TagProvider SQL Example

Create SQL-based tag providers.

This solution demonstrates the functionality of the TagProvider with the SQL Database.

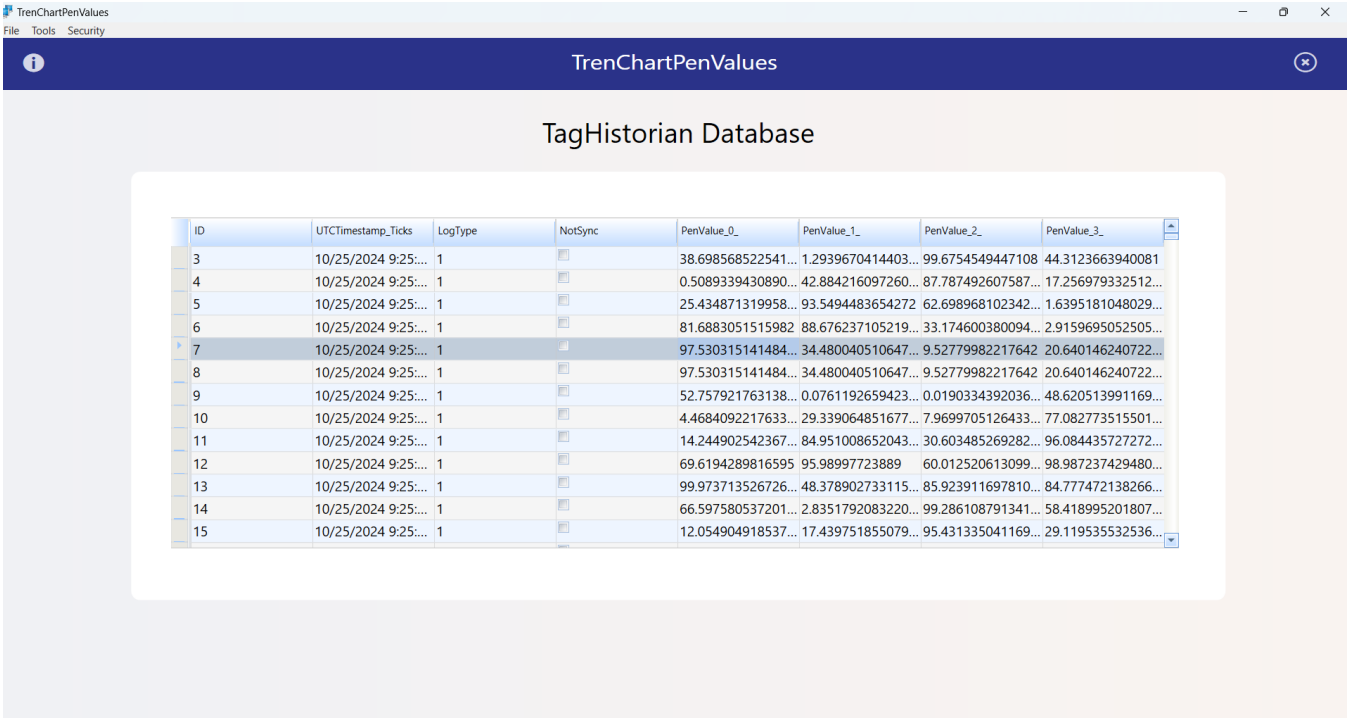
Download the Solution Example here:

- TagProvider SQL Monitor Example.dbsln
- TagProvider SQL Publisher Example.dbsln
- TagProvider SQL Publisher Example.dbHistorian

Summary

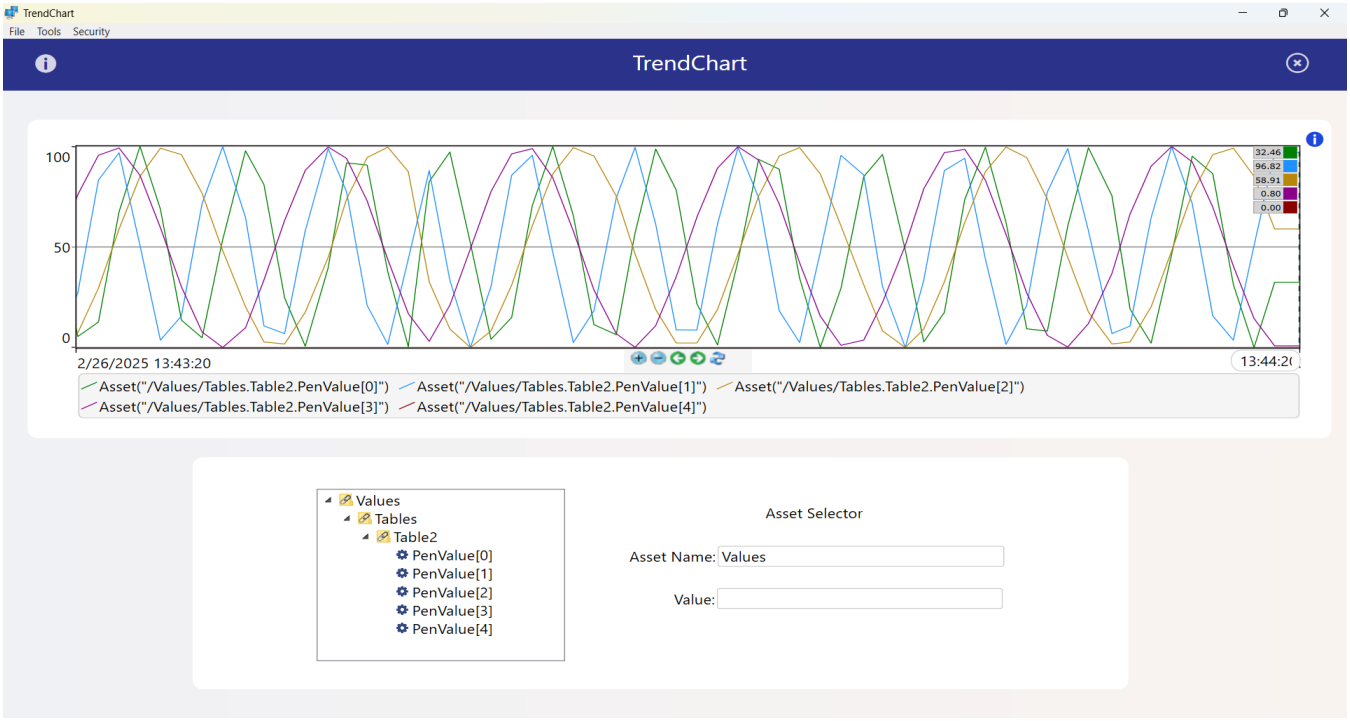
This solution demonstrates the functionality of the TagProvider with the SQL Database, enabling runtime data querying without the need for local Tags. This allows queried data to be displayed on TrendCharts and other areas of the application, streamlining real-time access and utilization of database information within the Unified Namespace.

First Solution:



ID	UTCTimestamp_Ticks	LogType	NotSync	PenValue_0_	PenValue_1_	PenValue_2_	PenValue_3_
3	10/25/2024 9:25:...	1		38.698568522541...	1.2939670414403...	99.6754549447108	44.3123663940081
4	10/25/2024 9:25:...	1		0.5089339430890...	42.884216097260...	87.787492607587...	17.256979332512...
5	10/25/2024 9:25:...	1		25.434871319958...	93.5494483654272	62.698968102342...	1.6395181048029...
6	10/25/2024 9:25:...	1		81.6883051515982	88.676237105219...	33.174600380094...	2.9159695052505...
7	10/25/2024 9:25:...	1		97.530315141484...	34.480040510647...	9.52779982217642	20.640146240722...
8	10/25/2024 9:25:...	1		97.530315141484...	34.480040510647...	9.52779982217642	20.640146240722...
9	10/25/2024 9:25:...	1		52.757921763138...	0.0761192659423...	0.0190334392036...	48.620513991169...
10	10/25/2024 9:25:...	1		4.4684092217633...	29.339064851677...	7.9699705126433...	77.082773515501...
11	10/25/2024 9:25:...	1		14.244902542367...	84.951008652043...	30.603485269282...	96.084435727272...
12	10/25/2024 9:25:...	1		69.6194289816595	95.98997723889	60.012520613099...	98.987237429480...
13	10/25/2024 9:25:...	1		99.973713526726...	48.378902733115...	85.923911697810...	84.777472138266...
14	10/25/2024 9:25:...	1		66.597580537201...	2.8351792083220...	99.286108791341...	58.418995201807...
15	10/25/2024 9:25:...	1		12.054904918537...	17.439751855079...	95.431335041169...	29.119535532536...

Second Solution:



Technical Information

In the first solution, which works as a publisher, each tag corresponds to a data point of interest and is configured to store its values in a SQLite database. This setup ensures essential information is captured and logged from various sources, with each tag mapped to a specific table for organized and easily queried storage.

In the second solution, real-time monitoring of tag values is achieved by using a TrendChart, enabled through the use of a TagProvider connection to the SQLite database from the first solution.

Additional Information

After downloading the files, move them to C:\Documents\FrameworX\Solutions. Then, open the TrendChart Solution, navigate to Datasets / DBs, and edit the Data Source for Provider 1 by specifying the path to the TrendChartPenValues.dbHistorian file.

In this section...
