

Using XLReporter with KEPServerEX - UA

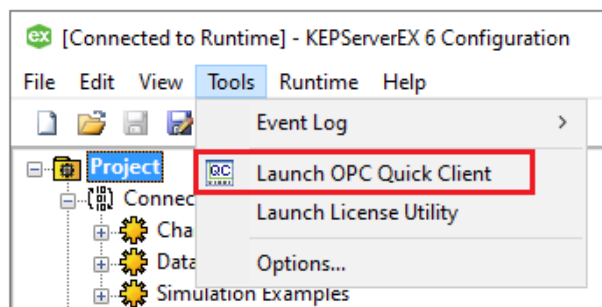
Overview

XLReporter takes process values directly from a PLC to a report without requiring a historian or database. This is accomplished by “report-as-you-run” technology that automatically populates a workbook, periodically or on event, without needing Excel. Completed reports are produced in workbook, PDF and web formats.

Prerequisites

Verify Communication

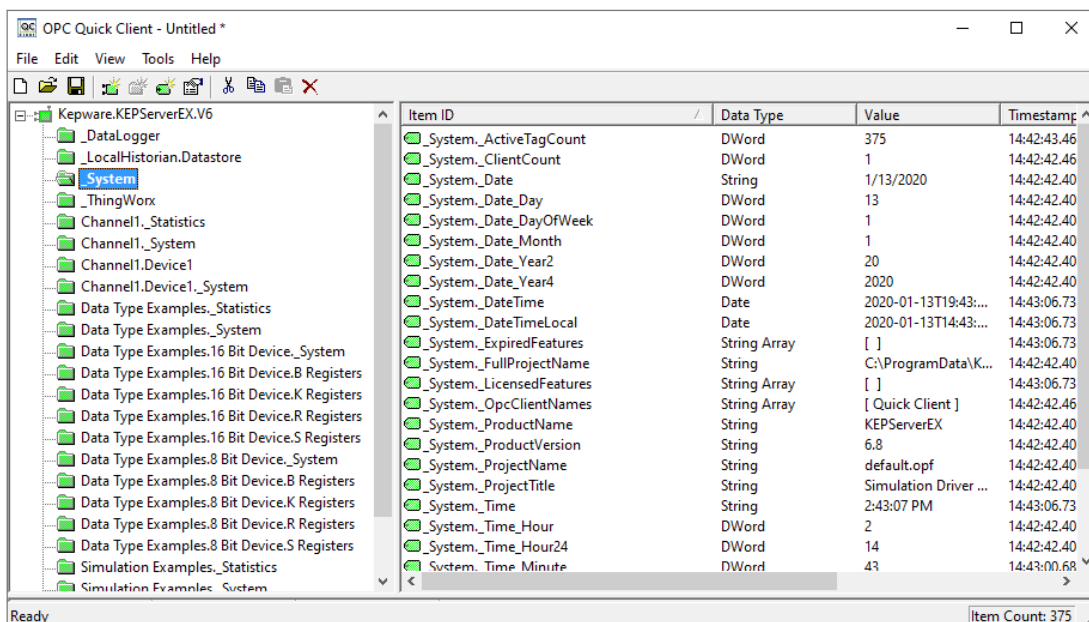
From the **Kepware** program group, open the **KEPServerEX Configuration** application then select **Tools, Launch OPC Quick Client**.



Once opened, every tag is available under the KEPServer branch at the top.

Expand **Kepware.KEPServer.EX.V6**, then a folder like **_System**.

- Verify the tags have a good quality data value.



If at any point you experience an issue with this client, contact Kepware technical support to troubleshoot and correct these issues.

Create a Project

From the **XLReporter Project Explorer** select **File, New** to start the **Project Wizard**. This will give step-by-step instructions on creating a project

Step 1

- Enter a **Project Name** and **Description** (optional).

The screenshot shows the 'New Project' dialog box with the following fields and options:

- Project Name:** XLR_Project
- Project Off Line
- Description:** Customer or Site name
- Project Location:** c:\XLRprojects

Buttons at the bottom: < Back, Next >, Finish, Cancel

Step 2

- Configure the data connector, click **Add**

The screenshot shows the 'New Project' dialog box with the following elements:

- Step 2 : Configure the Connectors (data sources) of the Project.**
- Buttons: **+ Add** (highlighted in red), Modify, Delete, Catalog
- Table with columns: Name, Provider, Description
- Table content: *

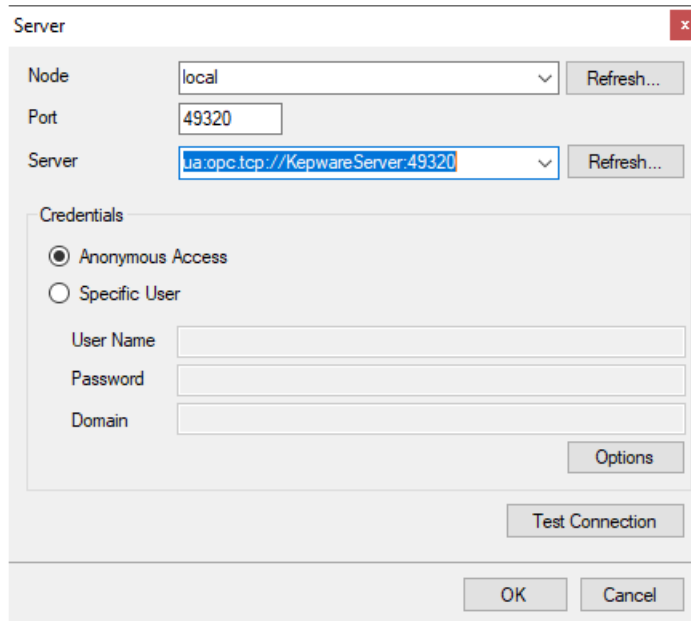
Select **Kepware, KEPServerEX Real-time values (OPC UA)**

The screenshot shows the 'KEPServerEX Real-time values (OPC UA)' dialog box with the following fields and options:

- Connector Name:** KEPServerEX_UA
- Description:** ua:opc.tcp://127.0.0.1:49320
- Primary Server:**
 - Secondary Server**
 - Name:** ua:opc.tcp://KepwareServer:49320
- Name:** ua:opc.tcp://KepwareServer:49320

Buttons at the bottom: OK, Cancel

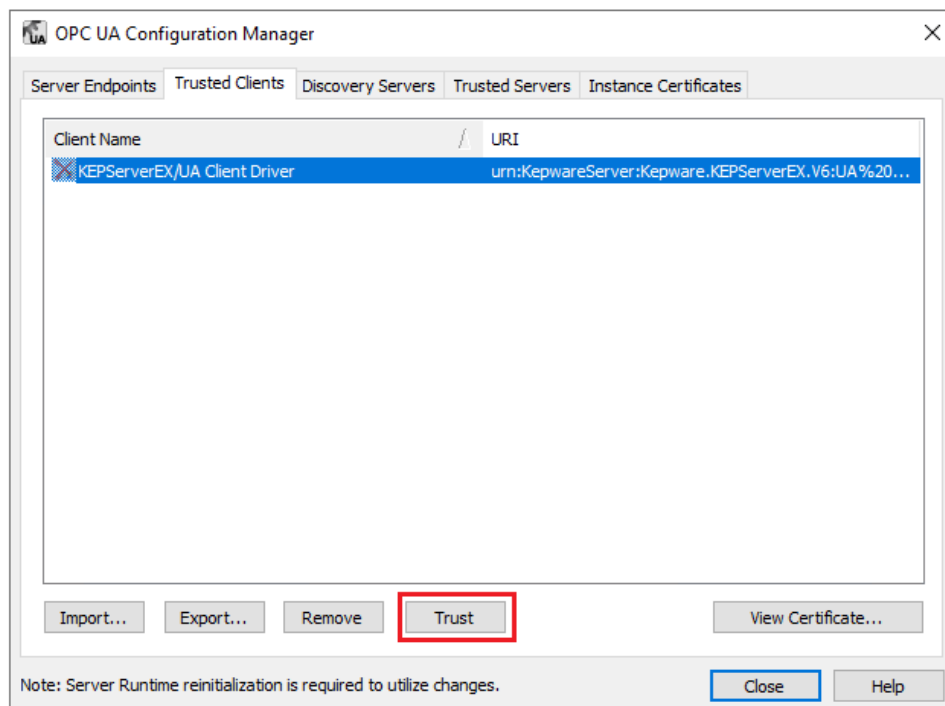
The connector requires a **Primary Server**. Click the browse pushbutton ([...]) for Name to define.



- For **Node**, if the server is on the same machine, leave as *local*, otherwise select or enter the name or IP address of the machine where the server is running.
- The default **Port** for the KEPServer EX UA server is *49320*. If this has been changed in the server, set it here.
- For **Server**, click **Refresh** and select from the list of server endpoints listed.
- If the server is set for **Anonymous Access**, leave that selected, otherwise select **Specific User** and enter valid credentials.
- Click **Test Connection** to verify connectivity.

Trusted Clients

In some cases the client has to be accepted by the server to make requests. From the **Kepware** program group, open the **OPC UA Configuration** application.



On the **Trusted Clients** tab, **Trust** the client to allow access to the KEPServerEX UA server.

Remote Communication to KEPServerEX

If KEPServerEX is installed on a workstation remote from the PLC then set the **Node** to an item in the dropdown list or enter an *IP address*.

The workstation must also have the OPC core components installed. To determine if the core components are installed verify the following file exists:

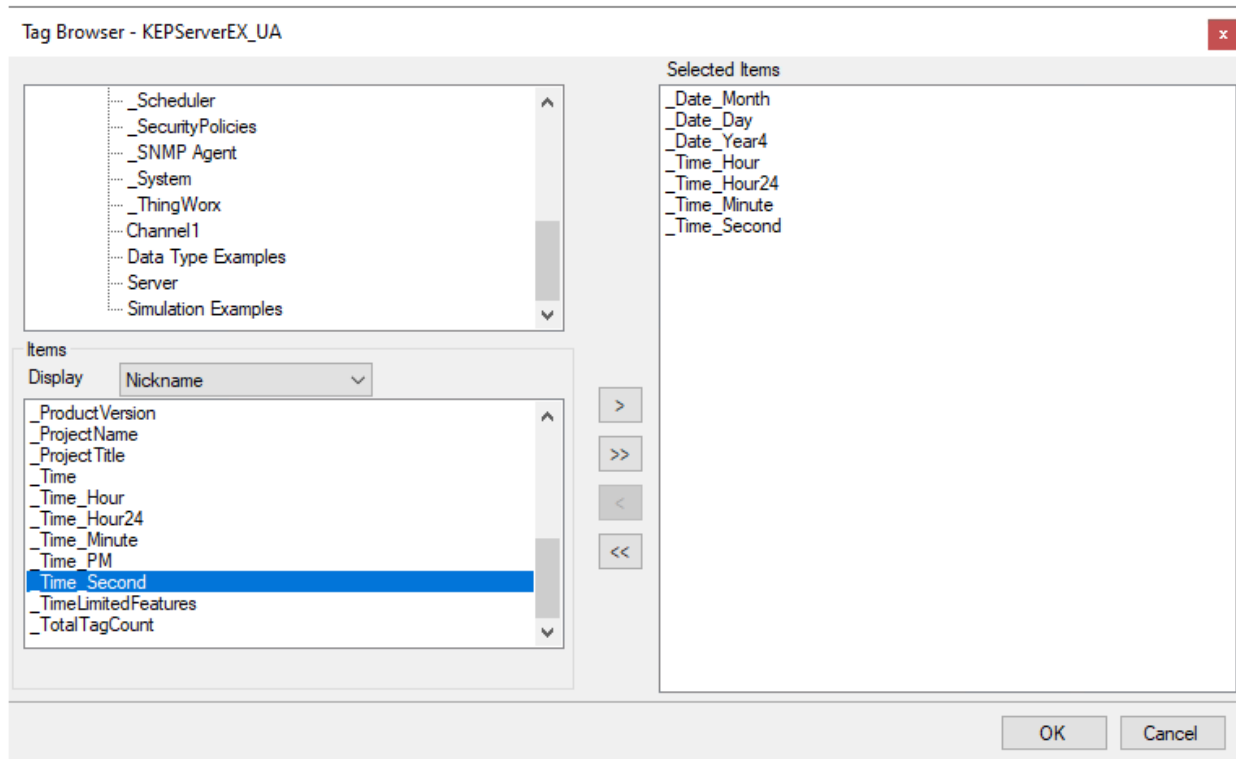
- 64 - bit OS C:\Windows\SysWow64\OPCEnum.exe
- 32 - bit OS C:\Windows\system32\OPCEnum.exe

If the components are not installed then they are provided in the tools folder of the installation or from www.opcfoundation.org.

Verify Data Communication

To verify communication to KEPServer EX, open the **Project Explorer** and select the **Tools** tab. Launch the **System Check** application.

- Click **Add**
- Choose the *KEPServer EX UA Connector* from the dropdown list.
- Click the pushbutton ([...]) next to **Items** to open the Tag Browser window.



- Select one or more tags, click **OK**

System Check x

File Edit Tools

Connector General

Add
 Modify
 Delete
 Clear
 Start

Connector	Source	Description	Value
KEPServerEX_UA	ns=2;s=_System._Date_Month	_Date_Month	1
KEPServerEX_UA	ns=2;s=_System._Date_Day	_Date_Day	21
KEPServerEX_UA	ns=2;s=_System._Date_Year4	_Date_Year4	2020
KEPServerEX_UA	ns=2;s=_System._Time_Hour	_Time_Hour	4
KEPServerEX_UA	ns=2;s=_System._Time_Hour24	_Time_Hour24	16
KEPServerEX_UA	ns=2;s=_System._Time_Minute	_Time_Minute	15
KEPServerEX_UA	ns=2;s=_System._Time_Second	_Time_Second	38

Clear

 Initialise Server and Items (ms) : 1
 Open Server and items (ms) : 568
 Read Server items (ms) : 1023
 Update display (ms) : 0

- Click **Start** to verify the communication