

# Troubleshooting FactoryTalk Data Agent Connections

## Overview

XLReporter supports connections to the FactoryTalk View SE servers and clients via the FactoryTalk Data Agent. The following document details some of the common issues that can come about when utilizing these interfaces with XLReporter.

## Common Issues

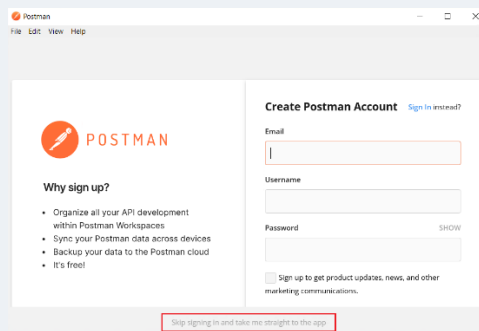
### Questionable Data

When requesting data from the Data Agent Live or Historical interfaces, either no data or data that appears incorrect can be returned.

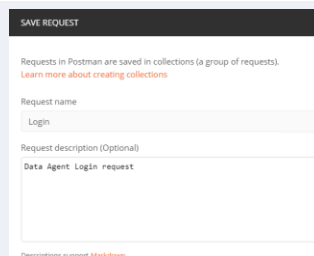
The **Postman** application can be used to query the same interface that XLReporter is outside of the software to offer a second opinion to the data returned.

To verify the data using Postman:

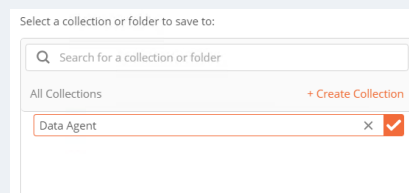
- Install the Postman application on the same machine as XLReporter.



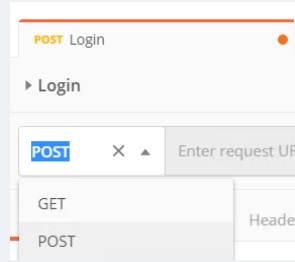
- Install the Postman application on the same machine as XLReporter.  
Click **Skip signing in and take me straight to the app**
- Select **[+] New** in the upper right corner
- Select **Request**



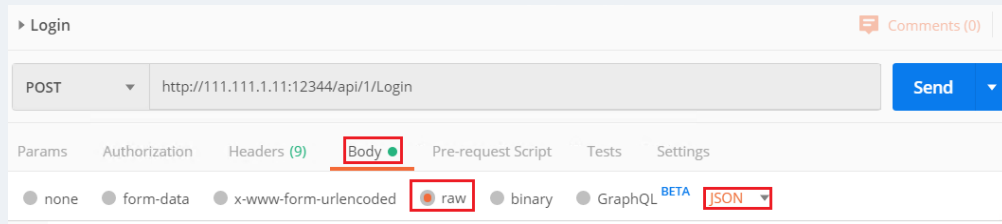
- Name the new request **Login**



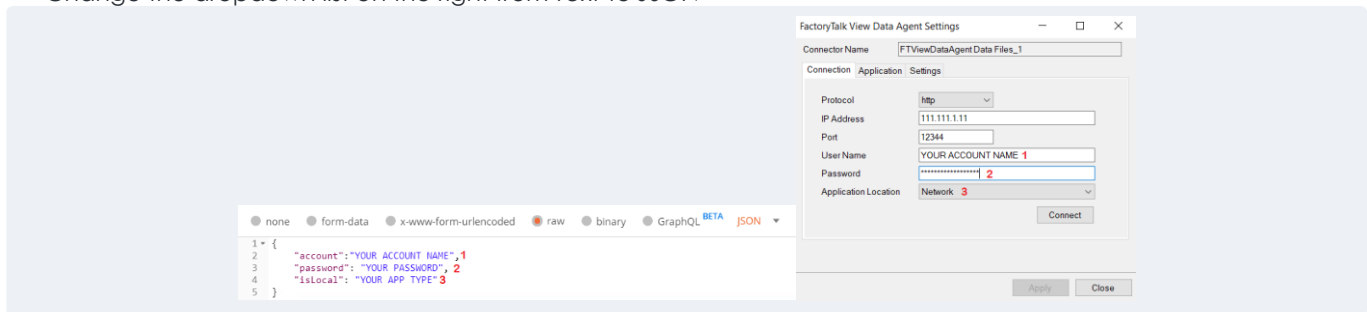
- Scroll down and select **+ Create Collection**
- Name the collection **Data Agent** and click the orange check mark next to it.
- Select **Save to Data Agent** at the bottom



- In the newly created Login request, click the dropdown list and select **POST**.



- Enter the *http://IP OF THE DATA AGENT:12344/api/1/Login* where it says *Enter request URL*
- Select **Body**
- Select **raw**
- Change the dropdown list on the right from *Text* to **JSON**

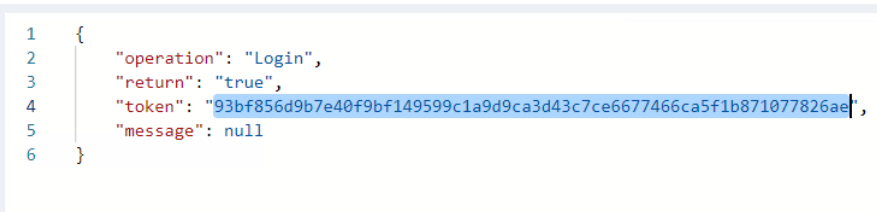


- In the body of the request, enter:

```
{
    "account": "YOUR ACCOUNT NAME",
    "password": "YOUR PASSWORD",
    "isLocal": YOUR APP TYPE(true or false)
}
```

Each of these fields corresponds to the parameters configured in the **FactoryTalk Data Agent** data connector as seen in the image above.

- Set "isLocal" to true for **Local Application Locations**, or false if it is a *Network* type application.
- Click **Send**



A result will be returned at the bottom of the request. In this request, copy the value of the *token* field and paste it into notepad. This will be used in future requests.

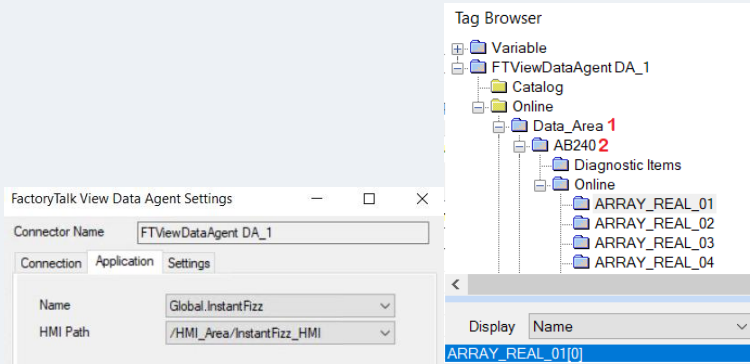
After running the Login request, define the Tag Browse request as it appears below:

```

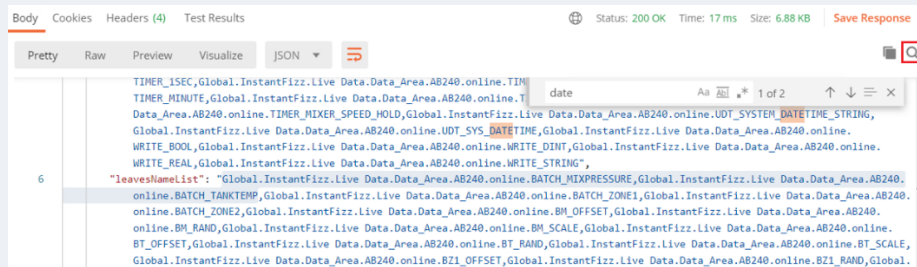
1 {
2   "token": "203d39ba3c49400caa77fc4df53017aecdc2968a6d8f4c648b42de6d8d7e471e",
3   "operation": "ListAllSubItemName",
4   "parameters":
5     {
6       "ParentFQN": "Global.InstantFizz.Live Data.Data_Area.AB240.online"
7     }
8 }
9

```

- Set the value of "token" to the token you copied to Notepad after running the **Login** request. This token may expire. If it does, re-run the **Login** request to generate a new token.



- Set the value of "ParentFQN" to the Name of the application selected on the **Application** tab of the data agent Data Connector configuration followed by *Live\_Data.branch1.branch2.online* similarly to how it appears in the request image above.
- Send this request.



A list of tags will be returned. This list can be navigated using the magnifying glass button in the upper right corner of the response section.

- Copy the tag name in question and paste it to notepad.
- After running the Tag Browse request, define the **Get Data** request as it appears below:

```

POST Login
POST Tag Browse
POST Get Data

> Get Data
POST http://111.111.1.11:12344/api/1/timeseriesDataService

Params Authorization Headers (9) Body Pre-request Script Tests Settings
none form-data x-www-form-urlencoded raw binary GraphQL JSON

1 {
2   "token": "93bf856d9b7e4d0f9149599c1a9d9ca3d43c7ce6677466ca5f1b871077826ae",
3   "fqns": ["COPIED TAG NAME"],
4   "timePeriod": {
5     "start": "START DATETIME IN YYYY-MM-DD hh:mm:ss FORMAT",
6     "end": "END DATETIME IN YYYY-MM-DD hh:mm:ss FORMAT"
7   }
8 }

```

- Replace *COPIED TAG NAME* with the tag name that was copied to note pad after the *Tag Browse* request.
- Replace the *START DATETIME* and the *END DATETIME* with the start and end dates in question. For real-time data, set this to the last five minutes from the current time.

- Send this request.

Values will be returned with timestamps corresponding to the recorded **"variant"** value similar to the output below:

```
1  {
2    "return": true,
3    "data": [
4      {
5        "item": [
6          {
7            "propertyFn": "Global.InstantFizz.Live Data.Data_Area.AB240.online.BATCH_MIXPRESSURE.Value",
8            "vqt": {
9              "quality": {
10               "value": 1048576,
11               "simpleQuality": 0,
12               "opcHdaQuality": 1048576,
13               "isGood": false,
14               "isUncertain": false,
15               "isBad": true,
16               "subStatus": 0,
17               "limit": 0
18             },
19             "timeStamp": "2023-05-22T11:51:00.000000Z",
20             "variant": 0
21           }
22         ]
23       },
24       {
25         "propertyFn": "Global.InstantFizz.Live Data.Data_Area.AB240.online.BATCH_MIXPRESSURE.Value",
26         "vqt": {
27           "quality": {
28             "value": 192,
29             "simpleQuality": 192,
30             "opcHdaQuality": 0,
31             "isGood": true,
32             "isUncertain": false,
33             "isBad": false,
34             "subStatus": 0,
35             "limit": 0
36           },
37           "timeStamp": "2023-06-02T13:57:12.7545540Z",
38           "variant": 88.113533020019531
39         }
40       }
41     ],
42     "Message": null
43   }
44 }
```