

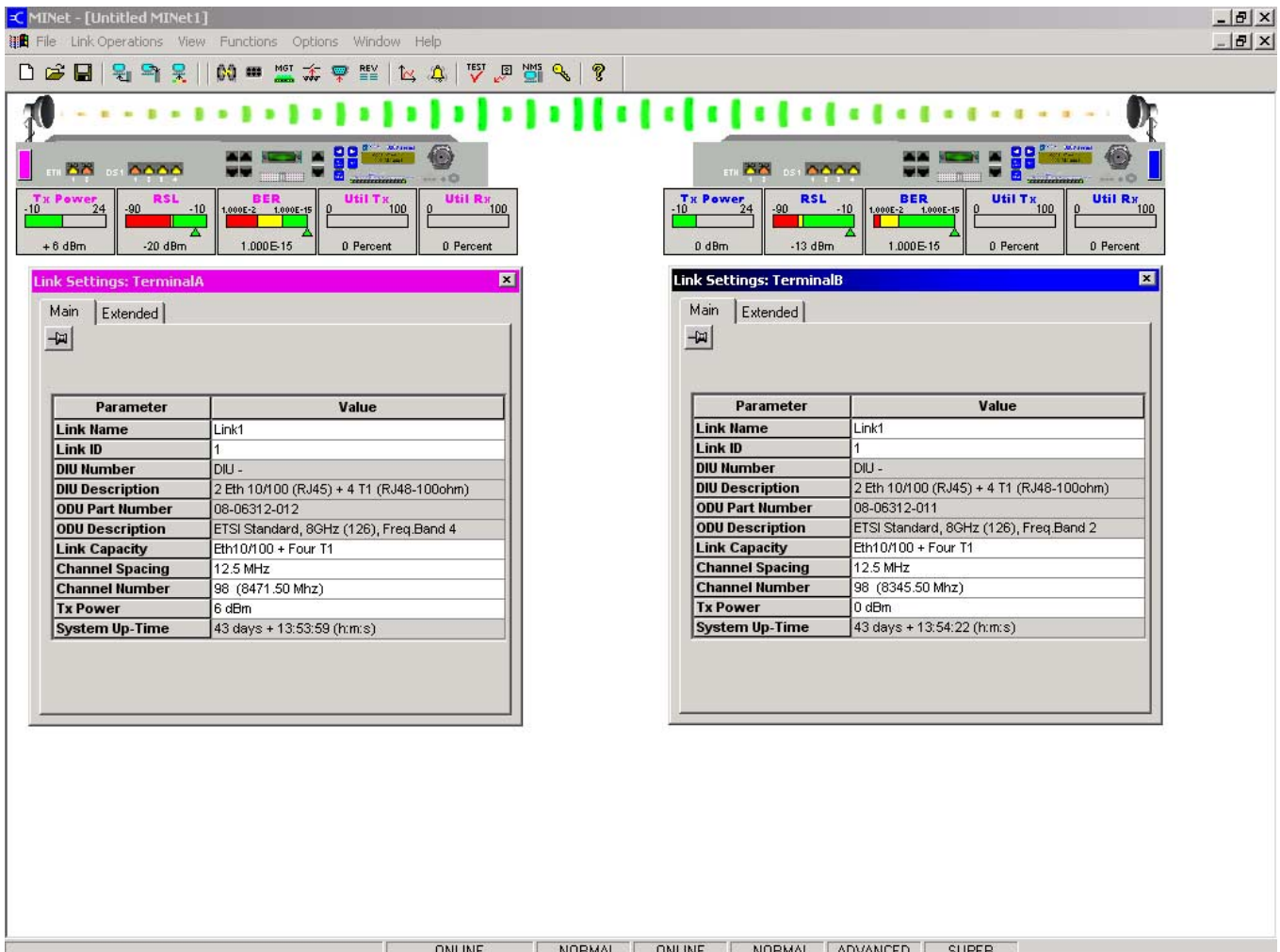
## MINet Overview

### MINet Concept

A network management system (NMS) is a system that monitors the status of elements within a given network. It adjusts their parameters as necessary to ensure proper communications and displays network elements and their attributes.

Using MINet, operators can configure a Codan 8800 system, monitor and analyse events, make adjustments and report network events based on displayed information.

MINet uses the familiar Microsoft Windows environment and the Simple Network Management Protocol (SNMP) to communicate and manage links having management platforms based on TCP/IP.



The screenshot displays the MINet software interface. At the top, there is a menu bar with options: File, Link Operations, View, Functions, Options, Window, Help. Below the menu bar is a toolbar with various icons. The main area shows two terminal link settings windows, 'Link Settings: TerminalA' and 'Link Settings: TerminalB', both displaying a table of parameters and values. Above these windows, there are performance metrics for Tx Power, RSL, BER, Util Tx, and Util Rx, each with a corresponding gauge and numerical value.

**Link Settings: TerminalA**

Parameter	Value
Link Name	Link1
Link ID	1
DIU Number	DIU -
DIU Description	2 Eth 10/100 (RJ45) + 4 T1 (RJ48-100ohm)
ODU Part Number	08-06312-012
ODU Description	ETSI Standard, 8GHz (126), Freq.Band 4
Link Capacity	Eth10/100 + Four T1
Channel Spacing	12.5 MHz
Channel Number	98 (8471.50 Mhz)
Tx Power	6 dBm
System Up-Time	43 days + 13:53:59 (h:m:s)

**Link Settings: TerminalB**

Parameter	Value
Link Name	Link1
Link ID	1
DIU Number	DIU -
DIU Description	2 Eth 10/100 (RJ45) + 4 T1 (RJ48-100ohm)
ODU Part Number	08-06312-011
ODU Description	ETSI Standard, 8GHz (126), Freq.Band 2
Link Capacity	Eth10/100 + Four T1
Channel Spacing	12.5 MHz
Channel Number	98 (8345.50 Mhz)
Tx Power	0 dBm
System Up-Time	43 days + 13:54:22 (h:m:s)

At the bottom of the interface, there is a status bar with the following indicators: ONLINE, NORMAL, ONLINE, NORMAL, ADVANCED, SUPER.



## MINet and Codan 8800 DMR

The Codan 8800 is equipped with a network management system (NMS). The Codan 8800 NMS contains two components:

- an SNMP-based management system called MINet that is installed on a PC
- an SNMP agent that is physically embedded in the IDU.

The management system and agent communicate with one another using the SNMP protocol over TCP/IP. The SNMP agent contains a database of standard and private SNMP Management Information dataBases (MIBs). To acquire information, the management communicates with the agent's database. Thus, the management system generally functions as a master and the agent as a slave.

An exception to this master-slave relationship is the handling of important alarm notifications. These agent-initiated messages or alarms, which are sent to the management system, are called traps.

Note that MINet does not have a capability to receive the traps itself directly but rather re-directs the traps to specific user-determined trap recipient IP addresses. HP OpenView and some Windows Operating Systems, for example, have in-built trap manager capabilities.

## MINet Features

MINet, provides the following features:

- A Graphical User Interface (GUI) based windows environment
- Ability to configure and set a terminal's properties
- Ability to view all data port information
- Remote access over the Internet
- Traffic monitoring
- Alarm, status, security, performance, test and configuration management
- Ability to download firmware upgrades to local, remote and network terminals