

Quick Start Guide TVIEW+ SNMP Agent

Introduction

Welcome to the Quick Start Guide for the TVIEW+ SNMP agent Software. This guide provides step-by-step instructions, with simple explanations to get your TVIEW+ SNMP agent up-and-running.

Overview

This software acts as an SNMPv2 agent for TRIO Datacom Pty Ltd (www.triodatacom.com) TVIEW+ radio diagnostic software, by interrogating TVIEW+'s database. TVIEW+ stores its diagnostic and configuration data in a Microsoft Jet .mdb format database file. The agent interrogates this file and makes appropriate information available to Network Management software via the SNMPv2 protocol, and sends SNMPv2 notifications to such Network Managers.

The SNMP information made available to Network Managers is defined in the TVIEWMIBv2.mib file. This MIB file must be compiled by each Network Manager.

The agent supports the D, E, M, K (single and dual antenna), O and J (single and dual antenna) model radios. Each model has a different set of diagnostic data available, so the agent supports a separate table for each model. The agent also support a common table with data from all models, containing only the core data as is available, to provide a quick reference and to support the alarms.

When a TVIEW+ user creates a new database (File... New) it is stored with a user chosen filename. The agent is supported by its own .mdb format database file (TVIEWAgent.mdb) which links to the appropriate tables in TVIEW+'s database. The agent database contains a series of query definitions which are used by the agent to query the TVIEW+ database. As the TVIEW+ database is a historical database of all diagnostic data ever read from the field, these queries are primarily to return only the latest data to the agent.

Though .mdb format files are usually associated with Microsoft Access, the agent does not require Microsoft Access to be installed. Rather, it makes use of Microsoft's Data Access Objects (DAO) to utilise the Microsoft Jet database engine installed with Microsoft operating systems.

Installing the Sentinel USB Hardware adaptor



The TVIEW+ Agent software is protected by a Sentinel USB Hardware Key. This Hardware Key Requires Drives and can be downloaded from:

<http://www2.safenet-inc.com/support/tech/latestdriver.asp>

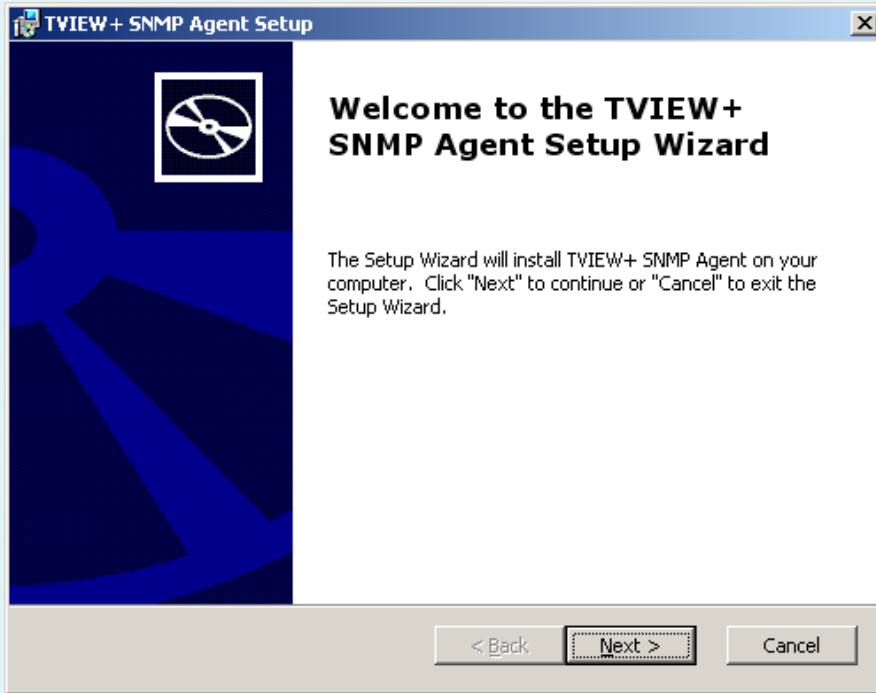
There are three types of license that the TVIEW+ Agent can be run under, and the type of license is dictated by the type of key. The differences are shown in the table below.

Key	Radio limit	Accurate data period	+/- 30% randomised data period	Zeroed data
No hardware key	5	60 minutes	Then 120 minutes	Thereafter
Demo key	5	Unlimited	Never	Never
Full licence key	Unlimited	Unlimited	Never	Never

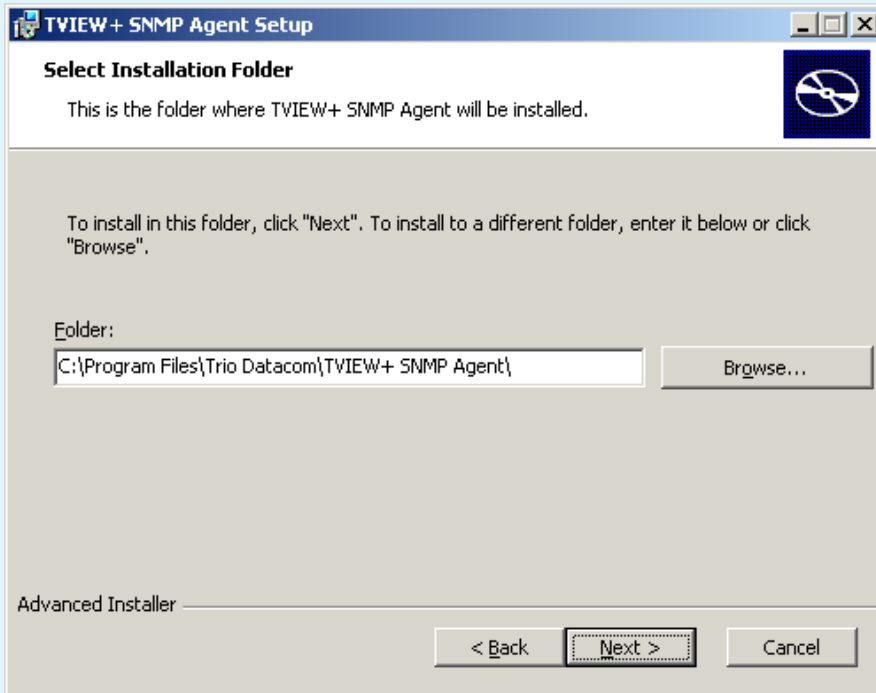
Installing the Agent

The agent is supplied in a Windows installer package, TVIEWAgent.msi. Double click on the installer to begin the installation.

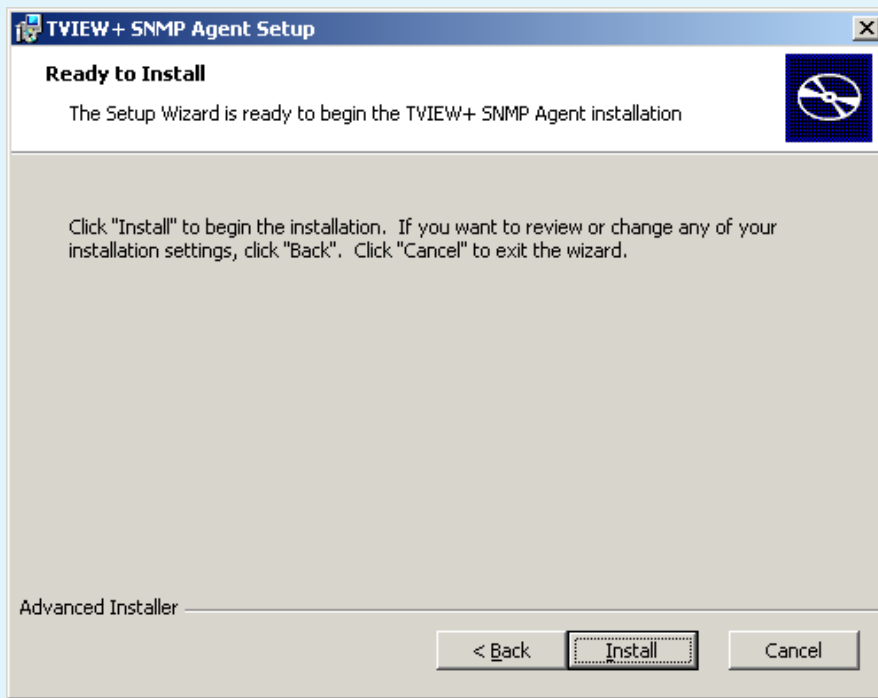
Click the next button:



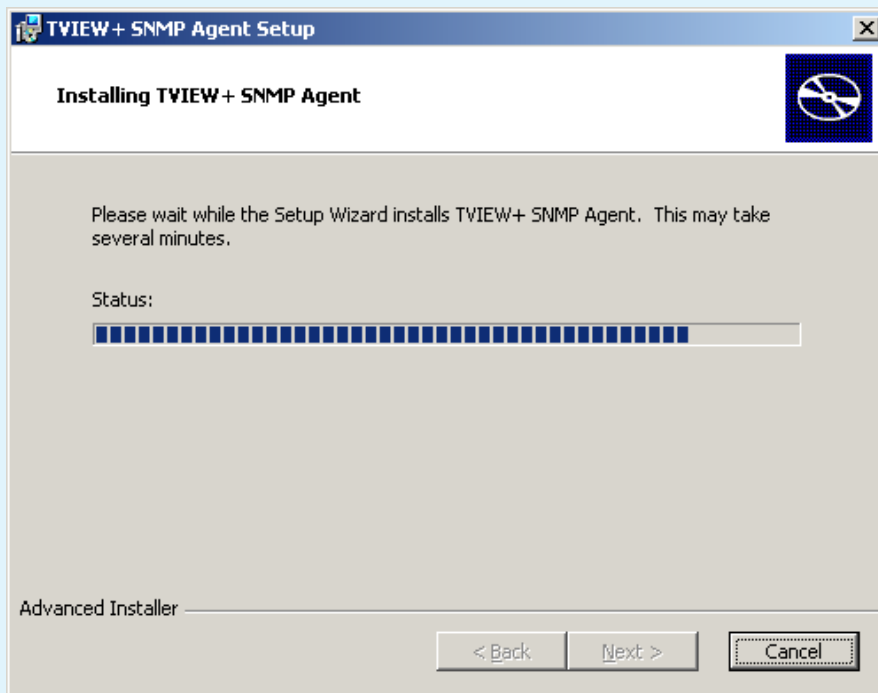
Change the Installation directory if needed, then click the Next button:



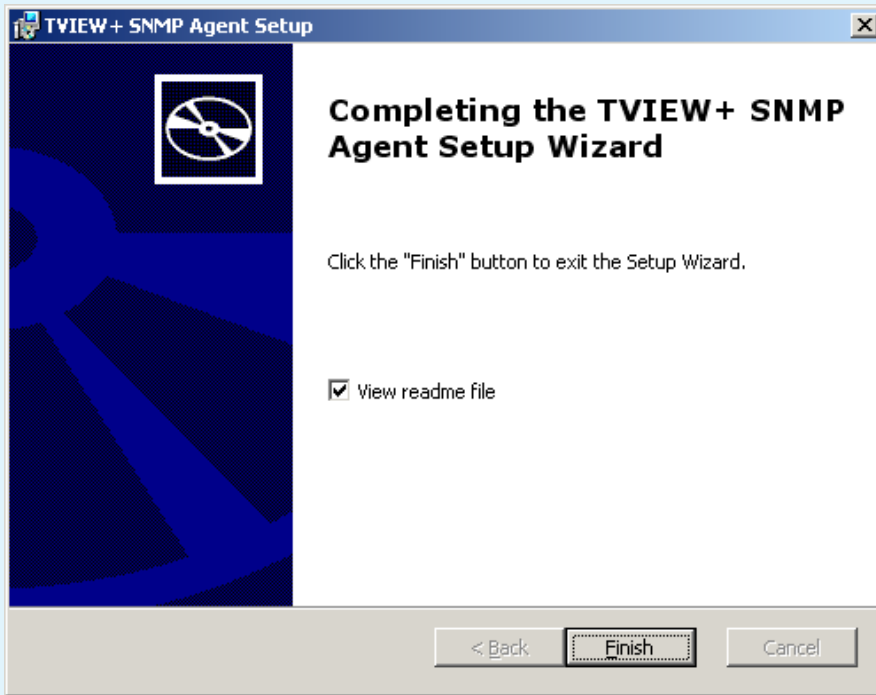
Click the Install button:



Wait for the program to install:



When installation has completed click finish:

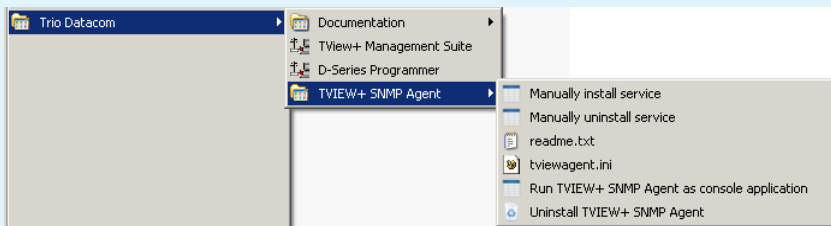


The installation package installs the agent as a Windows NT Service, set to start automatically upon computer start up, but it does not start immediately. This gives you a chance to configure the initialisation file prior to starting the service.

Configuring the Agent's initialisation file

Open the TVIEWagent.ini file

Start... All Programs... TVIEWAgent... TVIEWagent.ini



Edit :

DATABASEPATHFILE: Point this at the TVIEW+ diagnostics database file location. TVIEW+ diagnostics must be running in order for the TVIEW+ agent to work.

LISTENINGPORT: The TVIEW+ agents listening port is 8001.

NOTIFICATIONHOSTS: point to the IP address and notification listening port of your network manager.

Save tviewagent.ini when done.

```

//Initialisation file for the TVIEW+ SNMP Agent
//Trio Datacom Pty Ltd Copyright 2010

//Technical Support (via email): support@triodatacom.com
//Technical support (via phone): +61-3-8773-0100

//Updates (via web) visit www.triodatacom.com for the most up to date software and user documentation.

//-----
//*****CRITICAL CONFIGURATION PARAMETERS*****
//-----

//The full path and filename of the TView database (Default: "C:\Program Files\Trio DataCom\TViewDiagnostics\tview.MDB") or sim
//Must be prefixed and terminated by quotes.
DATABASEPATHFILE="C:\Program Files\TViewAgent\sample.MDB"

//The UDP port that the agent listens for requests from the network manager (ie: CastleRock)
//The default is the well known port 161, but as the agent may run on a computer which is already making use of port 161, this
//The suggested alternative port is 8001
LISTENINGPORT=161

//The list of network manager IP addresses that alarm notifications are sent to
//The default notification listener IP port is 162. If the ports are undefined then 162 shall be used as the default
//If no addresses are defined no notifications shall be sent
//Separate the list of addresses with semicolons, eg: 127.0.0.1:162;192.168.0.3
NOTIFICATIONHOSTS=127.0.0.1:162

//-----
//*****OPTIONAL CONFIGURATION PARAMETERS*****
//-----
// The software will successfully operate if you leave this parameters at their default settings, but you can
// change them if required. Please refer to the User Manual for more details.
//-----

//The minimum period (in seconds) between starting a poll cycle of the TView database by the SNMP Agent
//The default: 60, if you set the value to 0 it will be interpreted as the default)
//If the poll cycle takes longer than this period, the actual period will be extended until the poll is complete
POLLPERIODMINIMUM=60

//The minimum period (in seconds) between the end of one poll and the start of the next within a poll cycle.
//The default: 15, if you set the value to 0 it will be interpreted as the default)
POLLGAPMINIMUM=5

//The UDP port from which the agent sends notifications to the network manager
//This is the source port, NOT the destination port on the network manager, which is set by the NOTIFICATIONHOSTS parameter
//There is no need for this to be the same as the destination port on the network manager, but it just must be an unused port o
//The default is 8002
NOTIFICATIONSOURCEPORT=8002

// The period in minutes beyond which age the field Epoch is considered to be old, and therefore the radio is put offline (its
//The default=10, if you set the value to 0 it will be interpreted as the default)
ONLINECUTOFF=300

//Whether logging is enabled to the TViewAgentLog.txt and TViewAgentLog_old.txt files in the directory of the agent (default: 0
//0 to disable logging, *1 to enable logging
LOGTOFILE=0

//Whether logging is enabled to the screen (default: 0)

```

Start the TVIEW+ agent

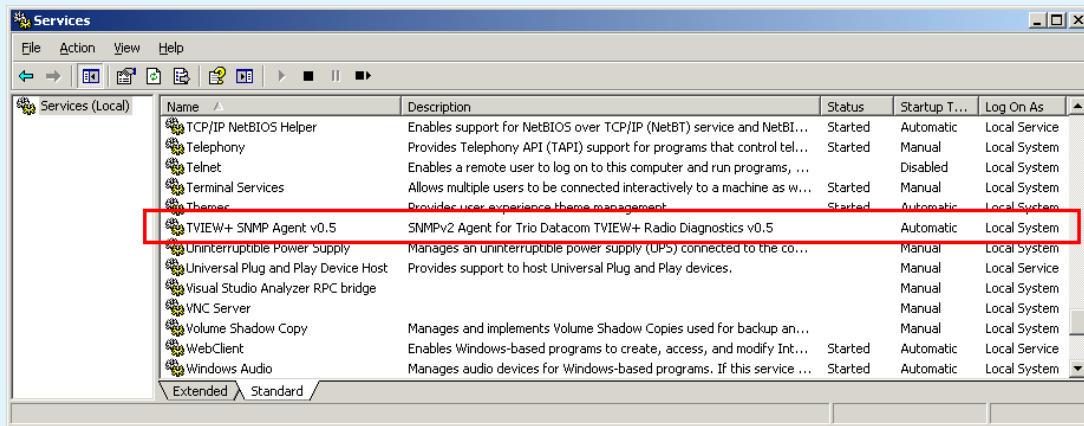
There are two different methods of starting and running the TVIEW+ Agent

1. Starting and running it as a Windows Service.
2. Starting and running it as a Console Application

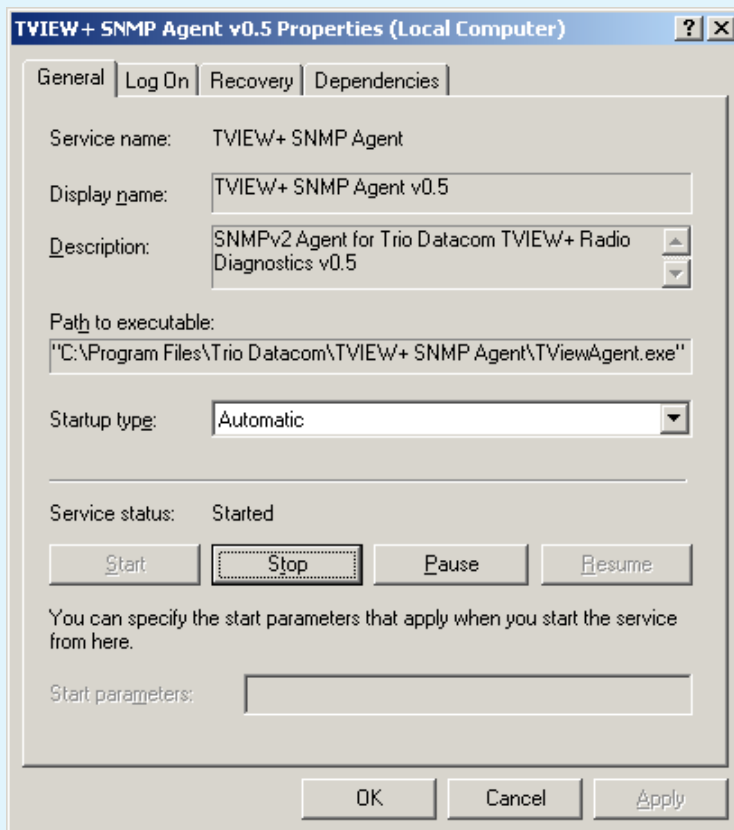
How to run the TVIEW+ SNMP Agent as a Windows Service.

Go to -> Start... Control panel... Administrative tools... Services

Scroll down your Services list until you find TVIEW+ SNMP gent v0.5



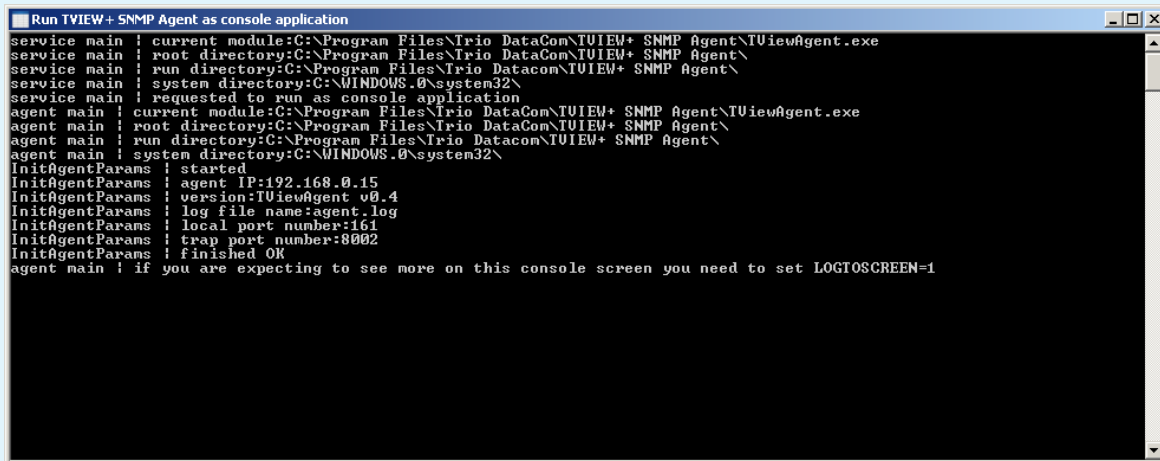
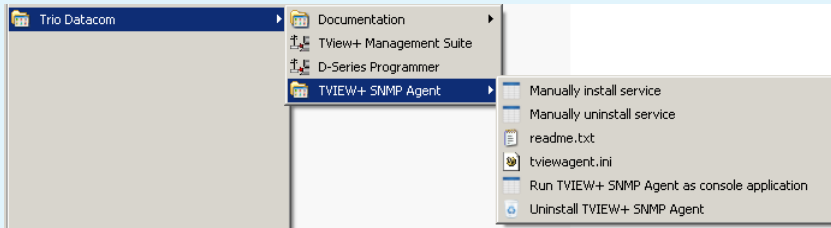
Open the TVIEW+ SNMP Agent service



Ensure the Startup type is set to Automatic and click Start. This will ensure that it is switched on and every time the computer is re-booted the service will start automatically.

How to run the TVIEW+ Agent as a Console Application.

Go to -> Start... all programs...



When running the TVIEW+ Agent as a Console Application, it will have to be started each time the PC is re-booted.

Compiling the TVIEW+ Agent's mib file

Once you have successfully started the TVIEW+ agent using either method, you can open your network manager on your managing computer and compile the mib files. If you installed the TVIEW+ Agent into the default directory TVIEWMIBv2.mib can be found here -> C:\Program Files\TVIEWAgent\TVIEWMIBv2.mib.

Network manager Setup

This example is based on the Castlerock SNMPc v7.2.3 software.

A 30 day full functional evaluation is available from: <http://www.castlerock.com/>

Compiling the MIB

The TVIEWMIBv2.mib file in the installation directory must be compiled by the network management software.

From the agent installation directory, copy (for example)

C:\Program Files\tviewAgent\tviewmibv2.mib

To

C:\Program Files\SNMPc Network Manager\mibfiles

Then in the network manager:

Config... Mib Database... Add button... Scroll down and select TVIEWmibv2.mib... press OK

Press compile and then Yes

It should finish with "Mib Compile OK"

Press OK and then done

Add a Radio Icon

Insert... map Object Device...

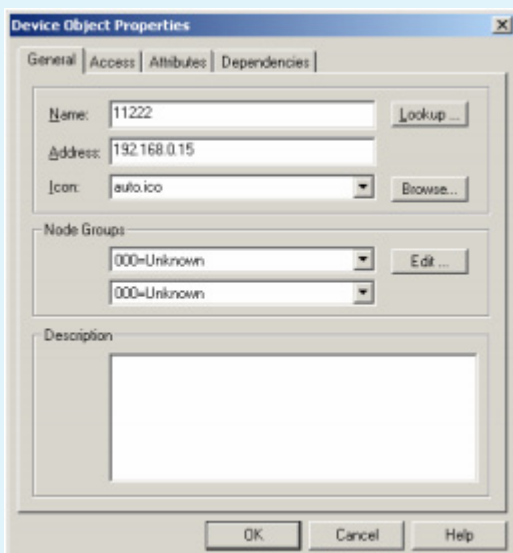
On general tab

Enter a meaningful label, for example, the radio serial number: 11222

Enter Address, for example: 192.168.0.15

If the LISTENINGPORT is set to anything other than the standard well known port 161, then enter the port as well in the format, for example 192.168.0.15.8001

The address consists of the IP address of the agent computer, then a dot, then the agent SNMP port 8001

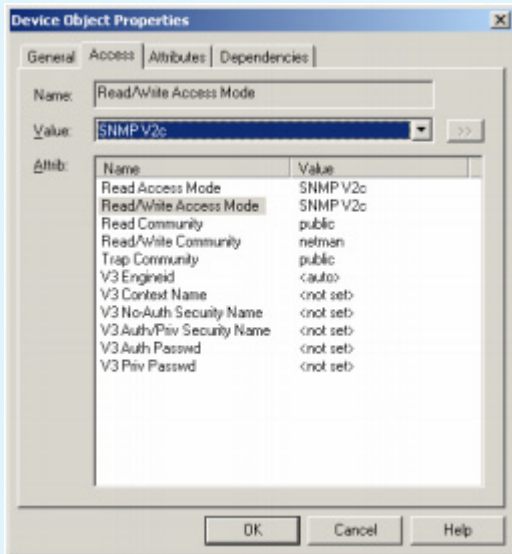


Setup the Radio Icon for SNMPv2

On Access tab, select the "Read Access Mode" name, then from the dropdown list select SNMP V2c.

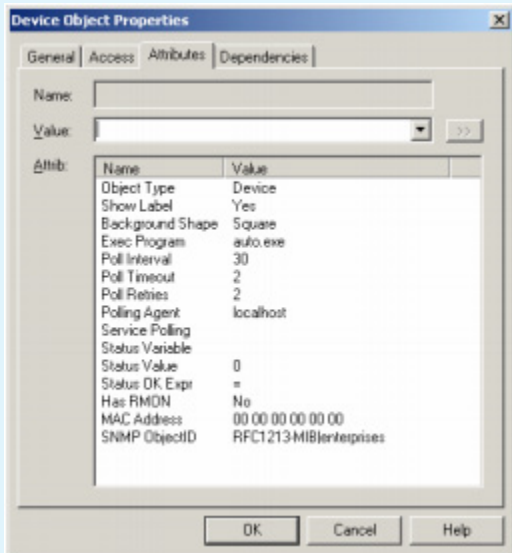
Do the same with "Read/Write Access Mode".

Press OK



Setup the Radio Icon Online State

Select the Attributes tab



The Online state of each radio is determined by the date time TVIEW+ last received a response from that radio, in conjunction with the ONLINECUTOFF parameter. This drives the Online field in the all Table table. For each radio.

Select the Statue Variable Attribute

Then press the Browse button>>

Browse through the tree structure

Snmp Mibs... private... trio... TVIEW... allTables... allOnline

Then press OK

Notice that TVIEWMIBv2|allOnline has been entered as the Status Variable. Then put your cursor at the end of the Value field and append a dot and the serial number of the unit, eg. TVIEWMIBv2|allOnline.11222

Then select the Status Value attribute and change the value to “online” from the Value drop down list.

Then press “OK”

Notice the text in the alarm list at the bottom of the page:

[Support Options](#)

Status Test Passed (allOnline 11222=online)

[E-mail Technical Support](#)

When e-mailing questions to our support staff, make sure you tell us the exact model number (and serial number if possible) of the TRIO Datacom equipment you are working with. Include as much detail as possible about the situation, and any tests that you have done which may help us to better understand the issue. If possible, please include your telephone contact information should we wish to further clarify any issues.

Contact Details

www.triodatacom.com

The TRIO Datacom web site has links to e-mail and telephone support, technical notes, manuals, software updates.

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