

Using SNMPc with MiMOMax products (rev. 2)

SNMPc refers to the SNMP application called “**SNMPc Enterprise Edition version 7.2 August 24, 2009**” by “**Castle Rock Computing**” (www.castlerock.com).

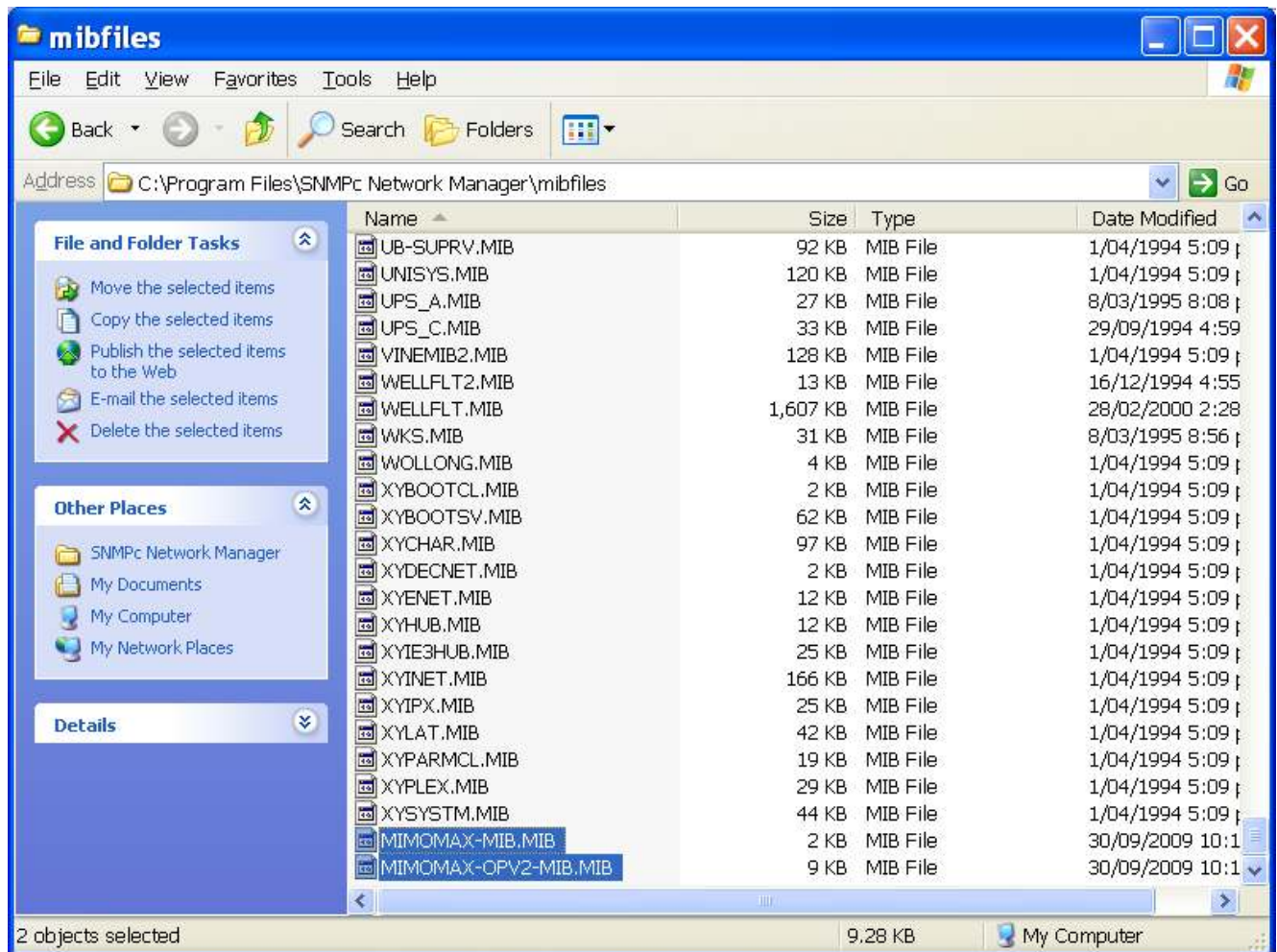
1. MiMOMax MIB files

The MIB files can be downloaded from the radio unit using CCMS on the “**Control Panel**” page. There are two files to download, “**SNMP Base MIB**” contains variable definitions common to all MiMOMax products; and “**SNMP MIB**” contains variable definitions common to the same product type, in this example, “**OPV2**”.

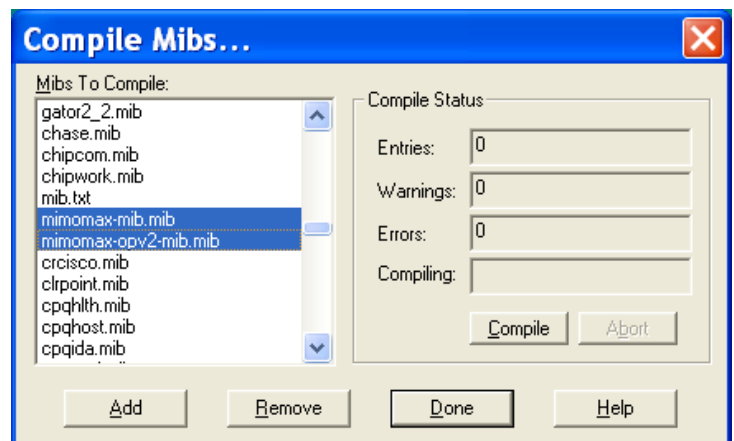
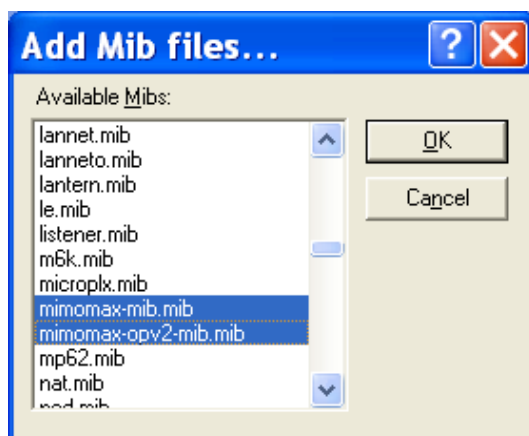
The screenshot shows a web browser window titled "OPV2 MIMOMAX - Mozilla Firefox". The address bar shows the URL "http://192.168.0.2/main.php?fileName=applyToTarget.php". The page content includes a sidebar on the left with a menu of options: Diagnostics, System, Transmitter, Receiver, Network, MDAP, Sync Serial, Control Panel, SFE, Log out, and Logged in as tech. The main content area is titled "Control Panel" and contains several sections: "File to be uploaded:" with a "Browse..." button and an "Upload_File" button; "System Download:" with buttons for "Configuration database", "Data log", "Routing table", "SNMP Base MIB" (highlighted with a red box), and "SNMP MIB"; and "System Upgrade Operations:" with buttons for "Apply changes", "Reset system", "Upgrade software", "Rollback software", and "Update SFE".

2. Importing the MiMOMax MIB files into SNMPc

The MIB files downloaded from the radio will have a file extension of “.txt”, these will need to be renamed to have “.MIB” file extensions in order to be compatible with **SNMPc**. The files will need to be placed in the folder called “C:\Program Files\SNMPc Network Manager\mibfiles” so that SNMPc can find it.



In SNMPc, navigate to “**Config -> MIB database**” and click on “**Add**”. Locate the MiMOMax MIB files and then click “**OK**”. Once the files are added, click on “**Compile**” to update SNMPc’s MIB database. When the process is done, click on “**Done**” to finish.



3. MiMOMax SNMP Configuration

Navigate to “**Network->Local**” page in CCMS and configure the SNMP settings as desired.

There are three sections here namely “*Agent*”, “*Manager*” and “*Traps*”. Settings under “*Agent*” will be the configuration that the radio’s SNMP agent will use. In other words, if using SNMPv3 here, this will be the username/password that the SNMP Manager would use in order to query the device.

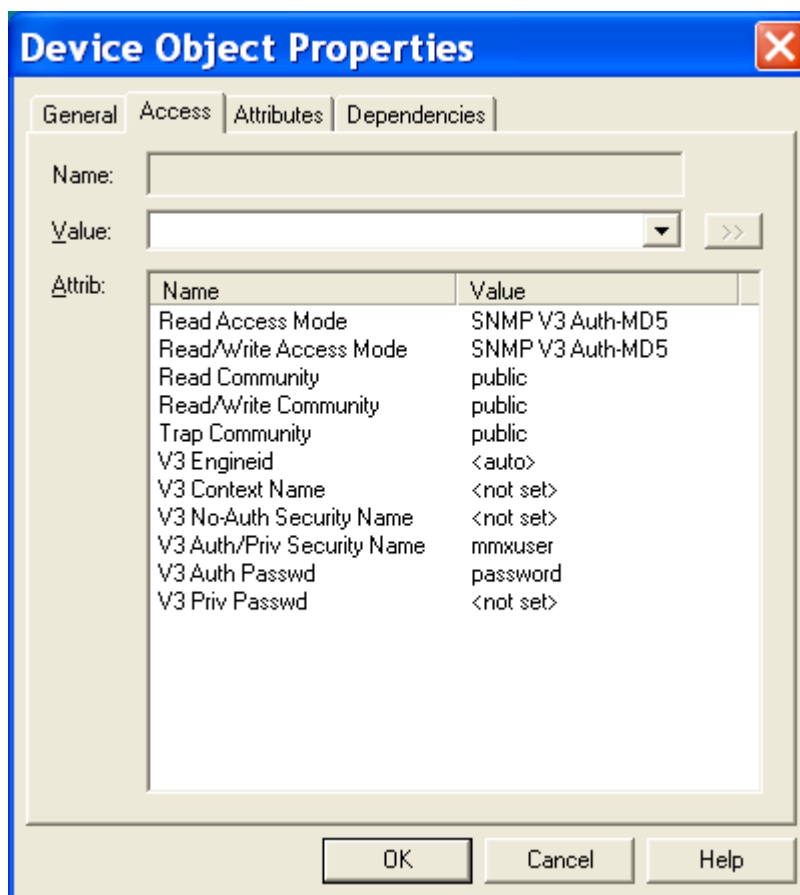
When sending traps, the radio will use the settings under the “*Manager*” section. When using SNMPv3 here, the radio will use the username/password here in order to login to the Manager.

The “*Traps*” section is where one can select which traps are enabled/disabled. The thresholds for when to send these traps are set under the “**System Configuration**” page in CCMS.

SNMP Agent		<i>the SNMP manager IP address. Traps will be sent when a level exceeds a threshold level. Traps will also be sent when the level goes below the threshold after having exceeded it.</i>
SNMP service	SNMPv2c ▾	
Community name	public	
Username		
Password		
Confirm password		
SNMP Manager		
Trap version	SNMPv2c ▾	
Trap community	public	
IP address	192.168.0.119	
Manager username	mmxadmin	
Manager password	
Confirm manager password	
SNMP Traps		
Low input voltage notification	Disabled ▾	
Low signal level notification	Disabled ▾	
High temperature notification	Disabled ▾	
<input type="button" value="Save"/> <input type="button" value="Cancel"/>		

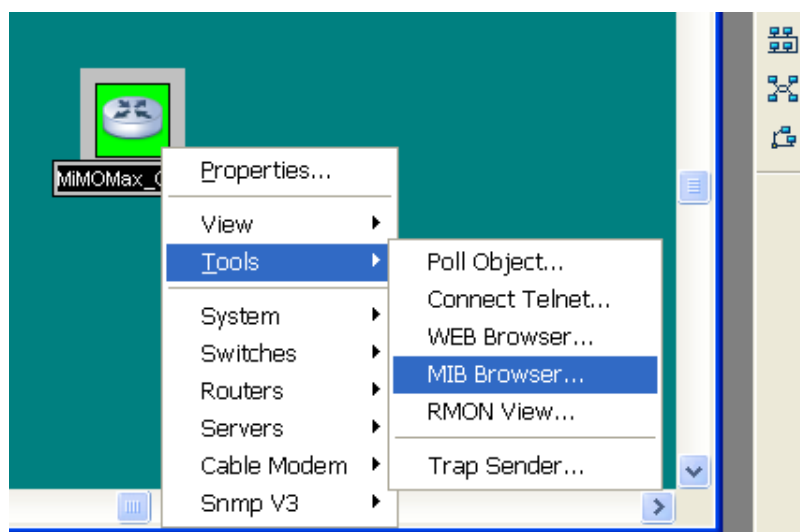
4. MiMOMax Device Object

Add a new device object in SNMPc as normal and set the “**Access**” configurations to match the configuration of the radio. A sample is shown below with SNMPv3 settings.



5. Querying a MiMOMax device

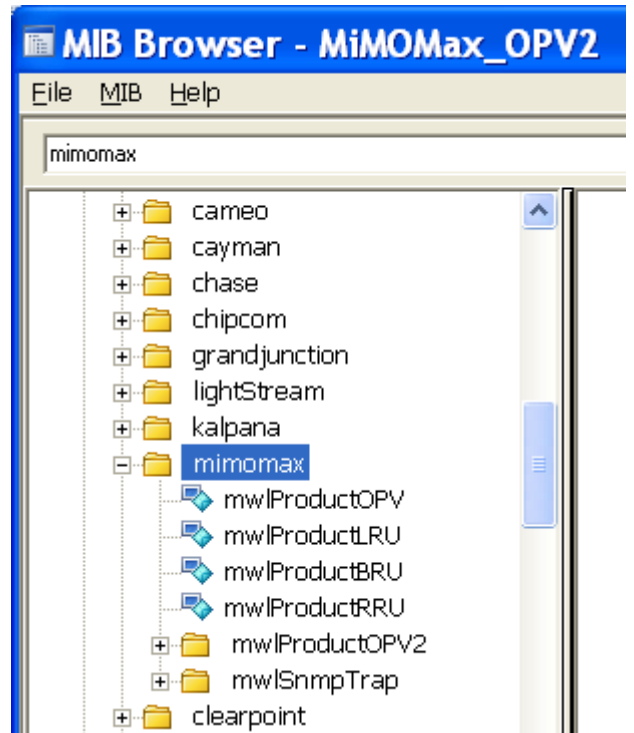
Once the MIB is setup and a MiMOMax device object is created, an SNMP query can then be performed. In SNMPc, navigate to the MIB browser for the MiMOMax device object to view the MIB browser window.



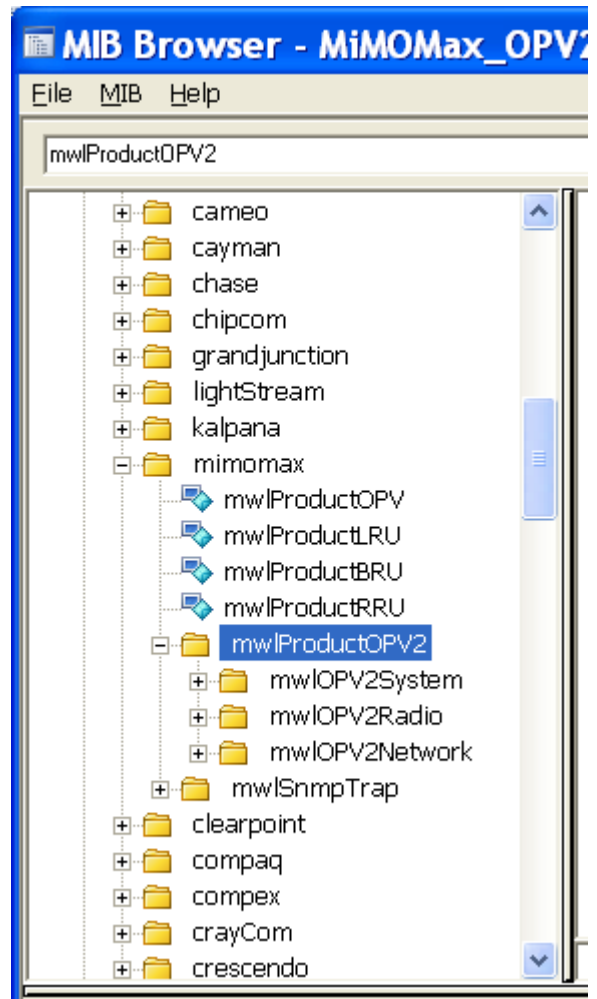
On the “MIB Browser” window, locate the “mimomax” item under the “private” tree.

Several items can be found under the “mimomax” tree subdivided into product types. In this case, we only have the MIB for the “OPV2” product type therefore only the “mwIProductOPV2” tree is populated.

There is also the “mwISnmpTrap” tree which contains the SNMP traps common to all MiMOMax products.

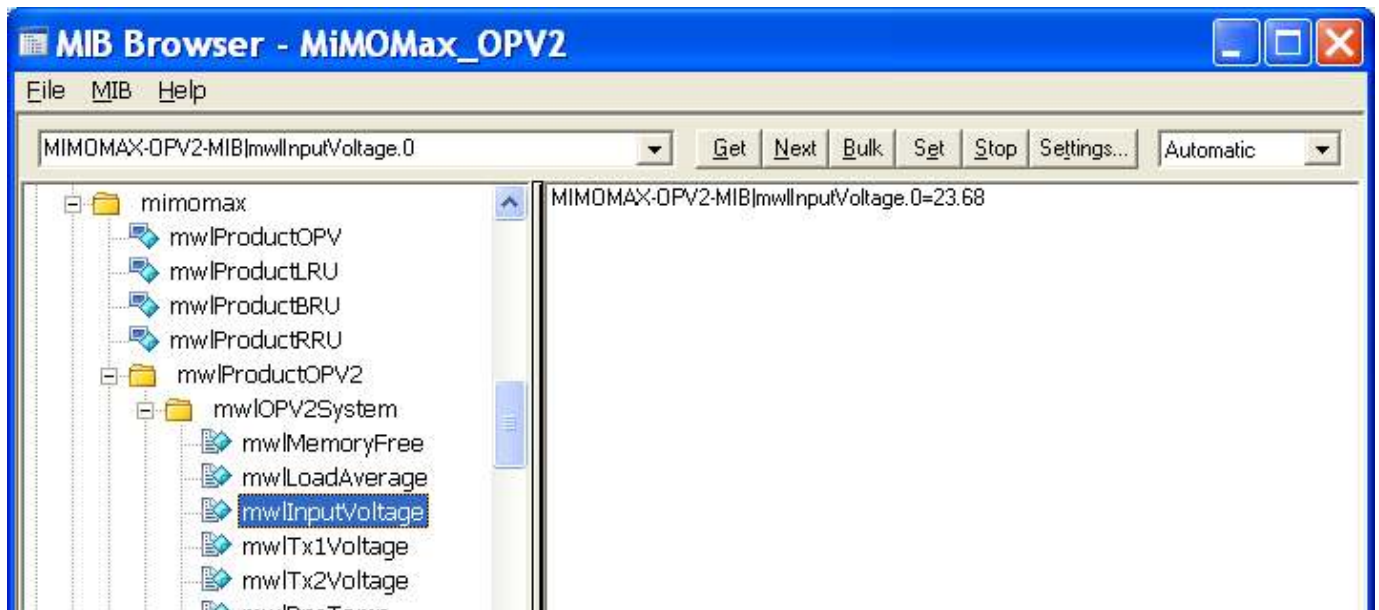


The “mwIProductOPV2” is further subdivided into three sub-trees, namely “mwIOPV2System”, “mwIOPV2Radio” and “mwIOPV2Network”.



A few more screenshots that show some SNMP queries being made to the MiMOMax device.

Querying the “**Input Voltage**”.



Querying the “**RSSI**” from one receiver channel.

