

Description: Using Hyper Historian OPC DA data

OS Requirement: Windows Server 2003 x64/Vista x64/ Server 2008 x64/Windows 7 x64/ Server 2008 R2 x64

General Requirement: Installation of GENESIS64 v10.60 and basic knowledge of Hyper Historian and GENESIS64

Introduction

ICONICS Hyper Historian is a powerful, 64-bit, high performance plant historian. The Hyper Historian provides many features and functions for most mission critical applications demanding the highest level of availability and provides the highest performance possible by taking advantage of 64-bit hardware and software architectures, allowing it to access more CPU power and memory than traditional 32-bit-based historians.

One of the key features of the Hyper Historian is to provide full data replay functionality, which allow the user to not only see the logged data in trend windows, but also to show the data in the original SCADA/HMI process mimics.

This application note will show how to use Hyper Historian for replaying this data in GraphWorX64.

Using Hyper Historian Data Replay

The Hyper Historian will automatically make any value that is being logged available for data replay. For this purpose all historical logging tags are also exposed as OPC Data Access tags.

1. Open GraphWorX64 and insert a **Process Point** into the display and in the Data Browser select:
Home -> OPC Classic Server -> My Server -> ICONICS.HyperHistorianDA.1 to show the OPC DA address space provided by the Hyper Historian Data Access Server as shown in Figure 1

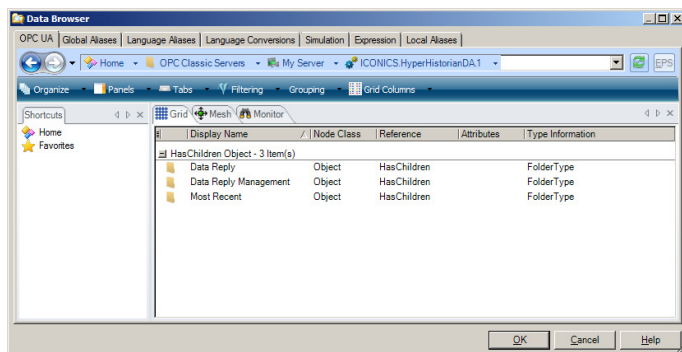


Figure 1 - Hyper Historian Data Access Server

Three main browse folders are provided by the Hyper Historian Data Access Server:

- **Data Replay**
This folder contains the tag hierarchy that can be browsed to select tags that can be replayed
- **Data Replay Management**
This folder contains the control tags to allow the user to go back and forward in time
- **Most Recent**
This folder contains the tag hierarchy to access the most recent (cached) value, this part of the Hyper Historian DA Server is especially useful when triggers or alarms have to be generated after the value has been logged and stored in the Historian database

2. Expand the **Data Replay** folder, and browse for a tag that has been logged by the system as shown in Figure 2, e.g. @ICONICS.HyperHistorianDA.1\LogGrp\OPCUA/Ramp.%Context.Value

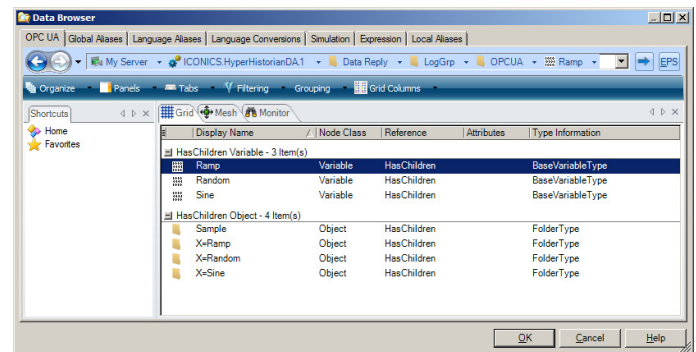


Figure 2 - Selecting Tag for Replay

It should be noted that the selected tag has a context flag in it, by default the context is set to %Context, this means that all tags within this context will be controlled by the Time control tag using the same context. The context identifier can be changed to suit the needs of the application. Hyper Historian is capable of independently maintaining and controlling multiple concurrent contexts.

3. Expand the **Data Reply Management** folder to access the Time control tag:
@ICONICS.HyperHistorianDA.1.%Context/Time.Value
4. The context identifier can be changed as required, for the purpose of this setup, it can be left unchanged
5. After entering runtime in GraphWorX64, the Time tag will show the default value of 31/12/1899 00:00:00, this means that the current value is shown in the replay tag. Changing this value to another time will update the other tags on the screen. Please note that the Time will have to be specified in UTC/GMT