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February 2013

Remarks about the FW licence and FW update

Starting with FW-Version 00.06.07.00 every FW needs a licence file to enable the functionality of the target system. If the licence file is missing no calls can be made, only remote access is possible. The licence file is transmitted to the target system using the NovaTec configuration software or is already present in the target system if a new system is purchased. The following needs to be considered when updating a system:

For running systems or newly purchased systems using FW 00.07.00.55 (or higher) which are configured with NMP 6.5 (or higher):

Your system already has a valid licence file for the appropriate Firmware and NMP Version 6.5 or higher software allows the transmission of configuration data without loading a licence file. The licence file will stay in the target system. It will only be deleted if you overwrite it with another licence file or if you delete the target system's flash. You only need a new licence file if you update to FW version 00.07.01.00 or higher.

General remarks on FW updates:

In general a new licence is required whenever you update to a non bugfix FW version. A non bugfix version differs in more than just the last two numbers from the previous installed version. e. g.:

Update from 00.06.07.00 to 00.06.07.02:

Update to a bugfix firmware version. No new licence is required.

Update from 00.06.07.00 to 00.07.00.55:

Update to a FW version including new features. A new licence is required.

Update from 00.07.xx.xx to 00.08.01.00:

Update to a FW version including new features. A new licence is required.

Update from 00.08.01.xx to 00.08.02.xx:

Update to a FW version including new features. A new licence is required.



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NovaTec Release Information Firmware 00.08.02.05

1. **Bug fixes included in this release**
2. **New features**
3. **Other Changes**
4. **Known Issues**
5. **Dependencies**

1. **Below is a list of bug fixes that have been resolved in this release**

CCU4 related:

- A call transfer was not successful if the CCU4 received a REFER message from a SIP device. After the failed transfer the held party still heard music on hold and the other transferred party heard nothing. The problem has been solved.
- It could happen that layer 1 on a BRI in slave mode did not come back up to active state after a system reset. The problem has been solved. The problem did only occur if an old BRI card was used on the CCU4 (article numbers 1F5020-2, 1F5020-P, 1F5021-2).
- Call forwarding failed if a call, which should have been forwarded, came in over an ISDN trunk or cross connection. The problem has been solved. The problem did not occur if the call came in over SIP or an analogue or ISDN subscriber line.

CCU3 and S3 related:

- A three way audio connection could not be established in a certain scenario. The problem has been solved. The problem did not occur if, in the call flow below, B was not using an analogue phone or if the call was established in the other direction (B called A). The problem only occurred on the following call flow:
 1. A called B (analogue phone)
 2. B answered the call
 3. B put A on hold
 4. A heard music on hold
 5. B called C
 6. C answered the call
 7. B and C had a 2 way audio connection
 8. B attempted to establish a 3 party call
 9. The attempt failed
 10. B was talking to C whilst A still heard music on hold



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Related to all systems:

- The call home event “DHCP-Application NMS/NAMES” was never reported. The problem has been solved.
- It could happen that a DHCP request for a new IP address was not successful. The problem did only occur sporadically. The problem has been solved.
- The command “dhcpconf” was not executed if used in the Trace Info Client CLI. The problem has been solved. The problem did not occur using telnet.
- It could happen that calls routed over the LCR module led to problems if the calls were not answered. The result was that after some days of operation ISDN→SIP calls were not established end-to-end. The problem has been solved.
- On interworking scenarios between S3 line and CUCM a calling user heard a ring back tone on calls to the S3 line even if the called phone was busy or not attached to the basic rate interface. The problem has been solved by introducing a new flag called “Do not send 183 Session Progress”. The problem can be avoided by activating the flag. Starting with NMP 7.2.0.1 the flag is labelled “Do not send 183 Session Progress”. In older NMP versions the flag is labelled “Reserved [7]” but it is also fully functional.
- It was not possible to establish more than 128 calls on a RMCS server, even if more VoIP channels were available. The problem has been solved.
- It was not possible to transmit a new configuration to a target system if a previous configuration upload process had been interrupted or disconnected during the transmission. A system reset was required to make the system accept a new configuration. The problem has been solved. An inactivity timer now monitors whether new packets arrive at the target system or not. If no new packets arrive because the connection has been interrupted or the NMP was closed etc. the timer will run out after 30 seconds and the connection is cleared. After the timeout the target system will accept a new configuration attempt.
- The command “dhcpconf” was not executed again, if it was entered repeatedly with the same parameters. The problem has been solved. Now the command will always be executed again and a new DHCP request will be performed by the target system. Please keep in mind that even if the target system sends a new DHCP request it may receive the same IP address as before from the DHCP server.
- If a SIP trunk in the NovaTec configuration had been configured to drop an incoming call to a unknown number to a configured subscriber the call still failed. The problem has been solved. Now, if configured, a call to an unknown number coming in on a SIP trunk will be dropped to the configured subscriber/terminal.
- The time via NTP was only queried once after a system reset. The problem has been solved. Now a request to the NTP server will be sent in the configured intervals.
- The information elements Bearer-Capability, Low-Layer-Compatibility, High-Layer-Compatibility and Subaddress (calling and called) were not passed through transparently between two NovaTec-GWs even if SIP+ was configured. The problem has been solved.



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2. New features

- None.

3. Other changes

- The CCU4 did not accept an SSRC change in the SRTP stream like the BCU and S3. This lead to one way audio connections after the SSRC change. Usually an SSRC change should not occur in the SRTP stream because it conflicts with the RFC for SRTP. A workaround allows now such a change. SRTP connections with devices who act conforming to the RFC are not influenced by this workaround.

4. Known issues

- With a S3 connected to a CUCM as a line device it can happen that a calling IP phone receives a ring back tone even when the callee behind the S3 is busy or not plugged in.
- In case an ISDN phone behind a NovaTec gateway is busy it will take three seconds until the caller is informed that the callee is busy. This behaviour is mandatory for the ISDN bus and is specified in European and international ISDN standards. This is not a bug but because of this ISDN behaviour the user experience is different compared to SIP to SIP or SIP to analogue calls.
- Call forwarding busy on the S3 line is not working if it is activated from the ISDN or analogue phone. The locally forwarded call from the S3 is rejected from CUCM with "Busy here". But the destination of the call has no active call. The problem is caused by the "Busy trigger" in the CUCM configuration for the S3. As a workaround call forwarding busy can be activated in the CUCM configuration.
- Sporadically, restarts may happen on synchronisation requests of the gateways, but only when CCU4 is in RMCS mode. These restarts have been recognized in the lab environment only in conjunction with gigabit switches. This problem is actually under analysis.

5. Dependencies

- The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature Data-Calls with clear channel codec (X-CCD):
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature TLS:
The feature requires NMP version 6.7.0.4 or higher and CUCM version 7.1.3 or higher. TI-CA 1.6.0.2 is required if client/server authentication is used. Please use only TI-CA 1.6.0.2.
- Feature MLPP:
The feature requires NMP version 6.6 or higher. If the NovaTec-GW is connected to a CUCM MLPP works only on SIP trunks. The feature cannot be used on a S3 which is configured as a line device.



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- **Feature RMCS:**
The feature requires NMP 6.7.0.4 or higher. To use RMCS on a S3 a special S3 hardware is required (article no. 1F8xxx-R). To use RMCS on a CCU3 based system, the CCU3 must have at least R state R8E.
- **Feature 3PTY:**
The feature requires a CCU3 based system and cannot be used on a S3.
- **Feature SCEP:**
The feature requires NMP 6.7.0.4 or higher.
- **Feature CLI over Trace Info Client:**
At least Trace Info Client version 6.8.0.5 is required. Please visit our website for detailed information about CLI commands and software and firmware versions supporting the CLI.
- **Feature CCU4 support:**
The feature requires NMP version 7.1.0.0 or higher.
- **Feature UP0 support:**
The feature requires NMP version 7.1.0.0 or higher.
- **Support for the Call Home events “Call Setup Time Threshold-Event”, “TLS CA certificate invalid in one week”, “TLS certificate invalid in one week”, “TLS has default time” and “TLS own chain invalid”:**
The features require NMP version 7.1.0.0 or higher.
- **Feature Separate RTP/SRTP:**
The feature requires NMP version 7.1.0.0 or higher. The feature can only be used on the CCU4 hardware.
- **NMS support:**
NMS is not supported with this firmware and all future firmware releases.
- **NAMES support:**
This firmware supports NAMES but has no direct dependency to NAMES itself. To support NAMES properly, the target system needs to be configured with NMP 7.1.0.0 or newer.
- **Support for extended Trunk Group options:**
The feature requires NMP 7.2.0.0 or higher.

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NovaTec Release Information Firmware 00.08.02.04

6. Bug fixes included in this release

7. New features

8. Other Changes

9. Known Issues

10. Dependencies

6. Below is a list of bug fixes that have been resolved in this release

CCU4 related:

- A call transfer was not successful if the CCU4 received a REFER message from a SIP device. After the failed transfer, the held party still heard music on hold and the other transferred party heard nothing. The problem has been solved.
- If a user who already was a member of a 3 party conference call established a second 3 party conference for the same user/msn on the same CCU4, then the first conference was disturbed. The problem has been solved. Now, the attempt to establish the second 3 party conference will be rejected. This restriction has no influence on the maximum number of separate 3 party calls. It is still possible to establish 42 simultaneous three party calls on the CCU4.
- It was not possible to transfer a call to a 3 party conference. Example call flow:
 1. A established a call to B.
 2. A established a call to C.
 3. A starts a 3 party call.
 4. A, B and C could talk to each other.
 5. B put the conference call on hold.
 6. B established a call to D.
 7. B transferred D to the conference call.
 8. B's call was cleared.
 9. D was part of the conference but could only talk to A.
 10. C could neither talk to A nor to D.The problem has been solved.
- The LEDs on the Ethernet socket did not indicate a duplicate IP address. The problem has been solved.
- On calls from an ISDN phone to an ISDN trunk (no VoIP) it could happen that no ring back tone or no busy tone was heard. The problem has been solved.



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CCU3 and S3 related:

- The timer for the detection of the fax tones is now set to 400 ms. This change solves interworking problems between Cisco and NovaTec regarding the sending of ANSAM telephone events. The result was that the echo canceller was not disabled on the Cisco side on calls coming from the PSTN to a NovaTec GW. This caused a lower baud rate on super G3 Fax calls. The problem has been solved.

Related to all systems:

- The call home event "DHCP-Application NMS/NAMES" was never reported. The problem has been solved.
- It could happen that a DHCP request for a new IP address was not successful. The problem did only occur sporadically. The problem has been solved.
- The command "dhcpconf" was not executed if used in the Trace Info Client CLI. The problem has been solved. The problem did not occur using telnet.
- It could happen that calls routed over the LCR module led to problems if the calls were not answered. The result was that after some days of operation ISDN→SIP calls were not established end-to-end. The problem has been solved.
- On interworking scenarios between S3 line and CUCM, a calling user heard a ring back tone on calls to the S3 line even if the called phone was busy or not attached to the basic rate interface. The problem has been solved by introducing a new flag called "Do not send 183 Session Progress". The problem can be avoided by activating the flag. Starting with NMP 7.2.0.1 the flag is labelled "Do not send 183 Session Progress". In older NMP versions the flag is labelled "Reserved [7]" but it is also fully functional.
- If the REFER method was used to perform a transfer in the CUCM the transfer failed when the second call was an incoming call. To be more precise the transfer failed, if the call which was active at the time of the transfer was an incoming call. This means the call transfer was successful if B called A, A called C, A transferred the call. In the same scenario, if A switched between the calls and the call B – A was active at the time of the transfer the transfer failed. The problem has been solved.
- If the time was set using NTP or call home the resolution of the time setting was 1 minute. The problem has been solved. The time setting is now done with a resolution of one second.
- The determination of a few basic services was wrong. The service fax group 4 was determined as fax group 2/3. The services eurofile, file transfer and access management, audio graphic conference, videoconference and videotelephony were determined as unrestricted digital information (data). The problem has been solved. It only had influence on the feature call forwarding. E.g. if a call forwarding had been activated for fax group 2/3 then a fax group 4 call would have also been forwarded because it was determined as fax group 2/3.
- The field "Dest. IP" and "Dest Port" was always 0 in the SIP leg of the CDRs. The problem has been solved. The fields now show the IP address and port of the direct SIP signalling counterpart (remark: for a NovaTec ↔ CUCM ↔ IP phone call it would be the address of



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the CUCM).

- If a configuration with deactivated TLS was transmitted to the target system already existing TLS certificates were deleted except the TLS certificates for SIP. The problem has been solved.
- NAMES could not access the target system if the TLS option “Client authentication” was inactive. The reason was that in this case the target system did not transmit its certificate list and therefore the TLS connection could not be established. The problem has been solved.
- It could happen that modem connections are not successful if the calling SIP-GW did not support the playback of ANS and ANSAM tones to the ISDN. The problem has been solved by introducing a new configuration option “Negotiate telephone-events 32-35 (ANS, ANSAM tones)”. Please see the online help of NMP 7.2.0.1 or higher for more information.

7. New features

- None.

8. Other changes

CCU4 related:

- The allocation of the Ethernet interfaces has been changed. Previously if only one interface was activated the left interface was always used for SIP, RTP and maintenance and the right one was out of order. If both interfaces were activated the left interface was used for RTP and the right one for SIP and maintenance. Now the left interface is always used for SIP and maintenance no matter whether one interface or both interfaces are active. RTP will run additionally on the left interface if only one interface is active or alone on the right interface if both interfaces are active. If the CCU4 is used in an S20 chassis the left interface is the upper and the right the lower one.

Related to all systems:

- The information shown in the field “service” has been changed. Previously it showed the content of byte 4 of the high layer compatibility information element (see ETSI ETS 300 102-1 or Q.931). Because this information was not sufficient to distinguish between the different basic services the content of the field has been changed. It now shows the basic service of the call. The basic service is determined by the content of the bearer capability and high layer compatibility information element according to table D.5 of ETSI EN 300 196-1. The values identifying the different basic services are described in table D.6 of ETSI EN 300 196-1.

9. Known issues

- With a S3 connected to a CUCM as a line device it can happen that a calling IP phone receives a ring back tone even when the callee behind the S3 is busy or not plugged in.
- In case an ISDN phone behind a NovaTec gateway is busy it will take three seconds until the caller is informed that the callee is busy. This behaviour is mandatory for the ISDN bus and is



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specified in European and international ISDN standards. This is not a bug but because of this ISDN behaviour the user experience is different compared to SIP to SIP or SIP to analogue calls.

- Call forwarding busy on the S3 line is not working if it is activated from the ISDN or analogue phone. The locally forwarded call from the S3 is rejected from CUCM with "Busy here". But the destination of the call has no active call. The problem is caused by the "Busy trigger" in the CUCM configuration for the S3. As a workaround call forwarding busy can be activated in the CUCM configuration.

10. Dependencies

- S3 registration as a line device in CUCM:
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature Data-Calls with clear channel codec (X-CCD):
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature TLS:
The feature requires NMP version 6.7.0.4 or higher and CUCM version 7.1.3 or higher. TI-CA 1.6.0.2 is required if client/server authentication is used. Please use only TI-CA 1.6.0.2.
- Feature MLPP:
The feature requires NMP version 6.6 or higher. If the NovaTec-GW is connected to a CUCM MLPP works only on SIP trunks. The feature cannot be used on a S3 which is configured as a line device.
- Feature RMCS:
The feature requires NMP 6.7.0.4 or higher. To use RMCS on a S3 a special S3 hardware is required (article no. 1F8xxx-R). To use RMCS on a CCU3 based system, the CCU3 must have at least R state R8E.
- Feature 3PTY:
The feature requires a CCU3 based system and cannot be used on a S3.
- Feature SCEP:
The feature requires NMP 6.7.0.4 or higher.
- Feature CLI over Trace Info Client:
At least Trace Info Client version 6.8.0.5 is required. Please visit our website for detailed information about CLI commands and software and firmware versions supporting the CLI.
- Feature CCU4 support:
The feature requires NMP version 7.1.0.0 or higher.
- Feature UP0 support:
The feature requires NMP version 7.1.0.0 or higher.
- Support for the Call Home events "Call Setup Time Threshold-Event", "TLS CA certificate invalid in one week", "TLS certificate invalid in one week", "TLS has default time" and "TLS own chain invalid":
The features require NMP version 7.1.0.0 or higher.



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- Feature Separate RTP/SRTP:
The feature requires NMP version 7.1.0.0 or higher. The feature can only be used on the CCU4 hardware.
- NMS support:
NMS is not supported with this firmware and all future firmware releases.
- NAMES support:
This firmware supports NAMES but has no direct dependency to NAMES itself. To support NAMES properly, the target system needs to be configured with NMP 7.1.0.0 or newer.
- Support for extended Trunk Group options:
The feature requires NMP 7.2.0.0 or higher.

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NovaTec Release Information Firmware 00.08.02.03

11. Bug fixes included in this release

12. New features

13. Other Changes

14. Known Issues

15. Dependencies

11. Below is a list of bug fixes that have been resolved in this release

CCU4 related:

- It could happen that calls on the CCU4 using a line group had no audio connection. The problem has been solved.
- If a member of a 3 party call on the CCU4 left the conference to establish a second call, then the 3 party audio connection was not re-established after that member cleared his second call and re-entered the conference. Depending on the call state which that members call had before the conference was started, it could happen that he heard nothing or music on hold or that the communication between the other two parties was interrupted. The problem has been solved.
- If a ULU board was taken out and put back (hot plug) in a CCU4 driven system, then layer 1 on the U lines could not be re-established. Layer 1 was only re-established when the system was restarted after putting back the ULU. The problem has been solved.
- If a CCU4 was configured to use VLAN, then the setting did have no influence on the packets of the RTP stream. The RTP stream was encoded in the same way as if VLAN was not activated. The problem has been solved.

Related to all systems:

- The RTP stream of a NovaTec gateway was always used as a clock source even if the corresponding call was a voice call. The problem has been solved.
Now, the RTP stream will only be used as the clock source if the call is a data call (...and if the clock priority of the RTP stream is higher than the priority of the currently selected clock source).

12. New features

- None.

13. Other changes

- None.

14. Known issues



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- With a S3 connected to a CUCM as a line device it can happen that a calling IP phone receives a ring back tone even when the callee behind the S3 is busy or not plugged in.
- In case an ISDN phone behind a NovaTec gateway is busy it will take three seconds until the caller will be informed that the callee is busy. This behaviour is mandatory for the ISDN bus and is specified in European and international ISDN standards. This is not a bug but because of this ISDN behaviour the user experience is different compared to SIP to SIP or SIP to analogue calls.
- Call forwarding busy on the S3 line is not working if it is activated from the ISDN or analogue phone. The locally forwarded call from the S3 is rejected from CUCM with "Busy here". But the destination of the call has no active call. The problem is caused by the "Busy trigger" in the CUCM configuration for the S3. As a workaround call forwarding busy can be activated in the CUCM configuration.
- If the REFER method is used to perform a transfer in the CUCM the transfer will fail when the second call is an incoming call. The transfer will be successful if both calls are outgoing or if at least the second call is outgoing.

15. Dependencies

- S3 registration as a line device in CUCM:
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature Data-Calls with clear channel codec (X-CCD):
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature TLS:
The feature requires NMP version 6.7.0.4 or higher and CUCM version 7.1.3 or higher. TI-CA 1.6.0.2 is required if client/server authentication is used. Please use only TI-CA 1.6.0.2.
- Feature MLPP:
The feature requires NMP version 6.6 or higher. If the NovaTec-GW is connected to a CUCM MLPP works only on SIP trunks. The feature cannot be used on a S3 which is configured as a line device.
- Feature RMCS:
The feature requires NMP 6.7.0.4 or higher. To use RMCS on a S3 a special S3 hardware is required (article no. 1F8xxx-R). To use RMCS on a CCU3 based system, the CCU3 must have at least R-State R8E.
- Feature 3PTY:
The feature requires a CCU3 based system and cannot be used on a S3.
- Feature SCEP:
The feature requires NMP 6.7.0.4 or higher.
- Feature CLI over Trace Info Client:
At least Trace Info Client version 6.8.0.5 is required. Please visit our website for detailed information about CLI commands and software and firmware versions supporting the CLI.



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- Feature CCU4 support:
The feature requires NMP version 7.1.0.0 or higher.
- Feature UP0 support:
The feature requires NMP version 7.1.0.0 or higher.
- Support for the Call Home events “Call Setup Time Threshold-Event”, “TLS CA certificate invalid in one week”, “TLS certificate invalid in one week”, “TLS has default time” and “TLS own chain invalid”:
The features require NMP version 7.1.0.0 or higher.
- Feature Separate RTP/SRTP:
The feature requires NMP version 7.1.0.0 or higher. The feature can only be used on the CCU4 hardware.
- NMS support:
NMS is not supported with this firmware and all future firmware releases.
- NAMES support:
This firmware supports NAMES but has no direct dependency to NAMES itself. To support NAMES properly, the target system needs to be configured with NMP 7.1.0.0 or newer.
- Support for extended Trunk Group options:
The feature requires NMP 7.2.0.0 or higher.

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NovaTec Release Information Firmware 00.08.02.02

1. Bug fixes included in this release

2. New features

3. Other Changes

4. Known Issues

5. Dependencies

1. Below is a list of bug fixes that have been resolved in this release

CCU3 and S3 related:

- It could happen that the S3 or CCU3 went into an “all VoIP channels busy” state. This lead to the problem that no VoIP calls were possible. The problem has existed since firmware version 00.08.02.01 and has now been solved.

CCU4 related:

- In some situations it could happen that the switching in the CCU4 stopped working. In such a situation it was possible to establish calls but after answering the call no audio connection was established and the caller and callee did not hear the other party. The problem was encountered on calls which did go out using SIP and were routed back to the same CCU4 (e. g. CCU4 internal call over CUCM) and on calls that were forwarded multiple times to destinations on the same CCU4 and finally forwarded to an IP phone. The problem has been solved.
- On the CCU4 it could happen that no ringtone was heard if an analogue subscriber was called multiple times in a row. The problem has been solved.

2. New features

- None.

3. Other changes

- None.

4. Known issues

- With a S3 connected to a CUCM as a line device it can happen that a calling IP phone receives a ring back tone even when the callee behind the S3 is busy or not plugged in.
- In case an ISDN phone behind a NovaTec gateway is busy it will take three seconds until the caller will be informed that the callee is busy. This behaviour is mandatory for the ISDN bus and is specified in European and international ISDN standards. This is not a bug but because



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of this ISDN behaviour the user experience is different compared to SIP to SIP or SIP to analogue calls.

- Call forwarding busy on the S3 line is not working if it is activated from the ISDN or analogue phone. The locally forwarded call from the S3 is rejected from CUCM with “Busy here”. But the destination of the call has no active call. The problem is caused by the “Busy trigger” in the CUCM configuration for the S3. As a workaround call forwarding busy can be activated in the CUCM configuration.
- If the REFER method is used to perform a transfer in the CUCM the transfer will fail when the second call is an incoming call. The transfer will be successful if both calls are outgoing or if at least the second call is outgoing.

5. Dependencies

- S3 registration as a line device in CUCM:
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature Data-Calls with clear channel codec (X-CCD):
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The feature requires NMP version 7.1.0.0 or higher.
- Support for the Call Home events “Call Setup Time Threshold-Event”, “TLS CA certificate



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invalid in one week”, “TLS certificate invalid in one week”, “TLS has default time” and “TLS own chain invalid”:

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- Feature Separate RTP/SRTP:
The feature requires NMP version 7.1.0.0 or higher. The feature can only be used on the CCU4 hardware.
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NMS is not supported with this firmware and all future firmware releases.
- NAMES support:
This firmware supports NAMES but has no direct dependency to NAMES itself. To support NAMES properly, the target system needs to be configured with NMP 7.1.0.0 or newer.
- Support for extended Trunk Group options:
The feature requires NMP 7.2.0.0 or higher.

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NovaTec Release Information Firmware 00.08.02.01

1. Bug fixes included in this release

2. New features

3. Other Changes

4. Known Issues

5. Dependencies

1. Below is a list of bug fixes that have been resolved in this release

CCU4 related:

- If a CCU4 was configured to use DHCP (setting "DHCP on (Default)"), then the CCU4 did perform a continuous reset after the configuration was transmitted to the target system. The problem has been solved.
- On the CCU4 a SIP call was not disconnected if no RTP packets had been received within 10 seconds after the call had been answered. The problem has been solved.
- A CCU4 could not be used as a RMCS-Server. The CCU4 did not accept any incoming RMCS calls. The problem has been solved.
- The auto negotiation on the Ethernet interfaces of the CCU4 did not work with some IP switches (e. g. with the vendor TP LINK). The result was that the Ethernet interface did not come up if it was connected to a gigabit switch. As mentioned before the problem did only occur with certain switches. The problem has been solved.
- A possible system reset on CCU4 based systems has been fixed. The problem could occur if many simultaneous calls were cleared at the same time.
- It was not possible to sign NMS certificates on the CCU4 using SCEP. The problem has been solved.
- If DTMF was used on the CCU4, then the call lost its audio connection after the first DTMF digit was played. Also, all subsequent calls had no tones and no audio connection. A system reset was required to bring the CCU4 back to work properly. The problem has been solved.
- The following switching problems on the CCU4 have been solved:
 - Sporadically no audio connection after a call transfer
 - Call was cleared 10 seconds after a call transfer
 - No audio connection on IP to ISDN calls if the ISDN interface was configured as cross connection subscriber line or trunk line



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Related to all systems:

- The connected party number received from the SIP side (e. g. from CUCM) was not properly forwarded to the ISDN phone if the number was suppressed. Instead of seeing that the number is suppressed the caller saw an IP address in the display of his phone. The problem has been solved. The suppressed connected party number from the SIP side is now forwarded to the ISDN side with the indication "presentation restricted".
- It could happen that a RMCS call was not cleared by the RMCS client after the last data call had ended. The problem has been solved.
- If TLS was used the setting "Connect channel before a connect message has been received..." in the trunk group settings did not work correctly. The NovaTec gateway always created an own ring tone regardless of the setting. The problem did not occur on systems not using TLS. The problem has been solved.
- It could happen that a target system booted in default mode after transmitting a configuration with a music on hold file. The problem has been solved.
- A RMCS client performed a system reset if the connection to the RMCS server could not be established due to a mismatch in the SRTP configuration of both systems. The reset occurred if the client was setup to allow SRTP only but the server did not allow SRTP. The problem has been solved. With such a faulty configuration it is still not possible to establish a RMCS call but the client will not perform a system reset anymore.
- If the NovaTec gateway did not receive a ring tone from the SIP side it could happen that no ring tone was send to the ISDN side. The problem did only occur if the ISDN interface was configured as cross connection subscriber line or trunk line. The problem has been solved.

2. New features

- None.

3. Other changes

- None.

4. Known issues

- With a S3 connected to a CUCM as a line device it can happen that a calling IP phone receives a ring back tone even when the callee behind the S3 is busy or not plugged in.
- In case an ISDN phone behind a NovaTec gateway is busy it will take three seconds until the caller will be informed that the callee is busy. This behaviour is mandatory for the ISDN bus and is specified in European and international ISDN standards. This is not a bug but because of this ISDN behaviour the user experience is different compared to SIP to SIP or SIP to analogue calls.
- Call forwarding busy on the S3 line is not working if it is activated from the ISDN or analogue phone. The locally forwarded call from the S3 is rejected from CUCM with "Busy here". But the destination of the call has no active call. The problem is caused by the "Busy trigger" in the CUCM configuration for the S3. As a workaround call forwarding busy can be activated in



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the CUCM configuration.

- If the REFER method is used to perform a transfer in the CUCM the transfer will fail when the second call is an incoming call. The transfer will be successful if both calls are outgoing or if at least the second call is outgoing.

5. Dependencies

- S3 registration as a line device in CUCM:
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature Data-Calls with clear channel codec (X-CCD):
The feature requires NMP version 6.3.2 or higher and CUCM version 7.1.2 or higher.
- Feature TLS:
The feature requires NMP version 6.7.0.4 or higher and CUCM version 7.1.3 or higher. TI-CA 1.6.0.2 is required if client/server authentication is used. Please use only TI-CA 1.6.0.2.
- Feature MLPP:
The feature requires NMP version 6.6 or higher. If the NovaTec-GW is connected to a CUCM MLPP works only on SIP trunks. The feature cannot be used on a S3 which is configured as a line device.
- Feature RMCS:
The feature requires NMP 6.7.0.4 or higher. To use RMCS on a S3 a special S3 hardware is required (article no. 1F8xxx-R). To use RMCS on a CCU3 based system, the CCU3 must have at least R-State R8E.
- Feature 3PTY:
The feature requires a CCU3 based system and cannot be used on a S3.
- Feature SCEP:
The feature requires NMP 6.7.0.4 or higher.
- Feature CLI over Trace Info Client:
At least Trace Info Client version 6.8.0.5 is required. Please visit our website for detailed information about CLI commands and software and firmware versions supporting the CLI.
- Feature CCU4 support:
The feature requires NMP version 7.1.0.0 or higher.
- Feature UP0 support:
The feature requires NMP version 7.1.0.0 or higher.
- Support for the Call Home events "Call Setup Time Threshold-Event", "TLS CA certificate invalid in one week", "TLS certificate invalid in one week", "TLS has default time" and "TLS own chain invalid":
The features require NMP version 7.1.0.0 or higher.
- Feature Separate RTP/SRTP:
The feature requires NMP version 7.1.0.0 or higher. The feature can only be used on the CCU4 hardware.



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- NMS support:
NMS is not supported with this firmware and all future firmware releases.
- NAMES support:
This firmware supports NAMES but has no direct dependency to NAMES itself. To support NAMES properly, the target system needs to be configured with NMP 7.1.0.0 or newer.
- Support for extended Trunk Group options:
The feature requires NMP 7.2.0.0 or higher.

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NovaTec Kommunikationstechnik GmbH



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NovaTec Release Information Firmware 00.08.02.00

- 1. Bug fixes included in this release**
- 2. New features**
- 3. Other Changes**
- 4. Known Issues**
- 5. Dependencies**

- 1. Below is a list of bug fixes that have been resolved in this release**

CCU4 related:

- Data calls on the CCU4 were rejected if the caller and callee both were destinations on the same CCU4. The problem did not occur on all call flows and depended on the behaviour of the called device. The problem is solved.

- 2. New features**

Related to all systems:

- The firmware supports a new configuration option which controls the behaviour on ISDN trunk line and cross connection. If the option is activated the NovaTec gateway will always connect through the B-channel when the call is alerting even if the called PBX does not signal/indicate the presence of a ring back tone. If the option is deactivated the NovaTec gateway will play its own ring back tone when the call is alerting and the PBX does not signal/indicate the presence of a ring back tone. This feature requires NMP 7.2.0.0. The new option can be found under "NovaTec-System/Trunk Group". Detailed information on the interworking of the current and previous NMP and firmware versions can be found in the NMP 7.2.0.0 online help.
- The firmware is now able to establish unsecure call home calls if TLS is activated but the certificates have not yet been signed. Before this change no call home calls were possible in that state because the system tried to establish secure calls but without signed certificates all secure calls failed, of course. To have successful call homes in this state an unsecure NMS or NAME Server must be configured in the target system. This feature enables NAMES to perform the call home job "Cert Sign Job" (sign certificate on incoming call home).

- 3. Other changes**

None.

- 4. Known issues**

- With a S3 connected to a CUCM as a line device it can happen that a calling IP phone receives a ring back tone even when the callee behind the S3 is busy or not plugged in.



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- In case an ISDN phone behind a NovaTec gateway is busy it will take three seconds until the caller will be informed that the callee is busy. This behaviour is mandatory for the ISDN bus and is specified in European and international ISDN standards. This is not a bug but because of this ISDN behaviour the user experience is different compared to SIP to SIP or SIP to analogue calls.
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The feature requires NMP 6.7.0.4 or higher.
- Feature CLI over Trace Info Client:
At least Trace Info Client version 6.8.0.5 is required. Please visit our website for detailed information about CLI commands and software and firmware versions supporting the CLI.
- Feature CCU4 support:
The feature requires NMP version 7.1.0.0 or higher.
- Feature UP0 support:



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The feature requires NMP version 7.1.0.0 or higher.

- Support for the Call Home events “Call Setup Time Threshold-Event”, “TLS CA certificate invalid in one week”, “TLS certificate invalid in one week”, “TLS has default time” and “TLS own chain invalid”:

The features require NMP version 7.1.0.0 or higher.

- Feature Separate RTP/SRTP:
The feature requires NMP version 7.1.0.0 or higher. The feature can only be used on the CCU4 hardware.
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NMS is not supported with this firmware and all future firmware releases.
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The feature requires NMP 7.2.0.0 or higher.

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NovaTec Kommunikationstechnik GmbH