

IONMM

Application Note M10 – MIB Variables

MIB Variables

Multiple Community Strings

The IONMM supports the use of multiple SNMP community strings.

SNMP community strings are like passwords for network elements. Most often, there is one community string which is used for read-only access to a network element. The default value for this community string is often “public”. Using this community string like a password, the NMS can retrieve data from network elements.

Less often, there is also a read-write community string. The default value for this is often “private”. Using this community string, the NMS can actually change MIB variables on a network element.

MIB Support

The IONMM supports both public and private Management Information Bases (MIB) variables.

Public (Standard) MIBs

The IONMM provides complete management through the SNMP interface. It supports the following standard MIBs for management using SNMPv2c:

- Bridge MIB (RFC 4188)
- DOT3 OAM MIB (RFC 4878)
- Entity MIB (RFC 4133)
- Ether-like MIB (RFC 3635)
- IEEE802.lag CFM MIB
- IF MIB (RFC 1573, RFC 2863, RFC 2864)
- MIB-II (RFC 1213)
- P-Bridge MIB, Q-Bridge MIB (RFC 4363)
- RMON-MIB (RFC1757)



Transition Networks, Inc.
10900 Red Circle Drive
Minnetonka, MN 55343
USA

Transition Networks Inc. offers networking connectivity solutions that make networks perform better, faster and more reliably while helping companies leverage their existing networking infrastructure.

IONMM

Application Note M10 – MIB Variables

Private MIBs

The Transition Networks private MIBs for SNMP IP-based management feature extensive management options. These MIBs are specific to the various modules in the ION system, and their use is dependent on the specific module being present in the system. The private MIBs provided by Transition Networks are:

- 802.1q VLAN support
- 802.3ah OAM enable/disable on all ports
- Administratively enable/disable port
- *AutoCross* on copper port
- Copper and fiber link status
- Copper and fiber port duplex
- Copper port speed
- Enable/disable Auto-Negotiation (copper)
- Enable/disable capability advertisement for speed and duplex
- Enable/disable far-end fault on fiber
- Enable/disable Pause
- IP traffic class priority
- OAM channel statistics
- OAM remote loopback
- Rate limiting/band width allocation using fixed rate sets
- Remote fault detect
- RMON statistics
- Transparent link-pass through
- Virtual cable test



Transition Networks, Inc.
10900 Red Circle Drive
Minnetonka, MN 55343
USA

Transition Networks Inc. offers networking connectivity solutions that make networks perform better, faster and more reliably while helping companies leverage their existing networking infrastructure.

IONMM

Application Note M10 – MIB Variables

An example of a private MIB objects tree is shown in **Figure 1**.

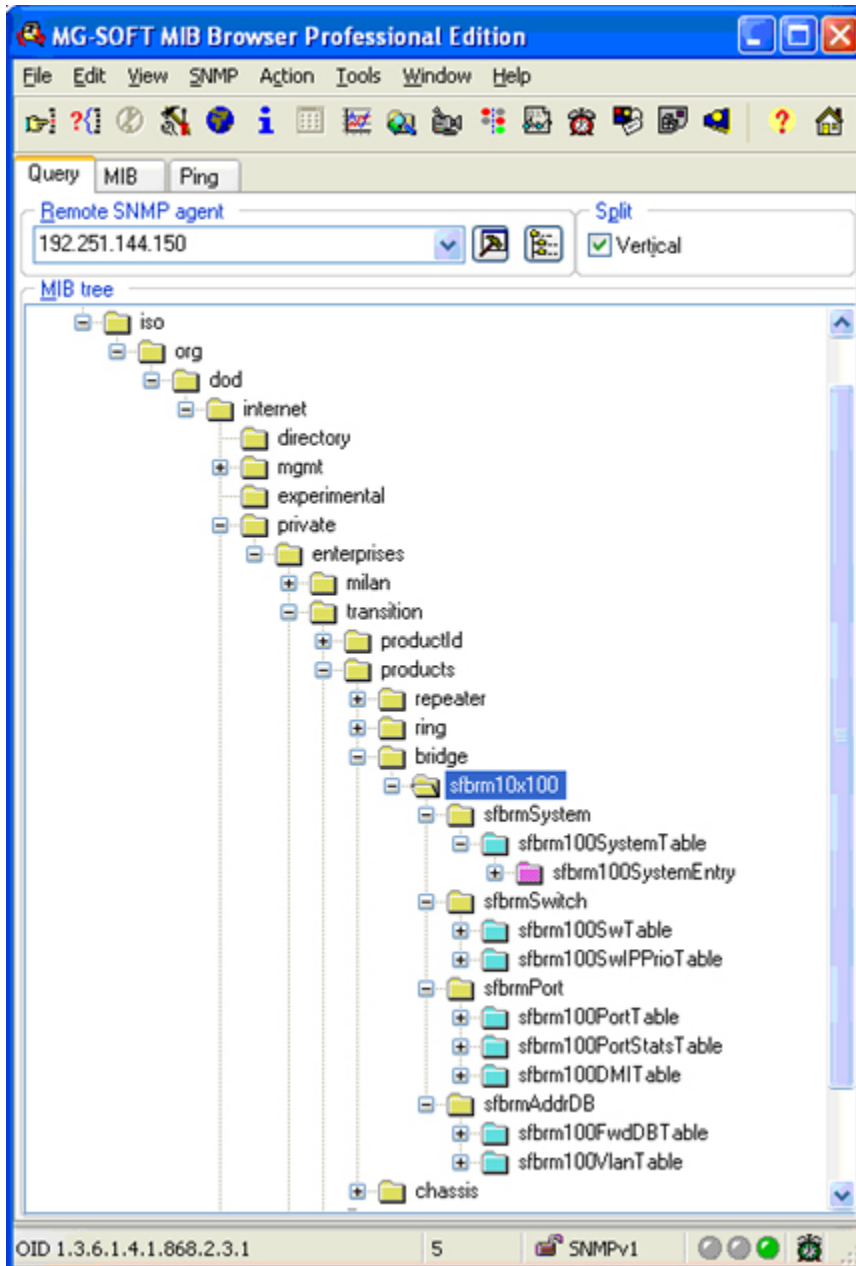


Figure 1:
Private MIB Objects



Transition Networks, Inc.
10900 Red Circle Drive
Minnetonka, MN 55343
USA

Transition Networks Inc. offers networking connectivity solutions that make networks perform better, faster and more reliably while helping companies leverage their existing networking infrastructure.