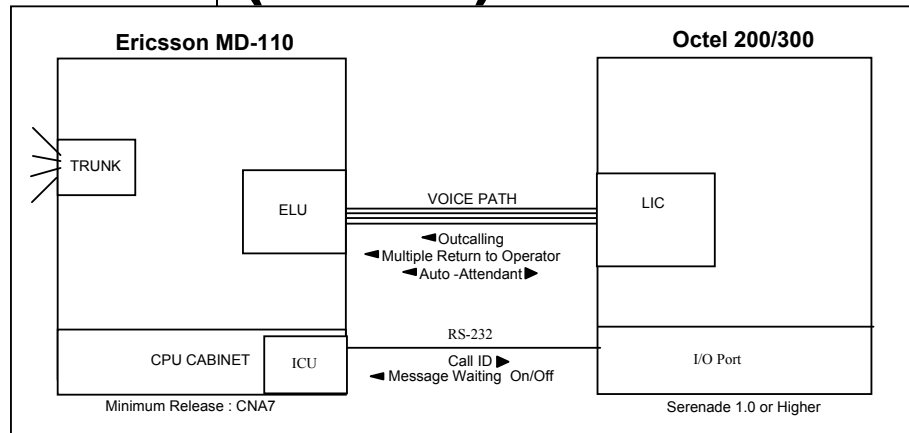


Octel 200/300

Message Server

## Configuration Note 6119 - Ver A (1/02)

# Ericsson MD-110 RS-232 Integration (EMEA)



**With RS232 integration, call information is transmitted over a digital RS232 link between the PBX and the Octel 200/300 message server**

**Octel 200/300 message server requirements**

### 1.0 METHOD OF INTEGRATION

With RS232 integration, call information is transmitted over a digital RS232 link between the PBX and the Octel 200/300 message server™. Voice communications are provided over separate analog lines on the PBX that connect to the Octel 200/300 message server. When an incoming call is received, it is accompanied by a digital message from the PBX containing call information. The Octel 200/300 message server then answers the call and plays the appropriate greeting. To set or cancel a message-waiting indicator (MWI), the Octel 200/300 message server sends a digital message over the RS232 link to the PBX.

### 2.0 OCTEL 200/300 MESSAGE SERVER ORDERING INFORMATION

- Adaptive Integration Software includes RS-232 integration software (F/P X0031)
- LIC 4, LIC 8, or DLC 16 - (4, 8, or 16 ports per card)
- Serenade 1.0 or higher (Refer to the PRM for earlier software releases)

**PBX hardware requirements**

- 25 pair cables with female end amphenol, one per line card, long enough to connect the Serenade line card to the PBX mainframe which then connects to PBX ports in the switch.

The connection to the Serenade line card is through a 25-pair amphenol, male connector.

- Software package SW-X0031 (Adaptive Integration)

**3.0 PBX HARDWARE REQUIREMENTS**

- ELU24 channels, one per Octel port
- One ELU24 channel for remote service access
- ICU card ROF 131 4421/2 R3A/3 or NIU card on BC10 s/w – please refer to section 8.4 in considerations.
- Minimum Firmware Level:
  - RYT/ROFU 131 0021/1 R1A P50

**PBX software requirements****3.1 PBX SOFTWARE REQUIREMENTS**

- Minimum Software: ASB50104, Release 1
- Supported Software Releases : BC-1 through BC-10 inclusive.
- Software patch required (*See section 8.2*)
- Options:
  - ILP      - DIR
  - MWP      - IHAH
  - DIM      - IHH

**Supported integration features****4.0 SUPPORTED FEATURES**

- System forward to personal greeting
  - ring-no-answer
- Station forward to personal greeting
  - all calls
  - busy
  - ring-no-answer
- Message-waiting notification
  - lights
- Automated attendant
- Multiple return-to-operator
- Outcalling
- Direct Call

## Configuring the MD110 data link

- Personal greeting of original-called party on a multiple-call forward
- Call Sender

**5.0 CONFIGURING THE MD110 DATA LINK**

Configure the ICU port using the ICFUP command. See figure below. Note : X=ICU card slot number and Y = the number of digits in the extension number.

**NOTE:** MD110 software release BC 5.0 requires that all PBX extension numbers be 4 digits long for proper operation of AI-MWI.

ICUIND	EQU	RATE	DFMT	UPDPCN	PARIITY	CCHECK	TXC
0	X	2400	Y	YES	EVEN	YES	YES

Configure the I/O data link to pass a three-digit/four-digit port ID number using the VMFUP command, as shown:

ICUND	VMF	POPMT
0	EXTND	3

## Configuring the voice lines

**5.1 CONFIGURING THE MD-110 VOICE LINES**

- Configure the ELU24 channels as follows:
- CAT=1
  - TYPE=EL6
- Configure these channels for all Class of Service features.
- Configure the hunt group using the GHDAP command. Assign the hunt group pilot number and set queue to 0. *See Section 8.2.*
- Configure the call diversion (call forward) target as the hunt group pilot number using the CDIDP command. The subscriber can then control call diversion (forwarding) from their phone.
- Application system parameter 56 defines how the phones will transmit DTMF tones. Set to 15 will allow the digital sets to send DTMF tones always. Set to 9 will require the subscriber to press 9, or press ETE button, to activate tone sending. Avaya MSG recommends setting this parameter to 15.

## Configuring the Octel 200/300 message server

### 6.0 CONFIGURING THE OCTEL 200/300 MESSAGE SERVER

- Refer to the Integration volume of the PRM for details of the configuration.
- System Parameter Table**
  - Set System Parameter 3: PBX TYPE / PBXMODEL = Ericsson MD-110
  - Set System Parameter 9: FLASH TIME (MSEC) = 130ms
  - Set System Parameter 13: TRANSFER INITIATE CODE
    - RE-CONNECT CODE AFTER NO-ANSWER: FE
    - RE-CONNECT CODE AFTER BUSY: FD
    - RE-CONNECT CODE AFTER FAST BUSY: FD
    - TRANSFER COMPLETE CODE: NONE

**NOTE: Verify that these dialing sequences match for your PBX.**

- Set System Parameter 26: DOUBLE INTERRUPTED RINGBACK = YES in UK and NO in Europe.
- Set System Parameter 45: SYSTEM RELOAD FORWARD STRING = \*2\*0#
- Set System Parameter 46: SYSTEM-RELOAD CANCEL-FORWARD STRING = #2#

**NOTE: Verify the system parameters 45 and 46 with your PBX Engineer and alter to match if required.**

- Set System Parameter 51: RS-232 INTEGRATED WITH PBX = YES
- Set System Parameter 77: PBX PROVIDES MOMENTARY DISCONNECT = NO
- Set System Parameter 78: PBX PROVIDES STUTTER DIAL TONE = YES
- Set System Parameter 116: INTEGRATION ACTIVE = NO
- Set System Parameter 117: RINGBACKS BEFORE ANSWERING AX PORT = 3
- Set System Parameter 130: SEND DTMF A TONES FOR FORWARDED CALLS = YES
- Set System Parameter 175: to match PBX network (eg. 4, 3, space, 1)
- Set System Parameter 180: RS-232 BYTE FORMAT FOR PBX INTEGRATION (e.g. = 0 for 7 BITS E/P)

- Set System Parameter 191: HOUR TO REACTIVATE MSG WTG INDICATORS = NONE. See Consideration 8.5.
- Set System Parameter 271: RS-232 INTEGRATION BAUD RATE (e.g. 9600 if set to this speed on PBX)

**NOTE: Verify the system parameters 180 and 271 matches the PBX link settings.**

Refer to the PRM for additional System Parameter Settings.

**Slots Table**

- Refer to the PRM Configuration Volume - Slots Table, for further information on how to configure the Slots Table.
- Configure integrated ports in AX mode.
- Ensure COS attribute 68 is NOT assigned to the port COS.

**COS Table**

- Add attribute 15 to all COS for extensions that are forwarded to Octel.
- Add attribute 9 to all COS for extensions with message waiting lamps.

**Prefix Digits Table**

- Refer to the PRM Integration volume and Configuration Volume for more information on programming the Prefix Digit Table.

**User Table**

- Extension numbers must match mailbox numbers for integration.

## 7.0 CONNECTING THE LINE INTERFACE CARDS

- Each LIC supports four, eight, or sixteen set appearances. Each LIC port connects to the PBX via the 25 pair connector at the rear of the Octel 200/300 message server. Connect each equipped port to the PBX. Ensure that all Yellow LEDs on the LIC are extinguished.

### Connecting the analog channels

**Connecting the serial channel****Steps to verify your installation when complete****7.1 CONNECTING THE RS232 CHANNEL**

- The data link connects to the J2 connector in the Octel 200/300 message server. Refer to the installation section of the PRM.7.2 Testing the Installation
- Create two mailboxes associated with two test extensions. Record a name and personal greeting for each.
- Forward one of the extensions to the Octel system access number.
- Call the above extension. You should hear the personal greeting.
- Leave a message. Verify that message-waiting indication turns on.
- Review and delete the message in the mailbox. Verify that message waiting indication turns off.
- Verify that transfer to attendant works properly.
- Call the Octel 200/300 message server from a test extension. You should “to enter your mailbox, press #. Press #, #. You should hear “Please enter your security code”. Enter the security code and verify that the correct mailbox has been accessed.
- Refer to the PRM for further testing instructions.

**Important notes regarding this integration****8.0 CONSIDERATIONS**

- 8.1 A patch is required on the PBX to expand the hunt group size limit.** Contact your Ericsson PBX representative for details and pricing.
- 8.2 The MD-110 Software BC 5.0 requires a patch from Ericsson so that the PBX sends call records before the Octel port answers.** If this patch is not available from Ericsson, set system parameter 174 to 3. If the patch is available, leave system parameter 174 to its default if zero.
- 8.3 This integration is Proprietary to Ericsson unless authorized by Avaya Inc.**
- 8.4 On the release of BC-10 software on the Ericsson MD-110 a new card has been brought out, known as the Network Interface Unit (NIU).** This new card gives an Ethernet connection to the PBX, to be able to administrate the PBX from a PC connected to a TCP/IP Network. There is also a couple of ports that can be configured as V.24 (RS.232). These ports can be configured so that the voice mail integration (GICI) can be used over the NIU card. Therefore an ICU card is not required.

There is, however, a new cable needed as the old cable will not work. The old cable for the ICU card was a Type TSR/9020039/1000. The new cable for the NIU card is Type TSR/9020459/10000 (10 metre V.24 cable). Please note this information has come from Ericsson and will require verification in the field. This is likely to be relevant on new installs as upgrades will still use the old ICU cards.

**8.5 Please note that an issue with MWI can occur on large systems if System Parameter 191 is set to any value other than NONE.**

Small systems have not been effected. It effects the larger systems with more than 1 limb whereby users phones may not have their lamps turned on first thing in the morning, even though they have new messages in their mailboxes and that we told the MD-110 to turn the lamps on for these phones during the night. O get round this problem, the MWI should be controlled by the MD-110 by setting up the parameters ICFUI and ICFUC. It is therefore recommended by Technical Support that System Paramater 191 remains set to NONE.

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