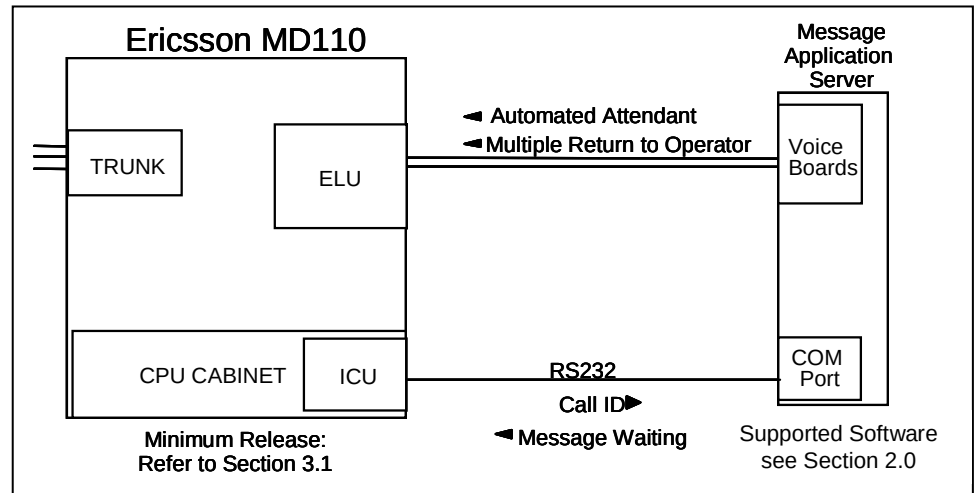


Configuration Note 88019 – Version L (1/10)

Ericsson MD-110



With RS232 integration, call information is transmitted over a digital RS232 link between the PBX and the Avaya Message Application Server

MAS requirements

¹ Release Note:

Should features of the integration not function optimally when integrated to a PBX or MM that may be operating on an unsupported software release as defined Section 2.0 and 3.1, customers will need to upgrade their PBX and/or MM to a supported software release.

PBX hardware requirements

1.0 METHOD OF INTEGRATION

With RS232 integration, call information is transmitted over a digital RS232 link between the PBX and the Avaya Message Application Server (MAS). Voice communications are provided over separate analog lines on the PBX that connect to the MAS. When an incoming call is received, it is accompanied by a digital message from the PBX containing call information. The MAS then answers the call and plays the appropriate greeting. The RS232 link also handles on & off message waiting indication.

2.0 AVAYA MESSAGE APPLICATION SERVER REQUIREMENTS

- Integration cables (PN 057-1580-000 & 003-1081-000)
- Dialogic D/41JCT-LS or D/120JCT-LS cards (4 and 12 port/cards)
- Releases ¹: 1.1, 2.0, 3.x, 4.0, 5.x

3.0 PBX HARDWARE REQUIREMENTS

- ELU24 *or* ELU29 channel, one per MAS port
- ICU2 card ROF 137 5397-1

- Minimum Firmware Level:
-RYT/ROFU 131 0021/1 R1A P50
- **Cables:**
 - RJ11 four-wire telephone cord, one per MAS port
 - TSR 901-0043/1700 and TSR 902-0038/15000 (order with female DB25)

The customer must provide the necessary hardware.

3.1 PBX SOFTWARE REQUIREMENTS

- Minimum Software ^{1 (see pg 1)}: ASB50104, Release 1
- Software Patch number 12198
- Options:
 - ILP -DIR
 - MWP -IHAH
 - DIM -IHH

4.0 SUPPORTED INTEGRATION FEATURES

[✓] Items are supported

System Forward to Personal Greeting

All Calls	[]
Ring/no answer	[✓]
Busy	[✓]
Busy/No Answer	[]

Station Forward to Personal Greeting

All Calls	[✓]
Ring/no answer	[✓]
Busy	[✓]
Busy/No Answer	[]

Auto Attendant	[✓]
Call Me	[✓]
Direct Call	[✓]
External Call ID (ANI)	[✓]
Find Me	[]
Internal Call ID	[✓]
Message Waiting	[✓]
Multiple Return to Operator	[✓]
Multiple Call Forward	[✓]
N+1	[]
Outcalling	[✓]

PBX software requirements

Supported integration features

5.0 CONFIGURING THE ERICSSON MD-110 TO INTEGRATE

Use the ICFUP command to configure the ICU port.

Configuring the MD 110 data link

ICUIND	EQU	RATE	DFMT	UPDPCN	PARITY	CCHECK	TXC
0	X	9600	Y	YES	EVEN	YES	YES

Where X=ICU card slot number and Y=the number of digits in the extension number.

Note: Verify these values with the MAS.

Use the VMFUP command to configure the I/O data link to pass a four (4) digit port ID number.

0	ICUND	VMF	POFMT
0	EXTN2	4	

Install software patch number 12198 on Program Unit CMPS12 and ELP6.

Create the analog lines
connected to the MAS

5.1 CONFIGURING THE VOICE LINES

Configure the ELU24 channels as follows:

- CAT = 1
- TYPE = EL6

Configure the Voice Mail 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.

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 Inc. recommends setting this parameter to 15.

Please refer to the Consideration section at the end of this document for special PBX programming considerations.

Configuring the Message Application Server

6.0 CONFIGURING THE MESSAGE APPLICATION SERVER

Configuring the MAS platform for proper PBX integration requires configuring several folders accessed within the **Voice Mail System Configuration** application.

- Access the **Voice Mail System Configuration** application from the MAS program group.

- Access the **Voice Mail Domain**, and then select:

PBXs – Ericsson MD-110

- Access the **General** tab and set the following values:

Go Off Hook when Port Disabled = Enable by checking the box
Pause before Digits = 500

Pause Interval for Comma in Dial String (ms) = 2000

DTMF Inter-Digit Delay during Dialing (ms) = 80

DTMF Length during Dialing = 800

DTMF Length during Detection = 50

- Access the **Call Transfer** tab and set the following values:

Transfer Mode = Blind

Transfer Prefix Code = &,XN

Transfer Completion Code = Leave Blank

Transfer Release Code when Busy = &&

Transfer Release Code when No Answer = &&

Transfer Release Code when Reject = &,

Flash Time Interval (ms) = 100

Enable Call Progress = Enable by checking the box

Start Delay for Call Progress (ms) = 1000

- Access the **Hangup Detection** tab and set the following values:

Maximum Continuous Tone before Hanging Up (ms) = 6000

Hangup String = Leave Blank

Hangup String Timeout (ms) = 0

Minimum Duration For Drop in Loop Current = 300

Maximum Silence before Hanging Up (ms) = 6000

- Return to the **Voice Mail System Configuration** window, and select **Voice Servers** and access **Telephony Interface (Dialogic Analog)**
- Select the **Dialogic Analog** tab to configure the selected port(s) on your Voice Server as follows:

Playback Volume = 2 (Default)

Number of Ports = Enter the number of ports in your system

Note: The MAS service must be restarted to allow port enabling

Enable the port(s) by checking the **Box** field next to the Port field
Extension = Enter the **port** number in the field, i.e. 1 for the first port, 2 for the second port, etc.

Incoming Ring Count = 1

Primary ID = Enter the **port** number again, i.e. 1 for first port, 2 for port second port, etc.

Secondary ID = Leave Blank

- Return to the **Voice Servers** section and access **PBX Integration**.
- Access the **General** folder. Select **Serial** as the **Integration Type**.
Max Time to Wait for Serial and Remote Integration Data (sec) = 6
- Access the **Serial General** tab and set the following values:

Packet Format = Ericsson MD-110

Extension Field Length in Packet = Number of digits in extension

Maximum Number of Remote Service Sessions = 0

Log Serial Packets = Enable by checking the box

- Access the **Serial NEC/Ericsson/DMID/** tab and set the following values:

Filler Character = x (Space or Zero)

Port Field Length = x (usually 2)

Tenant Number = x (usually 01)

First Port Number = x (1 or 01, depends on the PBX program)

Reminder: Verify value of x in switch.

Note: Message Waiting (MWI) needs to be configured on the switch to accept the Filler character Space or Zero. If this is not possible then set the following registry value on the MAS to remove Filler characters for Message Waiting only, set the following registry value to 0:

[\\HKLM\Software\Octel\Geneva\Vis_IntegrationServiceMgr\MWI_MD110_FORMAT_WITH_SPACE](\\HKLM\Software\Octel\Geneva\Vis_IntegrationServiceMgr\MWI_MD110_FORMAT_WITH_SPACE)

- Access the **Serial Settings** button from the **Serial General** tab and set:

Line Speed (Bits per Second) = 9600

Data Bits = 7

Stop Bits = 1

Parity = Even

For multiple MAS servers, refer to Consideration 8.3

Flow Control = None
Connector = COM1

Note: Verify these values within switch.

After making these changes, stop and restart the MAS.

Refer to "Configuring the voicemail system" within the Message Application Server Installation Guide. Ensure you are prompted to restart the Message Application Server services to apply these changes.

7.0 INSTALLING THE INTEGRATION LINK

Connect the data link cable to the COM1 serial port on the MAS. The DB25 RS-232 connector plugs into the Ericsson-provided RS232 cable to the ICU.

8.0 CONSIDERATIONS/ALTERNATIVES

- 8.1** If a caller dials an invalid extension number from the automated attendant the Ericsson will send an error tone to the MAS and the call will be falsely connected. The MD-110 will then call back to the MAS port attempted to transfer the call. For this reason we recommend setting the system parameter ***Transfer Invalid Mailboxes*** to **NO**.
- 8.2** Ensure the integration link is not configured for "UPDATING." If this feature is enabled then MWI failures will occur. It will also generate alarms on the PBX.
- 8.3 Procedure for adding more than one Message Application Server (MAS) when using RS-232 integration**

The following steps are for MAS 1 only:

- 1)** The first MAS is the only one that will have the RS-232 link from the PBX connected to COM1
- 2)** MAS 1 will also have the appropriate **Serial** integration (i.e. Serial General, NEC/Ericsson) according to the Configuration Note or the PBX used.
- 3)** Finally, within the **Serial** integration programming of MAS 1, configure the **Maximum Number of Remote Service Sessions**. For example, if there are 2 additional MAS servers, then the value should be 2.

The following steps are for the additional MAS servers only:

- 1)** The remaining MAS servers will not have any integration link or any other cabling from the PBX or external devices.

Important notes regarding this integration

- 2) These MAS servers will have the **PBX Integration** programmed as **“Remote.”**
- 3) Next, access the **Remote** tab from the **PBX Integration** General page and configure the 2 fields (**Primary Remote Server Name** and **Secondary Remote Server Name**) with MAS #1's info. You can not get integration data from any other MAS, so it must be MAS 1 only.

After concluding these steps, save them, and continue with the remaining of the programming detailed on either the Configuration Note and/or the MM Installation Guide.

8.4 For external CLI (Caller ID) to work with the Ericsson one of the following MM patches is required:

Software Release	MAS Patch or Service Pack required
MM1.1	Patch MAS110803 or newer; or Service Pack 9 (when available)
MM 2.0	Patch MAS200601 or newer; or Service Pack 7 (when available)
MM 3.0	Patch MM300103 or newer; or Service Pack 2 (when available)

- continued on next page -

CHANGE HISTORY

Revision	Issue Date	Reason for Change
Version A	03/20/03	GA
Version B	04/11/03	Consideration 8.2 added
Version C	12/18/03	Updated to meet MM Release 1.1
Version D	09/16/04	Updated to meet MM Release 2.0
Version E	04/22/05	Added Consideration 8.3
Version F	04/11/06	Updated to meet MM Release 3.0
Version G	08/10/06	Added Consideration 8.4 detailing patches required for CLID
Version H	05/05/08	Updated to support MM 4.0
Version I	05/16/08	Updated diagram page 1, removed Dialogic Driver Release from Section 2.0
Version J	2/2/09	Updated to support MM 5.0
Version K	07/09	Updated to support MM 5.1
Version L	01/19/10	Added note indicator to titles of Section 2.0 and 3.1; added corresponding note in sidebar; removed word "supported" in same sections for MAS releases and PBX Software releases.

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