

KTS Technical Assistance Centre Service Information Bulletin

NEC Xen Topaz Version 3.00 Main Software

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Introduction

This Service Information Bulletin applies to the NEC Xen Topaz Key Telephone System.

Version 3.00 Main software, for the NEC XEN Topaz Key Telephone System, is commercially available from NEC Business Solutions Pty. It incorporates new features that make the NEC XEN Topaz KTS more flexible, versatile, and exciting.

New Features:

- Directory Dialling feature.
- 3rd Party CTI feature.
- Xen Topaz SmartPhone CTI application.

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Resolved Issues

The following issues were reported by NEC Channel Partners and Technical Staff and these issues have been resolved. These issues are as follows:

1. Users voice during VM message recording is activating one-digit selections.
2. Busy tone recorded at the end of VM message will trigger disconnect status for PSTN trunk when listening to messages.
3. Error in layout when re-sizing PRG 31-03.
4. Digit # is not transmitted when it is stored under a DSS key.
5. PRG 14-02-02 when set to immediate ring follows PRG 20-15-01 ring pattern.
6. Start record beeps are feeding back into recording.
7. Queuing dial method for SLT is delayed beyond set value of PRG 20-04 causes the exchange PBR to time out and when the destination is finally dialled it will cause user to hear busy tone. To fix this, the default setting for PRG 20-04 has been changed to 1 sec and this should not be altered. In particular, do not change 20-04 to 0 as this will disable dialling from a SLT port.
8. Trunk access codes can seize a trunk during AA call.

System Data Default Changes

1. PRG 13-02-01, Group 01, Start = 1000, End = 1999.
2. PRG 20-03-04 = 1sec.
3. PRG 80-03, Item 1 (for Extensions):
80-03-01, = 0 (0dbm ~ -25dbm).
80-03-03 = 15
80-03-04 = 2
PRG 80-03, Item 2 (for Trunks):
80-03-01, = 1 (-5dbm ~ -30dbm).
80-03-03 = 15
80-03-04 = 2
4. PRG 15-02-04 = 3 (Directory Dialling) for all ports.
5. PRG 15-01-08 = Enabled for extensions 200 to 223 (first 24 ports only).
6. PRG 20-23-03 = 1 (Enabled).

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Installation Notes

1. For each installation, change the setting of Program 80-03-01 (DTMF Tone Receiver Setup) to 0 (0-25dBm). Do this for both Type 1 (Extensions) and Type 2 (Trunks). Note that the system must be reset for the changes to take effect..
2. When a software upgrade is performed from V1.xx to V2.xx, ensure that Program 40-10-06 (VRS/VMS Message Playback Level) is set to the default of 32, or other appropriate value. If this value is set to 0, the VRS/VMS prompts will not be heard.
3. When the Topaz system is set to Voice Call mode (Program 20-02-12 = 0), an internal call that is switched from Voice Call to Ring mode by dialling 1 will not follow a Call Forward No Answer set on the called extension.
4. When Delay Message is assigned it is possible to set a disconnect time after the end of VRS message. Assign Program 22-14-xx as follows to ensure that calls follows the disconnect timer assigned in Program 22-14-07.

01 - 1st Waiting Message Start Time = 1
02 - 1st Waiting Message No. = 1
03 - 1st Waiting Message Sending Count = 1
04 - 2nd Waiting Message No. = 1 (*do not leave as 0*)
05 - 2nd Waiting Message Sending Count = 1 (*do not leave as 0*)
06 - Message Interval Tone Kind Tone = MOH
07 - After End of VRS Waiting Message Disconnect Time = 10sec (*set as required*)
5. When PRG 22-11-04 (Transfer Operation Mode) is set to Busy, only PRG 22-11-05 (Transfer Destination Number 1) can then be used. If PRG 22-11-06 (Transfer Destination Number 2) is assigned a destination, it will not be followed and the call rings instead to the default ring group assigned in PRG 22-05 (Incoming Trunk Ring Group Assignment).
6. In order to set PRG 14-01-04 (Transmit Gain Level for Conference and Transfer Calls) to a value of between 40 and 52 (default = 22), you must also set PRG 10-09-01 (DTMF Circuit Setup) as Resource 1~16=Trunk Only & 17~32=Extension Only. Otherwise the value of PRG 14-01-04 is restricted to a maximum of 40.
7. The default setting for PRG 20-04 has been changed to 1 sec and this should not be changed. Do not change 20-04 to 0 as this will disable dialling from a SLT port.
8. Uploading a saved database will overwrite any default settings they were changed in the new version of software. This may change preferred programming settings and require manual alteration. Refer to "Default Changes" in this document and ensure they are restored as required.
9. To ensure the Xen Topaz system is not at risk from external parties fraudulently running up call costs by making unauthorized calls, install main software V2.02 or V3.00. Refer to NEC Service Information Bulletins 193C and 193D for further details.
10. If access to PRG 20-23 (3rd Party CTI setup - optional) is required, the installer must login using Access Level "MF" (Manufacturer). Contact the NEC KTS Technical Assistance Centre for MF Level login details.

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New Feature: Directory Dialling

Directory Dialling allows a Display Multiline Telephone to search for a name from an abbreviated dialling or extension list and then dial that number. The following Directory Dialling lists are available via the DC key:

- Personal Abbreviated Dialling
- Common Abbreviated Dialling
- Group Abbreviated Dialling
- Extension List

Pressing the DC key repeatedly will cycle between each of these options. Having selected the desired list, you may scroll through the list alphabetically or search the list for a particular name.

Programming Required:

MB 13-01-02	Abbreviated Dialling Function Setup - Personal Abbreviated Dialling The "PERSONAL ABB LIST" selection is only available if Personal Abbreviated Dialling is enabled system wide in PGM 13-01-02.
MB 13-03-01	Abbreviated Dialling Groups Assignment for Extensions The "GROUP ABB LIST" selection is only available if the extension is allowed in class of service 20-08-04.
MB 15-01-01	Basic Extension Data Setup - Extension Name To appear in the Extension List an extension number must be assigned a name of up to 12 characters (default = not assigned).
MB 15-01-08	Basic Extension Data Setup - Add to Extension List Only extensions which are allowed (1) in PGM 15-01-08 and have an Extension Number (PGM 11-02/04/06/07/08) and have an Extension Name (PGM 15-01-01), will appear in the Extension List. The Extension List may also include Virtual Extensions.
MB 15-02-04	MLT Basic Data Setup - Abbreviated Dial DC Key Control This option controls the function of the extension's DC key. Set to option 0 or 1 for non-display multi-line telephones, otherwise set to 3 to provide the Directory Dialling facility. In this mode, searching is performed alphabetically based on the name. (default setting = 3)

Feature Operation & Service Conditions:

Please refer to the feature "Directory Dialling" of the Release 3 Features & Specification Manual available on the KISS website <http://www.kts.nec.com.au/>

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New Feature: Computer Telephony Integration (CTI)

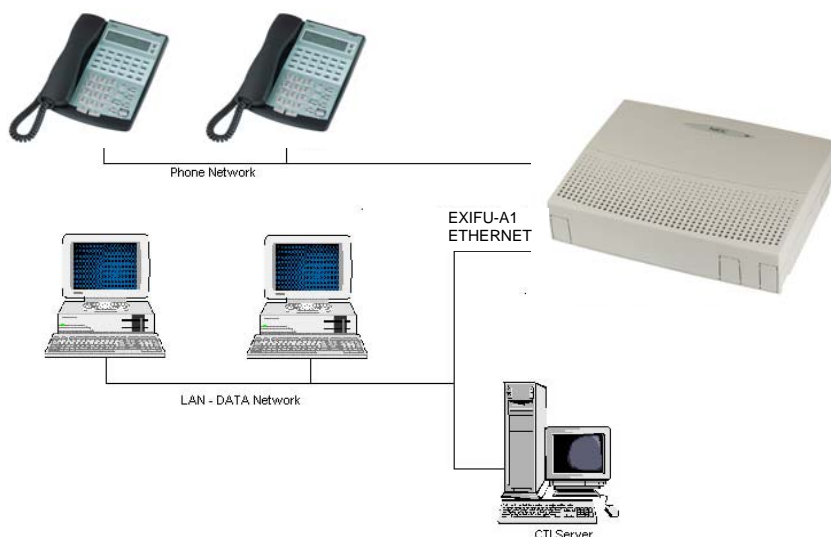
The NEC Xen Topaz supports Computer Telephony Integration (CTI) using the Telephony Application Programming Interface (TAPI) version 2.1 protocol via the Ethernet interface on the EXIFU card. TAPI 2.1 based CTI realises all manner of 3rd party call control features depending on the client application installed.

Computer Telephony Integration (CTI) applications automate your office with TAPI compatibility and external PC control. CTI provides the modern office with productivity improvements such as:

- **Personal Computer Interface (PCI):**
Connect your office PCs to the telephone system via the LAN. Install the central CTI Server and TAPI driver and compatible application in your personal computer to allow your PC to operate your telephone. The TAPI driver provides all TAPI Basic Services and a host of TAPI Supplementary Services. See the feature "TAPI Compatibility" for more.
- **Open Architecture Interface (OAI):**
OAI allows unique PC-based system functions via third-party development.
- **Outbound Telemarketing:**
Outbound Telemarketing utilises PC-based dialling that enables your staff to canvas prospects quickly and efficiently. Use third-party database software installed on your PC as auto-dialler which can automatically look up your clients and dial their numbers.
- **Database Lookup:**
Provided with incoming calls through Caller ID and TAPI compatible third-party software (such as ACT! or Goldmine), database lookup displays your caller's account information before their call is answered.

There are two main components in a 3rd Party CTI implementation:

- **CTI Server:**
A dedicated PC Server is recommended for Topaz CTI Server. The server should be connected to the network via the TCP/IP Protocol (Including WINS, DNS services), and should include the appropriate number of Client Access Licenses.
- **CTI Client:**
TAPI based requests are sent from the CTI application running on the Client PC to the Topaz via the CTI Server. The client application may be supplied by 3rd party providers.



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Programming Required:

- | | |
|-------------|--|
| MB 10-12-01 | EXIFU Network Setup – IP Address
Assign an IP Address to the EXIFU. |
| MB 10-12-02 | EXIFU Network Setup – Subnet Mask
Assign a Subnet Mask to the EXIFU. |
| MB 10-12-03 | EXIFU Network Setup – Default Gateway
Assign a Default Gateway to the EXIFU. |
| MB 10-20-01 | LAN Setup for External Equipment – TCP Port
For equipment type 1: CTI Server, assign a TCP Port to the EXIFU (port 8181 is recommended). |
| MB 90-38-01 | Maintenance Command – Feature Activation Code
Using WebPro or PCPro, enter the CTI feature activation code required to enable TAPI V2.1 output via the EXIFU-A1 LAN port. When purchasing the activation code, you must supply the Serial Number and MAC Address of the Xen Topaz KSU on which it is being installed. |

Optional Items:

- | | |
|-------------|---|
| MB 10-20-03 | LAN Setup for External Equipment – Keep Alive Time
For equipment type 1: CTI Server, assign the interval to transmit keep alive packet to the TSP driver (default = 30 seconds). |
| MB 20-23-01 | System Options for CTI – Delayed ring timer for CTI
Default = 30 sec. |
| MB 20-23-02 | System Options for CTI – Alert replay time for CTI
Default = 8 sec. |
| MB 20-23-03 | System Options for CTI – Trunk Virtual Bridge TSP Driver
Enable (1) the system's ability to send trunk or virtual extension information to the TSP driver (default = 0 Disable). |
| MB 20-23-04 | System Options for CTI – SLT Off-hook Timer for CTI
The timer which waits for an off-hook for SLT (default = 30 sec.). |

Feature Operation & Service Conditions:

Please refer to the feature "Computer Telephony Integration" of the Release 3 Features & Specification Manual available on the KISS website <http://www.kts.nec.com.au/>

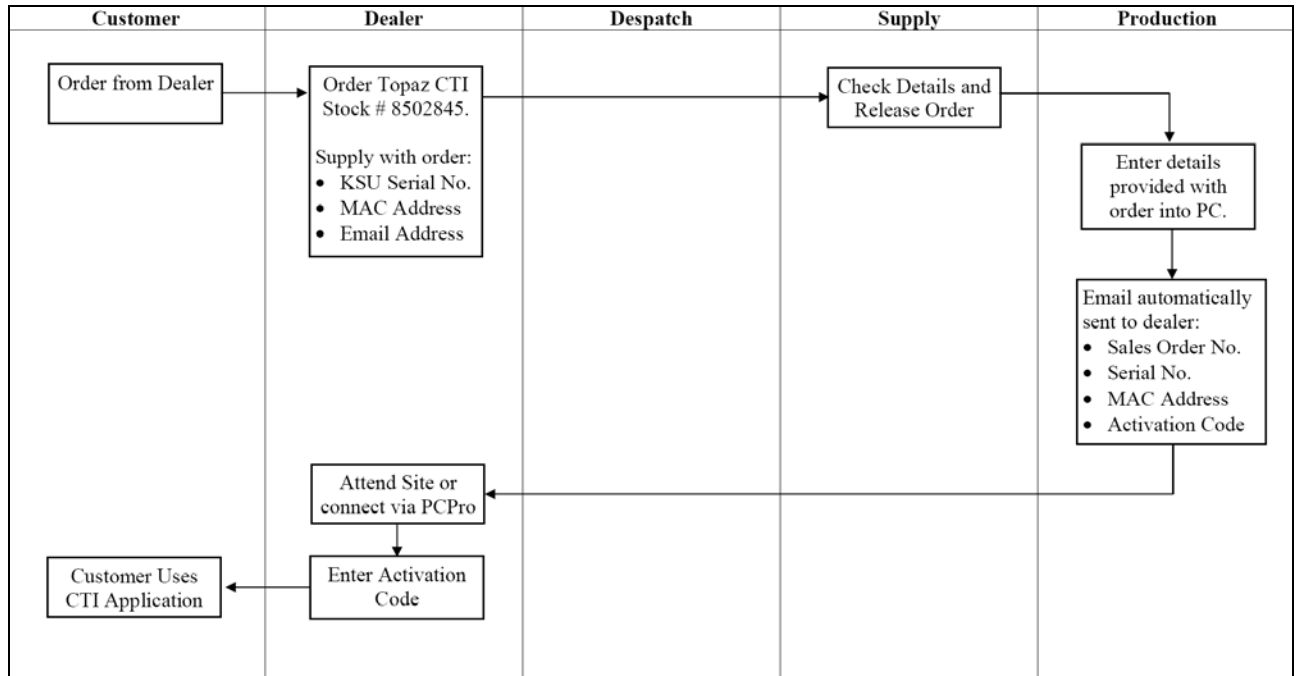
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New Feature: Topaz CTI Activation Code

8502845 Topaz 3rd Party CTI Activation Code

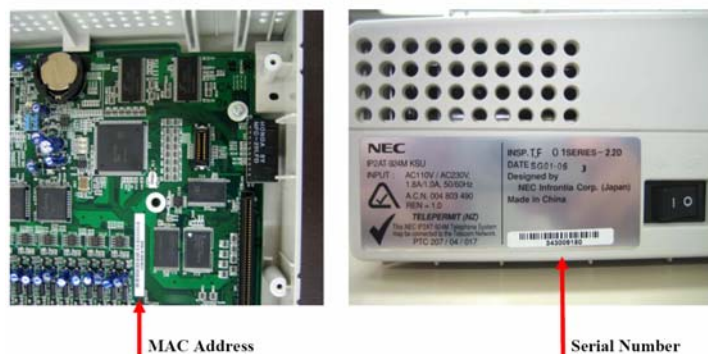
The process of ordering a Topaz CTI Activation Code is as follows. The ordered activation code will be generated by NEC and the code returned by email to the purchaser.



KSU Packaging Labels



KSU Labels



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New Feature: TAPI Compatibility

The NEC Xen Topaz system supports the Telephony Applications Programming Interface (TAPI) protocol providing:

- A reduced TAPI Feature Set.
- Caller ID data to the PC for data base lookups and screen pops.
- Telephone control (off-hook, on-hook and dialling).

The LAN interface of the EXIFU-A1 option card provides the user with control over the telephone system from a desktop or laptop PC when used in conjunction with a TAPI-compliant application.

Feature Operation & Service Conditions:

Please refer to the feature "TAPI Compatibility" of the Release 3 Features & Specification Manual available on the KISS website <http://www.kts.nec.com.au/>

Main Software Upgrade Procedure Version 3.00

Please ensure that this procedure is followed accurately. Further information can also be found in the version 3 System Hardware Manual on the KISS website <http://www.kts.nec.com.au/>

You may choose to upgrade the Xen Topaz main software using either a Compact Flash card or WebPro. Both methods require an EXIFU-A1 card (with CF slot and LAN port) to be installed (temporarily is desired) into the Topaz system.

The new Main System software version for each method can be obtained from the KISS Website <http://www.kts.nec.com.au/> under the download link for the XEN Topaz System.

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Upgrade via Compact Flash:

1. Obtain the software release file "topaz_release_3.00_cf.zip" from the KISS Website.
2. Ensure that the CompactFlash card is a maximum size of 128MB and has been formatted as a "FAT" file system (not a "FAT32" file system). This can be located under the properties for the CompactFlash card. If this is formatted correctly, then unzip the above file to the root directory of the CompactFlash drive.
3. Use the PCPro software v3.00 and download the current system database. Ensure that the download is saved. If you wish to save the system data via the CompactFlash, please refer to the System Hardware Manual under System Start-up (Chapter 9 – Section 2.3 "Save the customer data").
4. Switch the system OFF, then remove the main cover from the KSU, and ensure that the switch SW1 is set to the "COLD" position.
5. Temporarily insert the EXIFU-A1 card into the appropriate slot marked as CN2 on the Xen Topaz system, that's if the system doesn't already have one.
6. Insert the CompactFlash card into the CF slot on the EXIFU-A1 card.
7. Power ON the system. Observe the following LED conditions during the upgrade process. LED 1 turns on solid red, while LED 4 starts fast flashing for (approx 2~3 mins). When the upgrade process is complete, then LED 4 will stop flashing and switch OFF.
8. Set SW 1 to the "HOT" position, and then power OFF the system.
9. Remove the CompactFlash card from the CF slot on the EXIFU-A1 card. Power the system ON once again, and then confirm that the system software version has been upgraded by pressing "OPAC" and dialling "3". Should show the main version & checksum.
10. Then using the PCPro software V3.00 to upload the previously saved customer database. Once completed and if it's required to remove the temporarily installed EXIFU-A1 card, then it's necessary to power OFF the system before removing the EXIFU-A1 card.

NOTE! Uploading a saved database will overwrite the default settings in the new version of software. This may change preferred programming settings and require manual changes.

For more information & diagrams of the full procedure, please refer to the Xen Topaz System Hardware Manual, Chapter 10 – Maintenance, Section 2 – Main Software Upgrading.

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Upgrade via WebPro:

1. Obtain the software release file "topaz_release_3.00.bin". If this has been received as a zipped file, unzip the file to your hard disk.
2. Connect to the Xen Topaz system via the WebPro using your PC browser application.
3. Use the PCPro software v3.00, and download the current system database. Ensure that the download is saved. If you wish to save the system data via the Compact flash, please refer to the System Hardware Manual under System Start-up (Chapter 9 – Section 2.3 "Save the customer data").
4. Click on the 'Firmware Update' link from the WebPro 'Home' page.
5. Click the 'Browse' button, and select the provided firmware update file (topaz_release_3.00.bin) and then click the 'Open' button.

CAUTION! An invalid firmware file will render the system unworkable, and if this occurs, then perform the upgrade using the Compact Flash method as described above.

6. Then click the 'Update firmware' link. The update procedure may take a few minutes to complete. In this time do not interact with your browser window until the update has been completed.
7. Once the update is complete, perform a system initialisation for the updated changes to take place. Existing system programming will take effect after the initialisation.
8. Then using the PCPro software V3.00 to upload the previously saved customer database. Once completed and if it's required to remove the temporarily installed EXIFU-A1 card, then it's necessary to power OFF the system before removing the EXIFU-A1 card.

NOTE! Uploading a saved database will overwrite the default settings in the new version of software. This may change preferred programming settings and require manual changes.

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Version 3.00 CPU Software and PCPro Software Compatibility

PCPRO:

Version 3.00 Main software has been tested and approved for use with Version 3.00 PCPro software. PCPro software version 3.00 can be obtained from the KISS Website <http://www.kts.nec.com.au/> under the download link for the XEN Topaz System.

Main Software:

Version 1.xx and 2.xx systems can be upgraded to version 3.00 Main Software. Main System software version 3.00 can be obtained from the KISS Website <http://www.kts.nec.com.au/> under the download link for the XEN Topaz System.

For further information please call 1800 819 766
Or visit our web site at <http://www.kts.nec.com.au/>

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