



# Motadata MIB Browser

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User Manual

Version 1.0

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## Introduction

Motadata MIB Browser is a powerful and user friendly tool that provides MIB Browsing and related functions to users. It is an essential tool for engineers to manage SNMP enabled network devices and applications allowing them to load standard, proprietary MIBs. It also allows them to issue SNMP requests to retrieve SNMP agents' data, or make changes to agents. Using the Motadata MIB Browser, you can navigate within the MIB for the selected device and retrieve the value of any MIB variables.

## Features of the Motadata MIB Browser

1. Complete SNMPv1, v2c and v3 support
2. Enables to perform the basic SNMP operations such as GET, GETNEXT, GETBULK, WALK, TABLE VIEW and SET
3. Provides a user-friendly view of SNMP table data. The table data can be viewed in a separate window called SNMP Table UI
4. Load, compile and view MIB modules in a MIB tree
5. Allows adding more than one host agents
6. Intuitive search functionality for finding OIDs, values and tree nodes
7. Enables exporting the results of various SNMP operations

## System Requirements

The following are the hardware requirements

### Hardware

Memory: Minimum 200 MB RAM

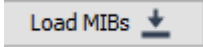
Disk Space: Minimum 50 MB

### Operating Systems Supported

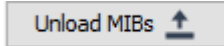
Windows: Windows 7, Windows 8 & Windows 10

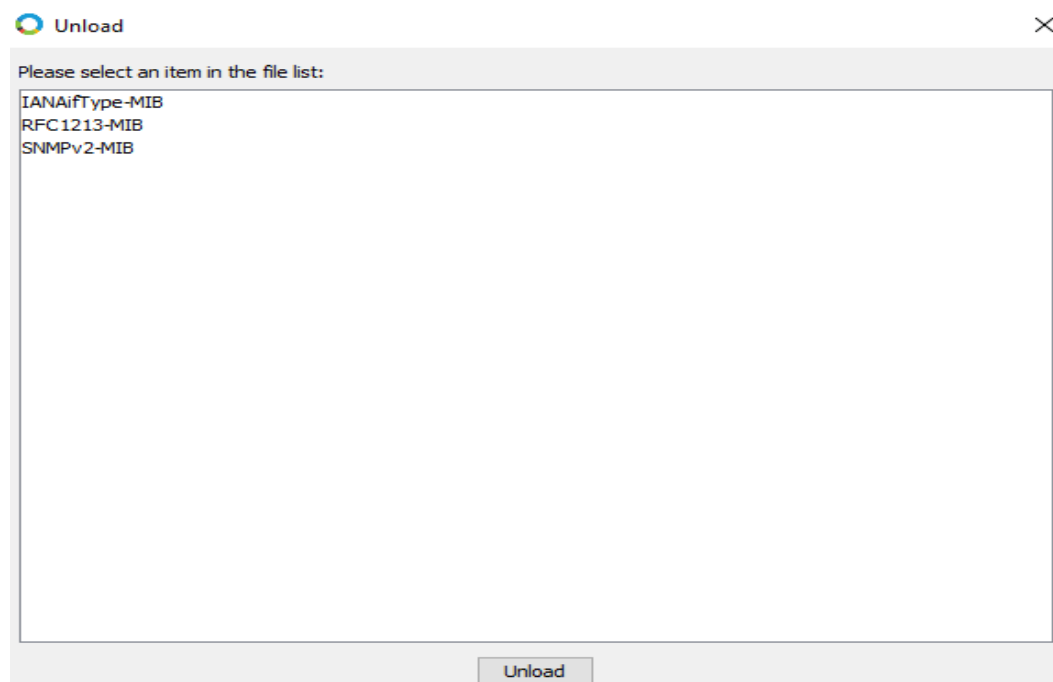
Windows Server: Windows Server 2008 & Windows Server 2012

## Load and Unload MIB Files

The load MIB feature has been provided to fetch the OIDs and their details according to the user's choice. Click on the  button at the top right corner of the MIB browser to browse and add a file of your choice.

**Note: Only .mib and .txt files can be loaded in the MIB browser**

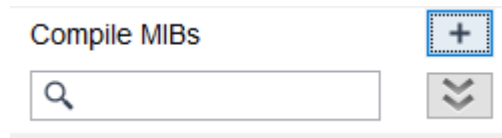
The unload MIB feature is to remove one or more MIB files from the tree view according to the user's choice. Click on the  button at the top right corner of the MIB browser. A list of the compiled files will open and you can select and unload one or more MIB files.



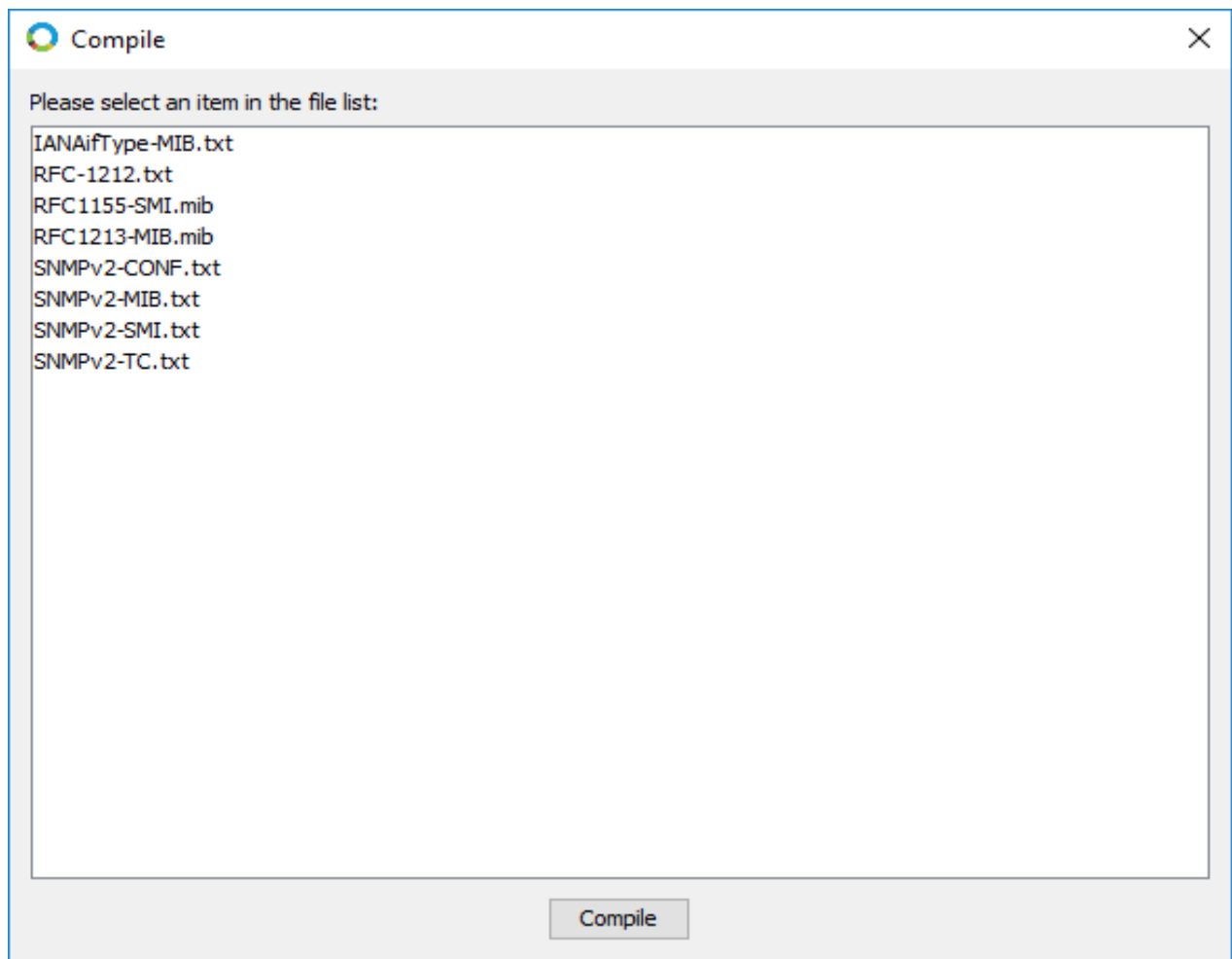
## Compile MIB Files

To compile one or more MIB from the loaded MIBs, click on the '+' button.

**Note:** Only the files which are loaded first can be seen in the compile MIB list.

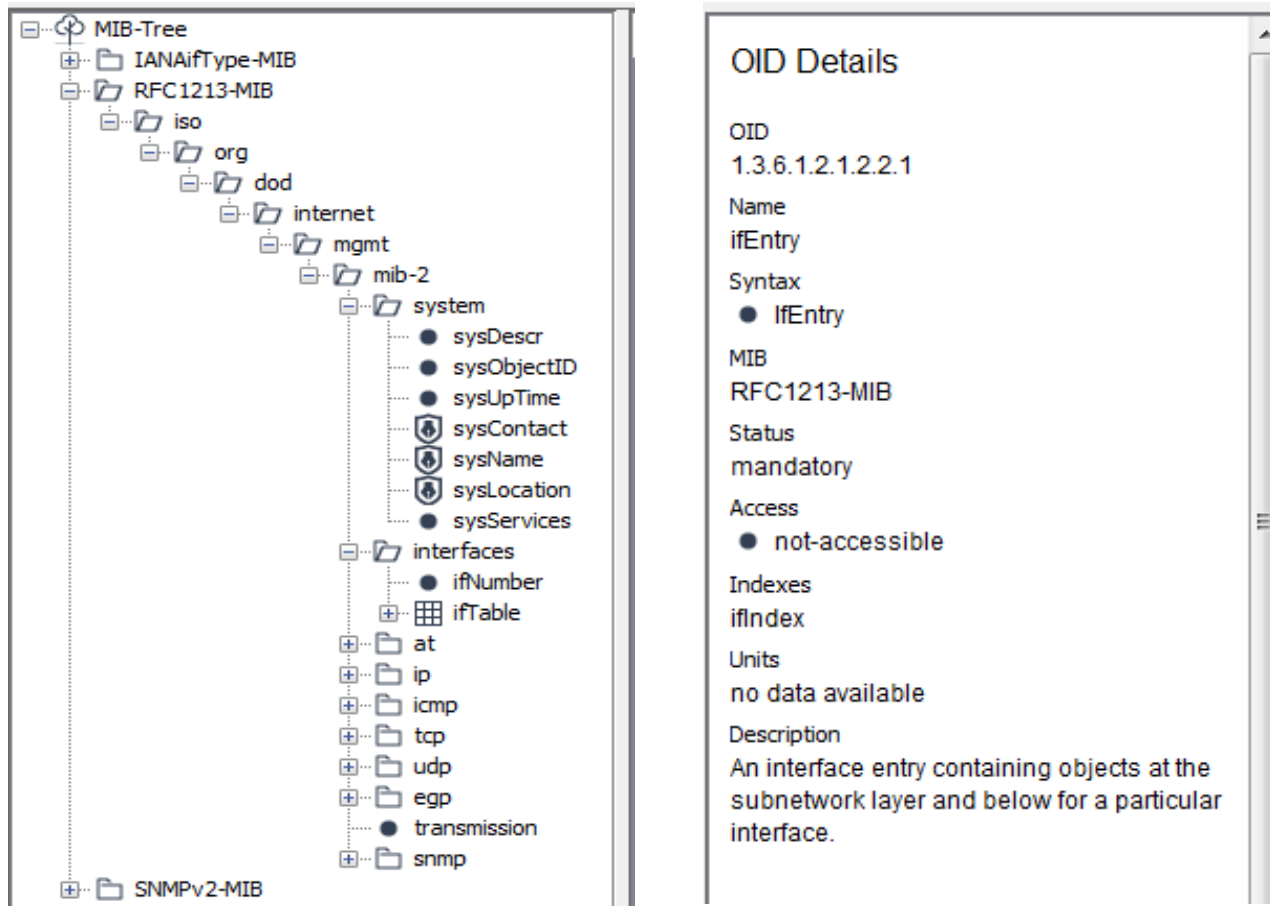


Select the files to be compiled from the list. Once the MIB is compiled it can be seen in the MIB tree view.



## MIB Tree

Once the file is compiled it can be viewed in the left side panel of the browser in a tree structure.







The screenshot displays a web browser interface with two main panels. The left panel, titled 'MIB-Tree', shows a hierarchical tree structure of MIB objects. The root is 'MIB-Tree', which branches into 'IANAifType-MIB' and 'RFC1213-MIB'. Under 'RFC1213-MIB', the path 'iso' > 'org' > 'dod' > 'internet' > 'mgmt' > 'mib-2' is expanded. The 'mib-2' folder contains sub-folders for 'system' and 'interfaces'. The 'system' folder lists objects: sysDescr, sysObjectID, sysUpTime, sysContact, sysName, sysLocation, and sysServices. The 'interfaces' folder lists: ifNumber and ifTable. Below 'interfaces' are several protocol folders: at, ip, icmp, tcp, udp, and egp, followed by transmission and snmp. The right panel, titled 'OID Details', provides information for the selected OID 1.3.6.1.2.1.2.2.1. It lists: Name: ifEntry, Syntax: IfEntry, MIB: RFC1213-MIB, Status: mandatory, Access: not-accessible, Indexes: ifIndex, Units: no data available, and Description: An interface entry containing objects at the subnetwork layer and below for a particular interface.

It is divided into two parts:

- Tree panel
- OID details panel

## Tree Panel

MIB tree contains different types of node. Each node is differentiated by different symbols.

	Table node
	Read-write node
	Index node
	Leaf node, usually read-only

## OID Details Panel

**OID:** Displays current OID information of that particular node

**Name:** Displays name of that particular node

**Syntax:** Displays data type of that particular node

**MIB:** Displays the MIB name of that particular node

**Status:** Displays the information about that particular node whether it is mandatory or deprecated

**Access:** Displays the user rights of that particular node whether READ ONLY or READ-WRITE

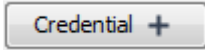

**Indexes:** Displays the table indexes of various SNMP tables

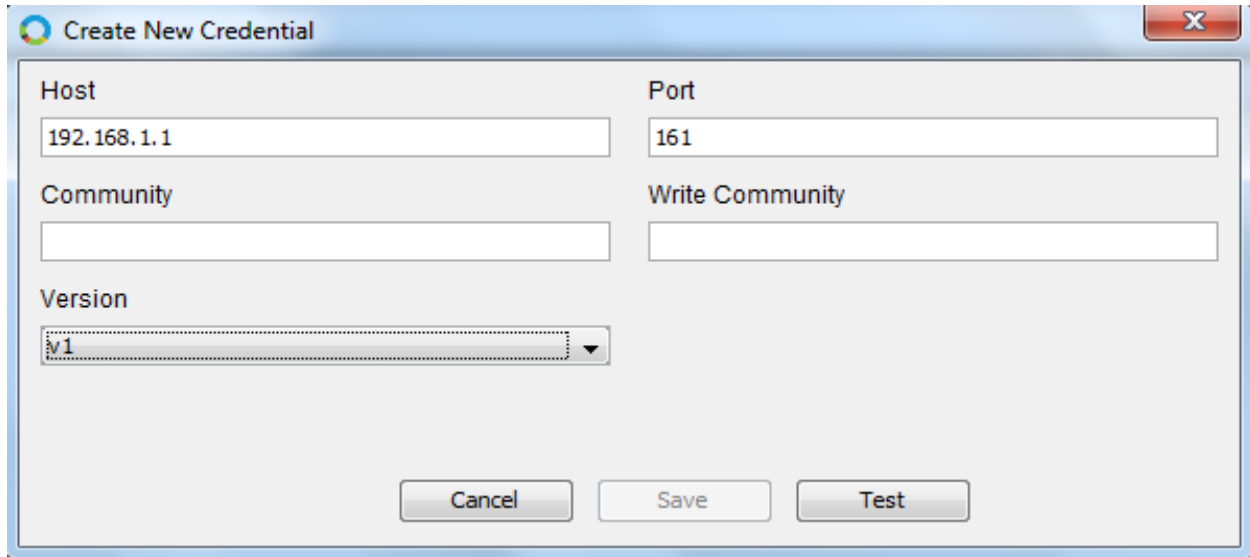
**Units:** Displays number of transmission units via the interface

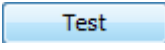
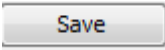
**Description:** Displays detailed information about the use of that particular node

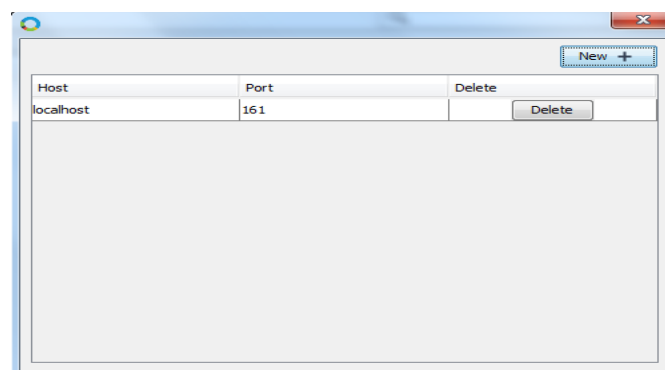
## Credentials

Follow below steps to add credentials:

1. Click on  button
2. Click on  button to add new credentials



3. Enter valid host
4. Enter Port
5. Enter Community (Read community of device)
6. Enter write community if configured in the agent
7. Select version: V1, V2c or V3
8. Click on  button
9. Message of valid credential will be displayed
10. Click on  button



Host	Port	Delete
localhost	161	<input type="button" value="Delete"/>



**Note:** User can add maximum ten credentials.

Motadata MIB browser supports below security level to configure SNMPv3

Security Level	Authentication Protocol	Privacy Protocol
noAuthNoPriv	None	None
authNoPriv	MD5 SHA	None
authPriv	MD5 SHA	DES 3DES AES128

## SNMP Operations

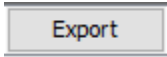
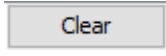
Following SNMP operation can be performed in the MIB browser:

- Get
- GetNext
- GetBulk
- Walk
- Set
- Table View

Before performing any of these operation make sure the valid host (as added in the credential) is selected.

The result of all these operations can be seen in the result table as shown in the image below.

OID	Value	Type
sysDescr.0	Cisco IOS Software, C2960 Software (C2960-LANBASEK...	OCTET STRING
sysObjectID.0	1.3.6.1.4.1.9.1.697	OBJECT IDENTIFIER
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
ifNumber.0	52	Integer32

The result can be exported in .csv format by clicking on  button. The records in the result table can be cleared by clicking on  button.

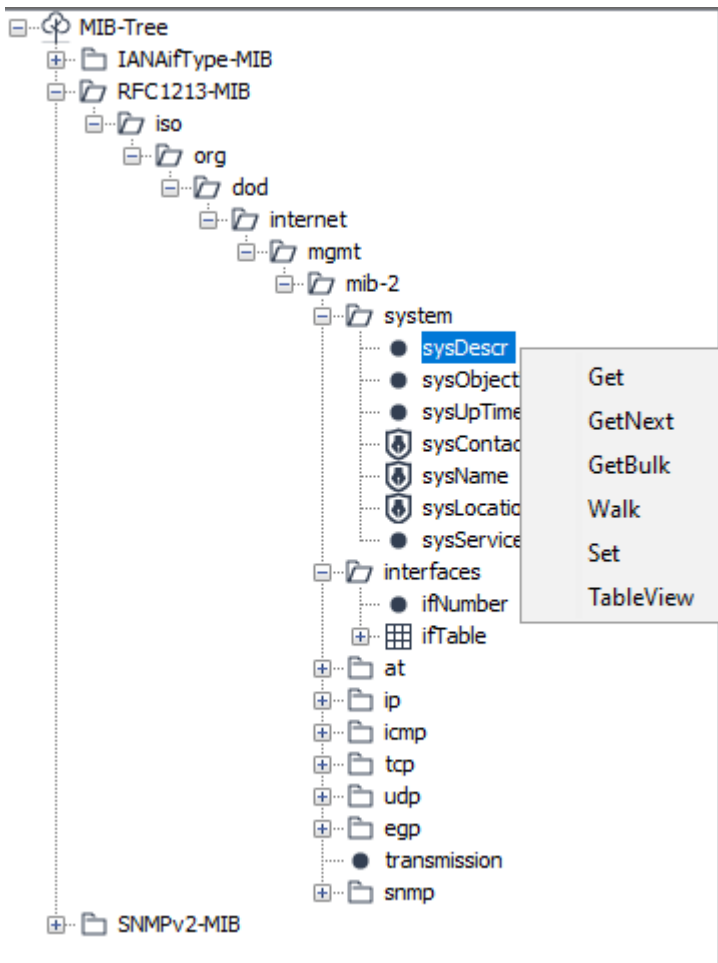
The user can also search for a specific OID or value in the result table.

All the operations can be performed in two ways:

1. From the top right corner of the MIB browser as seen in the figure below.

[Get](#) [GetNext](#) [GetBulk](#) [Walk](#) [Set](#) [Table View](#)

2. Right clicking on any of the node in the MIB tree as seen in the figure below.



Note: All the operations can also be performed by specifying only the OID value without selecting any node from the MIB tree. Give a valid OID and perform any of the operations.

OID :-

OID	Value	Type
sysDescr.0	Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M)...	OCTET STRING
sysObjectID.0	1.3.6.1.4.1.9.1.697	OBJECT IDENTIFIER
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
sysLocation.0	The SNMP Lab	OCTET STRING
ifNumber.0	52	Integer32

**Get:** Performs SNMP GET on the current host displaying the details of the selected OID.

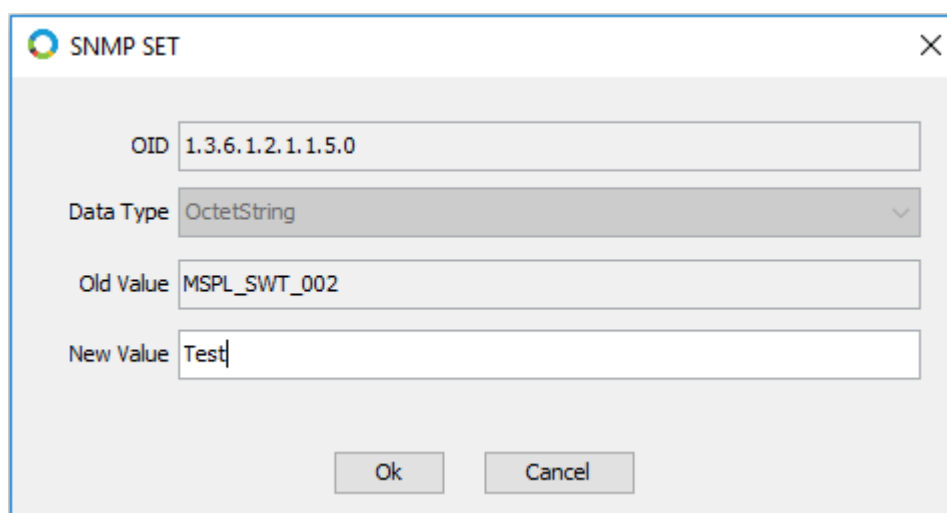
**GetNext:** Performs SNMP GET-NEXT on the current host displaying the details of next OID in the tree.

**GetBulk:** Performs SNMP GET-BULK on the current host displaying the details of the next ten OIDs in the tree from the current OID selected.

**Note:** For SNMP v1 type agent this operation will only get the details of the current OID selected.

**Walk:** Performs SNMP WALK on the current host displaying the details of the OIDs under the sub tree of the current selected OID.

**Set:** Performs SNMP SET on the current host to change the value of a selected OID. Mention the new value of the OID you want to set as seen in the figure below.



**Note:** Make sure that while creating the credential for the current host you have mentioned a write community string. A write community string is mandatory to perform SNMP SET.

**Table View:** Performs SNMP TABLE on the current host displaying contents of a SNMP table in the tree.

A new tab besides the 'Result Table' will be opened and the result of table view can be seen in the figure below

ifIndex	ifDescr	ifType	ifMtu	ifSpeed	ifPhysAddr...	ifAdminSta...	ifOperStatus	ifLastChange	ifInOctets	ifInUcastPkts	ifInDiscard
1	Vlan1	53	1500	1000000000	e8:04:62:b2...	up	up	0:02:20.63	4108586429	150553767	2
12	Vlan12	53	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.30	0	0	0
30	Vlan30	53	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.30	0	0	0
10101	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.12	0	0	0
10102	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.12	0	0	0
10103	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	24 days, 20...	1139104359	4529488	0
10104	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.12	0	0	0
10105	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	24 days, 17...	1477397040	6792144	0
10106	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10107	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10108	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	15 days, 20...	3908195020	49953404	0
10109	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10110	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10111	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	24 days, 22...	97749888	768043	0
10112	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	24 days, 1:...	136269954	664979	0
10113	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10114	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	24 days, 16...	1647510907	15448952	0
10115	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10116	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	1 day, 1:51:...	12213297	51301	0
10117	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	15 days, 20...	45251017	225836	0
10118	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10119	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10120	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	15 days, 18...	1626763440	2640065	0
10121	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10122	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	23 days, 19...	1663700348	92692832	0
10123	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	0:02:21.02	3028420205	395206846	0
10124	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	24 days, 23...	1875967655	49153595	0
10125	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.13	0	0	0
10126	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.14	0	0	0
10127	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	16 days, 16...	1330766195	6220591	0
10128	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.14	0	0	0
10129	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	up	24 days, 18...	259687078	610538	0
10130	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	0:02:00.14	0	0	0
10131	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	15 days, 22...	11662	15	0
10132	GigabitEther...	6	1500	1000000000	e8:04:62:b2...	up	down	17 days, 18...	298290155	402758	0

## About Motadata

Motadata powered by Mindarray Systems Pvt. Ltd. – is a global IT product company, offering next-gen product suite consisting of Network Management & Monitoring, Log & Flow Management and IT Service Management Platforms. The platform empowers both IT administrators and CXOs to Monitor, Analyze, Track & Resolve IT operations through a unified dashboard and service automation. It is industries first IT ops platform that truly correlates the metric, flow and log events and turns them into actionable insights. Motadata has customers worldwide across the Telecom, Government and Enterprise Domain.

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