

MIB Explorer Feature Matrix

Standards and Protocols Supported

SNMPv1 (RFC 1157), SNMPv2c (RFC 1901/1905), and SNMPv3 (RFC 3412 - 3417).	✓	✓	✓
Transport Protocols UDP, TCP, and. All transport protocols support with IPv4 and IPv6.	✓	✓	✓
TLS (RFC 5343, 5390, 5391, 5953) support over TCP transport with IPv4 and IPv6.	✓	✓	
MIB specification formats SMIv1 (RFC 1155) and SMIv2 (RFC 2578-2580).	✓	✓	✓
New Java Standard Edition (SE) Runtime Environment 6 or later.	✓	✓	

Platforms Supported

New Java WebStart 6 or later.	✓	✓	
Linux (RedHat, Novell SuSE, BSD), Solaris (x86/SPARC), Windows (XP, Vista, 7, 2008) , Mac OS X, HP-UX, AIX, and others where Java Standard Edition 6 or later is available.	✓	✓	
New Android 3.2 or later			✓

Query MIB Data

Browse sub-trees while detecting inconsistencies between retrieved values and MIB definition (if available).	✓	✓	
Directly edit browsed SNMP values based on the retrieved syntax type.	✓	✓	✓
Displaying MIB object instances as leaf nodes in MIB tree.	✓	✓	

View, Edit, and Create SNMP Values

Setting single MIB instances directly from MIB tree.	✓	✓	
Viewing and editing SNMP conceptual tables with multi-column sorting and transposable table editor.	✓	✓	
Table editor with virtually unlimited undo/redo including row creation and deletion.	✓	✓	
Column width for table views are (optionally) restored when table is browsed again.	✓	✓	
New Cell delta highlighting to quickly spot changed values between table refreshes.	✓	✓	

	Lite	Pro	Android
Commit changes to table cells row-by-row and auto-refresh set values.	✓	✓	
Commit all writable columns of each changed row even if value has not been changed.		✓	✓
Filter table contents by setting a lower and/or upper bound limit.	✓	✓	
Easy row creation with advanced index editor that allows to specify sub-index objects individually and according to its object format (including DISPLAY-HINT).	✓	✓	✓
Duplicate an existing row with the table editor by providing just a new index.	✓	✓	
Refresh table contents periodically and export table data to CSV, XML, and XLS.	✓	✓	
Table editor detects augment and expansion table relationships and displays them optionally in a single editor.	✓	✓	
View and edit scalar object instances with the table editor to quickly issue multi-variable SET requests.	✓	✓	
Advanced value editors with DISPLAY-HINT format input and output, smart OID lookup by lastname, and IP address lookup by hostname.	✓	✓	✓
View and edit related SNMP tables in a Grid table editor for better overview about sparse table relationships.		✓	
New Multi-target table view to view and edit rows (instances) of the same table (sub-tree) for multiple agents in the same table. Compare and copy content by row and side-by-side.		✓	
Receive Traps, Notifications, and Inform Requests			
SNMPv1 trap, SNMPv2c/v3 notification, and SNMPv2c/v3 inform request reception with configurable severity indication.	✓	✓	✓
Run configured scripts on behalf of incoming traps/notifications/informs depending on their notification ID.		✓	
Persistently save trap history (optionally also as XML).	✓	✓	
MIB Specification Authoring			
Edit MIB specification files with one or more MIB modules with customizable syntax highlighting and error stripe for quickly locating errors in MIB modules.	✓	✓	
Export MIB modules as XML, XML Schema, HTML, PDF, and plain text files.	✓	✓	
Check MIB files for syntax errors with exact error location and accurate checking results according to SMIV1 and SMIV2 rules.	✓	✓	✓
Auto-resolve MIB module dependencies when compiling MIB files.	✓	✓	✓
Detect all syntax errors of a MIB file at once with the advanced error recovery of MIB Explorer's MIB compiler.	✓	✓	✓
Auto SMI syntax completion using <Ctrl>-<Space> in MIB file editor.	✓	✓	

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SNMPv3			
Send, receive, and analyse SNMPv3 messages with MD5 and SHA authentication and DES, 3DES, AES 128/196/256bit encryption.	✓	✓	✓
New Send and receive SNMPv3 messages using the TLS security model.	✓	✓	
Specify authentication and encryption passphrases as plain text, decimal, or hexadecimal strings.	✓	✓	
Use non-localized passphrases as well as localized ones which allows using different passphrases for the same security name on different agents.	✓	✓	
Change passphrases, delete, and create remote (and optionally local) USM users on multiple SNMP entities at once (see also Administration).		✓	
PDU Editor			
Create and modify SNMP PDUs by dragging/selecting object types and instances from the MIB tree and browse results into the editor.	✓	✓	✓
Save and open PDUs as XML and MIB Explorer's PDU files.	✓	✓	
Send a PDU as GET, GETNEXT, SET, GETBULK, TRAP, and INFORM request to multiple target addresses at once.	✓	✓	
Debugging and Analyzing SNMP Devices/Entities			
SNMP Packet Analyzer for tree structured BER decoding and hex-dumping of all sent and received SNMP messages.	✓	✓	
SNMP Packet Analyzer decrypts scoped PDUs of SNMPv3 AES and DES encrypted messages on the fly using MIB Explorer's USM user configuration.		✓	
Logging with configurable log levels.	✓	✓	✓
Browse results indicate type inconsistencies between MIB specification and agent implementation as well as missing MIB specifications.	✓	✓	
Use MIB sets to group a set of MIB modules together and associate targets with MIB sets for faster loading of the appropriate MIB modules for a target.	✓	✓	
Auto-detect MIB modules supported by a SNMP agent and store it as a MIB set.	✓	✓	✓
Take snapshots from agents as a whole or in parts, open and compare snapshots, apply snapshots to agents (through SNMP SETs), and merge snapshots.		✓	
Run stress tests against SNMP agents by using scripting (e.g. trap-gun or simulating complex configuration steps).		✓	
MIB Analysis			
Search a loaded MIB modules for duplicate OIDs.		✓	
Search a MIB repository (= a set of compiled MIB modules) by OID, object name, description, or whole object definition with regular expressions.		✓	
Fully customizable script (mib2text.vm) to format MIB module as text file.		✓	
Example script to extract OID to object name mappings for Java (can be customized for any other programming language).		✓	

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SNMP Data Export			
Dump MIB tree, including possibly retrieved instances, to a text file.	✓	✓	
Export table data to CSV (Comma Separated Values), XLS (MS Excel®), and XML.	✓	✓	
Export browse data to text file.	✓	✓	
Save received traps and inform requests as PDUs for reuse in PDU editor or scripts.	✓	✓	✓
Monitoring SNMP Entities			
Monitor SNMPv1/v2c/v3 targets and collect data in round robin database with fully configurable data consolidation and display data as 2D and 3D charts.		✓	
Monitor chart images (GIF, JPEG, PNG, PS, PDF) and data (CSV, XLS, HTML, ..) can be accessed via HTTP using a built-in HTTP server (see also HTTP Server).		✓	
Monitor chart images and data can be exported periodically to files.		✓	
Monitor configuration is highly customizable and supports index calculation and spreadsheet like expressions.		✓	
Monitor data passively collected from notifications and inform requests.		✓	
Configure alarm conditions for Monitors to send notifications, SNMP operations, E-Mails, or execute a system commands when an alarm condition is met.		✓	
Run MIB Explorer as a background process (headless) to server SNMP data through the built-in HTTP server and to monitor/control SNMP entities.		✓	
Monitor configuration and collected data can be saved/loaded to/from XML.		✓	
Monitor configuration and collected data can be stored/loaded to/from relational databases with JDBC interface.		✓	
HTTP Server			
Built-in HTTP server to serve static content and dynamically created content through monitor and script servlets.		✓	
Dynamic content generation can be customized through templates/scripts.		✓	
SNMP Network Discovery			
Discovery of SNMPv1/v2c/v3 agents and other network elements by periodically scanning networks using seeds.		✓	

	Lite	Pro	Android
Discovered network elements are pinged periodically for connectivity test.		✓	
Add SNMP objects to include in SNMP entity scan.		✓	
Easily add scanned SNMP entities as new targets to MIB Explorer's configuration.		✓	
Administration			
SNMPv3 user administration on multiple targets at once, including USM user creation for local and remote users, password modification, and user deletion.		✓	
Backup critical SNMP data by saving a snapshot from a table or sub-tree and restore it to an agent at a later time via SNMP SET commands.		✓	
TFTP server and client to backup and restore bulk data (e.g. system configuration) of SNMP devices.		✓	
New Automatic software updates through Java WebStart/Android Play Store.	✓	✓	✓
Support			
Free informational support through the MIB Explorer Mailing List at: http://lists.agentpp.org/mailman/listinfo/mibexplorer .	✓	✓	✓
One year free e-mail support from support@mibexplorer.com .		✓	
Comprehensive, non-nonsense online help (also available as PDF) and HTML scripting API documentation.	✓	✓	

*New in MIB Explorer version 3.0 compared with MIB Explorer 2.x.

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