



**Aspiring Software Topaz Release 3.00 and IPK II V1000**

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**READ THIS FIRST.**

The software for both the IPKII and the Topaz originate from a system called the NEC Aspire. As both versions of software are basically the same I have incorporated the basic Topaz and IPKII software in one Quick installation guide.

Additional applications are covered by application notes on the IPKII CDROM or from our IPK website and are too involved to include in this guide Any new software will be posted on our NECBS web site as soon as it is available..

<http://www.necbs.co.nz/techsupport/techhome.htm>

After either the Topaz or IPKII have been uploaded from Oz default to NZ default the system be rebooted..

Any questions please call me

**Current released software version for the IPKII is R1.01 and Topaz is R3.00**

The number plan for the IPKII has been change from that of the Topaz system.

Topaz 8XY = IPKII \*XY Topaz 7XY = IPKII #XY. This has been done to allow all 8 dial codes to be used for stations. However feel free to change it how you like but if there are problems they are yours..

This document is designed to assist installer with the Topaz system. It is not design as a detailed Feature or installation manual..

*This document has been updated to reflect changes in Red Color*

### **Topaz basic setup info**

NOTE!! The digital sets are 4 wire. Blue pair voice, Orange pair data.

**Do not use BT line jacks for digital sets only RJ 11 or RJ45**

**Normal Installer login from phone** Opac + Hold + #0\*

**Access from WebPro and PC Pro** Login = tech, PW = 12345678

Power on system. This normally takes about 2 minutes.

**Set memory battery switch to ON.**

### **Quick and dirty setup for those without PC Access**

This sets up the most basic operation for the system to function in NZ environment.

1. Topaz: Opac + Hold + #0\* or Speaker 6321 + 12345678 + Hold
2. IPKII: Speaker + #\*\* + 12345678 + transfer
3. Change the dial plan. Enter 11.01.01. Press Vol up to scan thru numbers until you come to digit 9.
4. Press HOLD. Enter dial type = 3 for trunk access. Press Hold. Press DC.
5. Enter 01 and scroll thru numbers until digit 0 is reached. Press HOLD. Enter 5 for operator access. Press HOLD. Press DC until curser on left of display.
6. Enter 11.09.01 . Enter digit 9. Press HOLD. Press DC until curser on left of display. This set the CO access dial code.
7. Enter 14.01.07 This area allows for blocking of spare trunks for out calling. Press Vol/down up to scan thru trunks. Enter 0 (zero) to block trunk from out calling.. Press DC until curser on left of display.
8. Set trunk hunt pattern to circular. Enter 21.01.01. Enter digit 1. Press DC until curser on left of display.
9. Analog Station Hook Flash timer. Enter 82.04.07 Set min timer to 20 (200 ms) Press hold. Set max timer to 120 (600ms) Press hold. Press DC. Press speaker to exit and save data.
10. Set time and date. PRG 10.01.01~07

**For those with PC access if the EXIFU-B is installed. (Topaz)**

Note. This card only has a serial port installed.

1. Open PCPro set connect speed to 115200.8,N,1.Flow control = **None**
2. Connect with Pcprou and load default system file.
3. Set time and date. Programming > Time Settings (when connected )

**For those with PC access if the EXIFU-A is installed.**

Note: This is the card with a serial port, LAN port, two expansion KSU ports and a flash ROM socket.

1. OPAC + Hold + #0\*
2. Set IP Address for WEB Pro or PCPro. (Do this from phone program mode.)

**IPKII: The CPU has a LAN jack at the base. The Default IP address is the same as the Topaz.**

**Default IP address for system is 172.16.0.10 Sub net 255.255.0.0**

If you need to set up a different IP address for the customer . Go to:

PR 10.12.01 Set new IP address i.e. 192.168.001.213 (172.16.0.10)

PR 10.12.02 Set sub mask i.e. 255.255.255.000 (255.255.0.0)

PR 10.12.03 Set default gateway i.e. 192.168.001.254 (none defined)

Press DC

When Data save has finish. Power off and on system.

3. Connect with PCPro and upload NZ default for analog or ISDN config.
4. After upload disconnect PCPro and wait until the Yellow LED on the front of the system flashes at NZ Busy tone cadence (half second on and half second off) for default to be set. This takes about 30 seconds to a minute.
5. Open WebPro and login user = tech. password = 12345678
6. Go to PR 14.01.07 and block any trunks for out calling that are not being used.
7. Set time and date. PRG 10.01.01~07 (WebPro only)
8. To set in PCPro go to Programming > Time Settings. Only works when PCPRO is connected to Topaz

**Card setup:**

1. The NZ defaults assumes that the system is a analog 308 or an ISDN 416. If you have additional 008 or 308 cards these must be added to PCPro **BEFORE** you load the NZ default. If you don't the extra cards will not work. Press F11 in PCPro to add these cards. Be sure to add analog trunk cards before ISDN cards.

2. The above also applies if you install a larger or extra ISDN card. It must be added before the default is loaded. The first ISDN card goes in slot 5 the **Lower** slot in the OP Box.

### **Card setup IPKII:**

When you are configuring an IPKII for the first time you must not have any cards in the system. Load up the NZ default in PCPro and place cards in their slots, Power on system and when it has come on line place the cards in the system to match what card layout in PCPro. Work from the left allowing a bout 5 seconds between each card insertion.

### **Button Programming:**

The first 12 buttons of a Topaz digital set are by default trunk keys 1 to 12. These cannot be reprogrammed from the phone with feature code 851 or 852 until they have been nulled with feature code 852. To do this. Speaker >852>press button to program>dial 000> pres HOLD. The dial feature codes 851 or 852 and program button as normal. Alternatively you can use PCPro 2.00 or latter or WebPro to do this..

### **Ringling on Trunk Keys and Delay to other Stations.**

Unlike the Xen and IPK systems The Topaz software comes from a PBX system called the Aspire which is sold in the US. It does not have the ability of like keyphone systems of having delaying ringing on trunk appearance keys. However there are ways of doing this. This applies to both analog and ISDN sites. Our NZ defaults do not have this preprogrammed.

1. MB 22.04 Station 200 is the only phone in ring group 01. That means that on I/C CO calls only this phone will ring. If you want other stations to ring straight away add them to this ring group. If not read on.
2. 22.04 Add to RG 2 the stations that you want to ring as a delay ringing.
3. 22.08.xx Set the trunks that you want to delay ring in day mode (mode 01) to RG2. This MB sets the delay ring group for incoming calls.
4. 22.01.04 changes the ring delay timer.
5. Page 18 explains how to add an operator delay announce to this call flow..
6. Make sure that MB20.02.04 is set to **Holding**. This will allow the operator to retrieve the call before the recall timer kicks in.

### **ISDN DID setup**

1. 22.02 Select the BRI trunk and set to DID. Repeat for all trunks. Mode 1 = day . Mode 2-8 = Nite
2. 22.09.01 Set number of digits to receive from telco per trunk group.
3. 22.10.01 Conversion area start 1 end 200.
4. 22.11.01 Inbound digits received.
5. 22.11.02 Destination station number or virtual.
6. 22.11.03 DID name (DNIS)
7. 22.13 Mode 1 = normal day mode. Mode 2 to 8 = Nite mode
8. If you want this to go to a ring group after the Call forward timer 22.01.06 (default 20 seconds) has expired, Go to 22.11.05 and set to

No Answer. Set 22.11.06 to the ring group that you want. Remember all stations are in RG1 by default. Go to 22.04.XX and set ring group members for the ring group you select. Ring group number is vertical and members is horizontal.

9. For Call waiting on DID calls MB 22.11.08 set to on.

### **Automated Attendant / VRS Topaz and IPKII**

1. 22.02. Set required trunks to VRS for modes 1 to 8
2. 25.02. Set trunk mode to VAU . Set additional data to message number i.e 01
3. 25.06. Set single digit dialing. If station dial thru is required leave the first digit for that level blank. If multi level at next AA message number.
4. In Release 2 single digit dialing can now access voicemail (884) and also perform external transfers vial system speed dials. MB 25.06.02 is where the station number or speed dial is entered. New MB 25.06.03 defines as to whether the entry on 25.06.02 is a station or speed dial .
5. 25.07.01 Time to wait for user input. Set for 5 seconds
6. 25.07.11 Set delay until answer. 0 = immediate answer..
7. 25.03.XX Set ring group for call to go to after timeout. .Normally 01
8. 22.04.01 Set stations in ring group. Default Ext 200
9. 25.04.01 Set to Ring group if no answer on transfer from a 1 digit dial thru.
10. 25.07.02 Sets the no answer timer. If para 8 and 9 aren't set the call will cut of after the timer in 25.07.02 expires
11. If you wish to send the call to a mail box if the user does no action rather than a ring groups read on.
12. MB 25.03 "Transfer ring group at wrong dialing" set this to 101 on the trunks you are using
13. MB40.06 "Voice mail auto attendant data setup" Set guidance message to say message 2 and mail box to sat 1 for the operator. The mail box number here is the port number not station 200.
14. Record AA message 1 with the main greeting and record A message 2 with something like " Please leave a message after the tone" and the message will be left in the specified mailbox. Normal AA function will still operate when AA message 1 is being played..
15. Record VRS messages. I.e. Dial 716, Select 7 for Record, Message number, Record message + # to end..
16. For those who are interested the AA prompts live in the following location on the flash ROM card VM\OGM\3\1\9. G00.wav is AA msg1, G01.wav is AA msg 2 etc. These are recorded in CCITT A-law. 8000 Hz, 8bit, mono format.

### **Virtual Extensions**

1. PR 11.04. Set virtual station numbers
2. 15.07.xx Program virtuals to digital sets \*03 + virtual number.

3. 15.09.xx set virtual ringing on for each key appearance and for each day/nite mode.
4. 15.11.xx Set virtual delay ringing on each phone and each day/nite mode.. MB 20.04.03 sets this timer (10)
5. 20.10.08. Auto Off hook answer is set to **ON**.
6. 15.02.07: Trunk Key Depression . Set to **Hold**. If you want to transfer trunk call to station.

## **SMDR**

1. 35.01.01 Set SMDR output port to Com or LAN on EXIFU
2. 35.01.04 Set omit digits to 0
3. 35.02.09 Set ext to number if desired. (defaults to name)
4. Default baud speed for SMDR is 115200. PRG 10.21.02 will change the SMDR baud rate. If this baud rate is changed so is PCPro speed. Set to 5 for 115200 Not if your running PCPro and a EXIFU-B card check to make sure that you can still connect
5. 35.01.06 Set min call duration to 1. Otherwise all O/G calls will be reordered..
6. SMDR Via TCPIP. This can be used rather than using serial cable method. 10.20.05 : Set to port 1030 . Leave next field at 30
7. 35.01.01: Set LAN to 3 (LAN in PCPro)
8. **Reboot the system after LAN SMDR has been set up.**
9. Go to Hyperterm and set to TCPIP. Set address to Topaz IP address and port to 1030. You should see SMDR info coming out..

The SMDR buffer hold 300 call records then "SMDR Buffer Full" is displayed on the operators station.

## **Account Codes**

1. 14.01.11 Set Account Code on per trunk
2. 15.07.xx Program Account code button if needed.. Function number 50 (this button only works at present for in coming calls)
3. 20.06.xx check station CLS has Account Codes turned on. (CLS 1 is default)
4. 21.04.xx Toll class . Check that user is in correct toll class if needed..
5. 35.05. Set type of account code to be used per station CLS. (Default non)
6. 35.06. Setup verified account code numbers..
7. Test. Dial 9 for outside line + Account code voice prompt + star\*+ account code + star\* + get CO dial tone and dial number. If incorrect account code number enter a voice prompt will be heard.

NOTE: Voice prompts will only be heard if Voicemail installed..

Topaz SMDR currently only outputs 8 digits of the account codes..IPK2 can do 8 or 16 digit codes

## **Toll Bar**

1. Prg 21.04. All stations default to toll class 1 Topaz and Toll class 2 on IPK II . (0900 bar)

2. See Page 22 for toll bar matrix..
3. Note Personal and system speed dials have toll override turned on by default. Go to MB 25.05.09 and check to turn off override if required.

### **Voicemail Topaz Only**

1. 40.02. Set up mailboxes and passwords if needed. The NEC default will have 24 MBs created and 10 virtual mailboxes. .
2. 15.07.xx Set up voicemail access button on Digital sets Function = 67+ Add Data = mailbox number. This button will give MWI and VM access.. Can also be used for virtual mail boxes as well.
3. 15.07.xx Setup VM call forward button . Function = 70. Add data = MB number.. This toggles various call forward options to voicemail
4. **Note. Topaz Release 1 systems:** Voicemail is not user friendly to SLT users. CFNA can only be setup with the help of a digital set. CFAll can be setup from the SLT users mail box which when cancelled will kill the CFNA..
5. The CFNA timer for voicemail is MB24.02.03 Default 20 secs.
6. MB 11.12.39 is where the code 884 is located..

With the release of version 2 several new features have been added to the voicemail system.

1. Analog phone users can now auto login to their mailbox
1. Analog phone users can set CFNA to their mailbox box by dialing service code 67# (CFNA) or 62# (CF All)
2. The “dial thru” when in the mailbox has been enabled. By default only 2 dial thru digits are configured. These are digits 1 and 2 , however all 10 levels can be configured. To dial thru from the mail box the last two personal speed dials for each user is used. These are personal speed dials 918 = digit 1 and 919 = digit 2.

#### **To enable dial thru.**

2. MB 40.13. This is a new MB. Levels 1 and 2 are preset to go to Personal speed bins 918 and 919.
3. 40.02.03: This is where dial thru can be turned on via PC Pro or the station user can turn it on/off via their mail box by dialing service code 68#.. In MB 40.13.xx All 10 dial levels can be enabled allowing the mailbox to be used as a nite Auto Attendant. Note there is no dial thru only single digit dialing in a mail box.
4. A digital station user can change personal speed dials 918 and 919, however analog phone users have to have these set from PCPro or WebPro..
5. Prompt playback Volume : MB 40.10.06 Sets play back level. Should be set to 32 as default.

#### **Voice Mail Access from Outside Line: Release 1**

1. Dial in to listen to your personal greeting.
2. After your greeting has ended, two short beeps will be heard.
3. Enter your password (**Must Have**).
4. Dial #.
5. You now have access to the service code options for your mailbox,

(e.g. dial **1#** to listen to your messages).

**Voice Mail Access from Outside Line: Release 2 and later**

1. Dial in to listen to your personal greeting.
2. While the greeting is playing press Star \*.
3. Enter your password (**Must Have**).
4. Dial #.
5. You now have access to the service code options for your mailbox, (e.g. dial **1#** to listen to your messages).

**Voicemail IPKII: Normal Elite VMS inskin mail is being used at this time.**

**ACR/ARS/LCR what ever you want to call it**

1. PRG 14.01.23 Set LCR ON to those trunks that need it.
2. 26.01.01. Set ARS on.
3. 26.01.04. Set LCR mode to Not UK Mode.
4. 26.02.01 Insert digits to analyze.
5. 26.02.02 Set "service type" to Route To Trunk Group.
6. 26.02.03 Set "additional data" trunk group number . Normally 1
7. 26.02.06 Set "LCR carrier table". Use 02 or latter.. Don't use 01 as this is a special table.
8. 26.05.01 set "delete digits" for LCR carrier table ( carrier 02)
9. 26.05.02 "Access code". Means digits to add in front of dialed number..
10. Interdigit timer for ARS calls in 20.03.04 (believe it or not)

**Nite Service.**

There are 8 forms of day/nite service available to users. These are call modes. Below are DID and CO type of nite settings. These are the most basic setups. More complex routing can be setup if desired..

1. PRG 12.01.01 Enable manual nite service
2. 20.07.01 : Set manual nite switch in station CLS.
3. 12.01.02 This can be used to enable auto nite service set up.
4. 12.03.xx: Setup weekly auto nite switch modes.
5. 12.04.xx: Set holiday schedule.
6. 12.05.xx:Set up nite switch group for stations if needed
7. 12.06.xx : Set up nite switch group for trunks if needed
8. 12.07.xx : Define text message to appear in day/nite mode.
9. 15.07.xx Setup nite switch button on operators station. I.e. (01. 818) Separate mode switch buttons can be programmed onto a set.
- 10.22.02.xx : Set Incoming call type to DID for nite modes that are required on used trunks.
- 11.22.10.02 : Check what the 1<sup>st</sup> DID table is in DID area 2. Should be 201
- 12.22.11.xx Find the DID translation table that you want to re-route at nite. I.e table 1 day = 1 table 2 nite = 201 etc. Got to nite table and enter indial info and destination..

- 13.22.13.xx : Set nite mode conversion table i.e. Day = mode 1 table 1. Nite = mode 2 table 2. (Sets trunk group to DID conversion table)
14. Nite mode can also have an off premises number in place of an extension number in MB22.11.xx target number.
15. To test. Dial 818 and enter digit 2 . Display should day Nite and routing should have change. Dial 818 and enter digit 1 and system should return to day mode..
16. CO nite switching. Use the MODE settings to route to NITE switch destination.

### **Topaz ACD/UCD**

The Topaz can simulate a basic ACD by using the department group function. 32 Groups can be set up. A station can only be in one group.

1. 11.07. Setup number for of group. Use groups 1 to 31 as group 32 is the default group for all stations. If you use group 32 you may find the calls fall into a black hole of spare stations or virtuals. Set up group pilot number, this is a virtual number i.e. 350
2. 15.07.xx Setup group logout buttons on digital sets. Function is 46. The stations in this group are logged in by default and have to press this button to exit the Q. (Make busy button) Normal calls still go to this station
3. 16.01.01. Go to the extension group number that you want i.e. 1. Enter group name.
4. 16.01.02: Set type of hunting Priority (skill based) or circular.. If Priority used, set up skill set answering order. I/C calls will always go to priority 1 first.
5. 16.01.03: Set routes when busy to "routes to idle member"
6. 16.01.04: Set hunt type to circular.
7. 16.01.05: Set to "All ring" if required. (usually turned off.)
8. 16.01.09: Delay before hunting to next agent default = 15 secs.
9. 16.01.10: Set hunt type to "No Hunting"
10. 16.02.xx Add agents to group 1, 2 etc
11. Set up DID to group pilot.
12. If VRS or voicemail installed. Set delay messages. These messages only kicks in if all agents busy. If all agents are logged out the caller will receive busy tone. No message kicks in if there is no answer.  
22.15.01: Set delay time to when first message starts on all agent busy call. 1 = immediate , 15 = 15 seconds
13. 22.15.02. VRS message number to play. Default = 49.
14. 22.15.03: Number of times the first message plays. Repeated every 30 seconds.
15. 22.15.04: Second delay message number to play when 22.15.03 expires.
16. 22.15.05: Number of time the second message plays. Repeated every 30 seconds .
17. 22.15.06: What plays to the caller after 1<sup>st</sup> message has played.

- 18.22.15.07. Time after message 2 has been played for the last time and drops call. 0 = never releases.
19. Record VRS messages if needed. I.e. Dial 716, Press 7 to record, Message number , Record message + # to end..
20. To transfer a call to a Department group from a DSS button does not work. The method of doing this is:
  - a. Make a type 01 DSS with the virtual station number.
  - b. Go to MB24.06 . Locate the virtual and set to "Fixed Call Forward Immediate" and put the Dept group number in the destination box.

This method can also be used on the IPKII however there is a full functional ACD available as an extra cost item for the IPKII.

### **Toll Restriction Override**

The Topaz have 500 different Walking Toll PINs to allow users to override toll barring. This is not extension based but user based..

1. Set up toll bar class for extensions.
2. Go to 11.11.36: Set up walking toll restrict dial access code . Default = 763.
3. 20.08.06: Make sure that Toll restrict override is set to ON.
4. 21.01.07: Toll restriction override timer. Default 10 seconds. This is the time the system waits for you to dial after entering the override code before restrict is applied again. (treat with grain of salt)
5. 21.14.01 : Enter walking PIN. 6 Digits in length (Max 500 entries)
6. 21.14.02: Enter toll class for this PIN.
7. Make sure that MB 35-02-07 is turned on to output the PIN ID in the SMDR.
8. To test. Dial access code (default 763) + PIN+ get internal dialtone + dial 9 plus the outside number. If SMDR is active the output line should show W/xxx i.e. W/001 for the PIN entry that was used at the end of the line... It will not output the PIN.

### **Call Forward Off Premises**

This feature is not set by default. Steps to get this to go are:

1. 20.11.12 Set Call forward off premises for station CLS
2. 14.02.08: Set reversal of answer to all trunks.
3. 14.01.13: Set trunk to trunk transfer on all trunks
4. 21.03.01: Set trunk route to 1 on all trunks to allow external call forward.
5. 21.03.02 Set to trunk group 01
6. 14.02.12: If using analog trunks this must be set to on.
7. If using analog trunks answer reversal and clear forward must be enabled on the trunks by the telco.
8. MB 24.02.07: Trunk to trunk forced disconnect . (default = 1800 sec/30mins) This can be reduced if trunk supervision is not available.
9. To test. Dial CF Code (713) Dial 6 + 9 + PSTN number + hold. To cancel (713) + 6 + hold

10. The above program steps basically apply to Fix off premises call forwarding..

### **Dial Block.**

This allows a station or operator to lock a phone from making outgoing calls. This is password controlled by the user. I.e. The station user decides the password when they lock the phone. Only the supervisors password is programmed .

1. Setup toll bar classes.
2. Go to 11.10.17. Set up supervisors dial block code (701)
3. 11.11.33 : Set up station users block access code (700)
4. 20.06.01: Set station class of service if different from default (1)
5. 20.08.08: Set dial blocking to ON (OFF)
6. 21.09.01: Set dial blocking toll class when supervisor blocks calls. (1)
7. 21.09.02: Insert supervisors block/unblock pass word.
8. 21.10.xx: Set toll class for blocked stations when they are blocked.
9. 90.19.xx: This is the area that blocking can be cleared in the event that the station user forgets the block password.
10. Toll override with PIN overrides Dial Block (handy)
11. To test dial 700 + "password" + 1 to turn on and "password" + 0 to turn off.

### **Paging External:**

External paging can be provided via the outer pins of the MOH/PGR RJ11 jack on the KSU. External paging is turned on by default (pager group1)

1. PRG 31.04.xx Set up pager groups. They should be Ok in default state.
2. 31.06.xx Go to item speaker 7. This is the speaker jack on the KSU.
3. 31.06.01: Pager start tine. This is the chime first heard when the external pager is accessed.
4. 31.06.02: This is the chime heard after the pager message. Set to non if the customer complains. (default turned off)
5. 31.06.03. Set this to both way if the paging system allows it. Most pagers are one way..
6. 31.06.04/05: Sets pager levels..
7. To test . Dial pager access code (803), Press 1 for external pager group. Listen for chimes and then message..

### **Bothway DSS**

This feature is not documented in the Feature Manual but it can be setup. By default a DSS is one way. Red when station is busy or when pressed the station is called. The method to setup a both way DSS is.

1. Go to function key programming 15.07.xx and add Function number = \*03 and data = DSS station number.

2. PRG 15.02.21: Set to DSS. If set to outgoing you will receive internal dial tone rather than call the DSS station.
3. 15.09.xx: If you want the DSS to ring on an I/C call go the DSS key and set mode 1 to ring. Modes 2 to 8 are nite service ring settings..
4. 15.11.xx If you want the ring to delayed go to the DSS key and set to Mode 1 to delay ring. PRG 20.04.03 for delay timer.
5. 15.02.07: Trunk Key Depression . Set to **Hold**. If you want to transfer trunk call to station.

NOTE!! If the customer wants a visual indication of DND you will have to make the DSS buttons as type 01 DSS rather than B/W DSS

### **DID to VRS (AA)**

This is not a supported feature in this release of the Topaz however below is a work round

1. 22.09.01 Set number of digits to receive from telco per trunk group.
2. 22.10.01 Conversion area start 1 end 200.
4. 22.11.01 Inbound digits received.
5. 22.11.02 Destination of virtual for CFNA (If you want to go to the AA directly leave this field blank)
6. 22.11.03 DID name (DNIS)
7. 22.11.04 Set to No answer /busy (MB 22.01.06 sets this NA timer)
8. 22.11.05 set to 400 (DID)
9. 25.02.01 Set mode to VAU . Set additional data to message number i.e 01
- 10.25.06.01 Set single digit dialing. If dial station is required leave the first digit for that level blank. If multi level at next AA message number.
- 11.25.07.11 Set delay until answer. 0 = immediate answer..
- 12.25.07.01 Time to wait for user input. Set for 10 seconds
- 13.25.03.01 Set ring group for call to go to after timeout..
- 14.22.04.01 Set stations in ring group. Default Ext 200
- 15.25.07.02 Sets the no answer timer. If para 15 and 16 aren't set the call will cut of after the timer in 25.07.02 expires
- 16.Go to PRG 24.06.xx and set CFAll for virtual to a vacant number . i.e 400. This will cause the system to think the virtual is busy and route to the AA.
- 17.Record VRS messages. I.e. Dial 716, Message #, Record message + # to end..
- 18.NOTE: Do not change MB 25.01 otherwise the AA dial thru will not work.**
- 19.IPKII. You can DID to any of the 48 AA messages.**

### **External Voicemail**

This has been tested in the lab but not used on a customer site. This mail systems uses " Integrated Inband" signaling from the Topaz to the voicemail system.

1. Select the stations that you want to use as voicemail ports.

2. PRG 15.03.03 Go to the selected stations and set Terminal Type to **Special**.
3. 11.07.xx Select a spare department group (not group 1) and assign a Dept group pilot number i.e **444** . This will be the voicemail pilot number.
4. 16.01.01 Enter dept group name i.e. **Voicemail**
5. 16.01.02. Set to **Circular Routing**.
6. 16.01.03 Set to **Route to Idle Member**.
7. 16.01.04. Set hunt mode to **Circular**
8. 16.01.10 Set Enhanced hunting type to **Busy/no answer**.
9. 16.02.xx Put your assigned VM stations into the department group that you have selected for voicemail.
- 10.45.01.01. Enter the Dept group number that you have selected for a voicemail group.
- 11.45.02.01. Ensure that this is set to **Sending DTMF Tone to SLT/VM Port**.
- 12.The current MWI set code is 726 + mailbox number MWI cancel is 871 + mailbox number. Call back to voicemail is to your VM pilot or by dialing MWI call back code 841
- 13.Below are a list of the integration strings. You may not know what they mean but your voicemail vendor will..
- 14.MB24.06.xx Fixed forwarding can be set to mail if required.

#### **Integration info strings sent to Voicemail from the Topaz**

Direct login to mail from station 201 \*\*\*1201 \*\*\*1(from station)  
CFNA internal \*\*\*5200201 \*\*\*5(calling sta)(called sta)  
CFBusy internal \*\*\*4200201 \*\*\*4(calling sta)(called sta)  
CF All Internal \*\*\*3200201 \*\*\*3(calling sta)(called sta)  
CFNA External \*\*\*5001201 \*\*\*5(I/C trunk)(called sta)  
CFBusy External \*\*\*4001201 \*\*\*4(I/C trunk)(called sta)  
CF All External \*\*\*3001201 \*\*\*3(I/C trunk)(called sta)  
DID to the VM pilot \*\*\*6001 \*\*\*6(I/C trunk)  
Voicemail release code 9999 (sent from Topaz to disconnect the mail trunk)

**NOTE.** This has now been tested on a real voicemail. The integration had a 50% success rate . This is caused by the fact that the Topaz sends the integration DTMF string to the voicemail as soon as the mail answers. This can cause the first digit of the string to be lost... This will be fixed in a later release..

#### **Remote Access:**

There are three known methods of accessing the Topaz via remote.

#### **Connecting a Modem Topaz**

Connect a modem to the Topaz KSU via the EXFIU-A1/B1 card using a RS-232C serial cable. Connection to the EXIFU card requires a DB9 Female, while connection to the modem will depend on the requirements of the modem itself. Refer to section 1.6 for cable configuration details.

Configure the modem as follows:

- 1) Set Auto Answer On.
- 2) Port Speed – assign the required port speed for Topaz in system programming (PRG 10-21-02) and set the modem port speed to the same rate.

These settings can be performed manually or automatically. Manual settings will be made using HyperTerminal, however the settings will also be applied automatically whenever the system is reset (hot or cold) or PRG 10-21-02 is changed, as long as the modem is connected to the EXIFU-A1/B1 card and powered on at the time.

Ensure that jumper **CN10** on the EXIFU-A1/B1 card is set to position **1-2** (default setting).

The following facilities are supported via a modem connection:

1. PC Programming (PCPro),
2. SMDR data,

**IPKII: The modem is mounted on the CPU card. Modem access code is in MB 11-15-14 Default \*67 Put this into the DID table for remote access. Like IPK1 it can only be accessed via a trunk call.**

**LAN remote:**

1. Set up the EXIFU-A card IP with a fixed address to one in the customers range.
2. Arrange for the customer to setup any routers in their network to be able to access the Topaz switch. Their administrator can access the system or systems on their LAN/WAN with PCPro or WebPro.

**Via the WWW:**

**PCPro.**

1. MB 10.12.01: IP Address of the EXIFU card. Setup a fixed IP address that the companies IT manager gives you. i.e 10.0.1.213
2. 10.12.02: Set up the sub mask to equal the type of IP address set up i.e 255.255.0.0.
3. 10.12.03: Set up the companies default gateway address. i.e 10.0.0.17
4. Arrange for the IT manager to “pin hole” their ADSL router to the IP address in MB 10.12.01 and use port 8000

**This method of access has been found to be unreliable on Topaz systems but works fine on IPKII systems.**

**WEBPro**

1. In the customers ADSL router set up the internal IP address of the Topaz system Set the internal port to port 80 and the external port to port 81. Set the protocol to TCP. Some ADSL routers can't do this so use port 80 for all.
2. Accessing the system. In your web browser enter the IP address of the customer's router followed by port :81. ie. <http://210.256.321.987:81>

**Ringling Multiple phones via the Automated Attendant:**

This call flow is where a customer wants to access a group of phones via the AA. Normally the single digit dialing would be routed to a department group

that has MB 16.01.05 set to Automatic will ring all extensions. This works for internal calls to department groups but not from external calls. Unfortunately you can not route a AA call to a ring group via single digit dialing.

There is however a work round that will work with one ring group only.

1. MB 22.04.xx. Set the phones you want to ring into a ring group say RG2.
2. 25.03.xx **Transfer ring group with incorrect dialing.** Set the mode that you are using. I.e. mode 1 = day , mode 2 = nite on the trunks that you are using to access the AA to the ring group set up in MB22.04. This is an error trap
3. 25.06.xx Set the single digit level that you want to access the extensions with an invalid number i.e. star \*

When the call comes into the AA and the user dials single digit to access the ring group this will be routed to \*. As \* is invalid the error trap set in MB25.03.xx will route the call to RG2 set up in para 1.

### **TRUNK GROUP ROUTING:**

Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (9) for trunk calls. Trunk Group Routing routes calls in the order specified by system programming. If a user dials 9 and all trunks in the first group are busy, the system may route the call to another group.

1. 14.05. Place trunks in their appropriate trunk groups. By default all trunks are in TG1. i.e. Tks 1,2,3. in TG1, Tk 4 in TG2,
2. 14.06. Routing Table trunk group selection order. In each route table place the trunk groups to access in their priority order. I.e Route Table 1 has P1 = TG1 and P2 = TG2. Route Table 2 has P1 = TG2 and P2 = TG1.
3. 21.02. Assign the routes set in 14.06 to extensions. I.e ext 200 points to route table 1 in Mode 1 and ext 201 points to route table 2 in mode 1.

This feature can also be used to allow access to certain trunks by certain stations.

### **Call Forward No Answer Off Premises:**

The Topaz Unlike the Xen/IPK system will not allow a station to set CFNA off premises. By default CF OPX via service codes or fixed forwarding is immediate. However you can CFNA OPX via a system speed dial.

1. 13.04.XX Add to the speed dial list the external destination i.e. 009
2. Go to the station that you wish to setup and dial 845 + 1 + speed dial bin (\*009) + hang up
3. To cancel dial 845 + 0 + hang up.
4. This now works correctly with software version 2.01c

**Station User Name Change:**

A customer changes the name in the following two operations.

1) Changing their own name.

- a) Get dial tone and dial 800.
- b) Enter Hold
- c) Enter name by using the alpha keypad. Press \* to use other characters, DND/Conf to backspace by one character. If name = "GLENN" to move to the second "N" position press #. To put a space between first and last name enter ##.

Press Flash to add other characters by pressing \* or Japanese characters via the alpha keypad.

Press Hold once finished to save and hang up to exit.

2) Changing another extns name.

- a) Get dial tone and dial 800.
- b) Enter EXTN and press #
- c) Enter name by using the alpha keypad. Press \* repeatedly to use other characters, DND/Conf to backspace by one character. If name = "GLENN" to move to the second "N" position press #. To put a space between first and last name enter ##.

Press Flash to add other characters by pressing \* repeatedly or Japanese characters via the alpha keypad.

Press Hold once finished to save and hang up to exit.

**TIME: HOW TO CHANGE THE TIME.**

- a) Get dial tone and dial 828
- b) Enter Hours and Minutes in 24hr clock I.e. "2345"
- c) Hang up.

To change the date you will need to be logged into program mode from a display phone.

Prog. No.	Item	Input data	Default	Description
10-01-01	Year	00-99	No setting	Enter two digits for year (00-99)
10-01-02	Month	01-12	No setting	Enter two digits(01-12) for the month
10-01-03	Day	01-31	No setting	Enter two digits(01-31) for the day
10-01-04	Week	1-7 (Sun-Sat)	No setting	Enter digit for the day of the week (1=Sunday,.....,7=Saturday)
10-01-05	Hour	00-23	No setting	Enter two digits(00-23) for the hour
10-01-06	Minute	00-59	No setting	Enter two digits(00-59) for the Minute
10-01-07	Second	00-59	No setting	Enter two digits(00-59) for the second

Press HOLD to go to next field.

### **HOTLINE.**

Hotline in the Topaz does not work like the Xen and IPK systems. MB 21.11.xx is a delay Hotline to another station or outside destination. If you set this hotline on you will go to this destination after the timer in 21.01.09 expires. MB 20.08.09 must be set in the station CLS for this to work.

To Hotline a fax to a PSTN line, use MB 15.01.02 Outgoing Trunk Line Preference. Set to on. This will give trunk dial tone when the station goes off hook rather than internal dial tone.

### **LIVE CONVERSATION RECORD: Topaz only**

Live record similar to that of the IPK system can be set up with the Topaz System.

1. Set up Mailboxes as in the Voicemail section.
2. Setup on each Digital station a record button. This is a type 69 addition data = 0. Or on PCPro 69: Record Service button.
3. MB14.09.01 On the trunks that are going to be used for live record add the "Destination Extension" This is the same as the VM access number set in 11.12.39 (Default 884)
4. 14.09.03 Set "Save to own mailbox"
5. 15.12.01 Set record destination Extension in each extension. This is the same as the VM access number set in 11.12.39 (Default 884)
6. 15.12.03. Set to "Save to own mail box"
7. Operation. Call in or out of the system and pres "Record button" The LED will come on and CONV.REC will be displayed on the set. Press the button again to stop recording. The MWI lamp will flash when the record mode stops and it will be left as a message in the users mailbox.
8. If the situation arises where a station user wants to record a conversation and place it in another mail box MB 15.12.03 should be set to "Save to dialed mailbox" for the station doing the recording. Set MB 40.04.01 to "Call Back" When the Live Record button is pressed the conversation will be recorded. When the call finishes the voicemail will call

back to the station and ask for a mailbox number to be entered. The user enter that mailbox where the message is to saved to and voicemail will say "The message has been saved"

### **Operator Delay Message Answer for CO Trunks:**

If you have a VRS or Voicemail card installed on the system you can have an operator delay message for no answer.

By default station 200 is in ring group 1. This is the ring group that rings when a CO call terminates on the system. Setup. The same as ACD delay announce.

1. MB22.14.01 1<sup>st</sup> Message start time. How long the call is ringing before the 1<sup>st</sup> message plays.
2. 22.14.02 The message number to play.
3. 22.14.03 : The number of time message 1 plays before it play message #2
4. 22.14.04: The second message number
5. 22.14.05: The number of time message number 2 will play/
6. 22.14.06: decides what to play to the caller after the delay messages . Default = ringback tone.
7. 22.14.07: After message 2 has played for the last time this is how long before the trunk is forced disconnected.
8. Note . The ring pitch on the operators phone changes when the first message kicks in..
9. Second message delay timer is 22.01.11

### **VPN:**

This setup will give a rudimentary VPN system. This works similar to Closed Number Block signaling on the Xen systems. If there are number plan conflicts this method may not be used.

**1. I have created a TIB on a basic VPN.. Contact me if you need it**

### **Voice Message After Going To Ring Group. CO Trunks:**

Recently a configuration required a call going to a ring group that was not answered a nite message was played and a voicemail left in a mail box of the nite bell. With thanx from the TAC at NECA we can show you how it's done. Below is a typical call setup.

Mode 2 = nite mode. Call comes into nite bell on station 206. This is the only member of RG2. When the RG timer expires the caller hears the nite greeting from the VRS card and a record "beep" After the message is left it sets off the MWI to MB 206

Calls come into system on nite mode 2. Rings the nite bell 206. After timer 22.01.04 expires the call goes to VRS and plays AA message number 02 and then records the incoming message and dumps into nite bell mailbox 206.

1. MB22.02 Tk 1 mode 2 = normal
2. 22.04 Nite bell 206 only member of RG 2.
3. 22.05 Tk 1 Mode 2 goes to RG 2

4. 22.08 Tk 1 mode 2 goes to 101 VRS on no answer
5. 40.02. MB for 206 setup. (port 007)
6. 40.06 Mode 2 to AA, Guidance MGS number 2, leaves message in MB 206. **NOTE** .. In MB 40.06.03 The voicemail port number 007 is entered in this field rather than the mailbox number 206. Also and dial thru action is done with MB40.13 of the mailbox that is to receive the message not in the AA one touch area..

### **Timers.**

Below are a list of commonly used system timers. ( ) = default

- 22.01.06 : DID No answer timer (20). Timer for target number in 22.11.05  
22.01.07 : DID incoming ring group timer (20). Timer for 22.11.06 if 22.11.05 was a ring group.  
22.01.04 changes the ring delay timer for first ring group to second ring group.

### **Delay Ringing then forwarded to AA. CO trunks Only.**

1. MB 22.04. Station 200 is the only phone in ring group 01. That means that on I/C CO calls only this phone will ring. If you want other stations to ring straight away add them to this ring group. If not read on.
2. 22.02.xx : Set Incoming Call Setup on the trunks you want to use to "Delay VRS/DISA" .
3. Delay time for this is feature is 25.07.14 Delay DID Answer Time. Set this longer if needed. (default 10 seconds)
4. Set up VRS as normal.

### **PSTN Call Transfer with DSS button.**

Telecom NZ provides a service that allows NON Centrex lines to do a Centrex like transfer. This can be achieved in the topaz with a one touch DSS button.

1. MB15.07.xx Program a DSS button (type 01) with R5551212. Where R = hoop flash, 5551212 = external number. A pause is not needed as there is a dial pre-pause of 1 second already programmed into the system.. The Topaz user MUST wait until ring back tone is heard before they hang up to complete the transfer. If they hang up before ring back tone is heard the call may recall or be lost..

### **Caller ID Outgoing:**

This works much the same way as on the Xen systems.

1. MB 21.13.xx In the case of Telecom NZ enter the 7 digit DID number that is valid for this station. I.e. 3573403 . When a call is made from this station this number will be displayed . If this entry is blank the billing or ISDN pilot number will be displayed.
2. Telstra Clear format for IPK2 is BRI Toll access code + area code + XXX XXXX (095551212) and PRI is area code + XXX XXXX (95551212)

**DID to Ring Group.**

1. Set up ring groups and members in MB 22.04
2. Set up DID area in 22.11.01 in the normal way.
3. Set 22.11.02 Leave this entry blank.
4. set 22.11.03 in the normal way.
5. Set 22.11.04 to busy/no answer.
6. set 22.11.05 to the desired ring group. i.e. 1
7. set 22.11.06 to a secondary ring group if required i.e. 2. MB 22.11.07 controls the ring group timer (20 secs)

**Headsets and Loop keys:** Loop keys on the Topaz work differently than those on the NEC IPK system. They work more like an ICM key on a PBX. Headsets when used on the Topaz have to plug into the jack where the handset plugs into and must use an amplifier box. A type 05 Headset button must be programmed on a digital set to make and answer calls. The combination of Loop Keys and headsets creates problems with call flows. Two problems have been discovered

- a. Calls transferred to a ring no answer can not be retrieved if the loop key is not lit up. Usually happens when a call has been picked up and transferred.
- b. A call is transferred to a station who rejects the call. The reject station hangs up the call vanished from the transferors phone.

There are some work rounds for this.

1. To retrieve a RNR call the transferor must press the "Call" and then the "Transfer" buttons to talk to the outside line.
2. MB 20.02.09 Disconnect Supervision needs to be disabled. When the reject station now hangs up the transferor will now receive busy tone and see Hang Up on their screen. They then press the "Transfer" button to talk to the outside party.
3. Software release 2.01 has made headset operation better but still has a way to go when using loop keys

**FAX Extensions:** Recently a site experienced problems with fax machines receiving camp on tone during a call. This is my suggested method of setting up a fax stations. This is more likely to be a problem with ISDN rather than analog trunks..

1. MB15.01.02: Set to "Outgoing Trunkline Preference (by passes dial 9 for PSTN access if needed)
2. 20.06.: Put the fax stations in CLS3
3. 20.09.01: Set second call to OFF.
4. 22.11.07: Set Call waiting to OFF. (ISDN calls only)

**Cell Interface box with Route advance:** With the introduction of Cell interface boxes from mobile carriers the need has arisen to explain how to set this up with route advance feature so that if the cell interface box is busy the calls will overflow to the regular trunks. If the route advance is not needed use the regular LCR setup.

- c. MB 14.01.23 Set LCR ON to those trunks that need it.

- d. 14.05.xx Put cell interface box into Trunk Group 2.
- e. 26.01.01. Set ARS on.
- f. 26.01.04. Set LCR mode to Not UK Mode
- g. 26.02.01 Insert digits to analyze Typical "02@"
- h. Set "service type" to "F-Route Access"
- i. MB 26.02.xx set additional data to 1 (F-Route table #1)
- j. 44.05.01 . (F-Route table 1) set trunk group detour order 1 = 2 and 2 = 1 (picks trunk group 2 first then trunk group 1) Leave all other fields as is..

**TANDEM RINGING:**

The Tandem Ringing feature assigns an SLT to ring in tandem with an MLT. It can not be set from an operators station as defined in MB 20.17.

To set from MLT only:

1. Press Speaker or lift handset for internal dial tone.
2. Dial access code 744.
3. Dial 1 (to set).
4. Dial SLT extension number.
5. Go on-hook.

The MLT indicates on its LCD that Tandem Ringing has been set. Now when the MLT receives a call, both MLT and SLT start ringing. The tandem SLT no longer operates as an individual phone and cannot be called directly.

To cancel from MLT only:

1. Press Speaker or lift handset for internal dial tone.
2. Dial access code 744.
3. Dial 0 (to cancel).
4. Go on-hook.

To transfer a call to a "Tandem Ring" station via a DSS button it must be set up as a type 01 DSS rather than a \*03 type of DSS used in our defaults.

**DID multi forward and then leave message in MB**

This call flow allows a DID call to go to the 1<sup>st</sup> station then CFNA to a 2<sup>nd</sup> station, then to an AA message and leave a message in a predefined mailbox.

1. MB 22.04 Set up second station in a ring group. I.e. RG2
2. 22.11 set up DID to first station in normal way. In MB 22.11.04 set to Busy/No Answer.
3. 22.11.05. Set to second Ring Group number.
4. 22.12. Set "Dial In Conversion Table" for Mode 1 to 101.
5. 40.06 Trunks 4 and beyond set "Guidance Message" to a spare AA message i.e 10 and "Msg Box For Leaving Message" to the mail box number that you want this message left in i.e 1.
6. Record the AA message 10.

Call flow. When the caller rings on the first phone it will ring. When the timer in 22.01.06 expires the call will ring the RG defined in 22.11.05.

When the timer in 22.01.07 expires the call will be routed to AA message defined in 40.06. The caller will hear the message and after leaving the message the MWI in MB 1 (station 200) will flash.

**COT Multi forward then leave message in MB.**

This call flow allows an analog CO call to go to the 1<sup>st</sup> station then CFNA to a 2<sup>nd</sup> station, then to an AA message and leave a message in a predefined mailbox.

1. MB 22.01.04 set timer to 20 seconds.
2. MB 24.02.03 set timer to 15 seconds
3. 22.02. Tk #. set to DIL
4. 22.07. TK #. set DIL destination.
5. 22.08.TK #. set to 101 (VMS)
6. 24.06. Station No. Set fixed forward to CFNA and then destination of second call
7. 40.06.TK #. Mode to AA, AA message number to be played to callers and destination mailbox to leave message in (destination MB number is the mailbox port number not station number)

Operation.: Call comes in and rings 1<sup>st</sup> station, When timer in 24.02.03 expires the call goes to the second station. When timer 22.01.04 expires the call goes to the AA message specified in MB 40.06. MB 22.01.04 must be higher than MB 24.04.03..

**Misc functions.**

2. **CallerID.** This is turned on by default. However PRG 15.07 a CallerID list button can be programmed onto digital sets Function = 08 . When a missed call arrives the LED will flash . When the list has been reviewed it will stay steady. Callers can be called back by lifting the handset.
3. **I/C Speed Dial Name Display.** This is turned on by default and will use the lookup table for the system wide speed dial lists.. Analog CO trunks do not display the 0 as a part of the Caller ID..
4. **SLT internal ring cadence change** Prg 15.03.12
5. **Analog trunks. Rev on answer** PRG 14.02.08
6. **Out going trunk picking order.** By default trunks are picked the order of 1,2,3....20 PRG 14.05.xx allows the pick order to be changed by changing the trunk priority. Circular hunting can be set in 21.01.01
7. **Pickup groups.** These are set in 23.02.xx There are 32 pickup groups. See also PRG 11.12.26, 27, 28, 29 for numbering plan..
8. **Ring cadence** for internal and external calls. PRG 20.15.xx if you need to change them..20.15.09 is used for transferred ring cadence.

9. **Centrex Transfer with One Touch Button.** In PRG 15.07.xx Program a button as a DSS (01) with i.e FP15551212. Where F = Hook flash on the trunk, P = pause, 15551212 = the number called
10. **20.02.09 Disconnect Supervision.** Set to Enable. This allows a Dterm making a hands free call internally or via ISDN to go back to idle when the other party clears. Should also work on analog trunks.
11. **24.02.01 Allow trunk transfer to busy stations.** Allows station user to transfer an incoming call to a busy station and camp the call on. If you have trunk appearance keys they will stay green until the called station answers. If they don't answer the call will recall. If you don't have trunk keys you can't pull the call back..
12. **Camp on Muted ringing change :** MB 15.02.12 can change this from muted ringing to a beep thru the phone speaker or thru the handset. Extension terminating calls only. Does not work when phone is in handsfree mode you must be using the handset..
13. **24 Hour time mode.** MB 20.02.07. Set to 1 for 12 hour mode (default) or 5 for 24 hour mode.
14. **Analog Trunk to trunk transfer.** To enable this feature MB 14.02.12 needs to be turned on for each trunk. **NOTE.** The trunks must have Answer reversal / Clear Forward enabled by the carrier otherwise the trunks will lock up after the call has completed.
15. **Music On Hold.** By default this is set to internal music. MB 10.04.01 sets to external. MB10.04.03 sets the music level. External music is wired to the center pins of the MOH/Music jack.
16. **Retrieving calls that have been put on hold after Call Pickup.** If a station has only loop keys rather than trunk keys and the station does a call pickup the call does not appear under a loop key. If the call is put on hold it appears to vanish into a black hole until it recalls back to the station. We have found that if the station user presses the Transfer key the call returns to the station but still not under a loop key.
17. **Transmit levels of telsets:** MB 10.03.12 HBIU configuration. Use with care. The only reason that I could see for going into this area to change levels if there are issues with some headsets or modems..
18. **Fax Catchers:** Some Fax Catchers have a rather strange ringing cadence. i.e the silent period between rings is too long. This will cause the analog trunk to start to ring and then stop. The customer will have problems answering calls. MB 81.01.09 is a ring validation timer. Wind this out to 4800ms (4.8 seconds) seems to fix the problem.
19. **Manual Trunk Select :** 805 plus trunk number . i.e 805+01 for trunk 1.

20. MB 20.03.03 and 20.03.04 change the method of analog phone dialing from Que dial to direct dial. (Que now the default)

**21. Prevent CampOn ringing to transferred station:** MB 20.09.01 Second Call for VRS/DISA/DID/DIL - Uncheck this item. Note AA calls routed to the operators station from the AA will camp on with ringing and not follow fixed forwarding..

**22. Dial Pad Confirmation Tone:** Dial 824 to turn this on or off. Gives a beep every time a station button is pressed.

**23. Automatic dial thru during mail box greeting.** Recently a customer wanted to have a mailbox that when accessed the caller could not leave a message but go automatically to another destination. Bruce in Tauranga came up with the following.

- a. Set up a mailbox with level one as a dial thru level. Ensure that MB40.02 that dial thru is enabled. Plug in an analog phone, log into the mail box and record the users greeting. At the end of the greeting dial "1" and then hangup.
- b. When the caller dials in the here the message and the DTMF tone which will then do a trunk to trunk transfer.

I have found that this feature only seems to work on analog trunks and not on ISDN trunks so I would be cautious of offering that as a killer app solution..

**SLT Transfer after Call waiting.**

MB 20.02.01 is set to "Hooking" This allows an SLT to hook flash and talk to the second caller and then hook flash back to the first caller again. However if the station wants to hook flash then transfer the first call the MB should be set to "Hooking + Service Code"> This will give transfer dialtone and allow the SLT to transfer the first call before taking the second call.

**This document is a work in progress**

**Topaz Quick and Dirty Toll bar tables Topaz.**

Matching Tables		Permit Table	Rest table					Comm Rest	INTL Rest
Toll restriction ↓ class	<u>Description</u>			111 911	1 ~ 9 0800 0508 0125	01 ~ 09	021 025 027 029	0900	00
<b>01 Default</b>	Toll Allow, 0900 BAR	0	0	A	A	A	A	D	A
<b>02</b>	0900, IDD BAR	0	0	A	A	A	A	D	D
<b>03</b>	LOCAL	1	1	A	A	D	D	D	D
<b>04</b>	INTERNAL	0	2	A	D	D	D	D	D
<b>05</b>	LOCAL & CELL	3	1	A	A	D	A	D	D

Common Restrict = 0900.  
International Restrict = 00

Info: Common Permit MB 21.06.04  
Common Restrict MB 21.06.05  
Permit code tables MB 21.06.06  
Restrict code tables MB 21.06.07

**TOLL BAR TABLES FOR TOPAZ**

A = Allowed, D = Denied

**IPKII Quick and Dirty Toll bar tables.**

Matching Tables		Permit Table	Rest table					Comm Rest	INTL Rest
<b>Toll restriction ↓ class</b>	<b>Description</b>			111 911 999	1 ~ 9 0800 0508 0125	01 ~ 09	021 025 027 029	0900	00
<b>01</b>	All Free	0	0	A	A	A	A	A	A
<b>02 Default and Hotel Check in</b>	0900 Bar IDD Allow	0	0	A	A	A	A	D	A
<b>03</b>	Local and Toll	0	0	A	A	A	A	D	D
<b>04</b>	LOCAL	2	1	A	A	D	D	D	D
<b>05</b>	INTERNAL & Hotel	0	2	A	D	D	D	D	D
<b>06</b>	LOCAL & CELL	3	1	A	A	D	A	D	D

Common Restrict = 0900.  
International Restrict = 00  
Common Permit = 111,911

Info: Common Permit MB 21.06.04  
Common Restrict MB 21.06.05  
Permit code tables MB 21.06.06  
Restrict code tables MB 21.06.07

Use Toll class 10 for Hotel Rooms  
Use station class 10 for Hotel Rooms  
Use station timer class 10 Hotel Rooms

**TOLL BAR TABLES FOR IPKII**

A = Allowed, D = Denied