



Portable Modem Interception Munin POTS

Portable Modem Interception *Munin POTS*



The Munin POTS is a true portable modem intercept solution for monitoring modem traffic on any single analogue PSTN line.



Applications

- Field deployment and other temporary set-up scenarios
- Permanent set-up in monitoring centres and remote offices
- Operations where direct access to target lines is required
- Internal Investigations
- Covert Operations

Features

- Easy set-up
- Easy to operate
- Automatic Modem Detection
- Supports V.90 and V.92
- Web page Decoder and Viewer
- E-mail Decoder and Viewer
- Password Acquisition for non-encrypted protocols

Portable Modem Interception *Munin POTS*

The Munin POTS is a true portable modem intercept solution to be used in operations, where direct access to the target lines is required.

This unit can be deployed in the field close to the target or installed on a permanent basis in a monitoring centre. Due to the unique design of the physical line interface, the system is completely undetectable by the target and transparent to all parties on the line, making it ideal for all covert operations. The onboard sets of features enable you to solve your technically difficult monitoring tasks in a non-technical way and achieve your results with minimum effort.

System Summary

The Munin system is delivered as a complete turnkey solution including all cables and accessories. It consists of a high quality and special designed PSTN line interface and a lunchbox computer for recording and decoding. It is very easy to operate and it only takes a few hours of training to use it at its fullest potential.

The system intercepts and records all dial-up modem traffic on any two-wire analogue PSTN line and has no influence on normal voice or fax traffic on the intercepted target line.

V.90 and V.92 is supported but will be trained down to 33.600 from the interface box towards the target.

The target line is connected in serial to the line interface box that further connects to the lunchbox computer – power it up and you are ready to go.

System Features

The direct connection through the line interface box during non-modem sessions makes the intercept undetectable.

Ringling, On / Off hook voltage, call waiting and other services operate unaltered even when the interface box is powered off.

The Munin decoding software is a layered protocol decoder. This means that the decoder is organised in the same way as the TCP / IP protocol stack itself.

This gives the benefit of easy updating, replacement or extension of one decoder protocol layer without affecting the others.

Application Layer

The received TCP packets are being sorted and treated dependent on the type of communication taking place:

- HTTP
- POP3
- SMTP
- IMAP
- NNTP
- IRC
- TELNET
- FTP
- VoIP, H.323, SIP
- ICQ
- AOL IM
- Yahoo IM
- MSN Messenger
- AOL 6, 7 and 8
- Kazaa

and many other internet protocols and services.

HTTP communication through a proxy server is not exchanged on a well-known port and therefore treated as of type Unknown, but the HTTP communication packets are still extracted and stored on the hard disk.

E-Mail, SMTP, POP3 and IMAP

E-mail fragments in the TCP packets data section are extracted and collected. When an e-mail is finished, it is saved to disk and a HTML copy is made with a link to all attachments.

SMTP / POP3	HTTP	Application layer
TCP	UDP	Transport layer
IP		Network layer
PPP		Data Link layer
PSTN line		Physical layer

All possible attachments specified in the MIME standard are saved as files on the hard disk for later investigation.

User Identifications and Passwords are collected and shown for all non-encrypted protocols.

HTTP and HTML

All HTTP communication is saved in a log file that can be further investigated.

A directory structure that mirrors that of the visited web page is created containing a copy of all the received HTML pages including pictures, links and other page elements.

Unsupported

All unsupported protocols are detected, listed and stored as raw data packets on the hard disk for manual investigation. The log file containing the low-level raw decoded data packets is accessible through the end user software as clear text.

The Transport Layer

Received IP packets are being sorted and treated dependent on the encapsulated protocol type:

TCP - the packets are detected and sent to the application layer.

UDP - the packets are decoded and saved.

ICMP - the messages are decoded and saved.

The Network Layer

Currently IPv4.

IP packets are received.

The packets can be compressed and / or fragmented.

IP packets are reconstructed and sent to the transport layer.

Supports Van Jacobson compression.

The Data Link Layer

PPP with sub-protocols - LCP, CHAP / PAP, IPCP, CCP, CBCP and LQRP.

All communication is recorded in a main log file that can be further investigated and analysed through our extensive toolset in the software package.

The following Compression Protocols are available and decoded:

- Microsoft PPC
- Stac Electronics LZS

The Physical Layer

Modem Protocol:
Up to V.90 and V.92.

Other Features

Collection of all dialled numbers with timestamps.

➔ ***You can listen to any Voice over IP traffic. The audio player contains an automatic gain control filter to enhance the audio.***

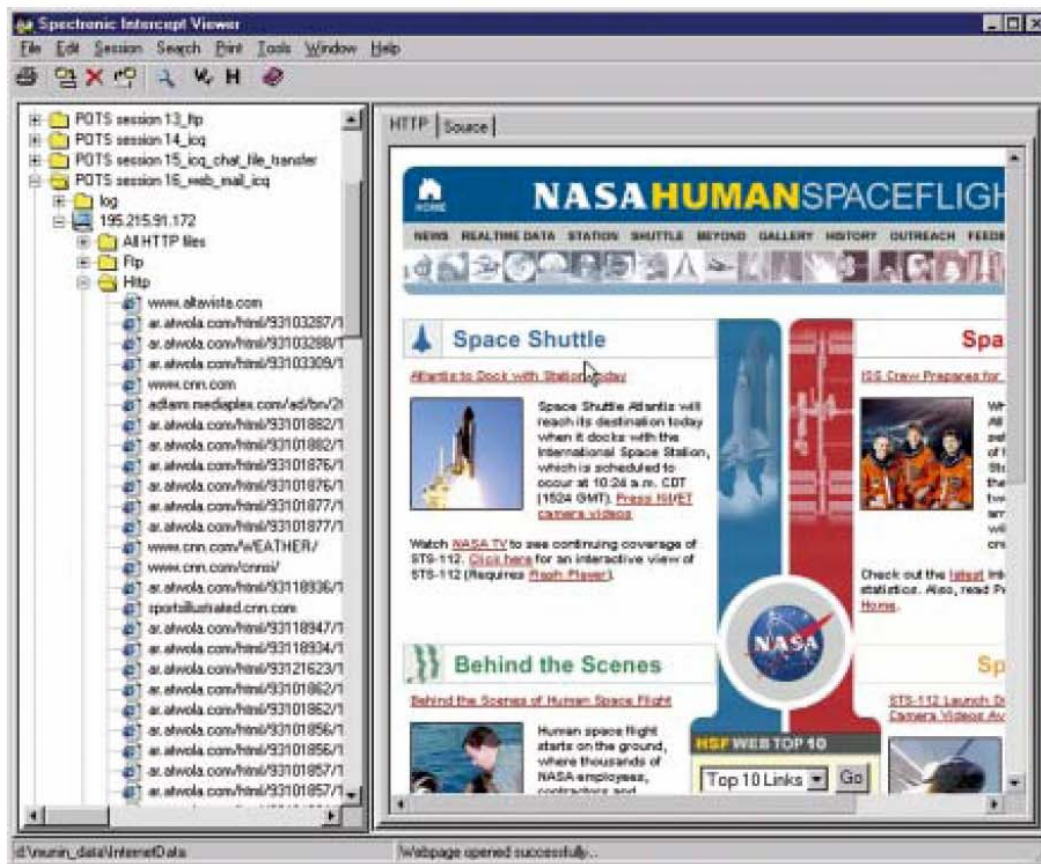
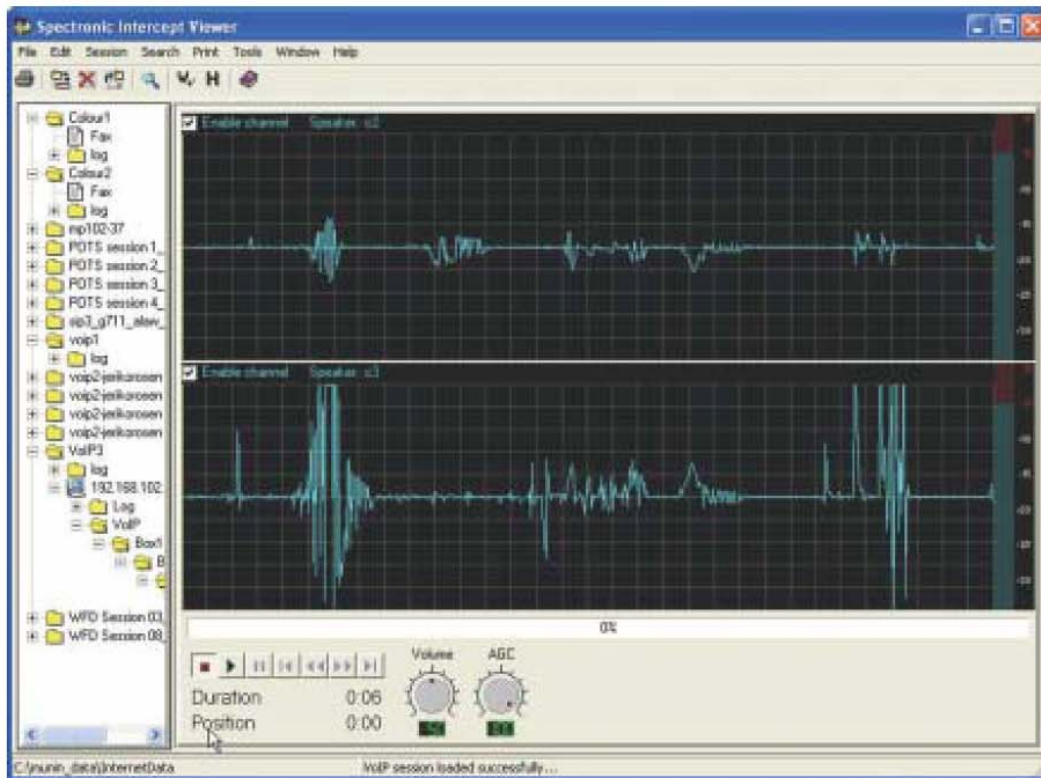
With these advanced tools you are able to follow whatever the target is doing on the internet and you can easily pinpoint any illegal activity.

Information can be copied to the built-in CD or DVD writer for presentations in court or other purposes.

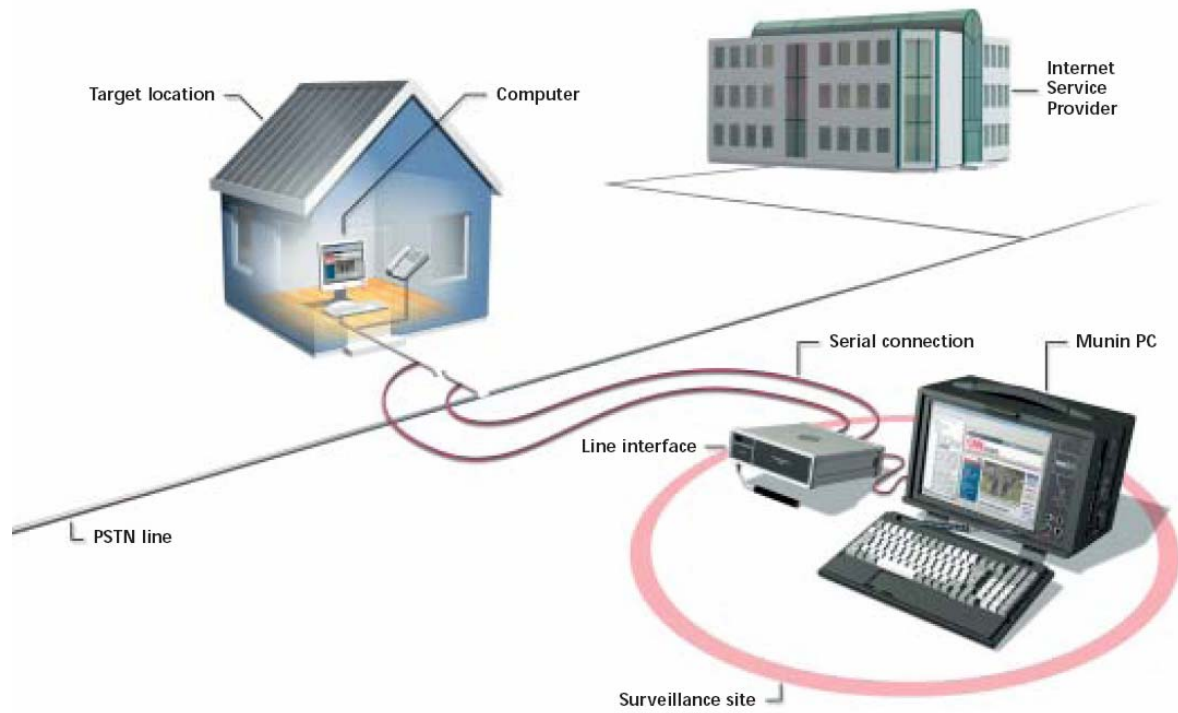
➔ ***The intercepted traffic is decoded into readable information and you have access to a broad range of tools for dealing with the intercepted data.***

- Web pages
- E-mails
- Attachments
- Chat Sessions
- Web mail
- Voice over IP
- File Transfers
- Messenger Services

Please contact us for a complete and updated list of supported protocols.



System Overview



Technical specifications · Portable Modem Interception - Munin POTS

System Platform*	Portable Lunchbox with built-in screen and keyboard
Internal Modems	
Protocols	V.21 Bell, V.22 Bell, V.22bis, V.23, V.32, V.32bis, V.34 (33.6 / 28.8), K56flex (56000), V.90, V.92 (56000)
Internet protocols	HTTP, POP3, SMTP, IMAP, NNTP, IRC, TELNET, FTP, VoIP, H.323, SIP, ICQ, AOL IM, Yahoo IM, MSN Messenger, AOL 6, 7 & 8, Kazaa
PSTN Line Interface	
Connector	Modular plug (RJ11) in parallel with Banana Jack 4 mm with cross hole
Power Input	
Connector	IEC Plug, 115 / 230 V Selections
Power Supply	
AC input	250 W / 100-120 V / 50-60 Hz 200-250 V / 50-60 Hz auto select EN60950 EMI EN55022 Class B
Dimensions (HxWxB)	41x31x25 cm / 16.1x12.2x9.8 inches
Weight	9.75 kg / 21.5 lbs.

Environmental specifications

Temperature	
Operating temperature Range	0° C to 50° C / 32 F to 122 F
Storage temperature Range	-40° C to 70° C / -40 F to 158 F
Humidity	
Range	Max. 90%

Options

Hard Carrying Case
Dial-in Access
External Storage

*Munin POTS is also available with a stationary PC



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or would like to discuss a specific requirement or project, please contact us at:

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