

Description: This application note is intended to help users use MonitorWorX to monitor Genesis32 v9.20 applications

OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7

General Requirement: Installation of GENESIS32 v9.x

Introduction

MonitorWorX is a tool that is installed with GENESIS32 version 9.x that allows user to view and monitor running GENESIS32 applications. The intention was to supplement GenTray and License Monitor. Therefore, you will see some similarities of information shown in GenTray and License Monitor that you can see in MonitorWorX.

Moreover, MonitorWorX also shows additional information that is not present in GenTray or License Monitor, especially Redundancy status and runtime application information.

Starting MonitorWorX

You can run MonitorWorX manually by going to Start → All Programs → ICONICS Tools → MonitorWorX. Like many of the GENESIS32 applications, you can also set MonitorWorX to run as a service. When MonitorWorX is running, you can see the  icon in the system tray.

Viewing License Information

MonitorWorX will show license information similar to what is shown in the License Monitor. You can view the license information by going to the Licensing tab within the MonitorWorX viewer.

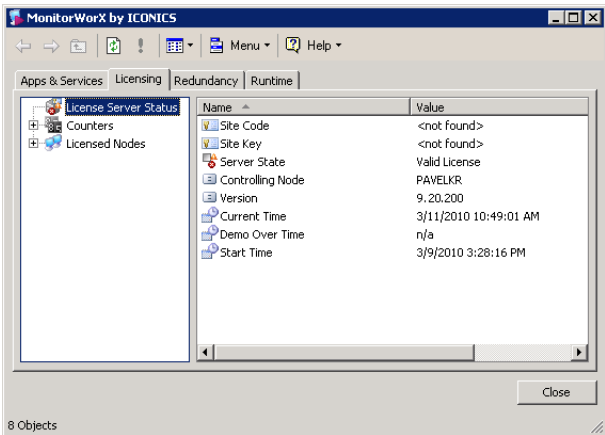


Figure 1 - MonitorWorX View

The counters section act very much like License Monitor, showing you how many client units and points that you have available, currently using, and total.

Licensed nodes basically list machines that are obtaining the license from the machine that has the license. If MachineA (not necessarily be the same machine where the MonitorWorX is running) is the machine where all the license is, licensed nodes will list MachineA and under that, all of the other machines that are getting the license from MachineA.

Viewing Application Information

You can also view running Genesis32 applications information through MonitorWorX. You can do this by going to the Runtime tab and it will show list of currently active components on the left tree. If you select a running application on the left hand pane, you will be able to see more information, like the process id, state, vendor, version, start up time, and much more. You will be able to see where this application is getting license from the Connections sections under Licensing Server.

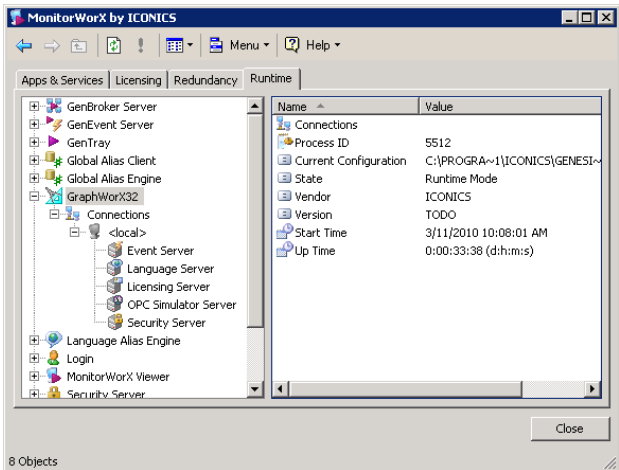


Figure 2 - MonitorWorX Running Tab

In the Connections section, you can also find and see all applications that a particular Gen32 module (in this case GraphWorX32) is connected to in order to get information from. This depends on the program, but usually it should include Licensing server, Language Server, and Security Server. Some other applications (like AlarmWorX32 or TrendWorX32) may also have information from the OPC Servers that they are connected to.

If an application cannot communicate or access another module, MonitorWorX will create a balloon pop-up on the system tray informing you of this status. It will also include the name of the module and the machine name of where this module is installed.

This will be very helpful when troubleshooting connection problems and/or bad tag data.

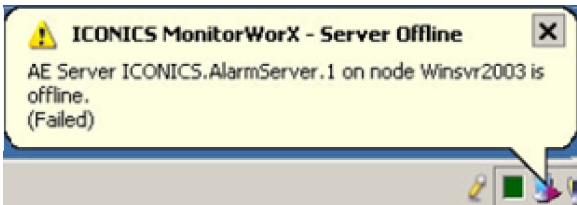


Figure 3 - System Tray Alert for Module/Server Offline

There are also cases where sometimes one machine loses the connection to other machines and this could affect some program (or performance) of your local machine (like connection to Licensing Server lost, for example). MonitorWorX will also create a balloon pop-up for this message that should help you identify where the problem is coming from and also determining why tags shows bad quality instead of good (i.e. connection to OPC Server lost).

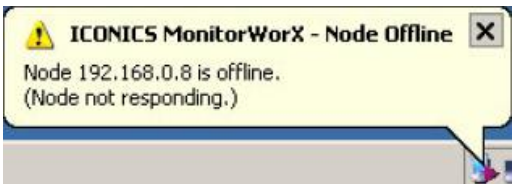


Figure 4 - System Tray For Lost Connection (Offline Node)

Viewing Redundancy Application

Like other v9.x release, MonitorWorX can show information of your redundancy system (your primary and secondary node). You can do this by going to the Redundancy tab on the MonitorWorX Viewer.

In order to view the information, however, you will need to have a redundancy set up by adding node pair information in your GenBroker configuration. Once you configured this, you can run Genesis32 in full redundant mode and you can view the node information, along with running application via MonitorWorX.

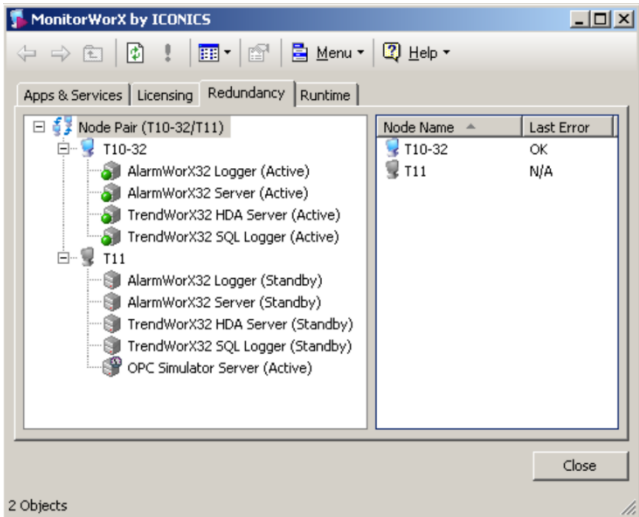


Figure 5 - MonitorWorX Redundancy Tab

You will see that the active server (active node pair) is blue colored and the backup will be gray. If you expand the node pair, you can see list of Genesis32 modules, including OPC Servers under there and their status. When the primary is running, every modules that are set up to run on the primary should say “Active” whereas the same module on the secondary node pair should be “Standby”. Any offline module (or servers) will have a red dot in their icon.

There are some instances where failback could occur (if the primary node is restarted or offline), and you should see this reflected in the MonitorWorX Redundancy status. Each module will switch over to secondary node pair (and later back to the primary when it is back online) and you have some control to this. If you have both node pair online and currently the active server is on the secondary, you can make the primary active by right-clicking on the module name and select “Switch to Active”. You can only do this on the designated primary node pair.

NOTE: You must have a valid Redundancy license and set up in order to view the Redundancy information.