Janitza E-Learning Portal

Manual
OPC UA Client

Janitza®

Janitza®

Table of Contents

These instructions explain how to integrate values of an OPC UA server in GridVis Desktop.

Content

- ▪ Opening an OPC UA client

- ▪ Setting up a new connection with an OPC UA server

- ▪ Adding new items

- ▪ Organizing items in groups

- ▪ Configuring items

-

Starting with version 7.3, the **Ultimate** edition of the GridVis software allows you to log into an OPC UA server via the built-in OPC UA client, retrieve data from there and integrate it directly into GridVis.

The data points (items) are organized in groups, which you can create and rename as necessary.

The following step-by-step instructions explain the function in Gridvis Desktop. The handling is the same in GridVis Energy (web). You will find the OPC UA client there under the menu item **Administration**.

Janitza®

Connection Details

CONNECTED

OPC UA-Server
localhost

⚙ Disconnect
⚙ Connection config
☰ Back to connection list

Item Browser

+ ☐ Server
− ☐ BMS
  + ☐ ServerStatus
  − ☐ XIO
    ☐ EURange
    ☐ EngineeringUnits
  + ☐ KNX
  + ☐ BACnet
  + ☐ Modbus
  + ☐ JSON
  − ☐ GridVis
    ☐ EURange
    ☐ EngineeringUnits
    − ☐ GridVis-Energy
      ☐ EURange
      ☐ EngineeringUnits
    + ☐ GATEWAY

My OPC Items　　　　　　　　　　　　Create Group

⌄　● 　Main Supply　　　　　　　　　　1 Item
　　　●　　U_Effective.L1

⌄　● 　Hall 6　　　　　　　　　　　　3 Items
　　　●　　U_Effective.L1
　　　●　　U_Effective.L2
　　　●　　U_Effective.L3

New Group

Name
Main Supply

Recording Options　●
☑ Record Group

Time base of recording (sec)
1 minute

Remove Group

Navigation

Devices

Dashboards

Alarm

Configurators

Settings

Administration

Help

Release Notes

Licence

System Info

Administration

User Management

Online Recorder

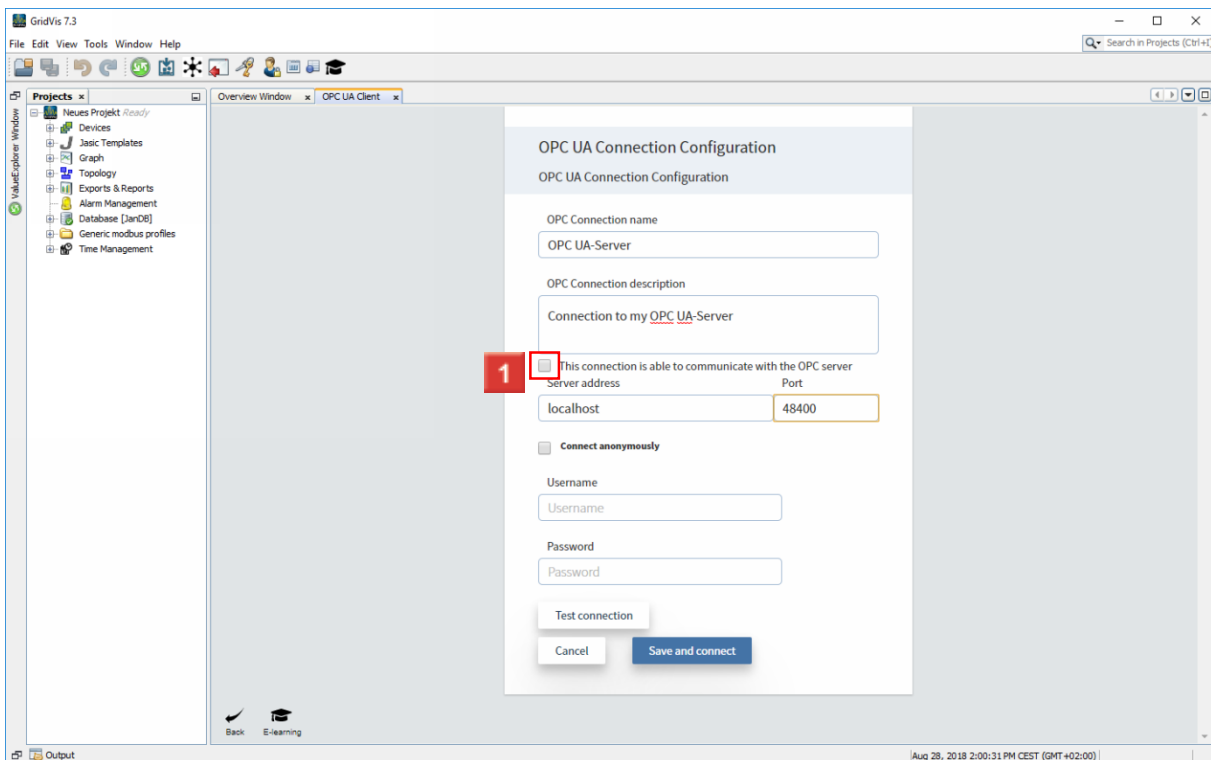Time Management

OPC UA Client

Picture Manager
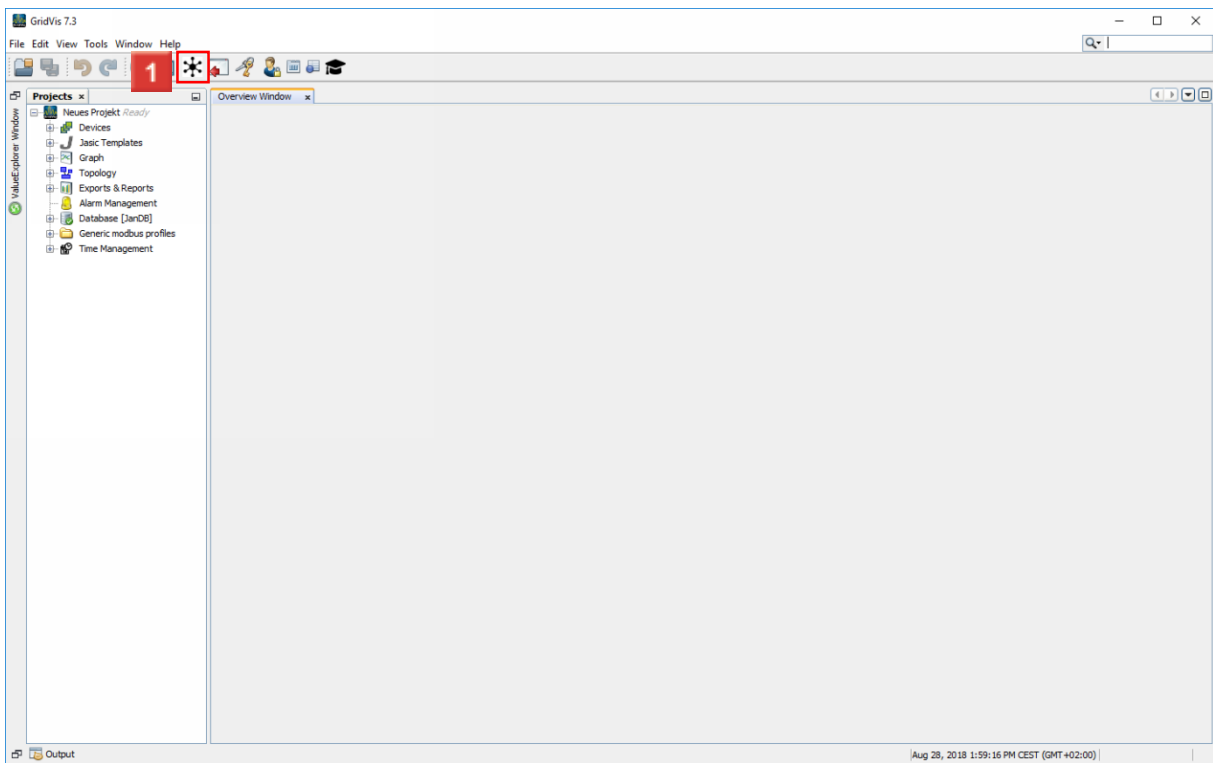
1 Click the **Open OPC UA Client** button.

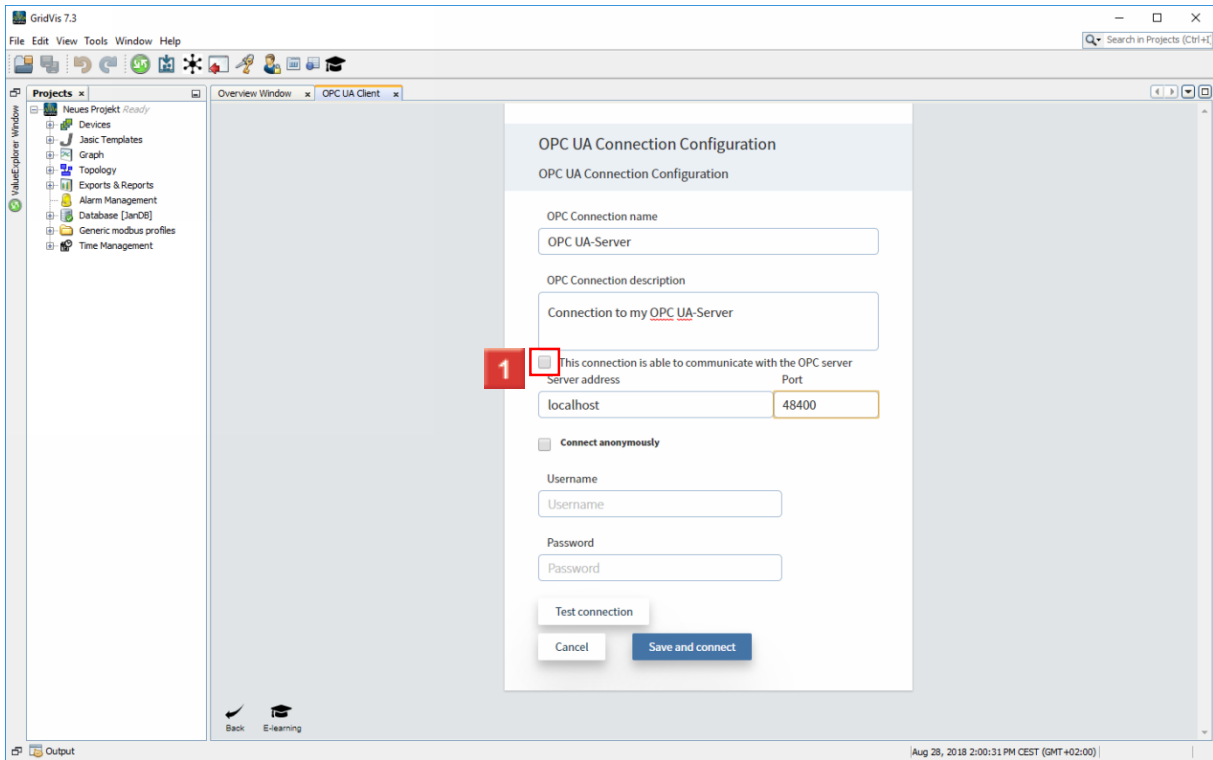# 1 Create new connection
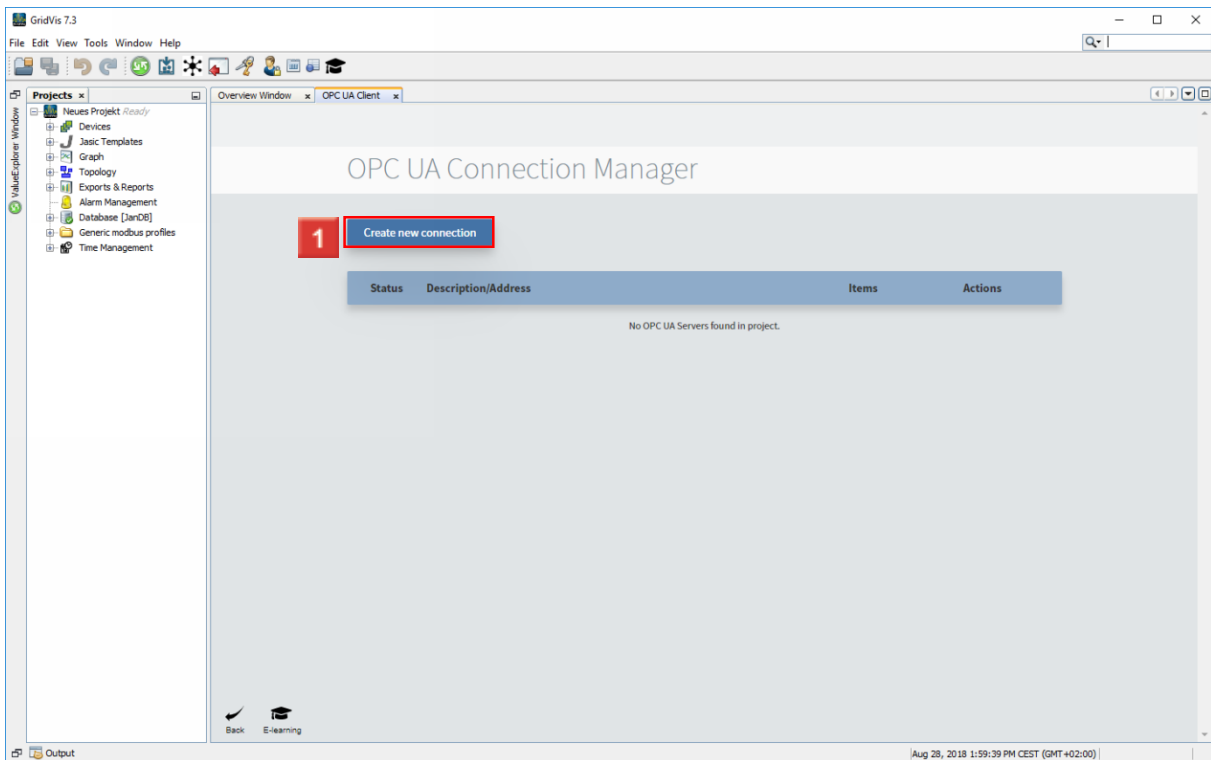
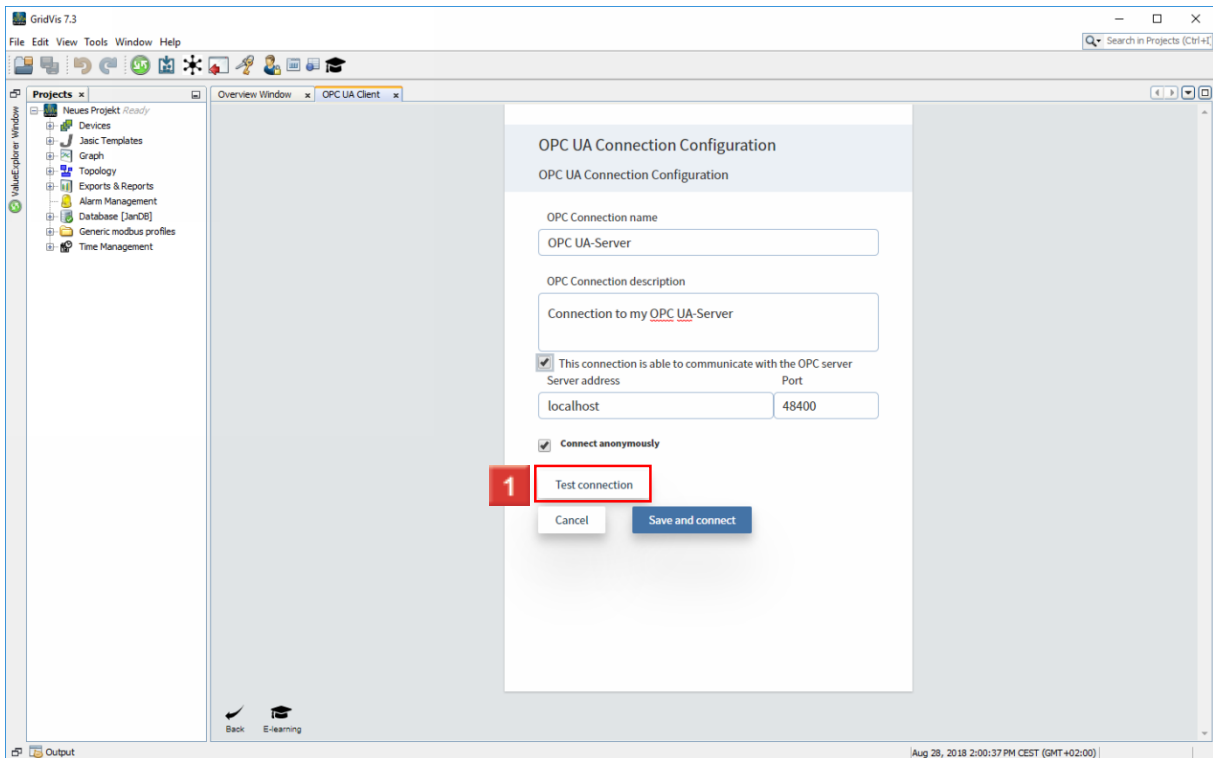**1** Click the **Create new connection** button.

1 Here, you enter the login data of the OPC UA server.

Click the checkbox to activate the communication with the OPC server.
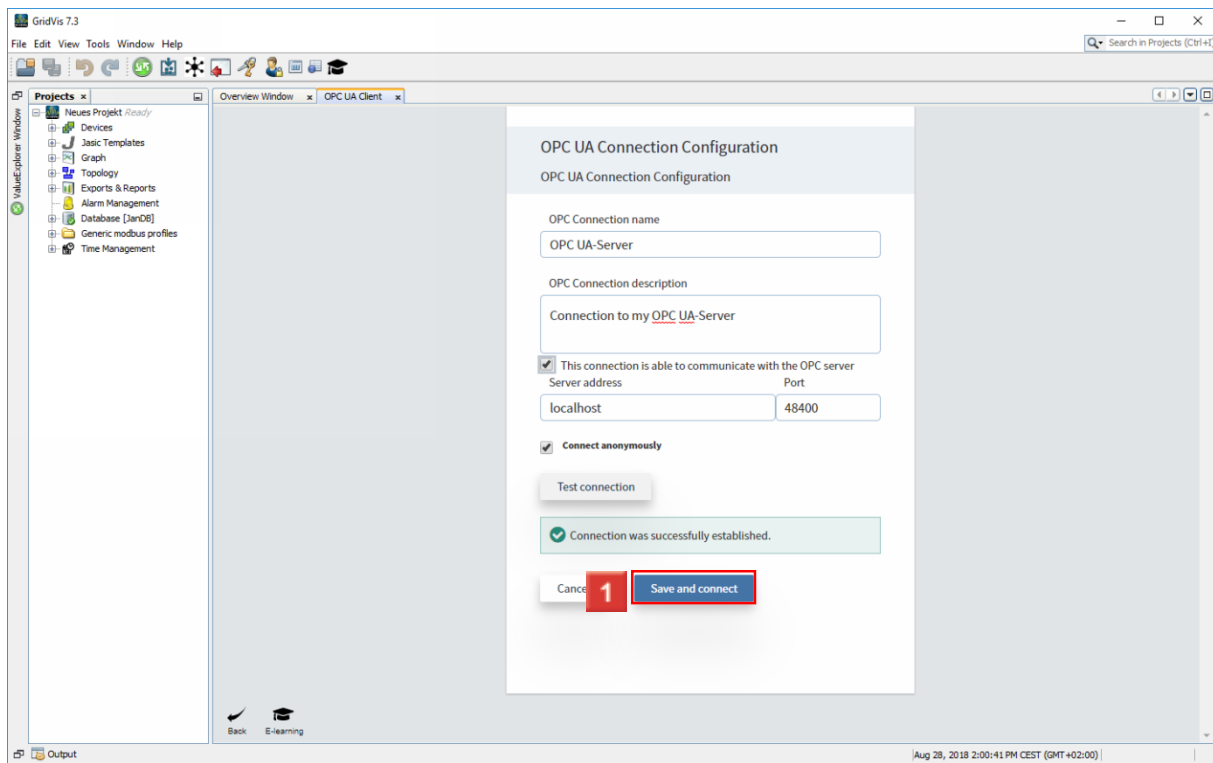
Janitza®

1 Some servers also support communication as an anonymous user without login data.

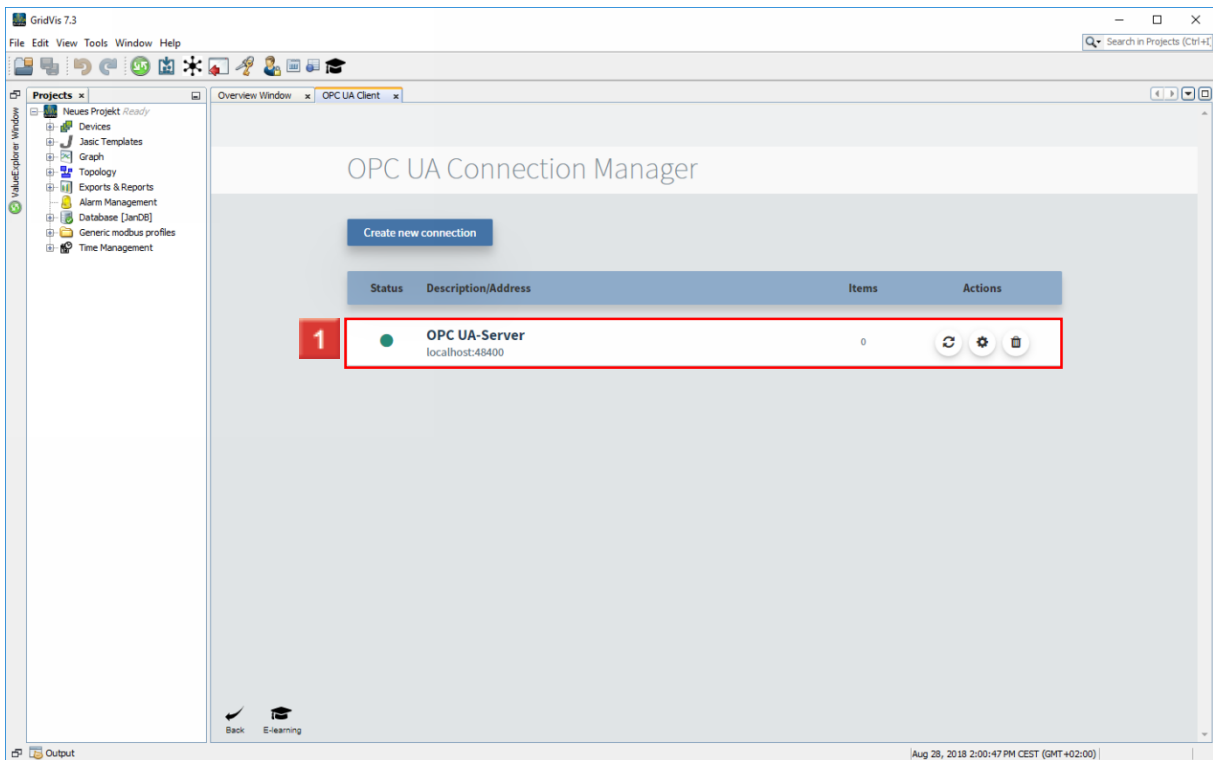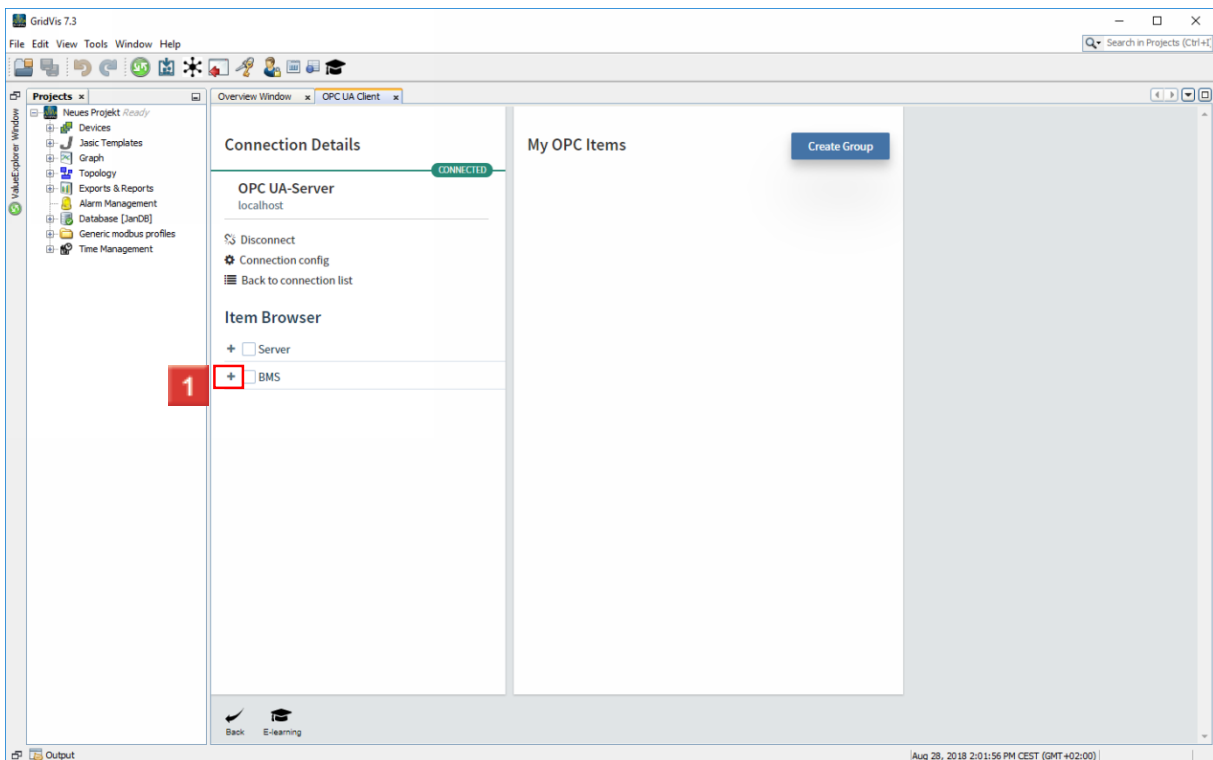Click the **Connect anonymously** checkbox to connect to the server without login data.

1 Click the **Test connection** button.

1 Click the **Save and connect** button.

Janitza®

2 Adding items to a connection
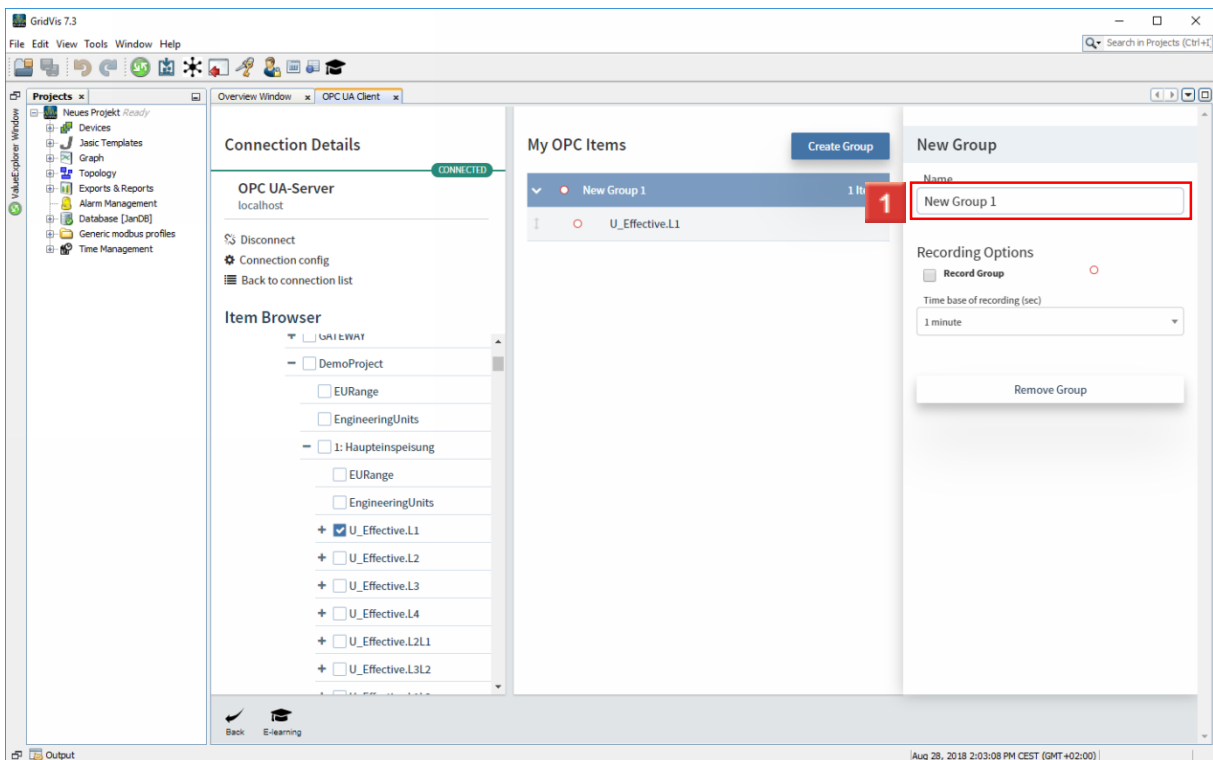

1 Click **the created connection**.

1 Click the **BMS** tree item.

> **i** It may take a moment to load the item browser depending on the quantity of data.

Janitza®
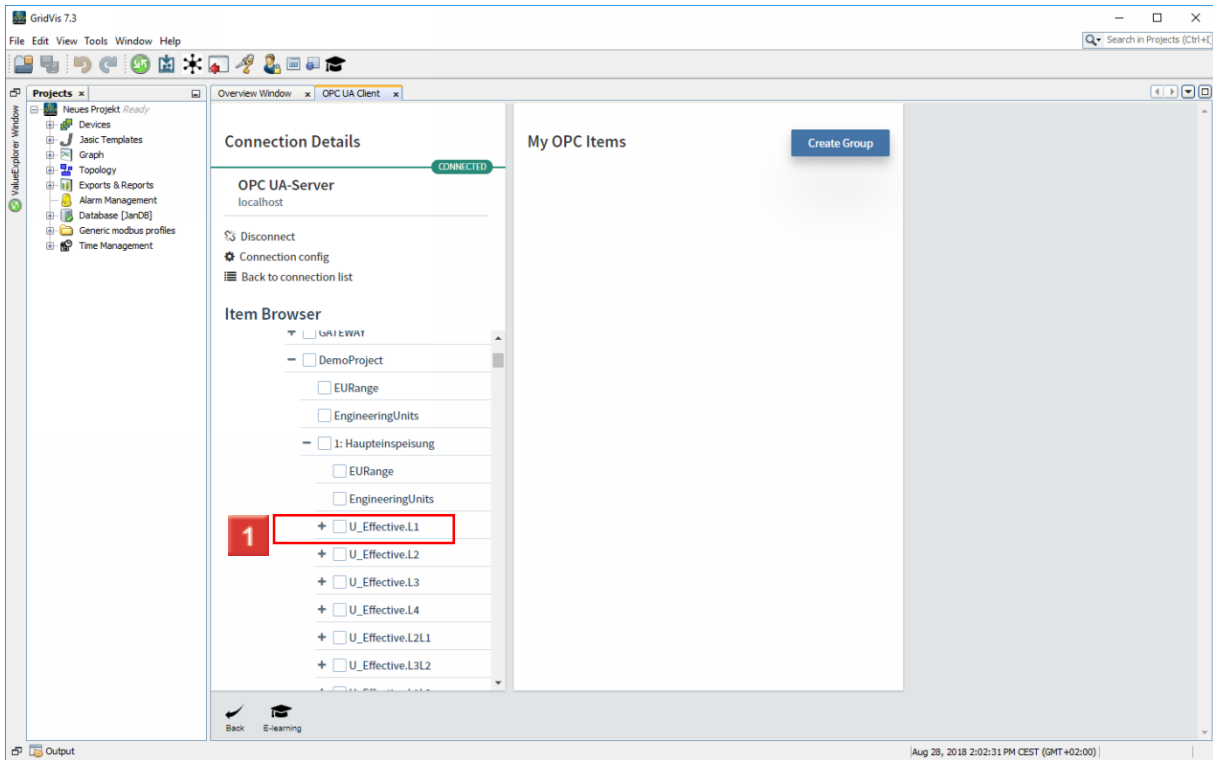
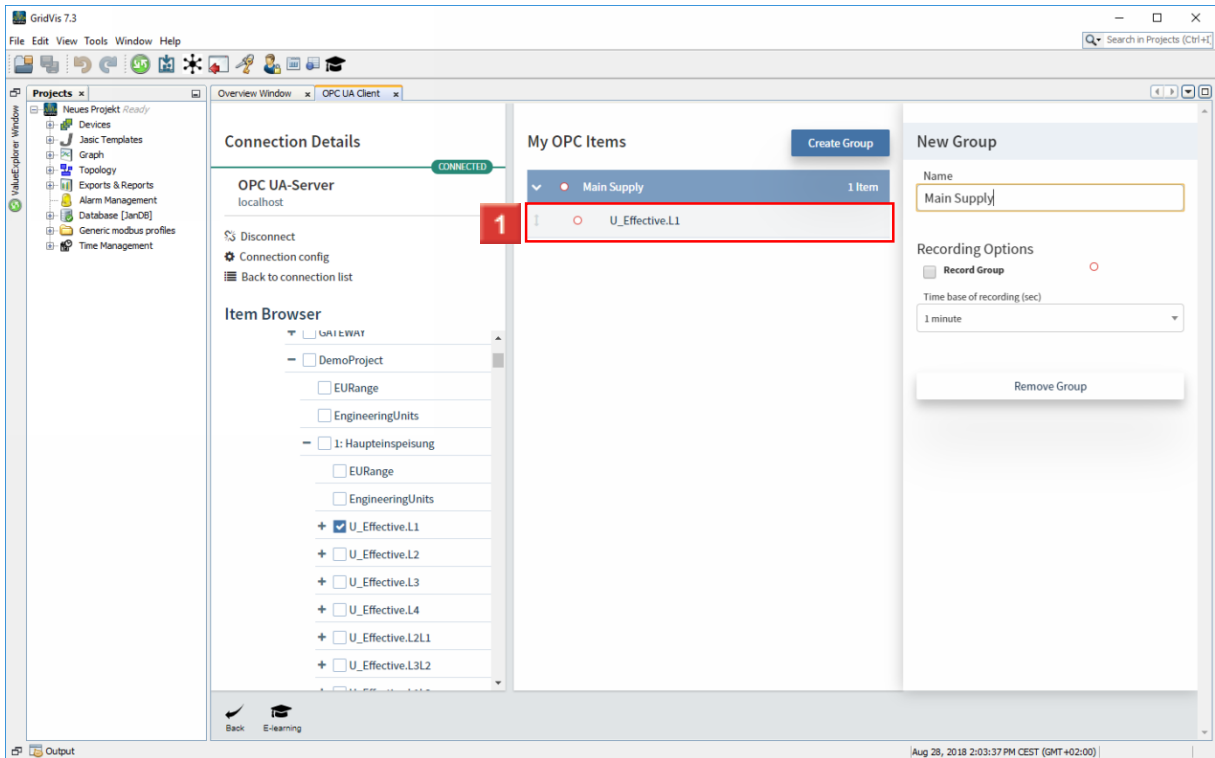**1** Click the item you want to add to your connection.

> **i** The structure of the directory depends on the structure of the connected server.
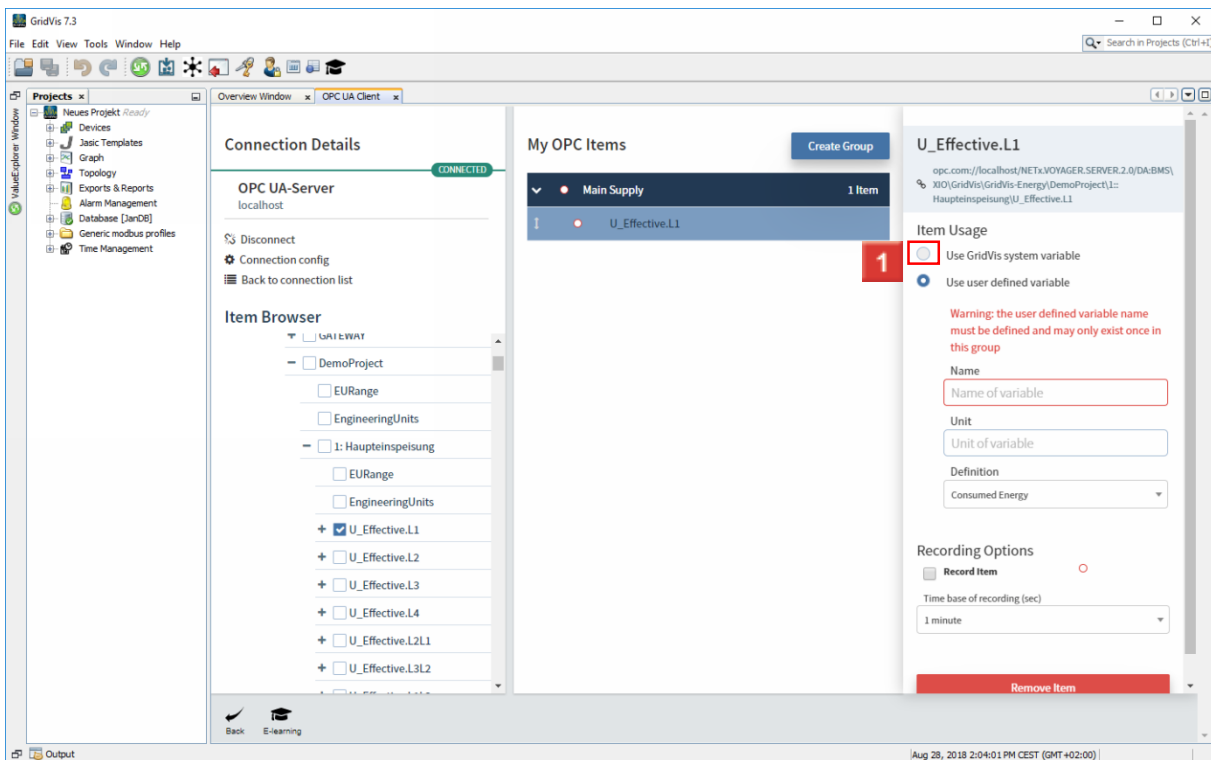

1 Click the **Name** input field to change the name of the group.

> **i** New items are always added to a group.

Janitza®

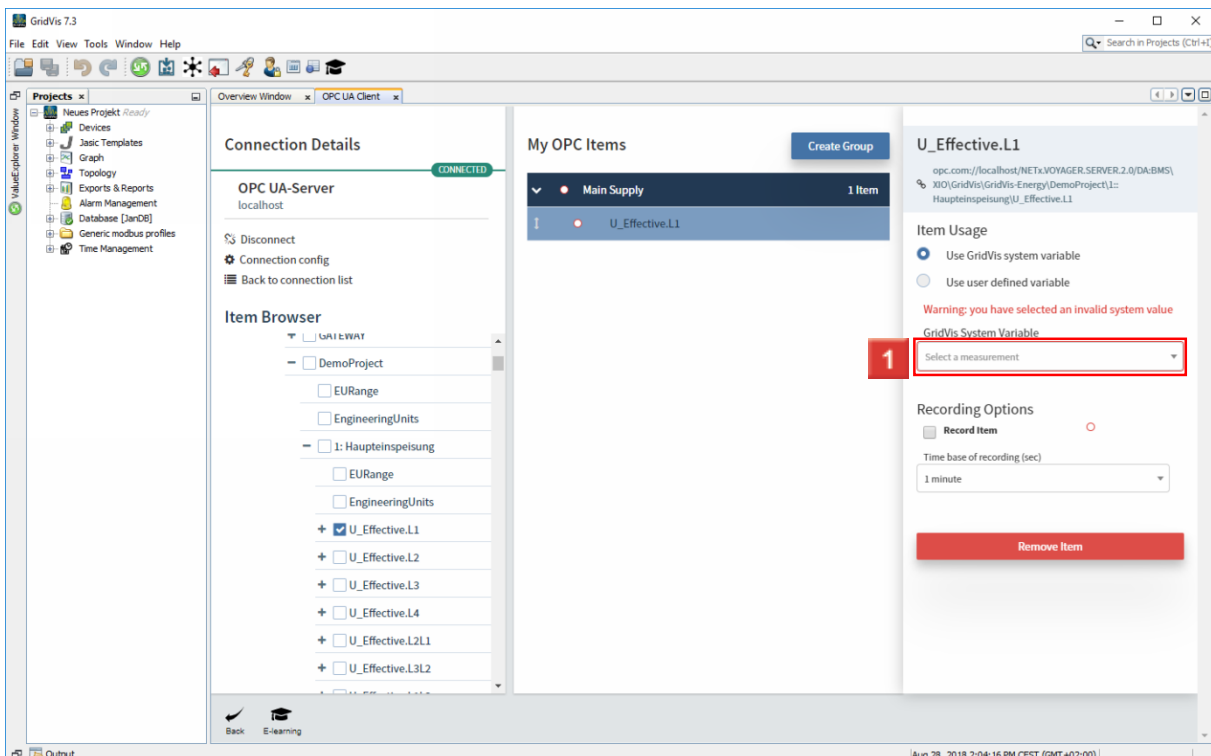> **i** If there is no group yet, a default group is created that can be renamed later.
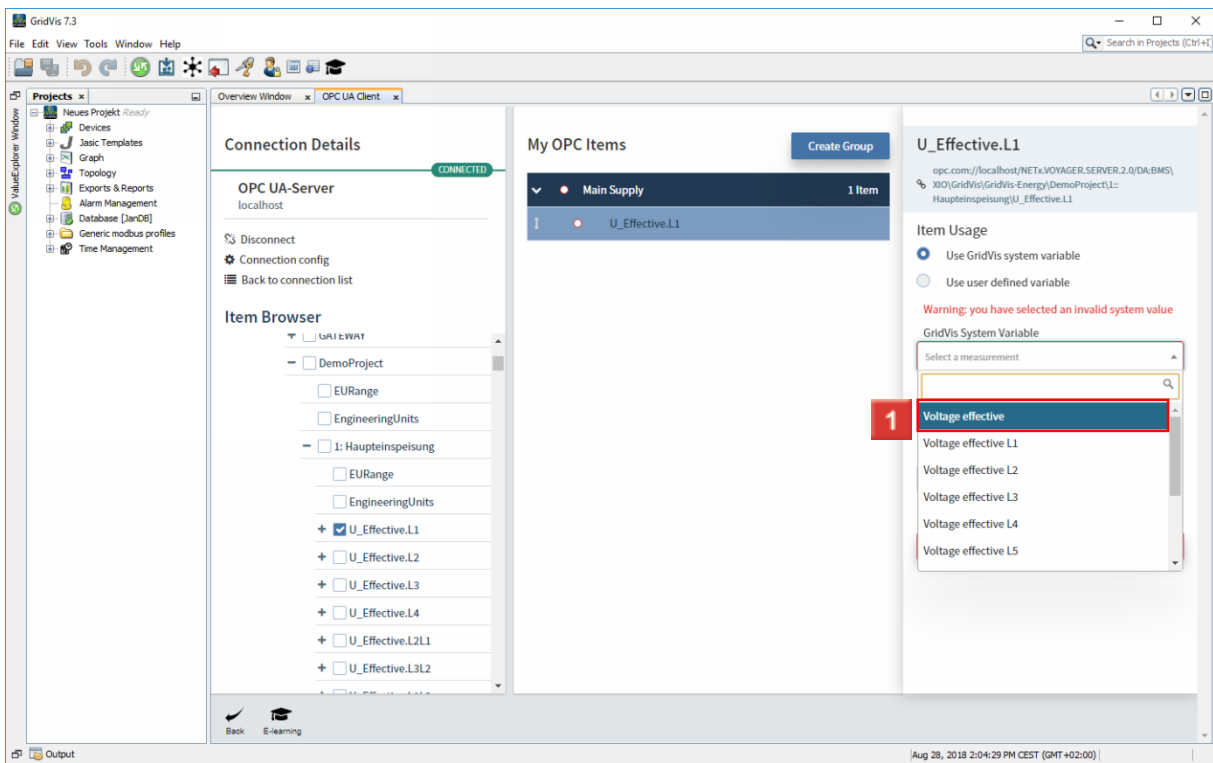

1 Click the newly added item to configure it.

> **i** Before the item data can be used in GridVis, the item must be configured.

1 Click the **Use GridVis system variable** radio button to assign the selected item to a GridVis system variable.
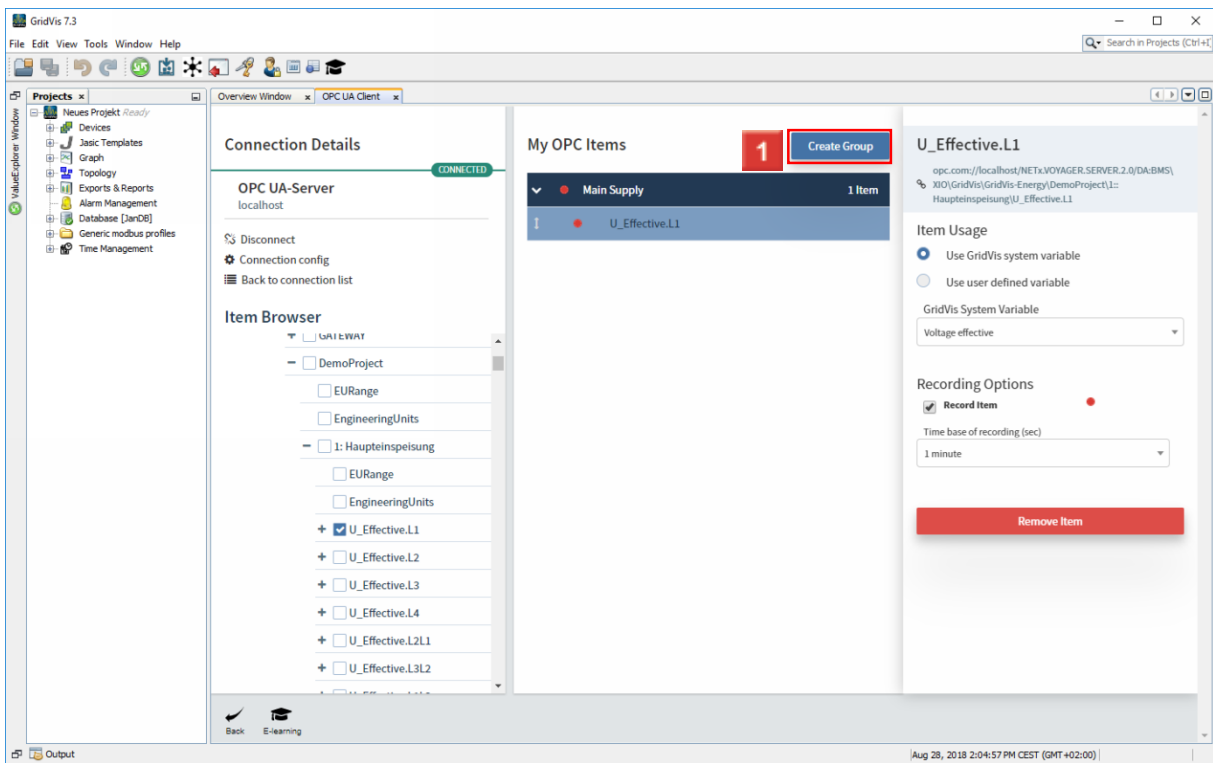

1 Click the **GridVis system variable** drop-down button to define under which variable the measured value is to be saved in GridVis.
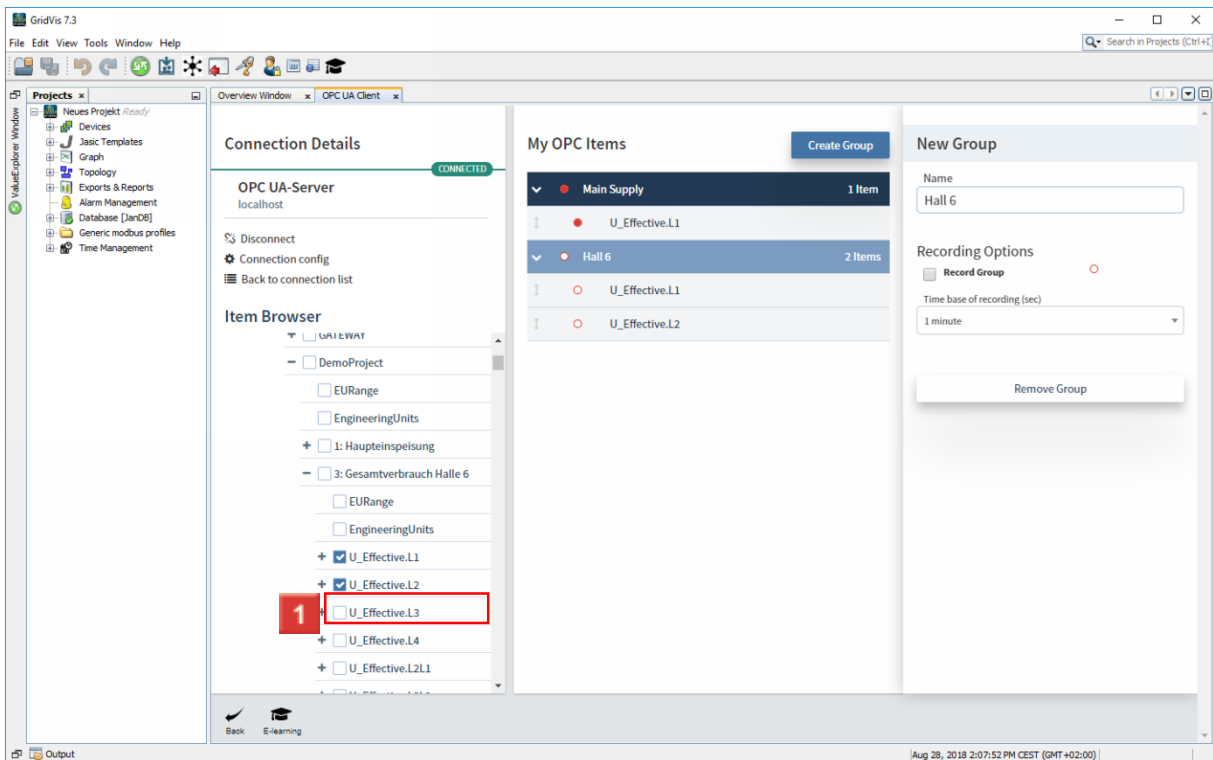
[1] Select the corresponding system variable from the list. The measured value of the item appears in GridVis under the selected system variable.
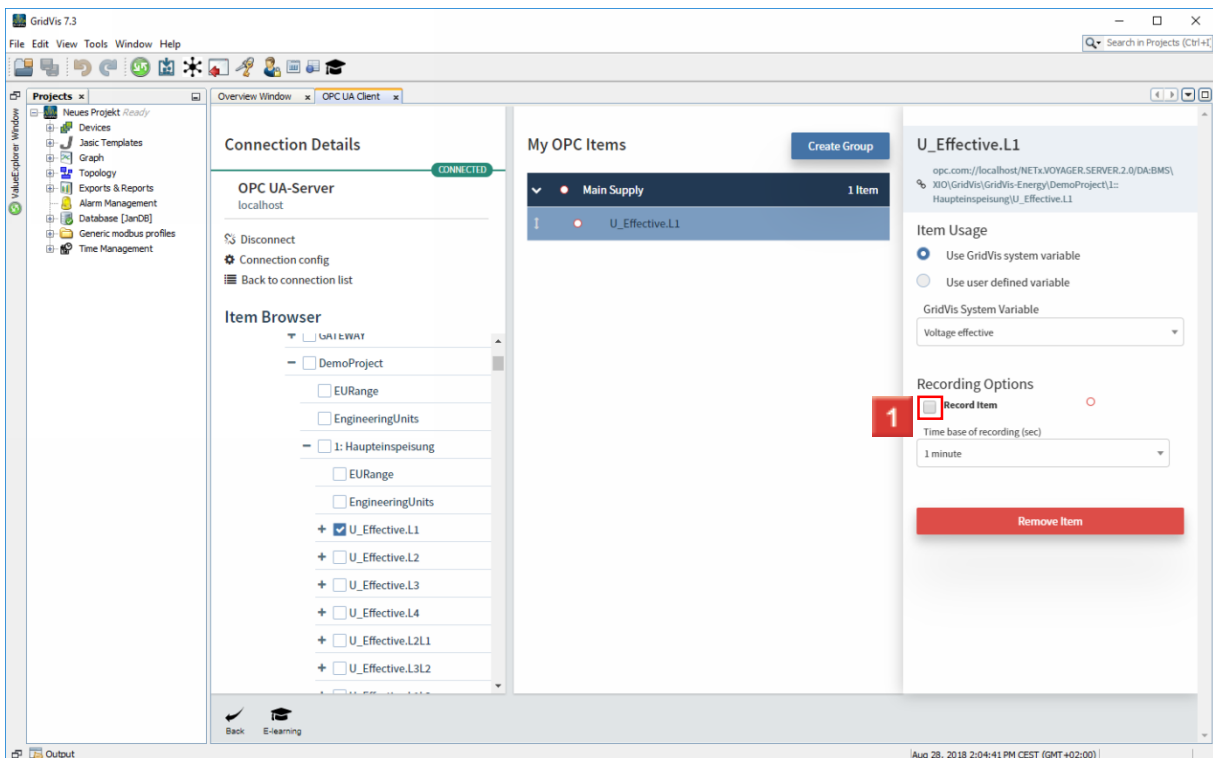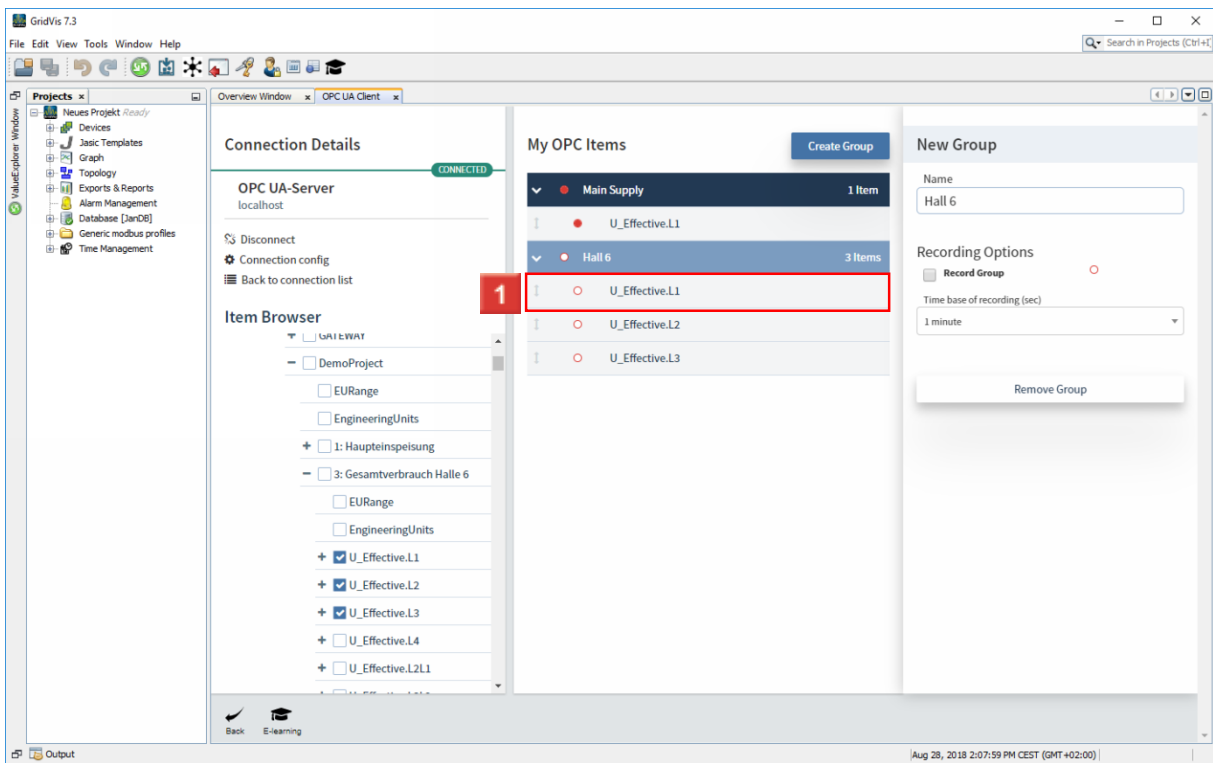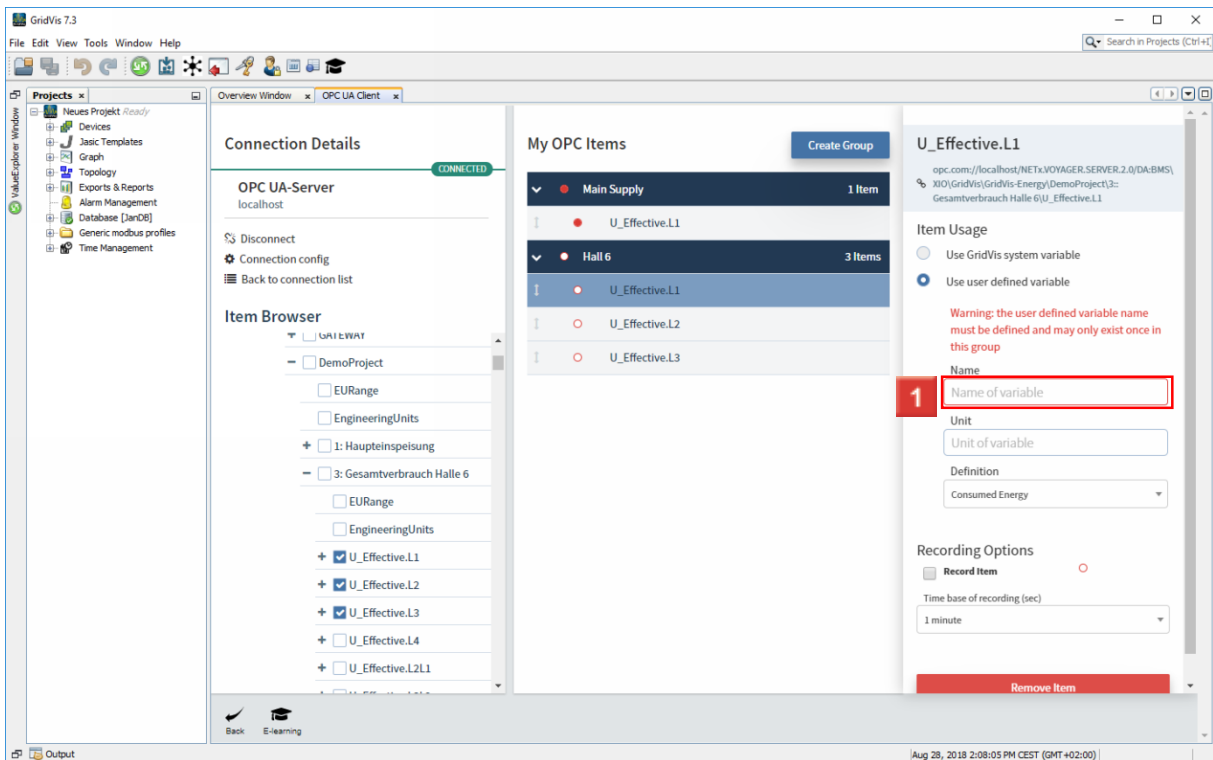

[1] Click the **Record item** to record historical data.
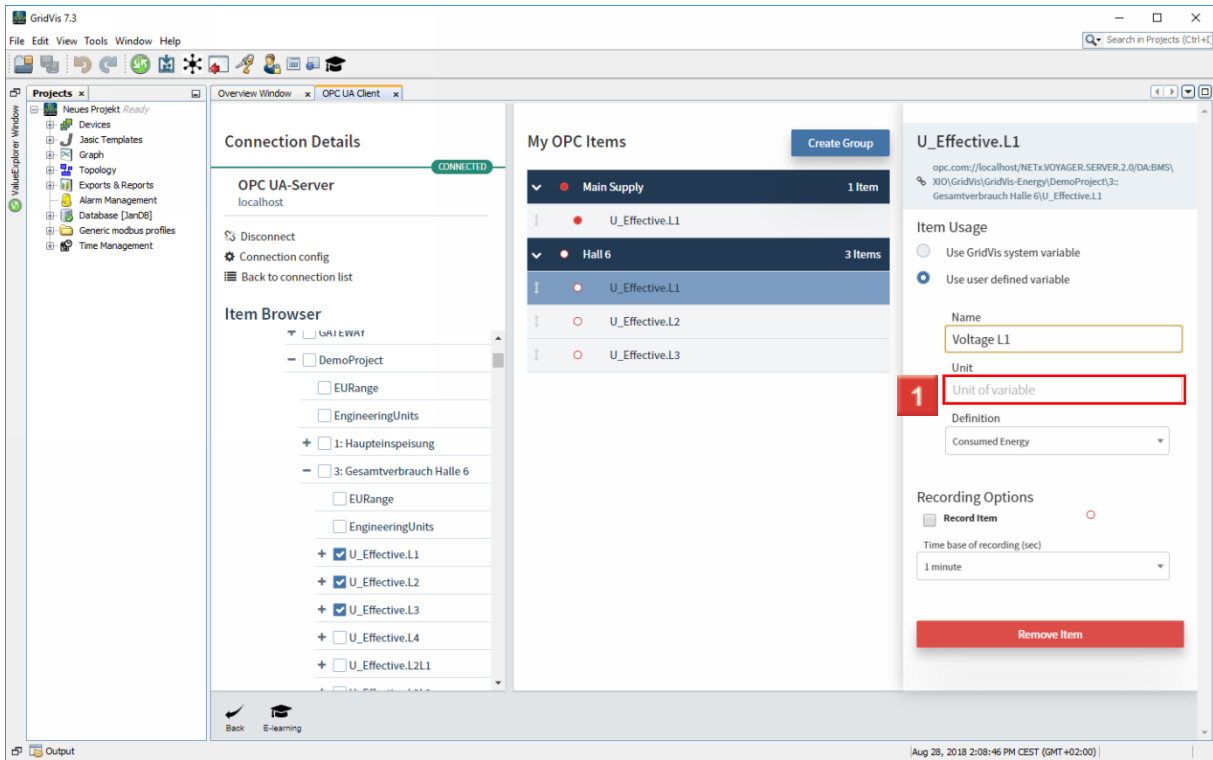
1 Click the **Create Group** button.

1 Click another item to add it to the highlighted group.
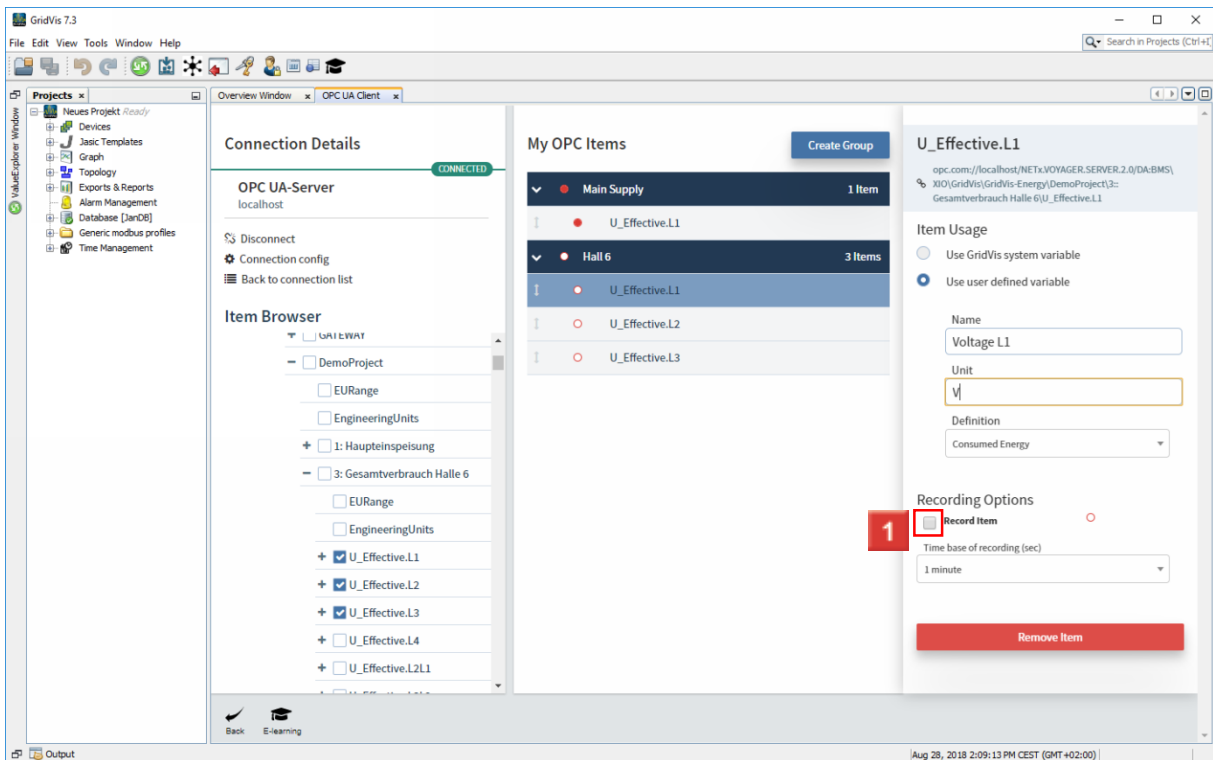
1 Click an Item of the Group Hall 6.

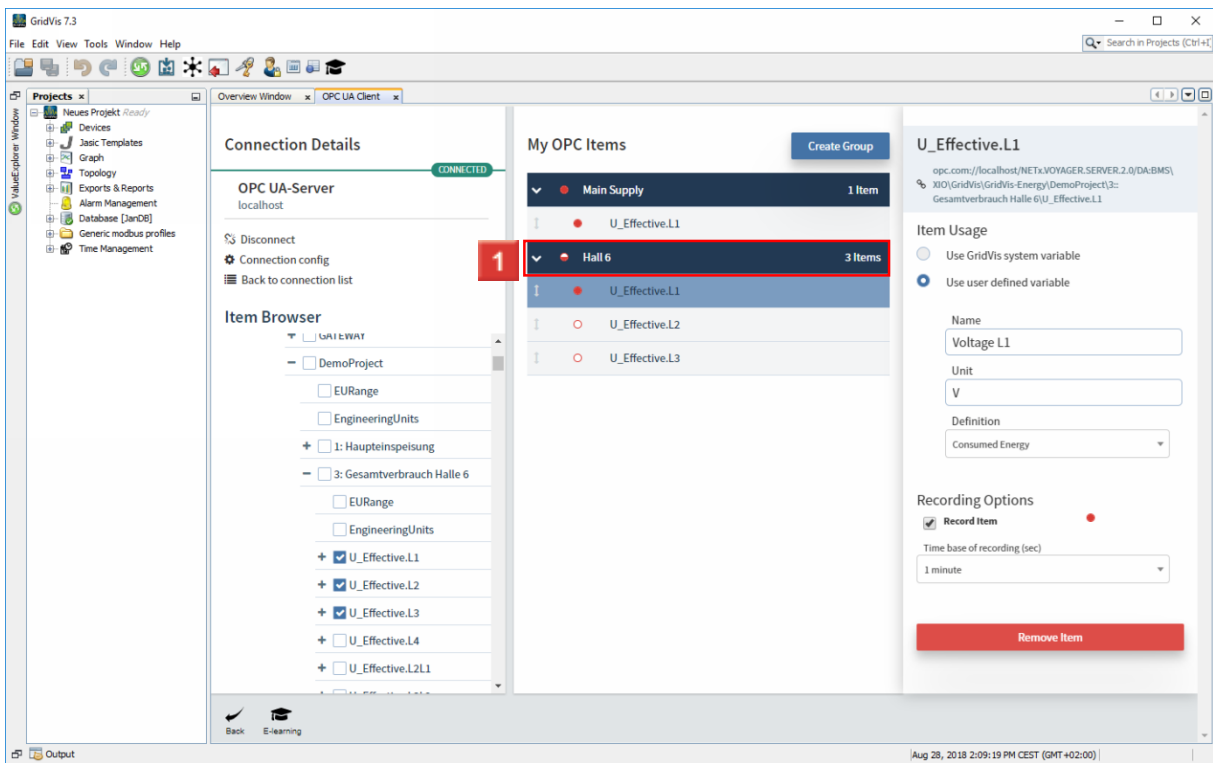**1** Click the **Name** input field to assign a name to the user-defined variable.
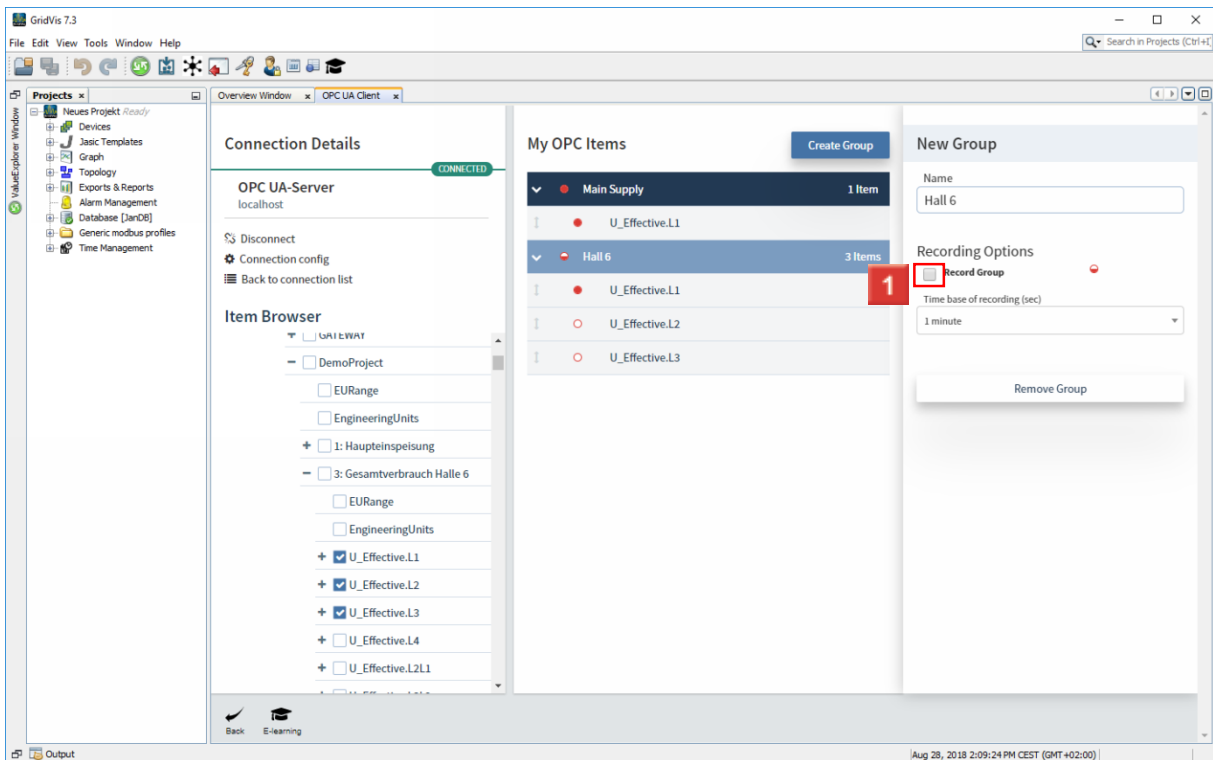
1 Click the **Unit** input field.

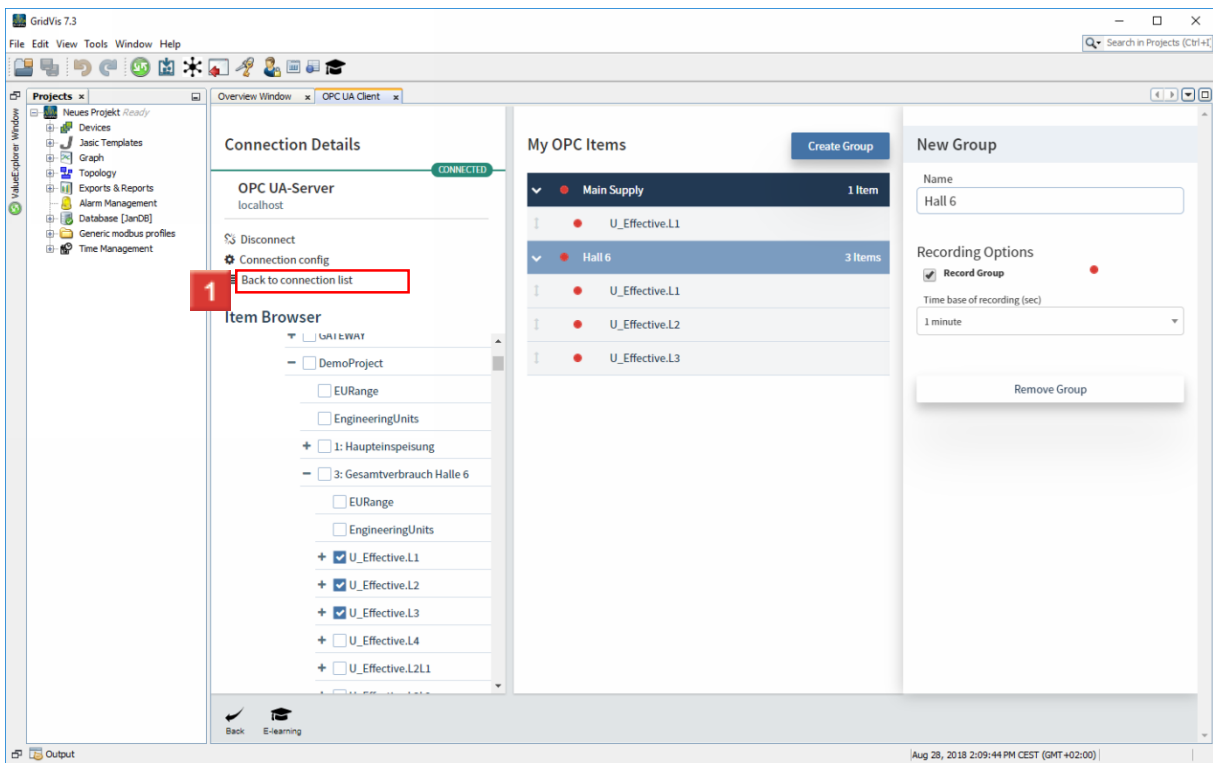**1** Click the **Record Item** checkbox.
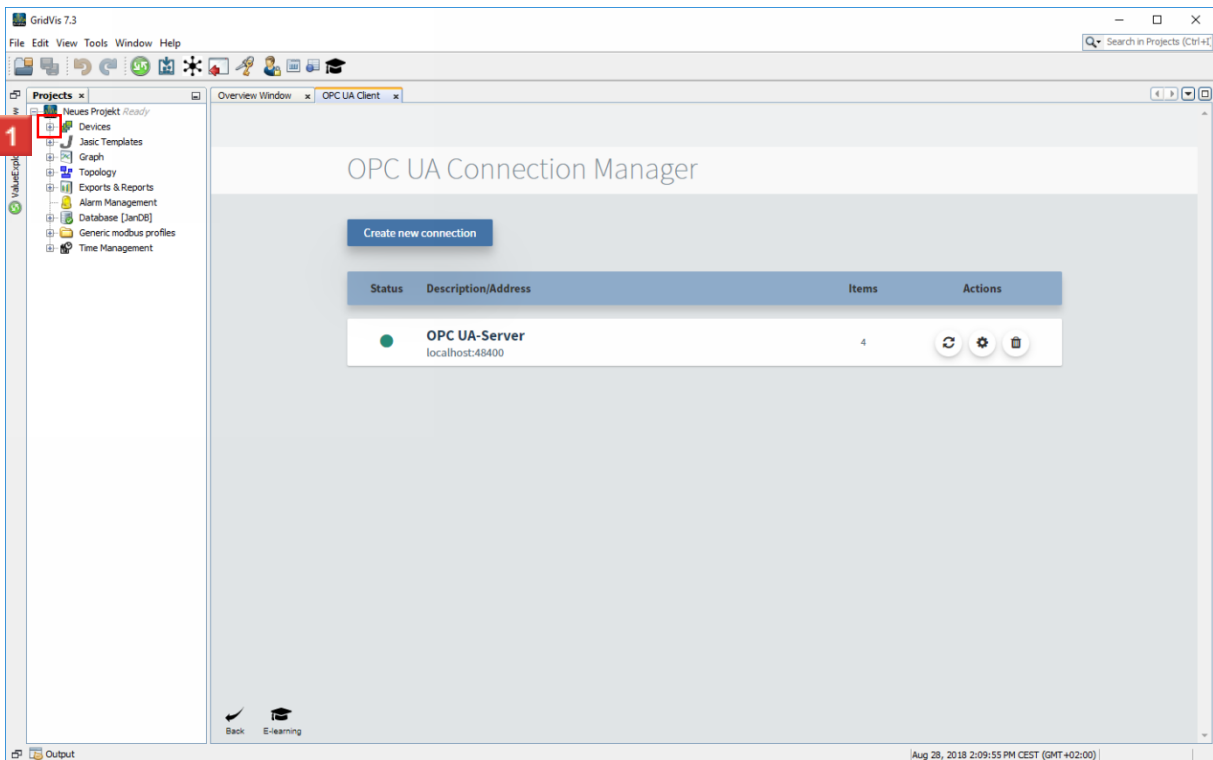
Janitza®

1 Click **Hall 6**.

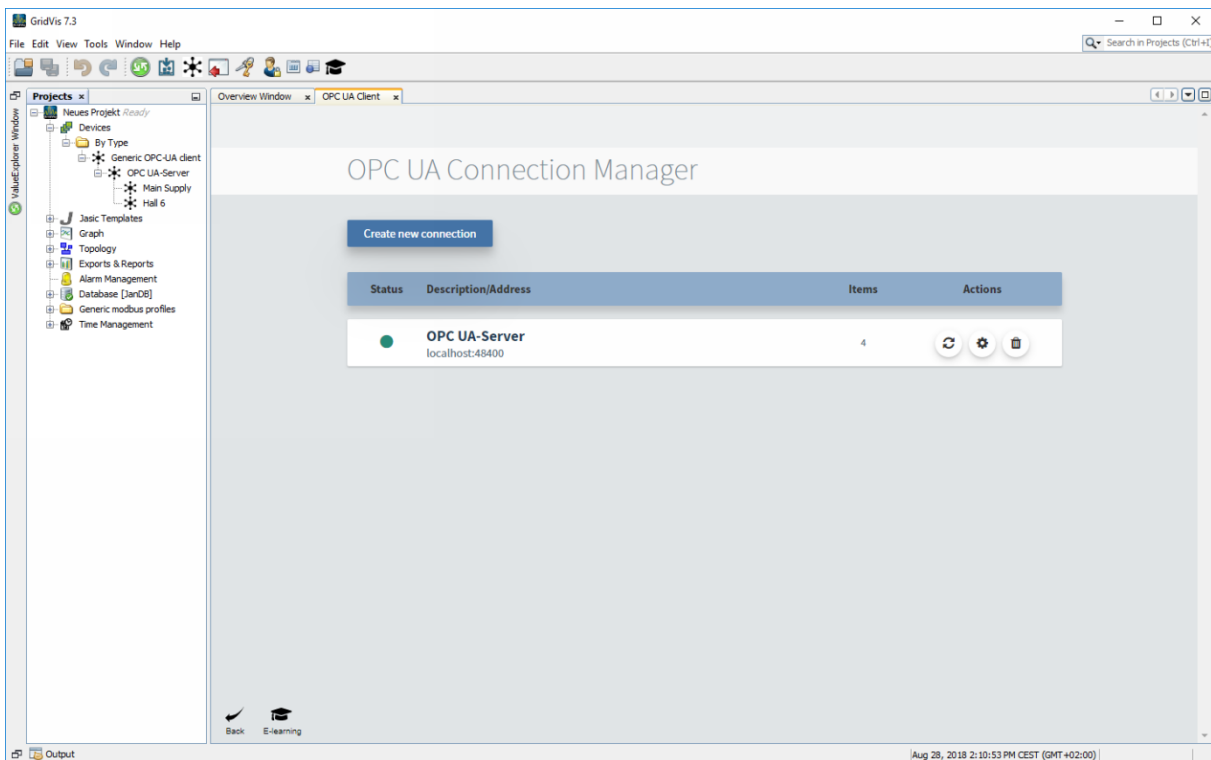**1** Click **Record group** to record all items in the group.

1 Click the **Back to connection list** button.

1 You can update or delete the existing OPC UA connections and open their settings in the connection manager.

Open the device tree.

Janitza®

Please enter your text here.

Groups

Newly added items are always saved in the highlighted group.

If no group is selected when an item is added, a default group is created.

Configuring items

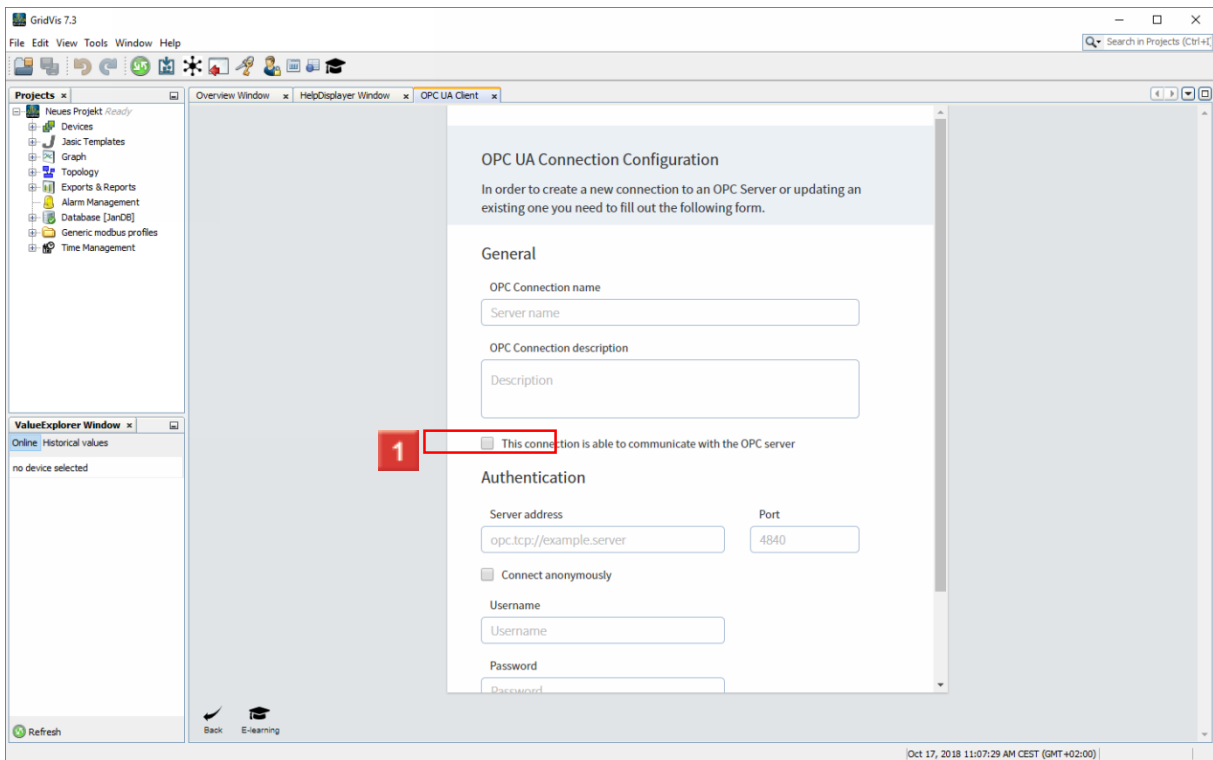Before an OPC item can be used in GridVis, it must first be configured.

An OPC UA item can be integrated either as a GridVis system variable or as a user-defined variable.

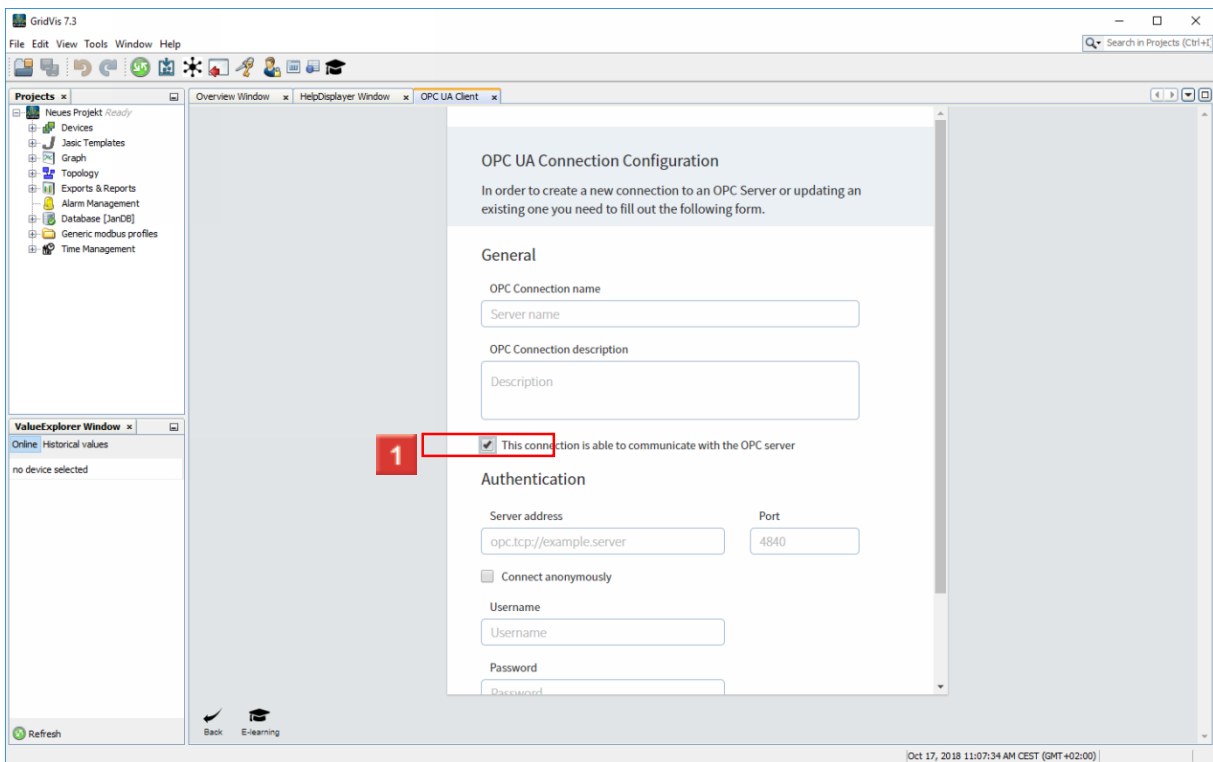The name of a user-defined variable may only occur once for each group.

Recordings

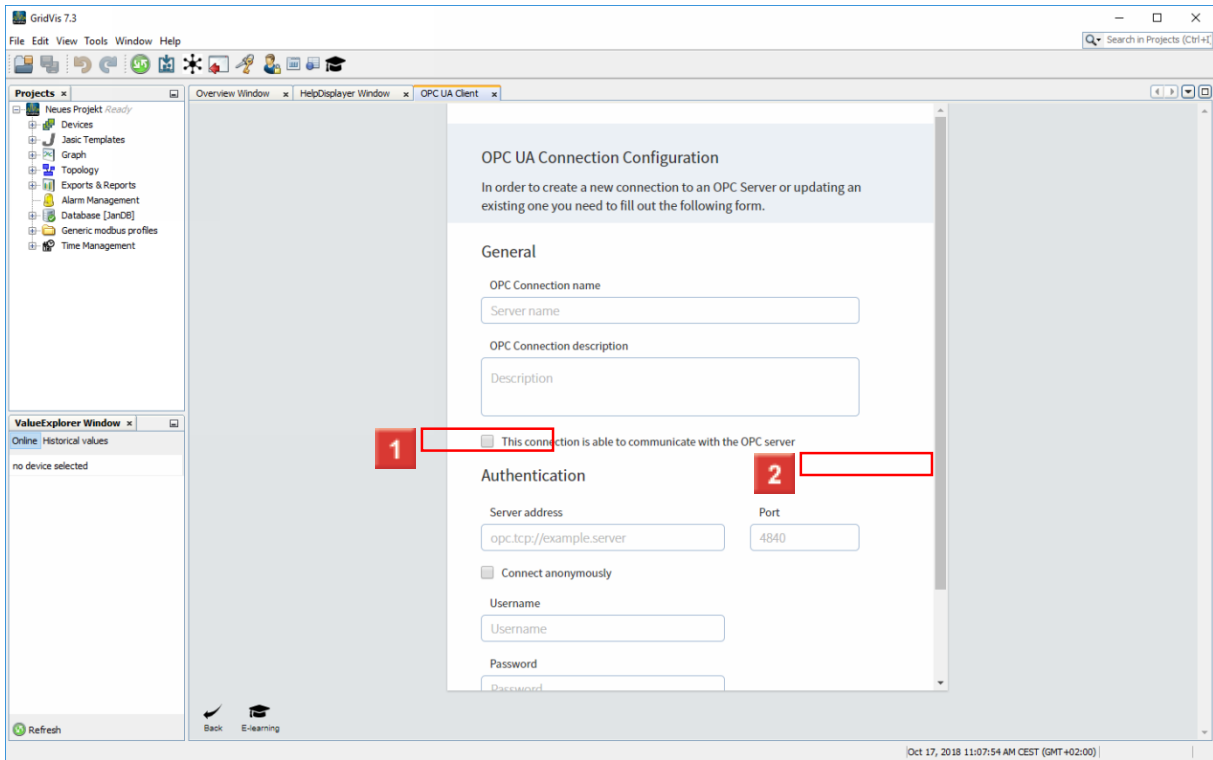To generate historical data, you can either activate the recording for individual items or entire groups.

Janitza®

3 GridVis 7.3

1 Click [ ] ☐ This conne.

1 Click [ ] ☑ This conne.

Janitza®

1 Click ☐ . ✔ This conne .

2 Click .