



First Results Implementing a Network Driver for SORBAS

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Outline

- How to communicate with SORBAS
 - UDP Packets, data format and signal list
 - A commandline-tool for communication
 - Still in progress, not all functions implemented yet
 - Will help us to develop a network driver
 - Developing of the linux driver
- Demo of the commandline-tool



How to communicate with SORBAS

- What you need is IP and Port
- Sending data and request as UDP payload
- special format (in UDP payload)

1	2	3	4	5..	N
Signal	Length par1	Parameter1	Length par2	Parameter2..	End
9c	15	Dot11CurrentFrequency	1	10	FF



UDP Envelope

- Some request signal codes:

Mime.Join.request	0x92
Mime.Associte.request	0x95
Mime.Authenticate.request	0x93
Mime.Start.request	0x98

- SORBAS answers with confirm signal
- Each request will be repeated (not needed)
- First parameter of confirm is error code



Sterm tool

- Before developing a driver, develop a tool
- Code can be used later for the driver
- Helps us to understand / verify source code
- A command-line tool can be used in a script

Demonstration of the tool after the presentation



Developing a network driver

- Behaviour of a normal network device
- Configuration through kernel /proc interface
- Also wireless configuration and debugging
- Developing of a P-t-P device similar to tun ?
- Or using Sterm as deamon with tun module??

Further proceeding



- Implement and test all functions in stern
(within the next 2 weeks)

- Write network driver
(2-3 weeks)



Thank you for your attention.

