



Platform Services

FrameWorX Server Troubleshooting



APPLICATION NOTE

September 2013

Description: Guide to troubleshooting FrameWorX Server issues.
OS Requirement: Vista x64/ Windows 7 x64/ Windows 8 x64/
Windows Server 2008 x64/ Windows Server 2008 R2 x64/
Windows Server 2012
General Requirement: Advanced knowledge of GENESIS64
v10.8

Introduction

Platform Services is a general term that is used for a group of services and applications that provide data to clients, and allow clients to configure application servers. The key piece of Platform Services is called FrameWorX server. It is the communication layer for ICONICS applications. If you need to troubleshoot FrameWorX server you can take one or all of the following approaches.

- **Use TraceWorX** –to obtain very useful information about the FrameWorX service state. Please read the application note "*GENESIS64 - Tracing Diagnostics and Troubleshooting*" For further information about using TraceWorX. In version v10.8 it is also possible to trace Point Manager calls as explained in the dedicated section of this document.
- **Disable individual Point Managers** one by one to isolate the problem **OR run the Point Managers out-of-process** and monitor the processes separately – for more information, see application note "*Platform Services - Running Point Managers*".
- **Set Performance Monitor** to monitor the behavior of the FrameWorX server and its individual components. You can read the application note "*ICONICS –Setting up Windows Performance Monitor*" to find how to setup Windows Performance Monitor and monitor single process information such as memory consumption or processor load. On top of that GENESIS64 v10.80 exposes a lot of new counters which were not available in previous versions. The next section explains how to add the FrameWorX counters into the performance monitor.

Monitoring the FrameWorX Server using Performance Monitor

1. Start Windows Performance Monitor.
2. Add **new Data Collector Set**.

3. Give it a name and select to **"Create manually (Advanced)"**.

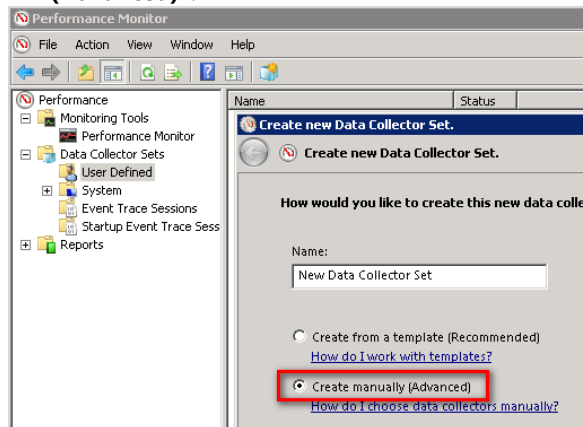


Figure 1 - Create the Collector Manually

4. On the next screen select **"Performance counter"** and proceed to the next step.
5. Click the **"Add"** button to add the performance counters.
6. In the Available counters section, look for items starting with FrameWorX such as FrameWorX Point Manager, FrameWorX Server or FrameWorX Session etc...
7. Expand for instance FrameWorX Server Session and select Point Count item.

Note: The Point count will also show points that do not require license.
8. In the Instances for the selected object, you may select a specified FrameWorX Server session, all instances or total and then hit **"Add>>"** to add the selected counters similar to Figure 2.



Platform Services

FrameWorX Server Troubleshooting



APPLICATION NOTE

September 2013

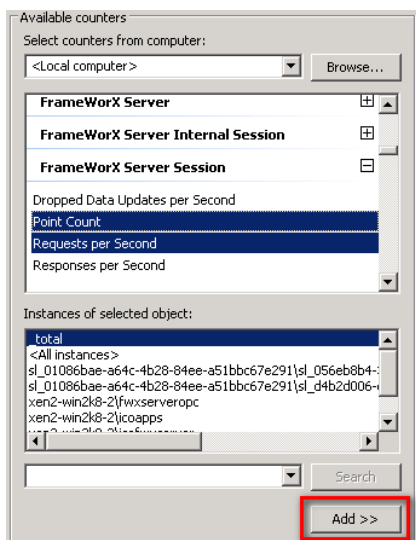


Figure 2 - Add FrameWorX Counters

9. Add any more counters you want and then **“Finish”** creation of the Data Collector Set.
10. Start the Data Collector Set and view the collected data later on as described in the application note *“ICONICS – Setting up Windows Performance Monitor”*.

Monitoring FrameWorX Server and Performance using GENESIS64

Since v10.8, the same FrameWorX Counters as well as any other Performance counters that are available in Performance monitor can be accessed as data points. It means that you can monitor for instance processor load in GraphWorX64 or AlarmWorX64. Let us have a look on how to find them.

1. Open GraphWorX64 and add a process point object.
2. In the Data Browser, navigate to the **“Control and Diagnostics”** where you would see the many object including:
 - **PerformanceCounters** –Contains all the counters as Windows Performance monitor.
 - **DiagnosticCounters** –Contains the same counters but the list is limited only to the FrameWorX Server counters. This category is useful mainly for clients such as Silverlight with restricted access to the operating system.

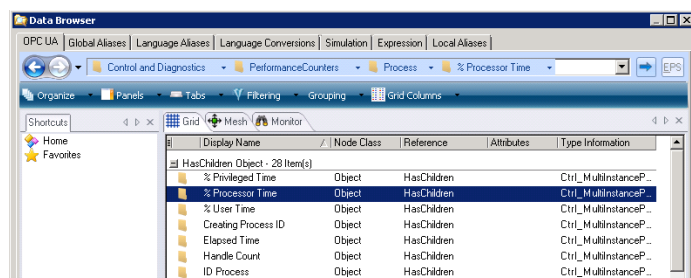


Figure 3 – Browse for the Performance and Diagnostic Counters

Point Manager Call Tracing

FrameWorX can trace Point Manager calls and post a message into TraceWorX if a specific timeout expires before the call is answered by a Point Manager. There are two types of messages that can be posted, namely *“Warning Call”* and *“Error Call”*. In order to turn on the Point Manager Call Tracing, follow the steps below.

1. Open Platform Services Configuration
2. Under the *“Settings”* tab you will see a section *“Diagnostics”*. Enable Point Manager Call Tracing if disabled and specify your limits.

Note: The default value for Warning is 500ms. Typically the call is answered faster but it may happen that the machine is temporarily more loaded so it will post a warning. Error call is set to 10000ms and if the call is not answered within this time, it is likely there is something wrong with the Point Manager.