CTT Issue

Title: Base Information / Base Info Server Capabilities / 011.js returns BadNotFound

Author: Karl.Mayr@br-automation.com / 05-Aug-2020

1 CTT Version

Used CTT Version 1.4.9.396

2 CTT Output

Test Case	Timestamp	Message
Debug Run1	2020-07-30 08:14:57.942	
beforeTest.js	2020-07-30 08:14:57.945	
Base Information	2020-07-30 08:15:00.209	Base Information. (optional)
Base Info Server Capabilities	2020-07-30 08:15:00.209	The Server supports publishing of the Server limitation in the ServerCapabilities, including MaxArrayLength, MaxStringLength, MaxNodePerRead, MaxNodesPerWrite, MaxNodesPerSubscription and MaxNodesPerBrowse.
initialize.js	2020-07-30 08:15:00.209	
011.js	2020-07-30 08:15:00.283	MaxNodesPerWrite
Log	2020-07-30 08:15:00.318	Read.Response.Results (count: 79) with RequestHandle=5 StatusCode check (suppressed): [0] (Setting: '/Server Test/NodeIds/Static/All Profiles/Scalar/Bool') StatusCode is Good (0x00000000), ..., [78] (Setting: '/Server Test/NodeIds/Static/DA Profile/AnalogType Arrays/Float') StatusCode is Good (0x00000000)
Log	2020-07-30 08:15:00.577	Read.Response.Results (count: 600) with RequestHandle=6 StatusCode check (suppressed): [0] (Setting: '/Server Test/NodeIds/Static/All Profiles/Scalar/Bool') StatusCode is Good (0x00000000), ..., [599] (Setting: '/Server Test/NodeIds/Static/DA Profile/DataItem/SByte') StatusCode is Good (0x00000000)
Error	2020-07-30 08:15:00.684	Write the ErrorCode in the Error Message received doesn't match the expectation. Expected: Good (0x00000000) but received: BadNotFound (0x803e0000)
Log	2020-07-30 08:15:00.689	CloseSecureChannel(); Result = Good (0x00000000)
Log	2020-07-30 08:15:00.746	CreateSession.Response.ServerCertificate validated successfully.
Log	2020-07-30 08:15:00.746	Requesting user credentials: username='Operator'; password='password'; securityPolicyUri='http://opcfoundation.org/UA/SecurityPolicy#Basic256Sha256'; token.PolicyId='1'; nonceAppended=Yes
Log	2020-07-30 08:15:00.761	Read the BrowseName on the SessionId node (for this session). Node Id: ns=1;i=1323917922
Log	2020-07-30 08:15:00.768	CloseSecureChannel(); Result = Good (0x00000000)
Log	2020-07-30 08:15:00.831	CreateSession.Response.ServerCertificate validated successfully.
Log	2020-07-30 08:15:00.832	Requesting user credentials: username='Operator'; password='password'; securityPolicyUri='http://opcfoundation.org/UA/SecurityPolicy#Basic256Sha256'; token.PolicyId='1'; nonceAppended=Yes
Log	2020-07-30 08:15:00.849	Read the BrowseName on the SessionId node (for this session). Node Id: ns=1;i=1323917923
cleanup.js	2020-07-30 08:15:00.853	
afterTest.js	2020-07-30 08:15:00.856	

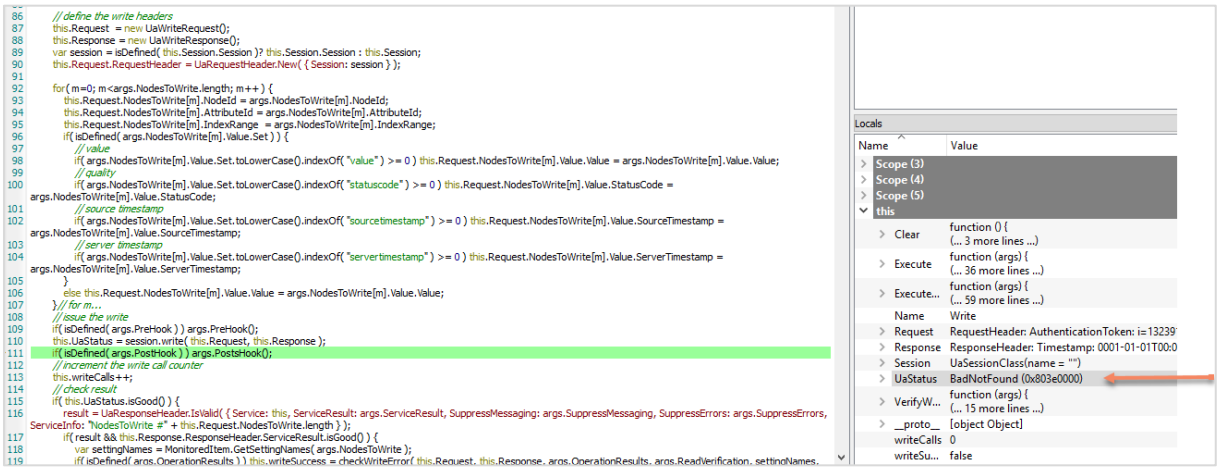
3 Description

When you run the test in the debugger, it first (in my case) reads 600 nodes and then comes to this point where these 600 nodes are to be written again.

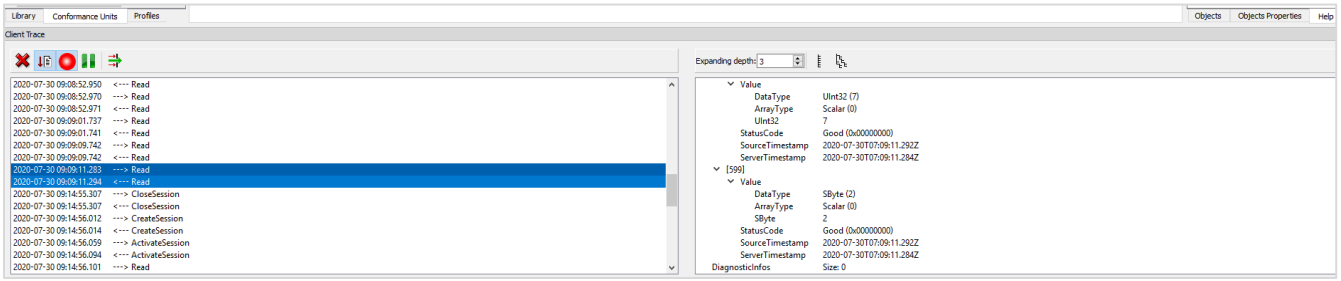
```
    }

    // now to re-fill the testItems with the max # needed by the test
    print(UaDateTime.utcNow() + " | Writing all Items");
    if( !WriteHelper.Execute( { NodesToWrite: testItems, ReadVerification: false, ProhibitSplitting: true } ) ) {
        // In testing we've found that some servers will crash or become none-too-reliable. Terminate channel and recreate.
        Test.Disconnect();
        Test.Connect();
        return (false);
    }
```

The session.write doesn't go on the network, but is internally rejected with the error BadNotFound.



The last thing you see on the network is the read from the 600 nodes.



4 Status

With a simulation server, which I made available to the OPC Foundation European Certification Lab, the following was determined:

The problem was found. Because the CTT does not know or understand the BR data types (derivatives of DateTime and String), it searches his table with EncodeableTypes where it does not find these types and that is where the BadNotFound comes from.