Mimer III SoftRadio



Network Controlled Radio, Part 1 LS Elektronik AB

Voice over IP / Radio over IP

VoIP / RoIP

All audio is digitized and sent over the network as packet data, together with control signals for the radio.



What do you need?

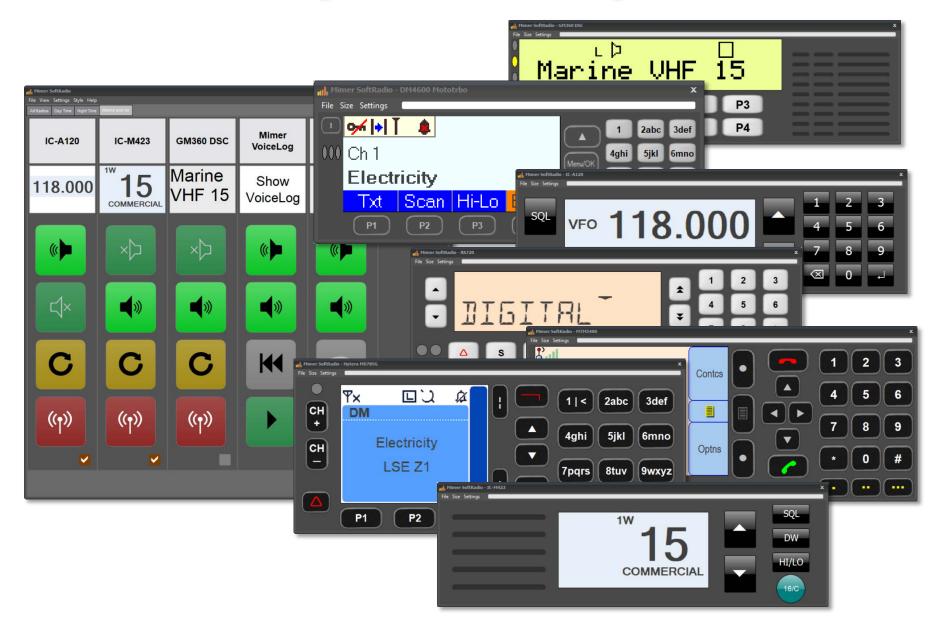


Radio Unit

Network Interface

The Software; Mimer SoftRadio

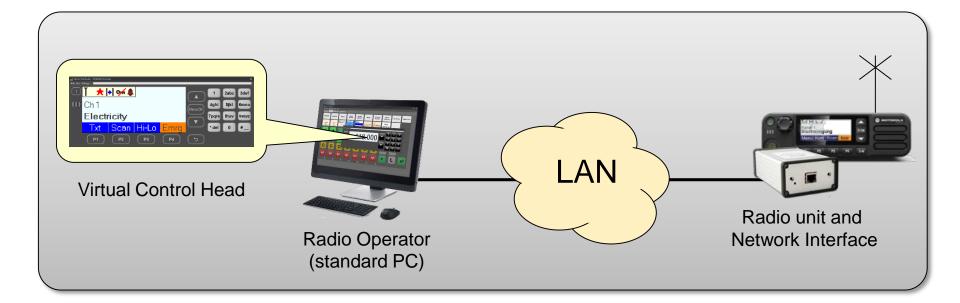
What will you see on your PC?



What does it mean?

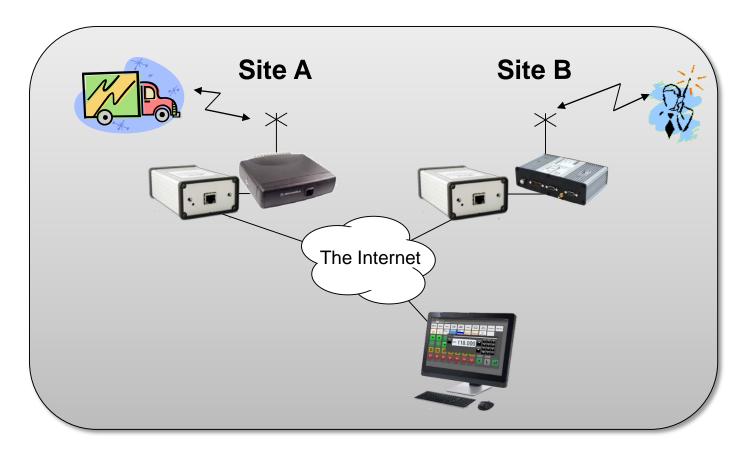






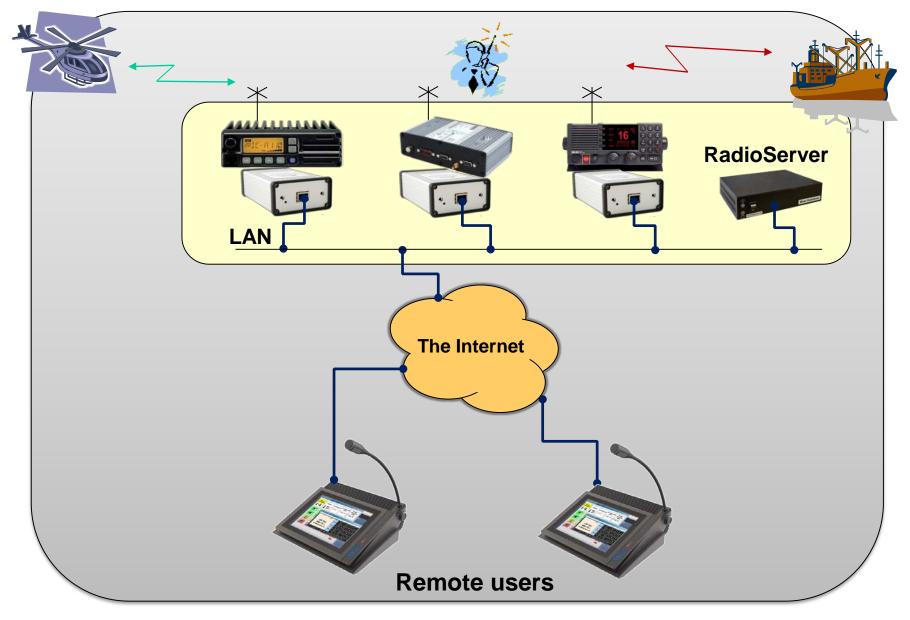
Example with one radio and one operator

Remote control over the Internet

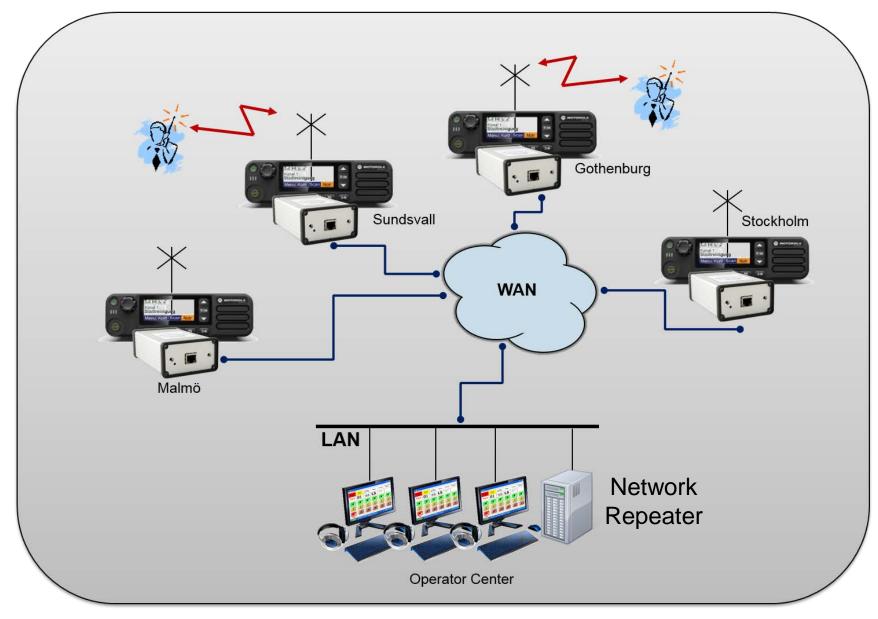


Example with two radios and one operator

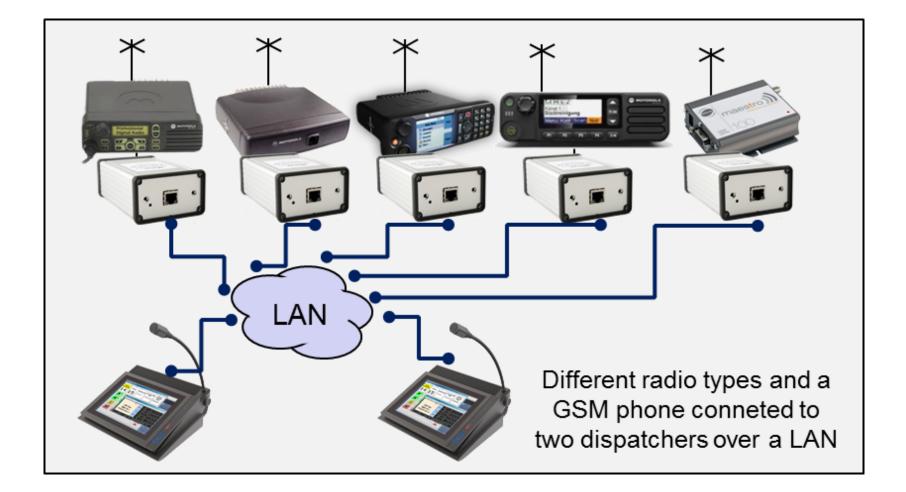
Remote control over the Internet



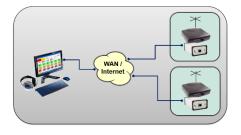
Remote control over the Internet

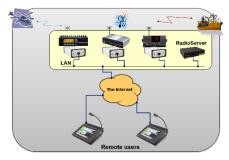


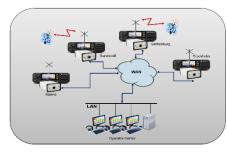
Multi type system



Reliability





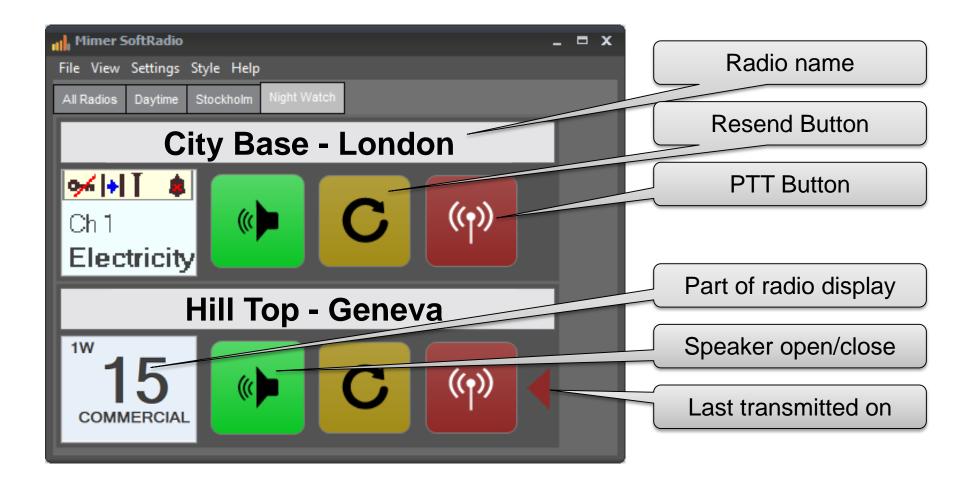




The SoftRadio systems does not have a Central Controller. All intelligence is in the network interfaces and in the operator software.

The rest is standard IP!

Main Menu



The "Magic Box"



vfo 118.000

Marine VHF 15

DIGITAL

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 P3

 P2
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 P4

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Network Interface for

 Radios that show a Virtual Control Head













The "Magic Box"



Network Interface LE for

- Radios with only audio and PTT access
 - Base stations
 - One channel radios
 - HF radios
- PA / PAGA Systems

SoftRadio Standard & XL

Standard supports up to 8 devices, XL supports up to 30 devices

Mimer SoftRa File View Settin Al Radios Dayti	ngs Style Help	Night Watch				_		_			_
MTM5400	MTM800E	Sepura	Kenwood TK-8189	GM380 Radio 208	GM380 Radio 209	Vässarö	IC-A120	Not connected	NX720	Ni3160	Intercom
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	DMR Radios		Maria	te radios			Phones		~		
DM4600 Mototrbo	DM3600 Mototrbo	Hytera MD785G	IC-M423	GM360 DSC	POTS Linj 15	e GSM	G SM / 30	G SIP-Phone	e	Mimer VoiceLog	GroupSend / Select Audio device
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((1))	((†))	((†))	((1))	((†))	C	C	C	C			
X1		X1									

Option: SoftRadio XL

With SoftRadio XL you can organise your devices in tabs.



	Name		All Radios	Night Time	Marine and Air
130	Hytera		\checkmark		
124	DM4600		\checkmark		
134	IC-A120		\checkmark		
127	MTM5400				
133	IC-M423				
240	Mimer SIP				
_	и ок 🗙	Cancel			

Option: CrossPatch

Several radios can be connected together to make up a patch.



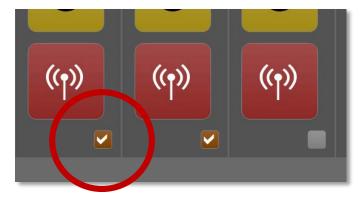
Option: Custom Function Panel

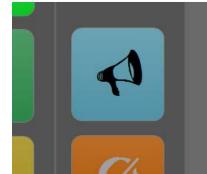


Programmable keys mainly used for selecting your audio device.

Option: GroupSend

You can transmit on several radio units at the same time.







Option: RadioCalls

00205 Roland Ehne	Make Private Call G	o to messages
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toland Ehne	LSE	(D
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Contacts	+) 8
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205 test 205	Make Private Call Go to messages
On Radio	Info ^
19-01-09 14:18:51	From - test 205
19-01-09 13:58:13	Taking on group 101 From - test 205
00 Hotel M0785	Taking on group 101
19-01-09 13:58:13	From - test 205
On DM4600 Mototrbo	Call Alert Received
19-01-09 13:57:36	From 206
On DM3600 Mototrbo	Taking on group 101
19-01-09 13:56:30	From - test 205
On DM3600 Mototrbo	Taking on group 101
19-01-09 13:56:25	From - test 205
On: Hytera MD7656	Taking on group 101
19-01-09 13:56:25	From - test 205
On DM3600 Mototibo	Taking on group 101
19-01-09 13:56:22	From - test 205
On Hytera MD785G	Taking on group 101
19-01-09 13:56:22	From - test 205
On DM4600 Mototrbo	Taking on group 101
19-01-09 13:42:40	From 202
On Hytera MD785G	Taking on group 101
19-01-09 13:42:39	From 202
Filter:	×
History	► 44 8



00205 Roland Ehne	Sent	i Message	to Roland Ehne			
	ssage to Roland	from R	adioCalls in			
Message Templates			Save as			
This is a message to	o the portable radio		template			
This is a message to	the portable radio		(and the second second			
Where are you?			Use selected template			
Hello SoftRadiol						
We have a fre at p	ant 23, please hum	yt	8			
We need more cof	lay!		×			
Message was sent t						
Tetra MTP850	We have a fire	at plant ?	23, please hurry			
Tetra MTP850	Where are you	u?				
Hytera Bärbar	This is a mess	age to the	portable radio!			
Hytera Barbar	This is a mess	age to the	portable radio!			
Hytera Bärbar	This is a messi	age to the	portable radio!			
Hytera Bärbar	This is a mess	age to the	portable radio!			
Hytera Barbar	Where are yo	u?				
Hytera Bärbar	We need mor	We need more coffey!				
Trbo Portable	Thankyou, let	s do that a	again sometime.			
test 205	Where are yo	07				
Trbo Portable	Where are you	u?	1			
Trbo Portable	This is a messi	age to the	portable radio!			
Trbo Portable	This is a messi	age to the	portable radio!			
GM380 CCTR-209	Thankson let	s do that a	sum sometime			
		112				

- Contact List
- Private Calls
- Call logging
- Text messaging

Option: Marine Calls

📶 Make DSC Call - I	C-M423 (765432109)		x
Individual Routine	Call to 123456789 Us	se CH:88	
Category	Format	Adress Source	Select Channel
 Individual Call 	 Routine 	 Favourites List 	78
Group Call	Safety	Enter manually	⊙ ~ <mark>88</mark>
All Ships Call	Urgency		Enter manually
	Position Request	Favourites: Swea Sandö - 12345 <mark>.</mark> 🔻	Channel: 88
	Polling Request	MMSI	
Close	Test Call	123456789	Send Call

	Ra Name		ID	Message	
19-01-17 13:28:26	North Coastal Radio Site	INDIVIDUAL from	123456788	ROUTINE to 000000011, , Radio Telephone	
19-01-17 13:14:50	South Island Radio Site	Self Cancel by	123456788	of DISTRESS From:123456788 ?9999?99999 UTC8	
19-01-17 13:14:33	South Island Radio Site	DISTRESS From	123456788	?9999?99999 UTC88:88 Undesignated distress	Ack
19-01-17 13:10:22	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to me , Ch08, Radio Telephone	Ack
19-01-17 13:08:38	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to 123456789, Ch08, Radio Telephone	
19-01-17 13:06:09	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to 222333444, RxCh08 , Tx , Radio Telepi	
19-01-17 13:05:14	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to me , RxCh06 , Tx , Radio Telephon	Ack
19-01-17 11:53:33	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to 123456777, RxCh08 , Tx , Radio Telepi	
19-01-17 11:49:08	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to me , RxCh77 , Tx , Radio Telephon	Ack
19-01-17 11:46:57	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to me , RxCh08 , Tx , Radio Telephon	New Ack

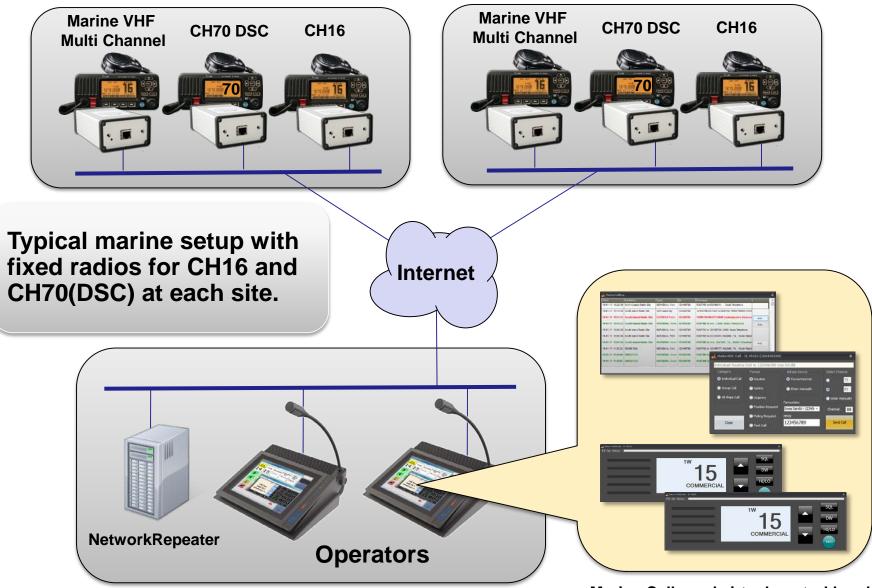
Marine systems

DSC calls can be made and answered.

ATIS calls can be decoded and exported

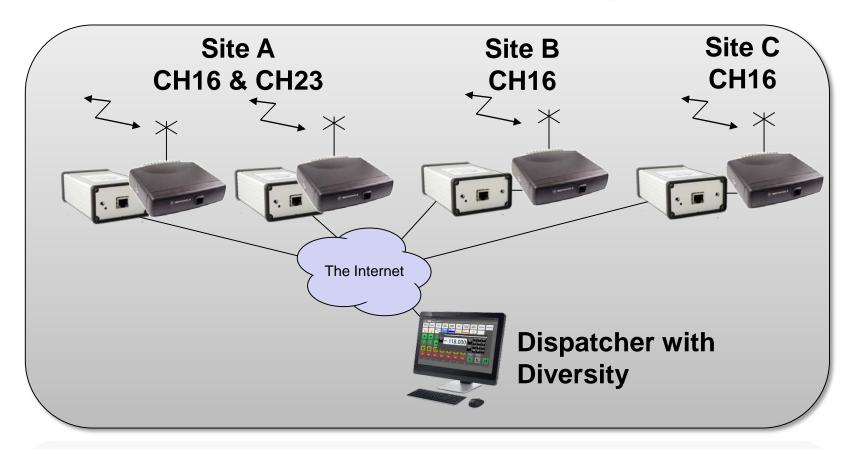
All calls are logged

Option: Marine Calls



Marine Calls and virtual control heads

Option: Diversity



In systems with several base stations on the same channel these can be connected together in a voting system so the operator always gets the best audio

Typical use is a coastal radio system for CH16

Option: PhoneConnect

One device panel can be changed to a telephone panel. Connection through two wire (POTS), IP-phone (SIP) or GSM-module.





Option: Intercom



One device panel can be changed to an intercom panel

The dispatchers can then talk between each other in the same manner as transmitting over the radio

Option: Damm TetraFlex



SoftRadio can be connected to a Damm base station.

You can then control all the functions in the Tetra system without going through a "donor radio".

- TalkGroup Calls
- Private Calls
- Emergency Calls
- SDS
- Status
- Etc

Mimer VoiceLog

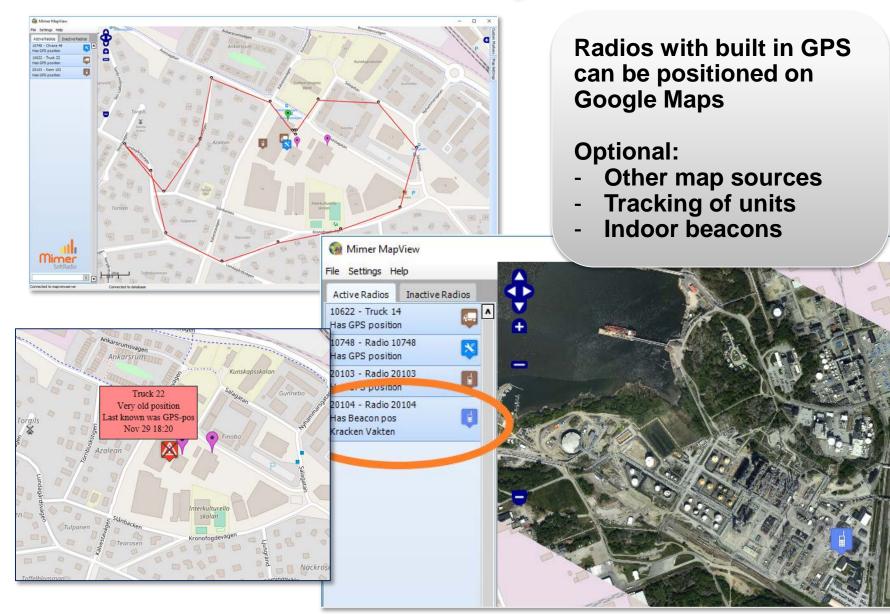
📊 Mimer SoftRadio - Mimer V	oiceLog	x
File Size Settings		
Sepura	₽	
IC-A120		
IC-M423		
AutoScroll 2018-10 Length= 1		+ + + + + + + + + + + + + + + + + + +
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All audio in the Mimer system is recorded on a server and time stamped.

The dispatcher can back-track an hour and the supervisor listen to everything in the log

Nimer VoiceLog Player		↔	-		×
File Settings					
Folder with audio clips:	_				
C:\VoiceLogFiles	Select new folder		Playback Mod	le	
Load dips from above folder			○ Realtime		
Found 458 logged audio clips			Max 2s fix between a	ed pau	se
Radios and Operators found in selected folder:	Recorded audio clips for selected Ite	em:	Detween		ps
Dispatch 1 - Roland (3 dips) Dispatch 2 - Lars (1 dips) Dispatch 3 - Nils (15 dips)	Start-Time: 31/05/2018 08:59:04 Talking : Dispatch 3 - Nils To: All Operators	^			••
Göteborg (48 clips)	Duration: 1s Playing		21/05	120	10
Hudiksvall (50 clips) Kristianstad (259 clips)	Silence: 0h 16m 22s		31/05	/20	18
Malmö (6 clips) Östra (21 clips) Stockholm (14 clips) Sundsvall (1 clips) Umeå (1 clips)	Start-Time: 31/05/2018 09:15:27 Talking : Dispatch 3 - Nils To: All Operators Duration: 1s		08:59	:04	ł
Västra (39 dips)	Silence: 0h 0m 0s				
	Start-Time: 31/05/2018 09:15:28 Talking : Dispatch 3 - Nils To: All Operators Duration: 1s				
	Silence: 0h 7m 21s				
	Start-Time: 31/05/2018 09:22:50 Talking : Dispatch 3 - Nils To: All Operators Duration: 2s				
	Silence: 0h 0m 0s				
	Start-Time: 31/05/2018 09:22:52 Talking : Dispatch 3 - Nils To: All Operators Duration: 1s				
	Silence: 0h 13m 15s	¥			

Mimer MapView



Mimer InfoServer

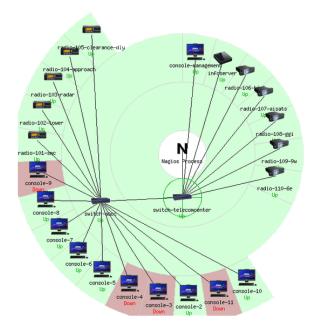
Mimer InfoServer Version 0.1.4

Ra				

D 113 IP 192 168 0 113 [Aurora] - is operating ID 115 IP 192 168 0 113 [Aurora] - is operating ID 115 IP 192 168 0.115 [GM1280] - is operating ID 117 IP 192 168 0.116 [M1070ia [GM360, RSS linput] - is operating ID 117 IP 192 168 0.119 [GM360] - is operating ID 120 IP 192 168 0.129 [Sepura SRG] - is operating ID 124 IP 192 168 0.129 [Sepura SRG] - is operating ID 125 IP 192 168 0.125 [MotoTrbo DM400] - is operating ID 125 IP 192 168 0.125 [MotoTrbo DM3600] - is operating ID 126 IP 192 168 0.126 [AVF*riseJ] - is operating ID 126 IP 192 168 0.156 [Kistakanale] - is operating ID 126 IP 192 168 0.156 [Kistakanale] - is operating ID 127 IP 192 168 0.156 [Kista Sartinas] - is operating ID 127 IP 192 168 0.156 [Kista Sartinas] - is operating

Users:

ID:44 IP:192.168.0.5 [Lasse] - Radios/Phones: VIEWED,113,115,116,117,120,125,126,124,172,HIDDEN;DISCONNECTED,129,104; ID:71 IP:192.168.0.16 [Roland] - Radios/Phones: VIEWED,101,102,125,126,116,124,HIDDEN,117,DISCONNECTED,129;



The InfoServer will tell all connections in the system. Which operator is connected to which radio etc.

Together with Nagios you get a complete System Monitor system where you easily can see faults and get warnings and statistics.

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