Mimer III SoftRadio

Connecting radios all over the world

How to set-up and use

Mimer Zone Extensions

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This guide will help with the setup and use of **Mimer Zone Extensions.**

Please also refer to the standard manuals for Mimer SoftRadio found on: <u>www.lse.se/setup</u>, and the web page: <u>www.lse.se/zones</u>.

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1 General

Mimer SoftRadio is a dispatch system that handles radios, intercoms and phones from a common PC GUI using IP as connection between all nodes in the system.

Radios are connected to the IP network through the use of a hardware Network Interfaces at the radio units. Also, other products than radios can be connected like PA-systems, voice recorders etc.

The standard SoftRadio system has a limit of 240 nodes, where each node is a network interface, operator PC, server etc. However, some customers have grown outside this limit and therefor the Zone Extension has been brought forward.

With the **Zones Extension** the system can handle 256 zones, each containing 240 nodes, in total over 60 000 nodes.



1.1 System example

Example with fleets of radios and operators around the world

A customer with large fleets of remote-controlled ships in different parts of the world that still needs to be able to remote all radio units from all operator centrals.

They can use one zone for Europe, one for Asia and one for the Americas.

1.2 Affected units

When setting up the Zone Extension option in SoftRadio all equipment in the system is affected. All operators, servers and network interfaces need to use the extended ID number with both Zone and ID.

The option is first installed in all SoftRadio operator PC's, the Network Interface's and then activated in each of the servers.

Below are instructions for each of the components.

Operator PC's without the Zone Extension option, will only be able to work in the basic "Zone 0". It is therefore not recommended to mix operators with and without the option Zone Extensions.

1.3 Zone numbering

In a basic SoftRadio system without zones, all units use "Zone 0". The zone number is normally not shown on any setup menus. With the option activated the new setting is shown.

For each zone that you add, you set the zone number to a higher value, "Zone 1", "Zone 2" etc. In this way giving room for 240 ID numbers inside each zone.

The different zones can be used geographically, by type of user, by type or group of radios. For example, all radios and other equipment in a certain windfarm cluster uses one zone.

2 Operator PC Installation

2.1 Needed setup

Each operator PC shall already be installed with **Mimer SoftRadio XL** to be able to handle the Zone Extension.

SoftRadio needs to be version 4.0.24.0, or later.

2.2 Software installation

Install the Zone Extensions option from the supplied USB stick or download. This will activate Zones in both the operator software, in Connections Setup and in the Network Interface Setup.

2.3 Connections Setup

In Connection Setup you will now have a new column for zones. Here you enter the zone for each connected radio or server.

M	imer	Сог	nections	Setup								x
File	Set	ngs	: Help									
	Ac	е	Zone	Rad	D	Name label	IP addr/URL	Connection type	Remote TCPport	Password	Buf Length	4
1	Ye		0	118		Sepura Färg	192.168.0.118	LocalUDP			3	
2	Ye		0	115		NX-5800	lsehost.mine.nu	TCP	20815	*****	3	
3	Ye		1	132		Kenwood TK	lsehost.mine.nu	тср	20832		3	
4	Ye		1	129		NX720	192.168.0.129	LocalUDP			3	
5	Ye		2	124		DM4600	192.168.0.124	LocalUDP			3	
6	Ye		2	125		DM3600	192.168.0.125	LocalUDP			3	
7	Ye		2	130		MD785	192.168.0.130	LocalUDP			3	
8	Ye		3	127		MTM5400	192.168.0.127	LocalUDP			3	
9	Ye		3 🗘	131		MTM800E	lsehost.mine.nu	TCP	20831	******	3	
10	Ye		0	120		Sepura	192.168.0.120	LocalUDP			3	
11	Ye		0	116		GM380 CCIR	192.168.0.116	LocalUDP			3	
12	Ye		0	113		GM380	lsehost.mine.nu	тср	20913	*******	3	
13	Ye		0	114		GM380	lsehost.mine.nu	TCP	20914	******	3	
14	Ye		0	111		IC-M506	192.168.0.111	LocalUDP			3	
15	Ye		0	134		IC-A120	lsehost.mine.nu	TCP	20834		5	
16	No		0	136		Jotron	lsehost.mine.nu	TCP	20836	******	3	
17	Ye		0	133		M423	192.168.0.133	LocalUDP	-		3	-
									0.5			
	~					X Cancel and o	lose			V 5	ave Changes	

Connection Setup with the Zone Extension activated

2.4 Operator Setting

Also, the operator now needs to be in a specified zone. This means that operators in different zones can use the same ID number. An example could be that in each central the supervisor has ID 10, but different zone numbers.

Go into Settings in Connection Setup and enter the zone number for the operator.

Operator settings				x
Operator ID: 188	Zone: 0	Operator Name:	Roland	
🔝 Block user setups				
Allow users to select	connections		Close	

Operator settings in Connection Setup with the Zone Extension activated

3 Activate Zones in the Network Interfaces

This can be done from an operator PC with the Zone Extension option installed.

3.1 Needed version of the interface

The Network Interface needs to have a late version of hardware. This is from serial number 3000 and upwards. Older interfaces can't be upgraded to work with Zone Extensions.

Network Interfaces with firmware 6.090 and upwards have the functionality built in, at it will be activated when setup is done from a PC with the Zone Extensions option installed.

Network Interfaces with an earlier firmware version (and also serial number >3000) can be firmware upgraded to work with zones. Please ask for firmware.

3.2 Setup the Network Interface for zone use

When using the "Interface Setup" software from a PC with the Zone Extensions option installed, the settings for zone will be visible.



Interface Setup software showing the settings for zones

3.3 Setup of connections

You need to set the zone that each interface shall work with.

Several network interfaces can have the same ID number as long as they have different zones. For example, you might want the same type of radio at each radio site to have the same ID number but different zone number.

4 Activate Zones in the RadioServer

The RadioServer needs to be setup for zone use.

All the standard settings for the RadioServer are found in the RadioServer setup manual found here: www.lse.se/setup

4.1 Setup the RadioServer for zone use

No setting is needed to start with Zone use. RadioServers with version 2.44 web r16, will always accept zones. RadioServers with older versions will need to be upgraded.

4.2 Setup of connections

In the setup window for the network interfaces (Radios etc) that the RadioServer shall connect to, add the Zone number before the ID number. See example below.

	R	Nimer adioS	erver (ftRadio Setup)
RadioSe	rver name is:				
MimerRa	adioServer				
Show s	erver status page S	how server log	Log out		
Change	password Change	network settings	Change radioserv	ver name	
Edit allo	wed users				
Con	nected de	vices:			
Active	Interface Zone	Interface ID	IP Address	Port	Password
	0	101	192.168.0.101	20801	secret-1
Image: Contract of the second seco	2	102	192.168.0.102	20802	secret-1
	2	103	192.168.0.103	20803	secret-1
Help	Add Radio Selec	Radio(s) to remov	е		
Load ar	older configuration	Save list to file	Load list from file		
Undo C	hanges Submit				

5 Activate Zones in the NetworkRepeater

The NetworkRepeater needs to be version 4.1.1.2 or later and setup for zone use.

All the standard settings for the NetworkRepeater are found in the NetworkRepeater setup manual found here: www.lse.se/setup

5.1 Setup the NetworkRepeater for zone use

Tick the box, Enable ID Zones.

-	Network	Repeater	C -4												×
File	Help														
Ne	etwork Rep	oeater II	55	Zone:	5	Encry	passwords	Allow al	ias for u	names	🗹 Enable	ID Zones			
	Setup	-file pat	C:\Use	ers\Public\D	ocuments∖Mim	erNetworl	epeater Wetw	orkRepeater.ini	_						
	Active	Туре		Zone	e ID	IP/Hos	st name	Connection	Remot	e port Al	ias/Identity	Password	Bu	fDly	^
1	Yes	Rem. Ne	etwintf	3	115	192.10	68.0.54	тср	20915			secret-1	3		

5.2 Setup the ID with zone

In the NetworkRepeater settings you now have a new box where the zone of the NetworkRepeater shall be entered.

5.3 Setup of connections

In the setup window for the network interfaces (Radios etc) that the NetworkRepeater shall connect to, add the Zone number before the ID number. This is similar to the operator setup. See example below.

File	Network Help	Repeater Setur	0						_		×
N	etwork Rej	peater ID: 55	Zone: 5		Encrypt passwords	Allow	alias for unit nam	es 🗹 Enable	ID Zones		
	Setup	-file path: C:	· · ·	Mime	rNetworkRepeater Wetw	orkRepeater.ini					
	Active	Туре	Zone 1		IP/Host name	Connection	Remote port	Alias/Identity	Password	Buf Dly	^
1	Yes	Rem. Netwi	3		192.168.100.54	TCP	20915		secret-1	3	
2	Yes	Rem. Netwi	3		192.168.100.14	TCP	20910		secret-1	3	
3	Yes	Rem. Netwl	1		lsehost.mine.nu	TCP	20819		password	3	
4	Yes	Rem. Netwi	1		lsehost.mine.nu	TCP	20911		secret-1	3	
5	Yes	Loc. Interco	0	4				Intercom			
6	No	Loc. Interco	0	5				Intercom 2			
7	No	Rem. Netwl	0		192.168.0.28	Ext. UDP	20801		secret-1	3	
•											

6 Activate Zones in the VoiceLog

The VoiceLog needs to be version 4.0.15.0 or later and setup for zone use.

All the standard settings for the VoiceLog are found in the VoiceLog setup manual found here: www.lse.se/setup

6.1 Setup the VoiceLog for zone use

No setting is needed to start with Zone use. The VoiceLog will always accept zones.

6.2 Setup the VoiceLog ID with zone

This is done in the same way as the monitored radios below. You just enter the Zone number, colon and ID number in the box for Server ID. Example 4:193

Server settings		•	x
VoiceLogServer			
Name Label:	VoiceLog		
Server ID:	4:193		
TCP port for operators:	20801		

6.3 Setup of connections

In the setup window for the network interfaces (Radios etc) that shall be monitored (VoiceLog.ini) you need to add the Zone number before the ID number. See example below.

This is done simply by adding the zone number before the radios ID number, with a colon in between. The list can have the same ID number several times, if they have different Zone numbers.

Example:

ID=2:119; TIMEOUT=500 ID=2:124; TIMEOUT=500 ID=3:119; TIMEOUT=500 ID=3:124; TIMEOUT=500



7 Activate Zones in the InfoServer

The InfoServer needs to be version 2.1 web r3, or later and setup for zone use.

All the standard settings for the InfoServer are found in the InfoServer setup manual found here: www.lse.se/setup

7.1 Setup the InfoServer for zone use

No setting is needed to start with Zone use. The InfoServer will always accept zones.

7.2 Setup of connections

In the setup window for the network interfaces (Radios etc) that the InfoServer shall connect to, add the Zone number before the ID number. See example to the right.

7.3 Setup of expected Operators

In the setup window for the expected Mimer Operators that the InfoServer shall connect to, add the Zone number before the ID number. See example to the right.

Ac e	Device Zone	D	ice ID	IP Address	
	0		01	102 169 0 101	
				192.100.0.101	
	2		11	192.168.0.110	
1	3		15	192.168.0.85	
	6		15	192.168.0.54	
F o	Add Device	ration	elect De Sav	vice(s) to remove	īle

Expected I	Mimer C	Operators:
Operator Zone	perator ID	IP Address
1	188	192.168.0.85
1	12	192.168.0.54
Select Operator(s) to remove	
Save list to file	Load list fr	om file
Undo Changes	Submit	
Go back		

8 Activate Zones in the RTP Gateway

The RTP Gateway is not yet prepared for Zone use. This manual will be updated when this is in place.

All the standard settings for the RTP Gateway are found in the manual here: www.lse.se/setup

9 Activate Zones in the Virtual Network Interfaces

The Virtual Network Interfaces are not yet prepared for Zone use. This manual will be updated when this is in place.

All the standard settings for the Virtual Network Interfaces are found in their respective manuals here: www.lse.se/setup

10 Activate Zones in the MapView server

The MapView is not yet prepared for Zone use. This manual will be updated when this is in place.

All the standard settings for the MapView are found in the MapView setup manual found here: www.lse.se/setup



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