

## Spectrum Enterprise SIP Trunking Service Ericsson IPECS MFIM50A IP PBX Configuration Guide

### About Spectrum Enterprise:

Spectrum Enterprise is a division of Charter Communications following a merger with Time Warner Cable and acquisition of Bright House Networks. Spectrum Enterprise is a national provider of scalable, fiber technology solutions. The Spectrum Enterprise portfolio includes networking and managed services solutions, including Internet access, Ethernet and Managed Network Services, Voice, TV and Cloud solutions. Our industry-leading team of experts works closely with clients to achieve greater business success.

### About this document:

Spectrum Enterprise assures IP PBX compatibility by conducting interoperability testing to ensure any potential compatibility issues have been resolved prior to installation. Please review the IP PBX configuration instructions in this guide prior to your installation date.

Be advised that this document may contain references to Charter or Charter Business. All references to Charter should be read as Spectrum Enterprise.

**Thank you,**

**Spectrum Enterprise**

# Ericsson IPECS MFIM50A IP PBX



## 1 Introduction

This document describes how to configure the Ericsson IPECS MFIM50A IP PBX to interoperate with the Charter network. It does not provide any information how to provision, configure or use the features of Ericsson IPECS. Please refer to the documentation provided with the IP PBX or contact the vendor.

## 2 Configuration Settings

Follow the step-by-step procedure to set up the configuration.

Steps	Action	Result
1	Logon to the Ericsson IPECS IPPBX Admin page.	
2	In the left frame of the window Click <b>SIP Data</b>	
3	Navigate to <b>SIP CO Attributes</b>	SIP CO Attributes window opens
4	In the right frame of the window At the CO Range: Enter <b>1-4</b> Click <b>Load</b>	Attribute lists opens
5	Click the check box in the <b>Check All</b> column	<b>Note:</b> for all fields modified from the default
6	Soft Switch Type: Select <b>Normal</b> .	
7	Proxy Server Address: Enter <b>IP address</b> of LAN side of eSBC	Example: 10.70.90.5
8	Outbound Proxy: Select <b>ON</b>	
9	Connection Mode Select <b>UDP</b>	
10	Caller Name Service: Select <b>USE</b>	
11	Go to next table.	



Steps	Action	Result
1	181 Being Forwarded: Select <b>NOT USE</b>	
2	100rel support: Select <b>OFF</b>	
3	Use single codec only: Select <b>OFF</b>	
4	User report method: Select <b>OFF</b>	
5	Domain: Enter: <b>IP address</b> of LAN side of eSBC	Example: 10.70.90.5
6	Invite Acceptance: Select <b>From All</b>	
7	Contact Address Domain: Select <b>SIP GW Addr</b>	
8	From Address Domain: Select <b>Server Domain</b>	
9	Firewall IP Apply: Select <b>OFF</b>	
10	Diversion Recursing: Select <b>Recursing</b>	
11	Go to next table.	



Steps	Action	Result
1	DVU Answer Response: Select <b>200 OK</b>	
2	RTP Diversion Method: Select <b>Recursing</b>	
3	Use single codec only: Select <b>OFF</b>	
4	Virtual SIP Channel Mode: Select <b>No</b>	

5	Proxy Registration Timer: Enter: <b>3600</b>	
6	Server UDP Port: Enter: <b>5060</b>	
7	Server TCP Port: Enter: <b>5060</b>	
8	Proxy Server TLS Port: Enter: <b>5061</b>	
9	Confirm Registration UID Range: <b>is blank(no data)</b>	
10	DTMF Type: Select <b>2833</b>	
11	Go to next table.	

Please be aware that the SIP Attributes settings are CO line based in 5.5, instead of gateway based as they were in 5.0

Enter CO Range:  -

CO Range From 1 To 4

<input type="checkbox"/> Check All	Attribute	Value	Range
<input type="checkbox"/>	Soft Switch Type	Normal	
<input type="checkbox"/>	Proxy Server Address	10.70.90.5	IP Address
<input type="checkbox"/>	Use Outbound Proxy	ON	
<input type="checkbox"/>	Connection Mode	UDP	
<input type="checkbox"/>	Caller Name Service	USE	
<input type="checkbox"/>	181 Being Forwarded	NOT USE	
<input type="checkbox"/>	100rel support	OFF	
<input type="checkbox"/>	Use single codec only	OFF	
<input type="checkbox"/>	Use rport method	OFF	
<input type="checkbox"/>	Domain	10.70.90.5	Max 32 Chars
<input type="checkbox"/>	Invite Acceptance	From All	
<input type="checkbox"/>	Contact Address Domain	SIP GW Addr	
<input type="checkbox"/>	From Address Domain	Server Domain	
<input type="checkbox"/>	Firewall IP Apply	OFF	
<input type="checkbox"/>	Diversion Recursing	Recursing	
<input type="checkbox"/>	DVU Answer Response	200 OK	
<input type="checkbox"/>	RTP Diversion Method	Recursing	
<input type="checkbox"/>	Virtual SIP Channel Mode	No	
<input type="checkbox"/>	Proxy Registration Timer	3600	
<input type="checkbox"/>	Proxy Server UDP Port	5060	Port
<input type="checkbox"/>	Proxy Server TCP Port	5060	Port
<input type="checkbox"/>	Proxy Server TLS Port	5061	Port
<input type="checkbox"/>	Registration UID Range		Max 50 Entries
<input type="checkbox"/>	DTMF Type	2833	



Steps	Action	Result
1	DVU Answer Response: Select <b>200 OK</b>	
2	Action with REG Failure: Select <b>IDLE</b>	
3	Media Port: Enter: <b>6000-6588</b>	
4	Under Secondary Proxy Server Confirm Secondary Proxy Server Address: <b>is blank (no data)</b>	
5	Confirm Secondary Domain: <b>is blank (no data)</b>	
6	Secondary Proxy Server UDP Port: Enter: <b>5060</b>	
	Under ID Presentation Option And ID Usage P-Asserted-Identity: Select <b>USE</b>	
	Remote-Party-ID: Select <b>USE</b>	
	Privacy(CLIR) Presentation: Select <b>Privacy: id &amp; Anonymous &amp; P-Preferred-ID</b>	
	Under ID Individuality From ID: Select <b>Extension Outgoing-CLI</b>	
	Go to next table.	



Steps	Action	Result
1	From Display: Select <b>SYS RULE</b>	
2	P-Asserted-Identity: Select <b>Extension Outgoing-CLI</b>	
3	P-Asserted-Identity Display: Select <b>SYS RULE</b>	

4	Contact ID: Select <b>Extension Outgoing-CLI</b>	
5	Remote-Party-ID: Select <b>Extension Outgoing-CLI</b>	
6	Under Offnet Call Route ID Transit And CO to Offnet Direct Call Route From/Contact ID: Select <b>SYS ATI)</b>	
7	From Display: Select <b>SYS RULE</b>	
8	P-Asserted-Identity: Select <b>SYS ATI)</b>	
9	P-Asserted-Identity Display: Select <b>SYS RULE</b>	
10	Remote-Party-ID: Select <b>ORG</b>	
11	Go to next table.	



Steps	Action	Result
1	Diversion: Select <b>ORG</b>	
2	Under Offnet Call Forward by Station From Contract ID Select <b>EXT</b>	
3	From Display Select <b>Sys Rule</b>	
4	P-Asserted-Identity Select <b>EXT</b>	
5	Go to next table.	

<input type="checkbox"/>	Action with REG Failure	IDLE	CO State
<input type="checkbox"/>	Media Port	5000 - 6588	UDP Port
<b>Secondary Proxy Server</b>			
<input type="checkbox"/>	Secondary Proxy Server Address		IP Address
<input type="checkbox"/>	Secondary Domain		Max 32 Chars
<input type="checkbox"/>	Secondary Proxy Server UDP Port	5060	Port
<b>ID Presentation Option</b>			
<b>ID Usage</b>			
<input type="checkbox"/>	P-Asserted-Identity	USE	
<input type="checkbox"/>	Remote-Party-ID	USE	
<input type="checkbox"/>	Privacy(CLR) Presentation	Anonymous Name & anonymous Number	
<b>ID Individuality</b>			
<input type="checkbox"/>	From ID	Extension Outgoing-CLI	
<input type="checkbox"/>	From Display	SYS RULE	
<input type="checkbox"/>	P-Asserted-Identity	Extension Outgoing-CLI	
<input type="checkbox"/>	P-Asserted-Identity Display	SYS RULE	
<input type="checkbox"/>	Contact ID	Extension Outgoing-CLI	
<input type="checkbox"/>	Remote-Party-ID	Extension Outgoing-CLI	
<b>Offset Call Route ID Transit</b>			
<b>CO to Offset Direct Call Route</b>			
<input type="checkbox"/>	From Contact ID	SYS ATD	
<input type="checkbox"/>	From Display	SYS RULE	
<input type="checkbox"/>	P-Asserted-Identity	SYS ATD	
<input type="checkbox"/>	P-Asserted-Identity Display	SYS RULE	
<input type="checkbox"/>	Remote-Party-ID	ORG	
<input type="checkbox"/>	Diversion	ORG	
<b>Offset Call Forward by Station</b>			
<input type="checkbox"/>	From Contact ID	EXT	
<input type="checkbox"/>	From Display	SYS RULE	
<input type="checkbox"/>	P-Asserted-Identity	EXT	



Steps	Action	Result
1	P-Asserted-Identity Display Select <b>SYS RULE</b>	
2	Remote-Party-ID Select <b>EXT</b>	
3	Diversion Select <b>ORG</b>	
4	Under Fixed Table Assignment Confirm SIP User ID Table Index <b>Leave blank (no data)</b>	
5	Confirm External CODEC Priority Configuration fields are: <b>None</b>	

6	Under SIP Call Setup Failover Option Set Call Setup No Response Time: Enter: <b>5</b>	
7	Confirm Fail Over CO Group Number: <b>is blank(no data)</b>	
8	Under Sip Session Timer Session Timer Usage: <b>OFF</b>	
9	Session Timer Value: Select <b>1800</b>	
10	Min SE: Select <b>90</b>	
11	Go to next table.	



Steps	Action	Result
1	Under URI Formatting and Rules and General Formatting To Filed Method Select <b>sip: method</b>	
2	Numbering Format: Select Local: <b>Local</b>	
3	Local include Area Code: <b>NO</b>	
4	Global include phone context: <b>NO</b>	
5	Go to next table.	



<input type="checkbox"/>	P-Asserted-Identity Display	SYS RULE ▾	
<input type="checkbox"/>	Remote-Party-ID	EXT ▾	
<input type="checkbox"/>	Diversion	ORG ▾	
<b>Mobile Extension External Call</b>			
<input type="checkbox"/>	From Contact ID	EXT ▾	
<input type="checkbox"/>	From Display	SYS RULE ▾	
<input type="checkbox"/>	P-Asserted-Identity	EXT ▾	
<input type="checkbox"/>	P-Asserted-Identity Display	SYS RULE ▾	
<input type="checkbox"/>	Remote-Party-ID	EXT ▾	
<input type="checkbox"/>	Diversion	ORG ▾	
<b>Fixed Table Assignment</b>			
<input type="checkbox"/>	SIP User ID Table Index	<input type="text"/>	
<b>External CODEC Priority Configuration</b>			
<input type="checkbox"/>	1st priority	none ▾	
<input type="checkbox"/>	2nd priority	none ▾	
<input type="checkbox"/>	3rd priority	none ▾	
<input type="checkbox"/>	4th priority	none ▾	
<input type="checkbox"/>	5th priority	none ▾	
<b>SIP Call Setup FailOver Option</b>			
<input type="checkbox"/>	Call Setup No Response Time	<input type="text" value="5"/>	0, 3 - 15 Sec.
<input type="checkbox"/>	FailOver CO Group Number	<input type="text"/>	1 - 21 CO Group
<b>SIP Session Timer</b>			
<input type="checkbox"/>	Session Timer Usage	OFF ▾	
<input type="checkbox"/>	Session Timer Value	<input type="text" value="1800"/>	90 - 3600 Sec.
<input type="checkbox"/>	Min SE	<input type="text" value="90"/>	90 - 3600 Sec.
<b>URI Formatting and Rules</b>			
<b>General Formatting</b>			
<input type="checkbox"/>	To Field Method	sip:method ▾	
<input type="checkbox"/>	Numbering Format	Local ▾	
<input type="checkbox"/>	Local: include Area Code	NO ▾	
<input type="checkbox"/>	Global: include phone-context	NO ▾	



Steps	Action	Result
1	Confirm Specific Formatting by Conversion fields <b>are blank (no data)</b>	
2	Under SRTP Setting SRTP Usage: Select <b>OFF</b>	
3	1 <sup>st</sup> CRYPTO: Select <b>NONE</b>	
4	2 <sup>nd</sup> CRYPTO: Select <b>NONE</b>	
5	Under Incoming Caller ID and IP Option Caller ID Selection: Select <b>P-Asserted-ID</b>	

6	Under Miscellaneous set OutOfResource Reply: Select <b>486</b>	
7	Drop Busy Station: Select <b>NO</b>	
8	Ignore INBAND DTMF: Select <b>NO</b>	
9	Click the <b>Save</b> button	
10	Procedure completed.	

Specific Formatting by Conversion			
<input type="checkbox"/>	Numbering Case #1: From (4 dgt) <input type="text"/>	> To (6 dgt) <input type="text"/>	
<input type="checkbox"/>	Numbering Case #2: From (4 dgt) <input type="text"/>	> To (6 dgt) <input type="text"/>	
<input type="checkbox"/>	Numbering Case #3: From (4 dgt) <input type="text"/>	> To (6 dgt) <input type="text"/>	
<input type="checkbox"/>	Numbering Case #4: From (4 dgt) <input type="text"/>	> To (6 dgt) <input type="text"/>	
<input type="checkbox"/>	Numbering Case #5: From (4 dgt) <input type="text"/>	> To (6 dgt) <input type="text"/>	
<input type="checkbox"/>	Numbering Case #6: From (4 dgt) <input type="text"/>	> To (6 dgt) <input type="text"/>	
SRTP SETTING			
<input type="checkbox"/>	SRTP Usage	OFF ▼	
<input type="checkbox"/>	1ST CRYPTO	NONE ▼	
<input type="checkbox"/>	2ND CRYPTO	NONE ▼	
Incoming Caller ID			
ID Option			
<input type="checkbox"/>	Caller ID Selection	P-Asserted-ID ▼	
Miscellaneous set			
<input type="checkbox"/>	OutOfResource Reply	486 ▼	
<input type="checkbox"/>	Drop Busy Station	NO ▼	Italy Only
<input type="checkbox"/>	Ignore INBAND DTMF	NO ▼	Check DTMF Type
<input type="button" value="Save"/>		<input type="button" value="Register"/> <input type="button" value="UnRegister"/>	



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