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Remarks about the FW license and FW update

Starting with FW-Version 00.06.07.00, every FW needs a license file to enable the functionality of the target system. If the license file is missing no calls can be made, only remote access is possible. The license 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:
Your system has already got a valid license file in it and NMP 6.5 software allows the transmission of configuration data without loading a license file. The license file will stay in the target system. It will only be deleted if you overwrite it with another license file or if you delete the target system's flash. You only need a new license file if you update to a future, not yet existing FW version 00.07.01.00 or higher.

General remarks on FW updates:
In general a new license is required every time you update to a non bugfix FW version. A non bugfix version differs in more than just the last two digits 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 license is required.

Update from 00.06.07.00 to 00.07.00.55:
Update to a FW version including new features. A new license is required.

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July 2010

NovaTec release information firmware 00.07.00.67

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

When making a SRTP call, 2 KB of RAM were lost after the call has been cleared. The problem has been solved. Installations using RTP did not have any problems. **We strongly recommend to update all SRTP secured systems, which run a firmware older than 00.07.00.67, to firmware version 00.07.00.67.**
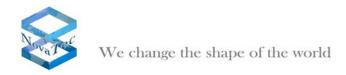
A SESSION PROGRESS message sent by a NovaTec Gateway on a SIP trunk did not include SDP even if the PRACK method was enabled. This lead to the problem that IP phones connected to a CUCM received a ring back tone if the called user behind a NovaTec Gateway was busy. The problem has been solved.

2. Other changes

The firmware now accepts a SSRC change in the SRTP packet header during the lifetime of a call. With Cisco VGs a problem occurred leading to one way voice. The reason was that the VGs changed the SSRC value during the call. The firmware now accepts the change of the SSRC making it more robust against problematic behaviour of other devices.
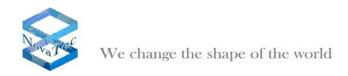
3. New features

None.

4. Known issues

With an S3 connected to a CUCM as a line device, it can happen that a calling IP phone receives a ring back tone if the callee behind the S3 is busy.

If an ISDN phone behind a NovaTec Gateway is busy it will take 3 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. That means that this is not a bug but because of the ISDN behaviour the user experience is different in comparison to SIP to SIP or SIP to analog calls.

Call forwarding busy on the S3 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 got no active call. The problem is caused by the "Busy trigger " in the CUCM configuration for the S3. As a work around call forwarding busy can be activated in the CUCM configuration.

July 2010
NovaTec Kommunikationstechnik GmbH

We change the shape of the world

NovaTec release information firmware 00.07.00.66

1	Bug fixes included in this release
2	Other changes
3	New features
4	Known Issues

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

The following scenario has lead to a MUTE mode of the analogue interface:
- A call was established to or from an analogue phone
- Both parties heard each other
- A second call came in to the analogue phone
- Call waiting was allowed an so the call waiting tone was played to indicate the second call to the analogue user
- At this state a MUTE mode was activated and therefore the analogue user could only hear the call waiting tone but not the other party. The other party could still hear the analogue user.

The problem has been solved.

When an NTP server was configured and addressed by its IP address then the target system could not get the time from the NTP server. The problem is solved. The problem did not occur if the NTP server was addressed by its name.

2. Other changes

The default time of the system is now set to the 01.06.2010. This prevents problems with TLS certificates becoming invalid if the system runs with the default time. The system runs with the default time until the time is set by NMS, NMP or a NTP server. During this time the TLS certificate will be valid if the start time of the validity date is before the 01.06.2010.
Of course, it should be guaranteed by the installation and configuration of the target system that the system receives a valid real time from the NovaTec NMS or NMP or an NTP server as soon as possible.
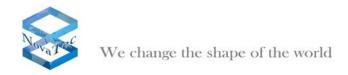
3. New features

None.

4. Known issues

Call forwarding busy on the S3 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 got no active call. The problem is caused by the "Busy trigger " in the CUCM configuration for the S3. As a work around call forwarding busy can be activated in the CUCM configuration.

June 2010
NovaTec Kommunikationstechnik GmbH

NovaTec release information firmware 00.07.00.65

1   Bug fixes included in this release
1.1   New features

2   Known Issues

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

With some configurations it can happen that a S3 registered at the CUCM does not receive MoH. Also the call might disconnect if it is put on hold and resumed repeatedly. The problem is solved.
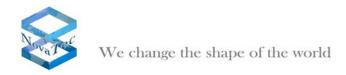
2. New features

None.

3. Known issues

Call forwarding busy on the S3 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 got no active call. The problem is caused by the "Busy trigger " in the CUCM configuration for the S3. As a work around call forwarding busy can be activated in the CUCM configuration.

May 2010
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We change the shape of the world

NovaTec release information firmware 00.07.00.64

1   **Bug fixes included in this release**
1.1   **New features**

3   **Known Issues**

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

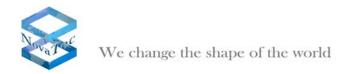The following problem could occur during the activation of TLS in the target system:
- A configuration with TLS enabled was transmitted to the target system
- Not all communication paths were configured to use TLS (e.g. SIP was configured for TLS but Maintenance and Call-Home were not)
- The Ethernet cable was plugged out and plugged back in
- The user resets the system
- After that all TLS files were deleted and TLS was deactivated in the target system

The problem is solved.

When the target system communicates with more than one SIP counterpart using TLS, a crash of the target system could occur. The problem is timing dependant and does therefore not occur in any case. The problem only occurred on SIP-Trunks. The problem is solved.
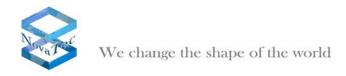
2. New features

None.

3. Known issues

Call forwarding busy on the S3 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 got no active call. The problem is caused by the "Busy trigger " in the CUCM configuration for the S3. As a work around call forwarding busy can be activated in the CUCM configuration.

With some configurations it can happen that a S3 registered at the CUCM does not receive MoH. Also the call might disconnect if it is put on hold and resumed repeatedly. The problem is in examination.

May 2010
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NovaTec release information firmware 00.07.00.63

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

A problem with synchronisation over RTP for the NLP mode has been fixed. This change avoids bit errors on the ISDN in long term tests above 13 hours loop test.

When using all 4 VoIP channels on a S3 at the same time it could happen that there are bit errors in one of the 4 channels.
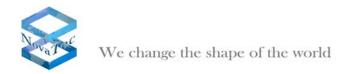
A problem with interfaces in NLP master mode is now solved. The synchronisation has been corrected for the case that synchronization used the RTP stream.

2. New features

Together with NMP version 6.5 the firmware supports Call-Home fallback to a second NMS. This means if the first NMS is not reachable, then the second will be called after a timeout of ca. 10-20 minutes. The firmware is compatible to older NMP versions but with older versions only one NMS can be addressed.

For NLP driven interfaces it is now possible to change the backplane-ID in the configuration without restarting the target system.
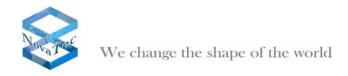
The SIP TLS configuration has been improved. The TLS flags for SIP can now be set under "NovaTec-System/System IP options/TLS security". Previously this flags were edited under "NIP (NovaTec Internet Pathfinder)/SIP (VoIP)/SIP general settings/Optional flags 2". This feature requires NMP 6.5.

3. Known issues

Call forwarding busy on the S3 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 got no active call. The problem is caused by the "Busy trigger " in the CUCM configuration for the S3. As a work around call forwarding busy can be activated in the CUCM configuration.

After a reconfiguration of a target system (this means the target system is reconfigured without doing a reset), the target system stops sending the Call-Home-Events "Trace Warning" and "Trace Error". The problem exists in all previous firmware versions.

March 2010
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We change the shape of the world

NovaTec release information firmware 00.07.00.55

1   **Bug fixes included in this release**
1.1   **New features**

5   **Known Issues**

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

On the S3 it could happen that layer 2 on ISDN ports was unstable. This lead to the problem that existing calls were cancelled or that it was not possible to establish new calls. With older firmware versions than 00.06.07.02 the problem can occur occasionally or permanently. Therefore we strongly recommend to update to this version even if a target system runs without any problems. Only S3 systems are affected by this problem.
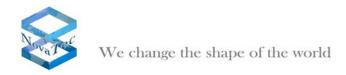
The Call-Home-Events L1-Activation and L1-Deactivation will not be sent for BCU, SCU and analogue interfaces. This was the case with previous firmware versions and lead to the problem that each time a call was made over a VoIP or analogue interface the events L1-Activation and L1-Deactivation were sent on the beginning and end of the call.

CDRs of analogue and SIP calls were only saved if the call data profile was configured to save CDRs for calls made from extern to extern even if the call was an internal call. The problem is solved.

For data calls a possible data loss is now fixed. It could happen that data in the b-channel was recognized as a DTMF tone and was then sent out as a DTMF sign in the RTP stream (telephone-event). Therefore this data was lost and the data stream was interrupted. The problem existed on the S3 only. It was especially recognised with V22bis modem connections.

If a S3 was connected to the CUCM using a SIP trunk, the calling number sent in the INVITE for the forwarded call was wrong. Instead of sending the original calling party number the S3 did sent the redirecting number as the calling party number. The problem is solved.

An attempt to perform a blind call transfer will now be rejected. Previously the system tried to process the blind call transfer even so the feature is not implemented. This lead to dead calls after the call transfer.

If the SIP registration of a system failed again and again (e.g. due to a wrong configuration of the system and the registrar), then the system crashed after approx. 5 minutes. The problem is solved.

A problem with call forwarding on no reply on analogue interfaces has been fixed. The problem was that the call has been forwarded in every case even if the call was answered. In this case after some time after answering the call, the system tried to forward it even if the call was already active. The forwarding fails (because the call is already active) and the call is cancelled because the system thinks that an error has occurred.
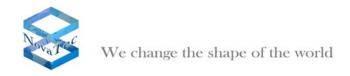
2. New features

High-precision quartz as an alternative to GPS synchronisation.
This firmware version supports the new S3 and BCU board versions which have a high-precision quartz installed instead of a GPS module. It can be used in installations where receiving or installing GPS is not possible. The high-precision quartz is not present on standard S3s or BCU boards. It is an optional extension which can be ordered if required.

3. Known issues

Call forwarding busy on the S3 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 got no active call. The problem is caused by the "Busy trigger " in the CUCM configuration for the S3. As a work around call forwarding busy can be activated in the CUCM configuration.

February 2010
NovaTec Kommunikationstechnik GmbH

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NovaTec release information firmware 00.07.00.45

1	Bug fixes included in this release
1.1	New features
6	Known Issues

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

Previous versions of the firmware did not support message segmentation. Therefore SIP messages could not be longer than 1400 bytes. The problem has been solved.

The SIP-Message "Not found" is now mapped to the ISDN cause 1 "unallocated number". Before the message was erroneously mapped to ISDN cause 34 "no channel available".

On activation or deactivation of call forwarding on an ISDN bus the S3/S6 will now send an ActivationStatusNotificationDiv or DeactivationStatusNotificationDiv message according to the standard ETSI ETS 300 207-1. Before the messages were not sent. This caused the problem that some ISDN devices did not recognize that the activation or deactivation of call forwarding was successful and therefore showed to the user that the activation or deactivation failed. NovaTec knows that for example the Siemens Gigaset and TIPTEL 290 D ISDN phones require the messages to function properly.

In a SIP OK message it could be that the field "transport=tcp" was sent by S3 or S6 in the contact field, even if the SIP session used a UDP connection. The problem is solved. We did not encounter any negative effects caused by this bug.

2. New features

TLS and sRTP support.
NovaTec systems now support TLS and sRTP. The feature is supported between NovaTec equipment and in interworking scenarios with CUCM 7.1.3. A new application called TraceInfo CA is required to create and sign TLS certificates. The tool is not part of the NovaTec Maintenance Package and needs to be purchased separately.

3. Known issues

Call forwarding busy on the S3 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 got no active call. The problem is caused by the "Busy trigger " in the CUCM configuration for the S3. As a work around call forwarding busy can be activated in the CUCM configuration.

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