

MANTA

High Capacity Digital Cross-connect

Signaling links grooming for monitoring optimization



PCM Grooming

TS Grooming

E1/T1 Links Supervision

Automatic Configuration

Scanning Mode

Centralized Supervision

E1/T1 Conversions

Chainable

Easy-to-use, friendly
GUI

Fixed and mobile phone service providers invest in network management systems to ensure quality and revenues using monitoring systems.

The network is usually spread out over different sites; thus, as networks expand, needs increase in terms of number of E1/T1 lines to be simultaneously monitored. Moreover, one probe can capture more than one site as soon as the remote signaling links are provided.

This is where MANTA finds all its relevance and makes a perfect complementary tool: MANTA Digital Cross-Connect (DXX) device is a cost-effective way to enhance the overall monitoring performance.

Typical applications

- Signaling links grooming
- Non-intrusive monitoring
- Supervision systems cost reduction
- Monitoring optimization
- Remote monitoring site
- E1/T1 links supervision
- Signaling links output duplication



Overview

MANTA Digital Cross-Connect (DXX) device is a cost-effective way to enhance monitoring performance by increasing the number of monitored E1 links without increasing the monitoring costs: MANTA digital multiplexer concentrates the signaling channels towards a monitoring tool, decreasing the number of probes E1 input links required on the monitoring system.

In addition, MANTA allows several monitoring tools to handle the same signaling channels at the same time. The easy-to-use and non-intrusive MANTA offers plug and play functions such as auto-detection of signaling channels (TS) and automatic switching. MANTA remote operation gives the operator the ability to manage from a central point all the MANTAs deployed in the network.

Moreover, MANTA can provide the signaling links to a remote probe. This means that the capture may be centralized, handling remote monitoring points and decreasing the number of required probes.

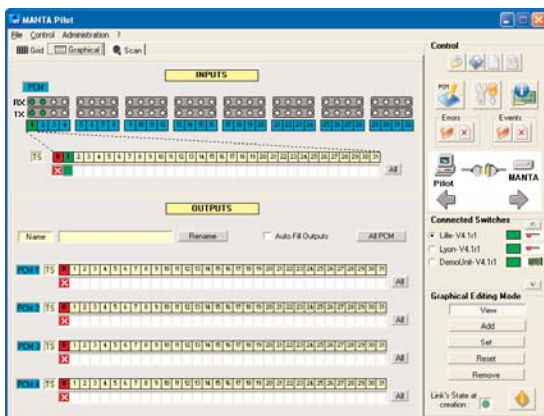
Main features

Two levels of Grooming

Timeslot grooming: any timeslot of the incoming PCM links may be switched to one or more free output timeslot(s).

PCM grooming: any incoming PCM link may be switched to any free output PCM links (one or several).

Timeslot and PCM link switching may be combined in the same configuration of MANTA.



MANTA Pilot Software

The MANTA Pilot control software is easy to use. PCM and timeslots allocation is graphically performed by a drag and drop. An allocation consists in associating one timeslot from an incoming PCM link to one timeslot on an outgoing PCM link. Timeslot aggregations are managed for a handy configuration of Nx64 kbit/s signalling links (for example GPRS Gb interface).

Access rights onto MANTA device are handled by MANTA Pilot too.

Centralized Supervision

One MANTA Pilot can oversee a set of MANTAs spread out over the monitoring system. The behavior of each MANTA as well as the physical PCM input links themselves are supervised.

Alerting through asynchronous messages (SNMP TRAPS) is fully compatible with the standard SNMP Managers.

Automatic Configurations

Automatic cross connection: MANTA Pilot software can automatically handle the switch configuration; the process is based on the selection of the first free output timeslot.

Scanning mode: incoming timeslots are continuously scanned in order to detect signaling channels. These channels are automatically switched to one of the output timeslots. More than largely simplifying the configuration of MANTA, this mode allows automatic adaptation to the networks reconfigurations too.

Automatic input gain adjustment.

Remote Control Interface

MANTA may be controlled locally (serial link) or remotely through an Ethernet LAN or WAN.

Open Control Interface

Three open interfaces enable the integration of MANTA management in customer-specific GUI:

- *MANTA API* for LINUX and Windows
- *HyperTerminal:* for local control
- *Telnet Commands:* local or remote control

T1/E1 Conversion

Depending on the selected model of MANTA, a conversion function is available. It enables to switch from E1 inputs to T1 outputs or from T1 inputs to E1 outputs.

Specifications

General Data

- MANTA Pilot software for Windows 98/NT/2000/XP
- Rack mounted equipment 19", 2HU
- Weight: 19 kg
- Input Voltage: 90-132 /180-264 VAC
- EMC: EN 50081-1, EN 50082-2
- FCC part 15, CEI 60950

Input/Output Interfaces

- Up to 32 bidirectional PCM input links
- Up to 8 bidirectional PCM output links
- E1 or T1 configuration, ITU-T G.703, G.704
- High-impedance inputs on 120/100 Ohms twisted pair or 75 Ohms coaxial
- Inputs sensitivity: -32 dB
- Outputs on 120/100 Ohms twisted pair or 75 Ohms coaxial

Typical I/O configurations

MANTA 164	16 input / 4 output
MANTA 324	32 input / 4 output
MANTA 328	32 input / 8 output



All other trademarks, service marks, registered trademarks or registered service marks mentioned in this document are the property of their respective owners.



ZART des Perrières - BP 27241
35772 Vern-sur-Seiche Cedex
France

Tel +33 (2) 99 04 80 60
Fax: +33 (2) 99 04 80 61
www.astellia.com

Copyright Astellia - All rights reserved.
Specifications are subject to change
without notice. January 2006.