We change the shape of the world

IP port matrix of NovaTec systems and applications

To attune your IP network and the NovaTec components within it to each other and to ensure the communication needed for the appropriate applications the given specifications in the tablet below are obligatory.

source/client	target/server	target-port	application
NMP/NAMES	NovaTec GW	800, NovaTec-MMX via TLS	Remote support: • NMP (NovaTec Configuration, Trace Info Client, Call Server) • TI-CA • NAMES
NAMES	NovaTec-GW	5671, AMQP via TLS	Remote support using NAMES 3.0 or higher (encrypted).
NAMES	NovaTec-GW	5672, AMQP	Remote support using NAMES 3.0 or higher (not encrypted).
PC	NovaTec-GW	23, TELNET (TCP)	TELNET: 1. Set up IP configuration (Rollout) TELNET is not available as long as TLS is active.
NMS/NAMES	SNMP-Trap-Receiver	162, UDP	NMS server reports Call Home-Events as SNMP traps to SNMP-Trap-Receiver
NAMES	SQL (Oracle DB or MySQL[1])	Default: 1521 (Oracle DB) or 3306 (MySQL), TCP	NAMES has to be able to communicate with the SQL data base in use.
Web-Client/ SOAP-Client	NAMES	80, HTTP (TCP)	Browser access to web GUI and access to SOAP web services for the reconfiguration of the gateways (not encrypted).
Web-Client/ SOAP-Client	NAMES	443, HTTPS (TCP)	Browser access to web GUI and access to SOAP web services for the reconfiguration of the gateways (not encrypted).
NovaTec-GW	1. NMS-/NAME-Server	802, NovaTec-MMX via TCP or TLS	NMS (Call-Home). Encrypted or not encrypted depending on the installation. In both cases the same port is used. Using another port is possible.
NovaTec-GW	2. NMS-/NAME-Server	812, NovaTec-MMX via TCP or TLS	NMS (Call-Home) Encrypted or not encrypted depending on the installation. In both cases the same port is used. It is possible to use another port. During installation port 812 instead of 802 has to be entered.

---

[1] Support of MySQL on request

source/client	target/server	target-port	application
NovaTec-GW	3. NMS-/NAME-Server	822, NovaTec-MMX via TCP or TLS	NMS (Call-Home) Encrypted or not encrypted depending on the installation. In both cases the same port is used. It is possible to use another port. During installation port 822 instead of 802 has to be entered.
NovaTec-GW	4. NMS-/NAME-Server	832, NovaTec-MMX via TCP or TLS	NMS (Call-Home) Encrypted or not encrypted depending on the installation. In both cases the same port is used. It is possible to use another port. During installation port 832 instead of 802 has to be entered.
NovaTec-GW	5. NMS-/NAME-Server	842, NovaTec-MMX via TCP or TLS	NMS (Call-Home) Encrypted or not encrypted depending on the installation. In both cases the same port is used. It is possible to use another port. During installation port 842 instead of 802 has to be entered.
NovaTec-GW	6. NMS-/NAME-Server	852, NovaTec-MMX via TLS (TCP)	NMS (Call-Home) Encrypted or not encrypted depending on the installation. In both cases the same port is used. It is possible to use another port. During installation port 852 instead of 802 has to be entered.
NovaTec-GW	DNS-Server	53, UDP	DNS resolving of domain names
NovaTec-GW	SCEP-Server	80, SCEP (TCP)	Automatic signing of TLS certificates (from FW version 00.07.03.00)
NovaTec-GW	NTP-Server	123, UDP	Time update in the gateway via NTP
NovaTec-GW	DHCP-Server	67, UDP	Determine IP configuration and NMS server address (option 129) via DHCP
NovaTec-GW	CUCM	5060, UDP	SIP signalling (not encrypted)
NovaTec-GW	CUCM	5061, TLS (TCP)	SIP signalling (TLS- encrypted)
CUCM	NovaTec-GW	From 30000, UDP	RTP or sRTP flow to NovaTec gateway. The number of ports is regulated by the configured hardware. Per VoIP channel two UDP ports are occupied. The even ports are used for RTP/sRTP and the uneven for RTCP. The ports can also be configured differently.
NovaTec-GW	NovaTec-GW	From 10000 UDP	NLP (NovaTec Link Protocol) signalisation. Any number of ports can be configured. For each ISDN interface (D channel) one port is needed.

source/client	target/server	target-port	application
NovaTec-GW	NovaTec-GW	From 20000 UDP	RTP/RTCP for NLP (NovaTec Link Protocol). Any number of ports can be used. For each ISDN B channel 2 ports are needed.

Dependencies:

NLP:
NMP version 6.6 and higher forbids the usage of port numbers smaller than 20.000. The number of ports is not controlled by NMP versions older than 6.6. In this case you have to remember not to choose small port numbers in order to avoid conflicts with other IP protocols.

Behaviour in Default mode:

Firmware-Versions up to 00.08.XX.XX:

In the default mode TLS is inactive in the NovaTec-GWs, even if TLS was activated in the configuration before. Furthermore the NovaTec-GW tries to call a NMS server / NAMES under the following addresses when in default mode:

- Via ISDN under the telephone number 052511589642 (only with CCU3 or S3)
- Via ISDN under the telephone number 004952511589642 (only with CCU3 or S3)
- Via TCP without TLS under the IP address 213.146.120.137:802

The following Call-Home-Events are active by default:

- System start default
- DHCP application NMS/NAMES
- Time-Event

Firmware-Versions from 00.09.00.00 on:

In the default mode TLS is inactive in the NovaTec-GWs, even if TLS was activated in the configuration before. Furthermore, the NovaTec-GW tries to call NAMES under the following addresses in default mode:

- The address of the last connected NAME-Server
- An IP-address which was received via DHCP option 129
- The NAMES address which was set using the Command Line Interface