version).
2. Connect the USB debug cable to the small USB connector on the MCH front and to a free USB port on your PC. If your Windows OS cannot detect the MCH USB port you need to download a separate driver from our FTP server (see firmware update below for server details).

Default IPv4 Address

The default IPv4 address of the NAT MCH is **192.168.1.41**. IPv6 is not supported yet.

Integration in IP network

To integrate the NAT MCH into your network a valid IPv4 address of your network needs to be assigned. You can change the IPv4 address of the MCH as follows:

1. Enter **ip** at the command line to show the current configuration.
2. Delete the current IP address using the backspace key. Enter the new address in **dotted quad format**, e.g. 192.168.1.42.
3. Change all other parameters by repeating step 2.
4. If an IP address is configured to 0.0.0.0 it will be ignored by the MCH.
5. If you configure a non-zero gateway IP address the related routing configuration will be performed automatically when the MCH starts up.

Web Server

The NAT-MCH has an embedded web server which allows users to view and change configuration parameters. The onboard web server can be accessed with any standard web browser by entering the IP-address of the NAT-MCH's management port into the browser's address line. The default login parameters are as follows:

User: root

Password: nat

PCIe switch configuration (only with PCIe HUB module)

For default AMC **Slot 1** is configured as the **root-complex** in the PCIe switch. For other slots the setting needs to be modified. Please refer to the manual for details.

NOTE: For PCIe Gen3 the configuration also considers the backplane routing information. Thus the configuration might need to be adapted again when changing from one uTCA system to another with a different backplane topology.

SATA

Please check your backplane connections to ensure that your SATA drive is configured to use the correct SATA ports (usually port 2 or 3). Consult the chassis documentation for details or use NATview Backplane Viewer.

Troubleshooting

Hot Swap Handle - please ensure that the hot swap handle of the MCH is always closed!

Reset MCH configuration with command line interface: `mchcfg -> 2 -> q`

LED Configuration see chapter "LED Indicators" of the **MCH user manual** for details (http://www.nateurope.com/products/NAT-MCH.html).

Firmware Version and Updates

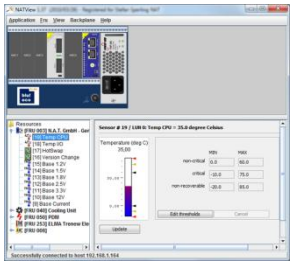
The firmware version installed on the MCH might be an intermediate release to support all the features of your MCH hardware configuration. You can check the current firmware version running on your MCH using the command "version" on the console or via the "Board Information" page in the web interface.

To get a notification if new a firmware version is available please register online:
http://www.nateurope.com/services/support/support_request.html

Download **MCH firmware** from our FTP-Server:	
Server name:	ftp.nateurope.com
FTP-User:	natmch
FTP-Password:	natmch
File name:	mch_fw_Vxx.zip (Replace xx with the firmware version)
	Retrieve the password for zip archive by registering via:
	http://www.nateurope.com/services/support/support_request.html

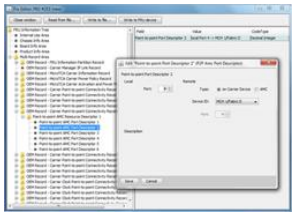
Questions? Send an email to **support(at)nateurope.com**.

Important Note about NATview



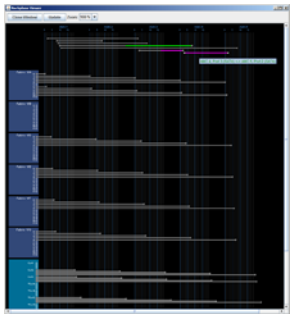
Overview and Purpose

NATview is an easy to use visualization tool for any MicroTCA system that includes an NAT-MCH. **NATview** is operating system independent and runs on any host computer internal or external to the MicroTCA system. **NATview** allows viewing and manipulating the components of the MicroTCA system in a graphical way (i.e. manufacturer and product names, serial numbers, versions, sensors and actors). Please visit http://www.nateurope.com/products/NATview.html.



Operating System

NATview is a **JAVA based tool** and thus independent of any host operating system. **NATview** can run on a host CPU internal or external to the MicroTCA system that can execute Oracle Java 1.6. **NATview** has been successfully tested under **Windows XP**, **Vista**, **Windows 7**, **Ubuntu Linux**, **SuSE Linux**, **Mac OS X**.



Features

When connected to an NAT-MCH **NATview** retrieves any information about the MicroTCA system, i.e. components such as backplane, power modules, cooling units and payload cards, the information provided by these and displays them in a photographical way. The picture displayed is the photographic visualization identical to the real MicroTCA system.

NATview offers the following user features:

- ✓ animation of hot-swap process of AMC modules
- ✓ tree structured representation of **sensor data** including fans and temperatures
- ✓ sensor threshold setting
- ✓ intelligent **alarm monitoring** and prioritization
- ✓ logging of events, incidents and alarms
- ✓ access to the system event log
- ✓ viewing and editing Field Replaceable Unit (FRU) information via the **FRU editor**
- ✓ viewing the backplane connections

Get your copy
of NATview NOW!!!

Download **NATview Easy** from our FTP-Server:

Server name:	ftp.nateurope.com
FTP-User:	natmch
FTP-Password:	natmch
File name:	natview_Vx.y.zip (replace x.y with firmware version)

Upgrade to NATview Professional:
Send an email to **sales_team@nateurope.com** for a license offer

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