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## Contents

### **1.1 brace-expansion 1.1.11**

1.1.1 Available under license

### **1.2 make-error-cause 2.2.1**

1.2.1 Available under license

### **1.3 zlib 1.2.11**

1.3.1 Available under license

### **1.4 popsicle-redirects 1.1.0**

1.4.1 Available under license

### **1.5 log-rotate 3.16.0-r0**

1.5.1 Available under license

### **1.6 net-snmp 5.9**

1.6.1 Available under license

### **1.7 graphql-request 1.8.2**

1.7.1 Available under license

### **1.8 psl 1.4.0**

1.8.1 Available under license

### **1.9 apk-tools 2.10.5-r1**

1.9.1 Available under license

### **1.10 utf-8-validate 5.0.2**

1.10.1 Available under license

### **1.11 openssl 1.1.1k**

1.11.1 Notifications

1.11.2 Available under license

### **1.12 cpp 9.3.0-r4**

1.12.1 Available under license

### **1.13 popsicle-transport-xhr 1.0.2**

- 1.13.1 Available under license
- 1.14 alpine-baselayout 3.2.0-r7**
  - 1.14.1 Available under license
- 1.15 cpp-httplib 0.7.8**
  - 1.15.1 Available under license
- 1.16 alpine-baselayout 3.2.0-r8**
  - 1.16.1 Available under license
- 1.17 node-gyp-build 3.7.0**
  - 1.17.1 Available under license
- 1.18 graceful-fs 4.2.3**
  - 1.18.1 Available under license
- 1.19 libmodbus 3.1.6**
  - 1.19.1 Available under license
- 1.20 fs.realpath 1.0.0**
  - 1.20.1 Available under license
- 1.21 busybox 1.32.0-r2**
  - 1.21.1 Available under license
- 1.22 path-is-absolute 1.0.1**
- 1.23 ws 7.2.5**
  - 1.23.1 Available under license
- 1.24 bufferutil 4.0.1**
  - 1.24.1 Available under license
- 1.25 lodash 4.17.21**
  - 1.25.1 Available under license
- 1.26 safe-buffer v5.2.0**
  - 1.26.1 Available under license
- 1.27 inherits v2.0.4**
  - 1.27.1 Available under license
- 1.28 alpine-keys 2.2-r0**
- 1.29 make-error 1.3.5**
  - 1.29.1 Available under license
- 1.30 inflight 1.0.6**
- 1.31 cron 1.8.2**
  - 1.31.1 Available under license
- 1.32 local-storage v2.0.0**
  - 1.32.1 Available under license
- 1.33 boost 1.73.0**
  - 1.33.1 Available under license
- 1.34 popsicle-user-agent 1.0.0**

- 1.34.1 Available under license
- 1.35 client-oauth2 v4.2.5**
  - 1.35.1 Available under license
- 1.36 fmt 7.0.1**
  - 1.36.1 Available under license
- 1.37 libtls-standalone 2.9.1-r1**
  - 1.37.1 Available under license
- 1.38 cross-fetch 2.2.2**
  - 1.38.1 Available under license
- 1.39 moment 2.24.0**
  - 1.39.1 Available under license
- 1.40 lowdb 1.0.0**
  - 1.40.1 Available under license
- 1.41 open62541 v1.1 dev-280-gff87c287**
  - 1.41.1 Available under license
- 1.42 popsicle-cookie 1.0.0**
  - 1.42.1 Available under license
- 1.43 ip-regex v2.1.0**
  - 1.43.1 Available under license
- 1.44 ms 2.1.1**
  - 1.44.1 Available under license
- 1.45 openssl 1.1.1i-r0**
  - 1.45.1 Notifications
  - 1.45.2 Available under license
- 1.46 servie-events 1.0.0**
  - 1.46.1 Available under license
- 1.47 busybox 1.31.1-r20**
  - 1.47.1 Available under license
- 1.48 tre 0.8.0**
  - 1.48.1 Available under license
- 1.49 azure-iot-sdk-c 1.3.9**
  - 1.49.1 Available under license
- 1.50 popt 1.16-r7**
  - 1.50.1 Available under license
- 1.51 musl 1.1.24-r10**
  - 1.51.1 Available under license
- 1.52 popsicle 12.0.4**
  - 1.52.1 Available under license
- 1.53 concat-map 0.0.1**

1.53.1 Available under license  
**1.54 ca-certificates 20191127-r4**  
1.54.1 Available under license  
**1.55 rapidjson 1.1.0**  
1.55.1 Available under license  
**1.56 apk-tools 2.10.5-r2**  
1.56.1 Available under license  
**1.57 mocha-multi-reporters 1.1.7**  
1.57.1 Available under license  
**1.58 mkdirp 1.0.3**  
1.58.1 Available under license  
**1.59 rimraf 3.0.2**  
1.59.1 Available under license  
**1.60 mosquito 1.6.12**  
1.60.1 Available under license  
**1.61 types-tough-cookie 2.3.5**  
1.61.1 Available under license  
**1.62 balanced-match 1.0.0**  
**1.63 glob 7.1.6**  
1.63.1 Available under license  
**1.64 acatl 0.2.0**  
1.64.1 Available under license  
**1.65 debug 3.2.6**  
**1.66 moment-timezone 0.5.28**  
1.66.1 Available under license  
**1.67 pax-utils 1.2.6-r1**  
1.67.1 Available under license  
**1.68 busybox 1.31.1-r19**  
1.68.1 Available under license  
**1.69 once 1.4.0**  
1.69.1 Available under license  
**1.70 promise 2.1.0**  
1.70.1 Available under license  
**1.71 pump 3.0.0**  
1.71.1 Available under license  
**1.72 openssl 1.1.1k-r0**  
1.72.1 Notifications  
1.72.2 Available under license  
**1.73 minimatch 3.0.4**

## **1.74 punycode v2.1.1**

1.74.1 Available under license

## **1.75 byte-length 1.0.2**

1.75.1 Available under license

## **1.76 types-vscode 1.43.0**

1.76.1 Available under license

## **1.77 wrappy 1.0.2**

1.77.1 Available under license

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1.78.1 Available under license

## **1.79 steno 0.4.4**

1.79.1 Available under license

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1.81.1 Available under license

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1.84.1 Available under license

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## **1.86 prettier 2.0.2**

1.86.1 Available under license

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DRuntime: Runtime Library for the D Programming Language

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Version 3.1, 31 March 2009

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## 1.13 popsicle-transport-xhr 1.0.2

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## 1.20 fs.realpath 1.0.0

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## 1.22 path-is-absolute 1.0.1

## 1.23 ws 7.2.5

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# 1.29 make-error 1.3.5

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# 1.30 inflight 1.0.6

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# 1.33 boost 1.73.0

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////

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////

[#mpl]

# MPL Support, <boost/mp11/mpl.hpp>

:toc:

:toc-title:

:idprefix:

The header `<boost/mp11/mpl.hpp>`, when included, defines the necessary support infrastructure for `mp_list` and `std::tuple` to be valid link:../../../../libs/mpl[MPL] sequences.

NOTE: `mpl.hpp` is not included by `<boost/mp11.hpp>`.

It's also possible to only enable support for `mp_list` by including `<boost/mp11/mpl_list.hpp>`, and for `std::tuple` by including `<boost/mp11/mpl_tuple.hpp>`. This may be required because some libraries, such as Boost.Fusion, contain their own MPL support for `std::tuple`, which conflicts with Mp11's one.

<!DOCTYPE html>

<html>

<head></head>

<body>

<h3>

Copyright Test

</h3>

<p class="copyright">

1963, 1964, 1965 Jane Doe

</p>

<p class="copyright">

2018 Joe Blow, John Coe

</p>

<p class="copyright">

1977, 1985 Someone else

</p>

</body>

</html>

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```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE article PUBLIC "-//Boost//DTD BoostBook XML V1.0//EN"
"http://www.boost.org/tools/boostbook/dtd/boostbook.dtd">
<article id="copyright_test" last-revision="DEBUG MODE Date: 2000/12/20 12:00:00 $"
xmlns:xi="http://www.w3.org/2001/XInclude">
<title>Copyright Test</title>
<articleinfo>
<copyright>
<year>1963</year> <year>1964</year> <year>1965</year> <holder>Jane Doe</holder>
</copyright>
<copyright>
<year>2018</year> <holder>Joe Blow, John Coe</holder>
</copyright>
<copyright>
<year>1977</year> <year>1985</year> <holder>Someone else</holder>
</copyright>
</articleinfo>
</article>
```

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## 1.36 fmt 7.0.1

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A. HISTORY OF THE SOFTWARE

=====

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of

the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

| Release        | Derived from | Year      | Owner      | GPL-compatible? (1) |
|----------------|--------------|-----------|------------|---------------------|
| 0.9.0 thru 1.2 |              | 1991-1995 | CWI        | yes                 |
| 1.3 thru 1.5.2 | 1.2          | 1995-1999 | CNRI       | yes                 |
| 1.6            | 1.5.2        | 2000      | CNRI       | no                  |
| 2.0            | 1.6          | 2000      | BeOpen.com | no                  |
| 1.6.1          | 1.6          | 2001      | CNRI       | yes (2)             |
| 2.1            | 2.0+1.6.1    | 2001      | PSF        | no                  |
| 2.0.1          | 2.0+1.6.1    | 2001      | PSF        | yes                 |
| 2.1.1          | 2.1+2.0.1    | 2001      | PSF        | yes                 |
| 2.2            | 2.1.1        | 2001      | PSF        | yes                 |
| 2.1.2          | 2.1.1        | 2002      | PSF        | yes                 |
| 2.1.3          | 2.1.2        | 2002      | PSF        | yes                 |
| 2.2.1          | 2.2          | 2002      | PSF        | yes                 |
| 2.2.2          | 2.2.1        | 2002      | PSF        | yes                 |
| 2.2.3          | 2.2.2        | 2003      | PSF        | yes                 |
| 2.3            | 2.2.2        | 2002-2003 | PSF        | yes                 |
| 2.3.1          | 2.3          | 2002-2003 | PSF        | yes                 |
| 2.3.2          | 2.3.1        | 2002-2003 | PSF        | yes                 |
| 2.3.3          | 2.3.2        | 2002-2003 | PSF        | yes                 |
| 2.3.4          | 2.3.3        | 2004      | PSF        | yes                 |
| 2.3.5          | 2.3.4        | 2005      | PSF        | yes                 |
| 2.4            | 2.3          | 2004      | PSF        | yes                 |
| 2.4.1          | 2.4          | 2005      | PSF        | yes                 |
| 2.4.2          | 2.4.1        | 2005      | PSF        | yes                 |
| 2.4.3          | 2.4.2        | 2006      | PSF        | yes                 |
| 2.4.4          | 2.4.3        | 2006      | PSF        | yes                 |
| 2.5            | 2.4          | 2006      | PSF        | yes                 |
| 2.5.1          | 2.5          | 2007      | PSF        | yes                 |
| 2.5.2          | 2.5.1        | 2008      | PSF        | yes                 |
| 2.5.3          | 2.5.2        | 2008      | PSF        | yes                 |
| 2.6            | 2.5          | 2008      | PSF        | yes                 |
| 2.6.1          | 2.6          | 2008      | PSF        | yes                 |
| 2.6.2          | 2.6.1        | 2009      | PSF        | yes                 |
| 2.6.3          | 2.6.2        | 2009      | PSF        | yes                 |
| 2.6.4          | 2.6.3        | 2009      | PSF        | yes                 |
| 2.6.5          | 2.6.4        | 2010      | PSF        | yes                 |
| 3.0            | 2.6          | 2008      | PSF        | yes                 |
| 3.0.1          | 3.0          | 2009      | PSF        | yes                 |
| 3.1            | 3.0.1        | 2009      | PSF        | yes                 |

|       |       |      |     |     |
|-------|-------|------|-----|-----|
| 3.1.1 | 3.1   | 2009 | PSF | yes |
| 3.1.2 | 3.1.1 | 2010 | PSF | yes |
| 3.1.3 | 3.1.2 | 2010 | PSF | yes |
| 3.1.4 | 3.1.3 | 2011 | PSF | yes |
| 3.2   | 3.1   | 2011 | PSF | yes |
| 3.2.1 | 3.2   | 2011 | PSF | yes |
| 3.2.2 | 3.2.1 | 2011 | PSF | yes |
| 3.2.3 | 3.2.2 | 2012 | PSF | yes |
| 3.3.0 | 3.2   | 2012 | PSF | yes |

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## 1.41 open62541 v1.1 dev-280-gff87c287

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```
<opc:TypeDictionary xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:tns="http://opcfoundation.org/UA/POWERLINK/" DefaultByteOrder="LittleEndian"
xmlns:opc="http://opcfoundation.org/BinarySchema/" xmlns:ua="http://opcfoundation.org/UA/"
TargetNamespace="http://opcfoundation.org/UA/POWERLINK/">
  <opc:Import Namespace="http://opcfoundation.org/UA/" />
  <opc:StructuredType BaseType="ua:ExtensionObject" Name="ErrorRegisterBits">
    <opc:Documentation>Represents the values of the POWERLINK ErrorRegister </opc:Documentation>
    <opc:Field TypeName="opc:ByteString" Name="Value"/>
    <opc:Field TypeName="opc:ByteString" Name="ValidBits"/>
  </opc:StructuredType>
  <opc:StructuredType BaseType="ua:ExtensionObject" Name="PowerlinkAttribute">
```

```

    <opc:Documentation>Represents the POWERLINK entry attributes</opc:Documentation>
    <opc:Field TypeName="opc:ByteString" Name="Value"/>
    <opc:Field TypeName="opc:ByteString" Name="ValidBits"/>
</opc:StructuredType>
<opc:StructuredType BaseType="ua:ExtensionObject" Name="PowerlinkErrorEntryDataType">
    <opc:Documentation>Represents the entries of the POWERLINK Object ERR_History_ADOM (Object 1003h,
SubIndex 1..254)</opc:Documentation>
    <opc:Field TypeName="opc:UInt16" Name="entryType"/>
    <opc:Field TypeName="opc:UInt16" Name="errorCode"/>
    <opc:Field TypeName="opc:UInt64" Name="timeStamp"/>
    <opc:Field TypeName="opc:UInt64" Name="additionalInformation"/>
</opc:StructuredType>
<opc:StructuredType BaseType="ua:ExtensionObject" Name="PowerlinkIpAddressDataType">
    <opc:Documentation>Structure DataType PowerlinkIpAddressDataType to represent POWERLINK Objects of
the POWERLINK data type IP_ADDRESS</opc:Documentation>
    <opc:Field TypeName="opc:Byte" Name="b1"/>
    <opc:Field TypeName="opc:Byte" Name="b2"/>
    <opc:Field TypeName="opc:Byte" Name="b3"/>
    <opc:Field TypeName="opc:Byte" Name="b4"/>
</opc:StructuredType>
<opc:StructuredType BaseType="ua:ExtensionObject" Name="PowerlinkPDOMappingEntryDataType">
    <opc:Documentation>Structure DataType PowerlinkPDOMappingEntryDataType to represent the entries of
POWERLINK Objects like PDO_RxCommParam_00h_REC</opc:Documentation>
    <opc:Field TypeName="opc:UInt16" Name="length"/>
    <opc:Field TypeName="opc:UInt16" Name="offset"/>
    <opc:Field TypeName="opc:Byte" Name="reserved"/>
    <opc:Field TypeName="opc:Byte" Name="subIndex"/>
    <opc:Field TypeName="opc:UInt16" Name="index"/>
</opc:StructuredType>
<opc:EnumeratedType LengthInBits="32" Name="PowerlinkNMTRResetCmdEnumeration">
    <opc:Documentation>This DataType is an Enumeration that represents the NMT reset commands for
POWERLINK</opc:Documentation>
    <opc:EnumeratedValue Name="NMTRResetNode" Value="40"/>
    <opc:EnumeratedValue Name="NMTRResetCommunication" Value="41"/>
    <opc:EnumeratedValue Name="NMTRResetConfiguration" Value="42"/>
    <opc:EnumeratedValue Name="NMTRSwReset" Value="43"/>
    <opc:EnumeratedValue Name="NMTInvalidService" Value="255"/>
</opc:EnumeratedType>
<opc:EnumeratedType LengthInBits="32" Name="PowerlinkNMTStateEnumeration">
    <opc:Documentation>This DataType is an enumeration that represents the NMT State</opc:Documentation>
    <opc:EnumeratedValue Name="NMT_GS_OFF " Value="0"/>
    <opc:EnumeratedValue Name="NMT_GS_INITIALISING" Value="25"/>
    <opc:EnumeratedValue Name="NMT_GS_RESET_APPLICATION" Value="41"/>
    <opc:EnumeratedValue Name="NMT_GS_RESET_COMMUNICATION" Value="57"/>
    <opc:EnumeratedValue Name="NMT_GS_RESET_CONFIGURATION" Value="121"/>
    <opc:EnumeratedValue Name="NMT_XS_NOT_ACTIVE" Value="28"/>
    <opc:EnumeratedValue Name="NMT_XS_PRE_OPERATIONAL_1" Value="29"/>
    <opc:EnumeratedValue Name="NMT_XS_PRE_OPERATIONAL_2" Value="93"/>

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<opc:EnumeratedValue Name="NMT_XS_READY_TO_OPERATE" Value="109"/>
<opc:EnumeratedValue Name="NMT_XS_OPERATIONAL" Value="253"/>
<opc:EnumeratedValue Name="NMT_CS_STOPPED" Value="77"/>
<opc:EnumeratedValue Name="NMT_XS_BASIC_ETHERNET" Value="30"/>
</opc:EnumeratedType>
</opc:TypeDictionary>
```

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```
<opc:TypeDictionary
xmlns:opc="http://opcfoundation.org/BinarySchema/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ua="http://opcfoundation.org/UA/"
xmlns:tns="http://opcfoundation.org/UA/"
DefaultByteOrder="LittleEndian"
TargetNamespace="http://opcfoundation.org/UA/"
>
```

```

<opc:Import Namespace="http://opcfoundation.org/BinarySchema/" />

<!-- Transport types begin -->

<opc:EnumeratedType Name="MessageType" LengthInBits="32">
  <opc:Documentation>Message Type and whether the message contains an intermediate
chunk</opc:Documentation>
  <opc:EnumeratedValue Name="ACK" Value="0x4B4341" />
  <opc:EnumeratedValue Name="HEL" Value="0x4C4548" />
  <opc:EnumeratedValue Name="MSG" Value="0x47534D" />
  <opc:EnumeratedValue Name="OPN" Value="0x4E504F" />
  <opc:EnumeratedValue Name="CLO" Value="0x4F4C43" />
  <opc:EnumeratedValue Name="ERR" Value="0x525245" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="ChunkType" LengthInBits="32">
  <opc:Documentation>Type of the chunk</opc:Documentation>
  <opc:EnumeratedValue Name="FINAL" Value="0x46000000" />
  <opc:EnumeratedValue Name="INTERMEDIATE" Value="0x43000000" />
  <opc:EnumeratedValue Name="ABORT" Value="0x41000000" />
</opc:EnumeratedType>

<opc:StructuredType Name="TcpMessageHeader">
  <opc:Documentation>TCP Header</opc:Documentation>
  <opc:Field Name="MessageTypeAndChunkType" TypeName="opc:UInt32" />
  <opc:Field Name="MessageSize" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="TcpHelloMessage">
  <opc:Documentation>Hello Message</opc:Documentation>
  <opc:Field Name="ProtocolVersion" TypeName="opc:UInt32" />
  <opc:Field Name="ReceiveBufferSize" TypeName="opc:UInt32" />
  <opc:Field Name="SendBufferSize" TypeName="opc:UInt32" />
  <opc:Field Name="MaxMessageSize" TypeName="opc:UInt32" />
  <opc:Field Name="MaxChunkCount" TypeName="opc:UInt32" />
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="TcpAcknowledgeMessage">
  <opc:Documentation>Acknowledge Message</opc:Documentation>
  <opc:Field Name="ProtocolVersion" TypeName="opc:UInt32" />
  <opc:Field Name="ReceiveBufferSize" TypeName="opc:UInt32" />
  <opc:Field Name="SendBufferSize" TypeName="opc:UInt32" />
  <opc:Field Name="MaxMessageSize" TypeName="opc:UInt32" />
  <opc:Field Name="MaxChunkCount" TypeName="opc:UInt32" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="TcpErrorMessage">
  <opc:Documentation>Error Message</opc:Documentation>
  <opc:Field Name="Error" TypeName="opc:UInt32" />
  <opc:Field Name="Reason" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="SecureConversationMessageHeader">
  <opc:Documentation>Secure Layer Sequence Header</opc:Documentation>
  <opc:Field Name="MessageHeader" TypeName="opc:TcpMessageHeader" />
  <opc:Field Name="SecureChannelId" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="AsymmetricAlgorithmSecurityHeader">
  <opc:Documentation>Security Header</opc:Documentation>
  <opc:Field Name="SecurityPolicyUri" TypeName="opc:ByteString" />
  <opc:Field Name="SenderCertificate" TypeName="opc:ByteString" />
  <opc:Field Name="ReceiverCertificateThumbprint" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="SymmetricAlgorithmSecurityHeader">
  <opc:Documentation>Secure Layer Symmetric Algorithm Header</opc:Documentation>
  <opc:Field Name="TokenId" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="SequenceHeader">
  <opc:Documentation>Secure Layer Sequence Header</opc:Documentation>
  <opc:Field Name="SequenceNumber" TypeName="opc:UInt32" />
  <opc:Field Name="RequestId" TypeName="opc:UInt32"/>
</opc:StructuredType>

<opc:StructuredType Name="SecureConversationMessageFooter">
  <opc:Documentation>Secure Conversation Message Footer</opc:Documentation>
  <opc:Field Name="PaddingSize" TypeName="opc:Byte" />
  <opc:Field Name="Padding" TypeName="opc:Byte" LengthField="PaddingSize" />
  <opc:Field Name="Signature" TypeName="opc:Byte"/>
</opc:StructuredType>

<opc:StructuredType Name="SecureConversationMessageAbortBody">
  <opc:Documentation>Secure Conversation Message Abort Body</opc:Documentation>
  <opc:Field Name="Error" TypeName="opc:UInt32" />
  <opc:Field Name="Reason" TypeName="opc:String" />
</opc:StructuredType>

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</opc:TypeDictionary>

```

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<?xml version="1.0" encoding="utf-8" ?>

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-->

<opc:TypeDictionary

xmlns:opc="http://opcfoundation.org/BinarySchema/"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns:ua="http://opcfoundation.org/UA/"

```

xmlns:tns="http://yourorganisation.org/test/"
DefaultByteOrder="LittleEndian"
TargetNamespace="http://yourorganisation.org/test/"
>
<opc:Import Namespace="http://opcfoundation.org/UA/" Location="Opc.Ua.BinarySchema.bsd"/>

<opc:StructuredType Name="Point" BaseType="ua:ExtensionObject">
  <opc:Field Name="x" TypeName="opc:Double" />
  <opc:Field Name="y" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="NestedPoint" BaseType="ua:ExtensionObject">
  <opc:Field Name="x" TypeName="opc:Double" />
  <opc:Field Name="y" TypeName="opc:Double" />
  <opc:Field Name="point1" TypeName="tns:Point" />
</opc:StructuredType>

<opc:StructuredType Name="PointWithArray" BaseType="ua:ExtensionObject">
  <opc:Field Name="x" TypeName="opc:Double" />
  <opc:Field Name="y" TypeName="opc:Double" />
  <opc:Field Name="z" TypeName="opc:Double" />
  <opc:Field Name="array1Size" TypeName="opc:UInt32" />
  <opc:Field Name="array1" TypeName="opc:Double" LengthField="array1Size" />
</opc:StructuredType>

</opc:TypeDictionary>
<?xml version="1.0" encoding="utf-8" ?>
<!--
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 -->

```

<opc:TypeDictionary
  xmlns:opc="http://opcfoundation.org/BinarySchema/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:ua="http://opcfoundation.org/UA/"
  xmlns:tns="http://yourorganisation.org/test/"
  DefaultByteOrder="LittleEndian"
  TargetNamespace="http://yourorganisation.org/test/"
>
  <opc:Import Namespace="http://opcfoundation.org/UA/" Location="Opc.Ua.BinarySchema.bsd"/>

  <opc:StructuredType Name="Point" BaseType="ua:ExtensionObject">
    <opc:Field Name="x" TypeName="opc:Double" />
    <opc:Field Name="y" TypeName="opc:Double" />
  </opc:StructuredType>

  <opc:StructuredType Name="NestedPoint" BaseType="ua:ExtensionObject">
    <opc:Field Name="x" TypeName="opc:Double" />
    <opc:Field Name="y" TypeName="opc:Double" />
    <opc:Field Name="point1" TypeName="tns:Point" />
  </opc:StructuredType>

  <opc:StructuredType Name="PointWithArray" BaseType="ua:ExtensionObject">
    <opc:Field Name="x" TypeName="opc:Double" />
    <opc:Field Name="y" TypeName="opc:Double" />
    <opc:Field Name="z" TypeName="opc:Double" />
    <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
    <opc:Field Name="array1" TypeName="opc:Double" LengthField="NoOfArrayDimensions" />
  </opc:StructuredType>

  <opc:StructuredType Name="PointWithPointArray" BaseType="ua:ExtensionObject">
    <opc:Field Name="x" TypeName="opc:Double" />
    <opc:Field Name="y" TypeName="opc:Double" />
    <opc:Field Name="z" TypeName="opc:Double" />
    <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
    <opc:Field Name="array1" TypeName="tns:Point" LengthField="NoOfArrayDimensions" />
  </opc:StructuredType>

</opc:TypeDictionary>
<?xml version="1.0" encoding="utf-8" ?>
<!--

```

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-->

```
<opc:TypeDictionary
```

```
  xmlns:opc="http://opcfoundation.org/BinarySchema/"
```

```
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
  xmlns:ua="http://opcfoundation.org/UA/"
```

```
  xmlns:tns="http://opcfoundation.org/UA/"
```

```
  DefaultByteOrder="LittleEndian"
```

```
  TargetNamespace="http://opcfoundation.org/UA/"
```

```
>
```

```
<opc:Import Namespace="http://opcfoundation.org/BinarySchema/" />
```

```
<opc:StructuredType Name="XmlElement">
```

```
  <opc:Documentation>An XML element encoded as a UTF-8 string.</opc:Documentation>
```

```
  <opc:Field Name="Length" TypeName="opc:Int32" />
```

```
  <opc:Field Name="Value" TypeName="opc:Char" LengthField="Length" />
```

```
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="NodeIdType" LengthInBits="6">
```

```
  <opc:Documentation>The possible encodings for a NodeId value.</opc:Documentation>
```

```
  <opc:EnumeratedValue Name="TwoByte" Value="0" />
```

```

<opc:EnumeratedValue Name="FourByte" Value="1" />
<opc:EnumeratedValue Name="Numeric" Value="2" />
<opc:EnumeratedValue Name="String" Value="3" />
<opc:EnumeratedValue Name="Guid" Value="4" />
<opc:EnumeratedValue Name="ByteString" Value="5" />
</opc:EnumeratedType>

<opc:StructuredType Name="TwoByteNodeId">
  <opc:Field Name="Identifier" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="FourByteNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:Byte" />
  <opc:Field Name="Identifier" TypeName="opc:UInt16" />
</opc:StructuredType>

<opc:StructuredType Name="NumericNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="StringNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:CharArray" />
</opc:StructuredType>

<opc:StructuredType Name="GuidNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:Guid" />
</opc:StructuredType>

<opc:StructuredType Name="ByteStringNodeId">
  <opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />
  <opc:Field Name="Identifier" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="NodeId">
  <opc:Documentation>An identifier for a node in a UA server address space.</opc:Documentation>
  <opc:Field Name="NodeIdType" TypeName="ua:NodeIdType" />
  <opc:Field Name="Reserved1" TypeName="opc:Bit" Length="2" />
  <opc:Field Name="TwoByte" TypeName="ua:TwoByteNodeId" SwitchField="NodeIdType" SwitchValue="0" />
  <opc:Field Name="FourByte" TypeName="ua:FourByteNodeId" SwitchField="NodeIdType" SwitchValue="1" />
  <opc:Field Name="Numeric" TypeName="ua:NumericNodeId" SwitchField="NodeIdType" SwitchValue="2" />
  <opc:Field Name="String" TypeName="ua:StringNodeId" SwitchField="NodeIdType" SwitchValue="3" />
  <opc:Field Name="Guid" TypeName="ua:GuidNodeId" SwitchField="NodeIdType" SwitchValue="4" />
  <opc:Field Name="ByteString" TypeName="ua:ByteStringNodeId" SwitchField="NodeIdType"
SwitchValue="5" />

```

</opc:StructuredType>

<opc:StructuredType Name="ExpandedNodeId">

<opc:Documentation>An identifier for a node in a UA server address space qualified with a complete namespace string.</opc:Documentation>

<opc:Field Name="NodeIdType" TypeName="ua:NodeIdType" />

<opc:Field Name="ServerIndexSpecified" TypeName="opc:Bit" />

<opc:Field Name="NamespaceURISpecified" TypeName="opc:Bit" />

<opc:Field Name="TwoByte" TypeName="ua:TwoByteNodeId" SwitchField="NodeIdType" SwitchValue="0" />

<opc:Field Name="FourByte" TypeName="ua:FourByteNodeId" SwitchField="NodeIdType" SwitchValue="1" />

/>

<opc:Field Name="Numeric" TypeName="ua:NumericNodeId" SwitchField="NodeIdType" SwitchValue="2" />

<opc:Field Name="String" TypeName="ua:StringNodeId" SwitchField="NodeIdType" SwitchValue="3" />

<opc:Field Name="Guid" TypeName="ua:GuidNodeId" SwitchField="NodeIdType" SwitchValue="4" />

<opc:Field Name="ByteString" TypeName="ua:ByteStringNodeId" SwitchField="NodeIdType"

SwitchValue="5" />

<opc:Field Name="NamespaceURI" TypeName="opc:CharArray" SwitchField="NamespaceURISpecified"/>

<opc:Field Name="ServerIndex" TypeName="opc:UInt32" SwitchField="ServerIndexSpecified"/>

</opc:StructuredType>

<opc:OpaqueType Name="StatusCode" LengthInBits="32" ByteOrderSignificant="true">

<opc:Documentation>A 32-bit status code value.</opc:Documentation>

</opc:OpaqueType>

<opc:StructuredType Name="DiagnosticInfo">

<opc:Documentation>A recursive structure containing diagnostic information associated with a status code.</opc:Documentation>

<opc:Field Name="SymbolicIdSpecified" TypeName="opc:Bit" />

<opc:Field Name="NamespaceURISpecified" TypeName="opc:Bit" />

<opc:Field Name="LocaleSpecified" TypeName="opc:Bit" />

<opc:Field Name="LocalizedTextSpecified" TypeName="opc:Bit" />

<opc:Field Name="AdditionalInfoSpecified" TypeName="opc:Bit" />

<opc:Field Name="InnerStatusCodeSpecified" TypeName="opc:Bit" />

<opc:Field Name="InnerDiagnosticInfoSpecified" TypeName="opc:Bit" />

<opc:Field Name="Reserved1" TypeName="opc:Bit" Length="2" />

<opc:Field Name="SymbolicId" TypeName="opc:Int32" SwitchField="SymbolicIdSpecified" />

<opc:Field Name="NamespaceURI" TypeName="opc:Int32" SwitchField="NamespaceURISpecified" />

<opc:Field Name="Locale" TypeName="opc:Int32" SwitchField="LocaleSpecified" />

<opc:Field Name="LocalizedText" TypeName="opc:Int32" SwitchField="LocalizedTextSpecified" />

<opc:Field Name="AdditionalInfo" TypeName="opc:CharArray" SwitchField="AdditionalInfoSpecified" />

<opc:Field Name="InnerStatusCode" TypeName="ua:StatusCode" SwitchField="InnerStatusCodeSpecified" />

<opc:Field Name="InnerDiagnosticInfo" TypeName="ua:DiagnosticInfo"

SwitchField="InnerDiagnosticInfoSpecified" />

</opc:StructuredType>

<opc:StructuredType Name="QualifiedName">

<opc:Documentation>A string qualified with a namespace index.</opc:Documentation>

<opc:Field Name="NamespaceIndex" TypeName="opc:UInt16" />

```

<opc:Field Name="Name" TypeName="opc:CharArray" />
</opc:StructuredType>

<opc:StructuredType Name="LocalizedText">
  <opc:Documentation>A string qualified with a namespace index.</opc:Documentation>
  <opc:Field Name="LocaleSpecified" TypeName="opc:Bit" />
  <opc:Field Name="TextSpecified" TypeName="opc:Bit" />
  <opc:Field Name="Reserved1" TypeName="opc:Bit" Length="6" />
  <opc:Field Name="Locale" TypeName="opc:CharArray" SwitchField="LocaleSpecified" />
  <opc:Field Name="Text" TypeName="opc:CharArray" SwitchField="TextSpecified" />
</opc:StructuredType>

<opc:StructuredType Name="DataValue">
  <opc:Documentation>A value with an associated timestamp, and quality.</opc:Documentation>
  <opc:Field Name="ValueSpecified" TypeName="opc:Bit" />
  <opc:Field Name="StatusCodeSpecified" TypeName="opc:Bit" />
  <opc:Field Name="SourceTimestampSpecified" TypeName="opc:Bit" />
  <opc:Field Name="SourcePicosecondsSpecified" TypeName="opc:Bit" />
  <opc:Field Name="ServerTimestampSpecified" TypeName="opc:Bit" />
  <opc:Field Name="ServerPicosecondsSpecified" TypeName="opc:Bit" />
  <opc:Field Name="Reserved1" TypeName="opc:Bit" Length="2" />
  <opc:Field Name="Value" TypeName="ua:Variant" SwitchField="ValueSpecified" />
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" SwitchField="StatusCodeSpecified" />
  <opc:Field Name="SourceTimestamp" TypeName="opc:DateTime" SwitchField="SourceTimestampSpecified" />
  <opc:Field Name="SourcePicoseconds" TypeName="opc:UInt16" SwitchField="SourcePicosecondsSpecified" />
  <opc:Field Name="ServerTimestamp" TypeName="opc:DateTime" SwitchField="ServerTimestampSpecified" />
  <opc:Field Name="ServerPicoseconds" TypeName="opc:UInt16" SwitchField="ServerPicosecondsSpecified" />
</opc:StructuredType>

<opc:StructuredType Name="ExtensionObject">
  <opc:Documentation>A serialized object prefixed with its data type identifier.</opc:Documentation>
  <opc:Field Name="TypeIdSpecified" TypeName="opc:Bit" />
  <opc:Field Name="BinaryBody" TypeName="opc:Bit" />
  <opc:Field Name="XmlBody" TypeName="opc:Bit" />
  <opc:Field Name="Reserved1" TypeName="opc:Bit" Length="5" />
  <opc:Field Name="TypeId" TypeName="ua:ExpandedNodeId" SwitchField="TypeIdSpecified" />
  <opc:Field Name="BodyLength" TypeName="opc:Int32" />
  <opc:Field Name="Body" TypeName="opc:Byte" LengthField="BodyLength" />
</opc:StructuredType>

<opc:StructuredType Name="Variant">
  <opc:Documentation>A union of several types.</opc:Documentation>
  <opc:Field Name="VariantType" TypeName="opc:Bit" Length="6" />
  <opc:Field Name="ArrayDimensionsSpecified" TypeName="opc:Bit" Length="1"/>
  <opc:Field Name="ArrayLengthSpecified" TypeName="opc:Bit" Length="1"/>
  <opc:Field Name="ArrayLength" TypeName="opc:Int32" SwitchField="ArrayLengthSpecified" />
  <opc:Field Name="Boolean" TypeName="opc:Boolean" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="1" />

```

```

<opc:Field Name="SByte" TypeName="opc:SByte" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="2" />
<opc:Field Name="Byte" TypeName="opc:Byte" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="3" />
<opc:Field Name="Int16" TypeName="opc:Int16" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="4" />
<opc:Field Name="UInt16" TypeName="opc:UInt16" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="5" />
<opc:Field Name="Int32" TypeName="opc:Int32" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="6" />
<opc:Field Name="UInt32" TypeName="opc:UInt32" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="7" />
<opc:Field Name="Int64" TypeName="opc:Int64" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="8" />
<opc:Field Name="UInt64" TypeName="opc:UInt64" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="9" />
<opc:Field Name="Float" TypeName="opc:Float" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="10" />
<opc:Field Name="Double" TypeName="opc:Double" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="11" />
<opc:Field Name="String" TypeName="opc:CharArray" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="12" />
<opc:Field Name="DateTime" TypeName="opc:DateTime" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="13" />
<opc:Field Name="Guid" TypeName="opc:Guid" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="14" />
<opc:Field Name="ByteString" TypeName="opc:ByteString" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="15" />
<opc:Field Name="XmlElement" TypeName="ua:XmlElement" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="16" />
<opc:Field Name="NodeId" TypeName="ua:NodeId" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="17" />
<opc:Field Name="ExpandedNodeId" TypeName="ua:ExpandedNodeId" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="18" />
<opc:Field Name="StatusCode" TypeName="ua:StatusCode" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="19" />
<opc:Field Name="QualifiedName" TypeName="ua:QualifiedName" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="20" />
<opc:Field Name="LocalizedText" TypeName="ua:LocalizedText" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="21" />
<opc:Field Name="ExtensionObject" TypeName="ua:ExtensionObject" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="22" />
<opc:Field Name="DataValue" TypeName="ua:DataValue" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="23" />
<opc:Field Name="Variant" TypeName="ua:Variant" LengthField="ArrayLength" SwitchField="VariantType"
SwitchValue="24" />
<opc:Field Name="DiagnosticInfo" TypeName="ua:DiagnosticInfo" LengthField="ArrayLength"
SwitchField="VariantType" SwitchValue="25" />

```

```

    <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" SwitchField="ArrayDimensionsSpecified"
/>
    <opc:Field Name="ArrayDimensions" TypeName="opc:Int32" LengthField="NoOfArrayDimensions"
SwitchField="ArrayDimensionsSpecified" />
</opc:StructuredType>

<opc:EnumeratedType Name="NamingRuleType" LengthInBits="32">
    <opc:EnumeratedValue Name="Mandatory" Value="1" />
    <opc:EnumeratedValue Name="Optional" Value="2" />
    <opc:EnumeratedValue Name="Constraint" Value="3" />
</opc:EnumeratedType>

<opc:OpaqueType Name="ImageBMP">
    <opc:Documentation>An image encoded in BMP format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="ImageGIF">
    <opc:Documentation>An image encoded in GIF format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="ImageJPG">
    <opc:Documentation>An image encoded in JPEG format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="ImagePNG">
    <opc:Documentation>An image encoded in PNG format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="AudioDataType">
    <opc:Documentation>An image encoded in PNG format.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="BitFieldMaskDataType">
    <opc:Documentation>A mask of 32 bits that can be updated individually by using the top 32 bits as a
mask.</opc:Documentation>
</opc:OpaqueType>

<opc:StructuredType Name="KeyValuePair" BaseType="ua:ExtensionObject">
    <opc:Field Name="Key" TypeName="ua:QualifiedName" />
    <opc:Field Name="Value" TypeName="ua:Variant" />
</opc:StructuredType>

<opc:StructuredType Name="EndpointType" BaseType="ua:ExtensionObject">
    <opc:Field Name="EndpointUrl" TypeName="opc:String" />
    <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
    <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
    <opc:Field Name="TransportProfileUri" TypeName="opc:String" />

```

</opc:StructuredType>

<opc:EnumeratedType Name="OpenFileMode" LengthInBits="32">

<opc:EnumeratedValue Name="Read" Value="1" />

<opc:EnumeratedValue Name="Write" Value="2" />

<opc:EnumeratedValue Name="EraseExisting" Value="4" />

<opc:EnumeratedValue Name="Append" Value="8" />

</opc:EnumeratedType>

<opc:EnumeratedType Name="IdentityCriteriaType" LengthInBits="32">

<opc:EnumeratedValue Name="UserName" Value="1" />

<opc:EnumeratedValue Name="Thumbprint" Value="2" />

<opc:EnumeratedValue Name="Role" Value="3" />

<opc:EnumeratedValue Name="GroupId" Value="4" />

<opc:EnumeratedValue Name="Anonymous" Value="5" />

<opc:EnumeratedValue Name="AuthenticatedUser" Value="6" />

</opc:EnumeratedType>

<opc:StructuredType Name="IdentityMappingRuleType" BaseType="ua:ExtensionObject">

<opc:Field Name="CriteriaType" TypeName="tns:IdentityCriteriaType" />

<opc:Field Name="Criteria" TypeName="opc:String" />

</opc:StructuredType>

<opc:EnumeratedType Name="TrustListMasks" LengthInBits="32">

<opc:EnumeratedValue Name="None" Value="0" />

<opc:EnumeratedValue Name="TrustedCertificates" Value="1" />

<opc:EnumeratedValue Name="TrustedCrls" Value="2" />

<opc:EnumeratedValue Name="IssuerCertificates" Value="4" />

<opc:EnumeratedValue Name="IssuerCrls" Value="8" />

<opc:EnumeratedValue Name="All" Value="15" />

</opc:EnumeratedType>

<opc:StructuredType Name="TrustListDataType" BaseType="ua:ExtensionObject">

<opc:Field Name="SpecifiedLists" TypeName="opc:UInt32" />

<opc:Field Name="NoOfTrustedCertificates" TypeName="opc:Int32" />

<opc:Field Name="TrustedCertificates" TypeName="opc:ByteString" LengthField="NoOfTrustedCertificates" />

<opc:Field Name="NoOfTrustedCrls" TypeName="opc:Int32" />

<opc:Field Name="TrustedCrls" TypeName="opc:ByteString" LengthField="NoOfTrustedCrls" />

<opc:Field Name="NoOfIssuerCertificates" TypeName="opc:Int32" />

<opc:Field Name="IssuerCertificates" TypeName="opc:ByteString" LengthField="NoOfIssuerCertificates" />

<opc:Field Name="NoOfIssuerCrls" TypeName="opc:Int32" />

<opc:Field Name="IssuerCrls" TypeName="opc:ByteString" LengthField="NoOfIssuerCrls" />

</opc:StructuredType>

<opc:StructuredType Name="DecimalDataType" BaseType="ua:ExtensionObject">

<opc:Field Name="Scale" TypeName="opc:Int16" />

<opc:Field Name="Value" TypeName="opc:ByteString" />

</opc:StructuredType>

```

<opc:StructuredType Name="DataTypeSchemaHeader" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfNamespaces" TypeName="opc:Int32" />
  <opc:Field Name="Namespaces" TypeName="opc:String" LengthField="NoOfNamespaces" />
  <opc:Field Name="NoOfStructureDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="StructureDataTypes" TypeName="tns:StructureDescription"
LengthField="NoOfStructureDataTypes" />
  <opc:Field Name="NoOfEnumDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="EnumDataTypes" TypeName="tns:EnumDescription" LengthField="NoOfEnumDataTypes"
/>
  <opc:Field Name="NoOfSimpleDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="SimpleDataTypes" TypeName="tns:SimpleTypeDescription"
LengthField="NoOfSimpleDataTypes" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="DataTypeDescription" BaseType="ua:ExtensionObject">
  <opc:Field Name="DataTypeId" TypeName="ua:NodeId" />
  <opc:Field Name="Name" TypeName="ua:QualifiedName" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="StructureDescription" BaseType="tns:DataTypeDescription">
  <opc:Field Name="DataTypeId" TypeName="ua:NodeId" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="Name" TypeName="ua:QualifiedName" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="StructureDefinition" TypeName="tns:StructureDefinition" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="EnumDescription" BaseType="tns:DataTypeDescription">
  <opc:Field Name="DataTypeId" TypeName="ua:NodeId" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="Name" TypeName="ua:QualifiedName" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="EnumDefinition" TypeName="tns:EnumDefinition" />
  <opc:Field Name="BuiltInType" TypeName="opc:Byte" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="SimpleTypeDescription" BaseType="tns:DataTypeDescription">
  <opc:Field Name="DataTypeId" TypeName="ua:NodeId" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="Name" TypeName="ua:QualifiedName" SourceType="tns:DataTypeDescription" />
  <opc:Field Name="BaseDataType" TypeName="ua:NodeId" />
  <opc:Field Name="BuiltInType" TypeName="opc:Byte" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="UABinaryFileType" BaseType="tns:DataTypeSchemaHeader">
  <opc:Field Name="NoOfNamespaces" TypeName="opc:Int32" />
  <opc:Field Name="Namespaces" TypeName="opc:String" LengthField="NoOfNamespaces" />
  <opc:Field Name="NoOfStructureDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="StructureDataTypes" TypeName="tns:StructureDescription"
LengthField="NoOfStructureDataTypes" />
  <opc:Field Name="NoOfEnumDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="EnumDataTypes" TypeName="tns:EnumDescription" LengthField="NoOfEnumDataTypes"
/>

```

```

/>
  <opc:Field Name="NoOfSimpleDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="SimpleDataTypes" TypeName="tns:SimpleTypeDescription"
LengthField="NoOfSimpleDataTypes" />
  <opc:Field Name="SchemaLocation" TypeName="opc:String" />
  <opc:Field Name="NoOfFileHeader" TypeName="opc:Int32" />
  <opc:Field Name="FileHeader" TypeName="tns:KeyValuePair" LengthField="NoOfFileHeader" />
  <opc:Field Name="Body" TypeName="ua:Variant" />
</opc:StructuredType>

<opc:EnumeratedType Name="PubSubState" LengthInBits="32">
  <opc:EnumeratedValue Name="Disabled" Value="0" />
  <opc:EnumeratedValue Name="Paused" Value="1" />
  <opc:EnumeratedValue Name="Operational" Value="2" />
  <opc:EnumeratedValue Name="Error" Value="3" />
</opc:EnumeratedType>

<opc:StructuredType Name="DataSetMetaDataType" BaseType="tns:DataTypeSchemaHeader">
  <opc:Field Name="NoOfNamespaces" TypeName="opc:Int32" />
  <opc:Field Name="Namespaces" TypeName="opc:String" LengthField="NoOfNamespaces" />
  <opc:Field Name="NoOfStructureDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="StructureDataTypes" TypeName="tns:StructureDescription"
LengthField="NoOfStructureDataTypes" />
  <opc:Field Name="NoOfEnumDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="EnumDataTypes" TypeName="tns:EnumDescription" LengthField="NoOfEnumDataTypes"
/>
  <opc:Field Name="NoOfSimpleDataTypes" TypeName="opc:Int32" />
  <opc:Field Name="SimpleDataTypes" TypeName="tns:SimpleTypeDescription"
LengthField="NoOfSimpleDataTypes" />
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="NoOfFields" TypeName="opc:Int32" />
  <opc:Field Name="Fields" TypeName="tns:FieldMetaData" LengthField="NoOfFields" />
  <opc:Field Name="DataSetClassId" TypeName="opc:Guid" />
  <opc:Field Name="ConfigurationVersion" TypeName="tns:ConfigurationVersionDataType" />
</opc:StructuredType>

<opc:StructuredType Name="FieldMetaData" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="FieldFlags" TypeName="tns:DataSetFieldFlags" />
  <opc:Field Name="BuiltInType" TypeName="opc:Byte" />
  <opc:Field Name="DataType" TypeName="ua:NodeId" />
  <opc:Field Name="ValueRank" TypeName="opc:Int32" />
  <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
  <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
  <opc:Field Name="MaxStringLength" TypeName="opc:UInt32" />
  <opc:Field Name="DataSetFieldId" TypeName="opc:Guid" />

```

```

<opc:Field Name="NoOfProperties" TypeName="opc:Int32" />
<opc:Field Name="Properties" TypeName="tns:KeyValuePair" LengthField="NoOfProperties" />
</opc:StructuredType>

<opc:EnumeratedType Name="DataSetFieldFlags" LengthInBits="16" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="PromotedField" Value="1" />
</opc:EnumeratedType>

<opc:StructuredType Name="ConfigurationVersionDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="MajorVersion" TypeName="opc:UInt32" />
  <opc:Field Name="MinorVersion" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="PublishedDataSetDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="NoOfDataSetFolder" TypeName="opc:Int32" />
  <opc:Field Name="DataSetFolder" TypeName="opc:String" LengthField="NoOfDataSetFolder" />
  <opc:Field Name="DataSetMetaData" TypeName="tns:DataSetMetaDataType" />
  <opc:Field Name="NoOfExtensionFields" TypeName="opc:Int32" />
  <opc:Field Name="ExtensionFields" TypeName="tns:KeyValuePair" LengthField="NoOfExtensionFields" />
  <opc:Field Name="DataSetSource" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="PublishedDataSetSourceDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="PublishedVariableDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="PublishedVariable" TypeName="ua:NodeId" />
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
  <opc:Field Name="SamplingIntervalHint" TypeName="opc:Double" />
  <opc:Field Name="DeadbandType" TypeName="opc:UInt32" />
  <opc:Field Name="DeadbandValue" TypeName="opc:Double" />
  <opc:Field Name="IndexRange" TypeName="opc:String" />
  <opc:Field Name="SubstituteValue" TypeName="ua:Variant" />
  <opc:Field Name="NoOfMetaDataProperties" TypeName="opc:Int32" />
  <opc:Field Name="MetaDataProperties" TypeName="ua:QualifiedName"
LengthField="NoOfMetaDataProperties" />
</opc:StructuredType>

<opc:StructuredType Name="PublishedDataItemsDataType" BaseType="tns:PublishedDataSetSourceDataType">
  <opc:Field Name="NoOfPublishedData" TypeName="opc:Int32" />
  <opc:Field Name="PublishedData" TypeName="tns:PublishedVariableDataType"
LengthField="NoOfPublishedData" />
</opc:StructuredType>

<opc:StructuredType Name="PublishedEventsDataType" BaseType="tns:PublishedDataSetSourceDataType">
  <opc:Field Name="EventNotifier" TypeName="ua:NodeId" />

```

```

    <opc:Field Name="NoOfSelectedFields" TypeName="opc:Int32" />
    <opc:Field Name="SelectedFields" TypeName="tns:SimpleAttributeOperand"
LengthField="NoOfSelectedFields" />
    <opc:Field Name="Filter" TypeName="tns:ContentFilter" />
</opc:StructuredType>

<opc:EnumeratedType Name="DataSetFieldContentMask" LengthInBits="32" IsOptionSet="true">
    <opc:EnumeratedValue Name="None" Value="0" />
    <opc:EnumeratedValue Name="StatusCode" Value="1" />
    <opc:EnumeratedValue Name="SourceTimestamp" Value="2" />
    <opc:EnumeratedValue Name="ServerTimestamp" Value="4" />
    <opc:EnumeratedValue Name="SourcePicoSeconds" Value="8" />
    <opc:EnumeratedValue Name="ServerPicoSeconds" Value="16" />
    <opc:EnumeratedValue Name="RawData" Value="32" />
</opc:EnumeratedType>

<opc:StructuredType Name="DataSetWriterDataType" BaseType="ua:ExtensionObject">
    <opc:Field Name="Name" TypeName="opc:String" />
    <opc:Field Name="Enabled" TypeName="opc:Boolean" />
    <opc:Field Name="DataSetWriterId" TypeName="opc:UInt16" />
    <opc:Field Name="DataSetFieldContentMask" TypeName="tns:DataSetFieldContentMask" />
    <opc:Field Name="KeyFrameCount" TypeName="opc:UInt32" />
    <opc:Field Name="DataSetName" TypeName="opc:String" />
    <opc:Field Name="NoOfDataSetWriterProperties" TypeName="opc:Int32" />
    <opc:Field Name="DataSetWriterProperties" TypeName="tns:KeyValuePair"
LengthField="NoOfDataSetWriterProperties" />
    <opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
    <opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="DataSetWriterTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataSetWriterMessageDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="PubSubGroupDataType" BaseType="ua:ExtensionObject">
    <opc:Field Name="Name" TypeName="opc:String" />
    <opc:Field Name="Enabled" TypeName="opc:Boolean" />
    <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
    <opc:Field Name="SecurityGroupId" TypeName="opc:String" />
    <opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" />
    <opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription"
LengthField="NoOfSecurityKeyServices" />
    <opc:Field Name="MaxNetworkMessageSize" TypeName="opc:UInt32" />
    <opc:Field Name="NoOfGroupProperties" TypeName="opc:Int32" />
    <opc:Field Name="GroupProperties" TypeName="tns:KeyValuePair" LengthField="NoOfGroupProperties" />
</opc:StructuredType>

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<opc:StructuredType Name="WriterGroupDataType" BaseType="tns:PubSubGroupDataType">
  <opc:Field Name="Name" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode"
SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="SecurityGroupId" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" />
  <opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription"
LengthField="NoOfSecurityKeyServices" />
  <opc:Field Name="MaxNetworkMessageSize" TypeName="opc:UInt32"
SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="NoOfGroupProperties" TypeName="opc:Int32" />
  <opc:Field Name="GroupProperties" TypeName="tns:KeyValuePair" LengthField="NoOfGroupProperties" />
  <opc:Field Name="WriterGroupId" TypeName="opc:UInt16" />
  <opc:Field Name="PublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="KeepAliveTime" TypeName="opc:Double" />
  <opc:Field Name="Priority" TypeName="opc:Byte" />
  <opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
  <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
  <opc:Field Name="HeaderLayoutUri" TypeName="opc:String" />
  <opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="NoOfDataSetWriters" TypeName="opc:Int32" />
  <opc:Field Name="DataSetWriters" TypeName="tns:DataSetWriterDataType"
LengthField="NoOfDataSetWriters" />
</opc:StructuredType>

<opc:StructuredType Name="WriterGroupTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="WriterGroupMessageDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="PubSubConnectionDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" />
  <opc:Field Name="PublisherId" TypeName="ua:Variant" />
  <opc:Field Name="TransportProfileUri" TypeName="opc:String" />
  <opc:Field Name="Address" TypeName="ua:ExtensionObject" />
  <opc:Field Name="NoOfConnectionProperties" TypeName="opc:Int32" />
  <opc:Field Name="ConnectionProperties" TypeName="tns:KeyValuePair"
LengthField="NoOfConnectionProperties" />
  <opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="NoOfWriterGroups" TypeName="opc:Int32" />
  <opc:Field Name="WriterGroups" TypeName="tns:WriterGroupDataType" LengthField="NoOfWriterGroups" />
  <opc:Field Name="NoOfReaderGroups" TypeName="opc:Int32" />
  <opc:Field Name="ReaderGroups" TypeName="tns:ReaderGroupDataType" LengthField="NoOfReaderGroups"

```

```

/>
</opc:StructuredType>

<opc:StructuredType Name="ConnectionTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="NetworkAddressDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NetworkInterface" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="NetworkAddressUrlDataType" BaseType="tns:NetworkAddressDataType">
  <opc:Field Name="NetworkInterface" TypeName="opc:String" SourceType="tns:NetworkAddressDataType" />
  <opc:Field Name="Url" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="ReaderGroupDataType" BaseType="tns:PubSubGroupDataType">
  <opc:Field Name="Name" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode"
SourceTypes="tns:PubSubGroupDataType" />
  <opc:Field Name="SecurityGroupId" TypeName="opc:String" SourceType="tns:PubSubGroupDataType" />
  <opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" />
  <opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription"
LengthField="NoOfSecurityKeyServices" />
  <opc:Field Name="MaxNetworkMessageSize" TypeName="opc:UInt32"
SourceTypes="tns:PubSubGroupDataType" />
  <opc:Field Name="NoOfGroupProperties" TypeName="opc:Int32" />
  <opc:Field Name="GroupProperties" TypeName="tns:KeyValuePair" LengthField="NoOfGroupProperties" />
  <opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" />
  <opc:Field Name="NoOfDataSetReaders" TypeName="opc:Int32" />
  <opc:Field Name="DataSetReaders" TypeName="tns:DataSetReaderDataType"
LengthField="NoOfDataSetReaders" />
</opc:StructuredType>

<opc:StructuredType Name="ReaderGroupTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="ReaderGroupMessageDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataSetReaderDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" />
  <opc:Field Name="PublisherId" TypeName="ua:Variant" />
  <opc:Field Name="WriterGroupId" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetWriterId" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetMetaData" TypeName="tns:DataSetMetaDataType" />

```

```

<opc:Field Name="DataSetFieldContentMask" TypeName="tns:DataSetFieldContentMask" />
<opc:Field Name="MessageReceiveTimeout" TypeName="opc:Double" />
<opc:Field Name="KeyFrameCount" TypeName="opc:UInt32" />
<opc:Field Name="HeaderLayoutUri" TypeName="opc:String" />
<opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
<opc:Field Name="SecurityGroupId" TypeName="opc:String" />
<opc:Field Name="NoOfSecurityKeyServices" TypeName="opc:Int32" />
<opc:Field Name="SecurityKeyServices" TypeName="tns:EndpointDescription"
LengthField="NoOfSecurityKeyServices" />
<opc:Field Name="NoOfDataSetReaderProperties" TypeName="opc:Int32" />
<opc:Field Name="DataSetReaderProperties" TypeName="tns:KeyValuePair"
LengthField="NoOfDataSetReaderProperties" />
<opc:Field Name="TransportSettings" TypeName="ua:ExtensionObject" />
<opc:Field Name="MessageSettings" TypeName="ua:ExtensionObject" />
<opc:Field Name="SubscribedDataSet" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="DataSetReaderTransportDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataSetReaderMessageDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="SubscribedDataSetDataType" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="TargetVariablesDataType" BaseType="tns:SubscribedDataSetDataType">
<opc:Field Name="NoOfTargetVariables" TypeName="opc:Int32" />
<opc:Field Name="TargetVariables" TypeName="tns:FieldTargetDataType"
LengthField="NoOfTargetVariables" />
</opc:StructuredType>

<opc:StructuredType Name="FieldTargetDataType" BaseType="ua:ExtensionObject">
<opc:Field Name="DataSetFieldId" TypeName="opc:Guid" />
<opc:Field Name="ReceiverIndexRange" TypeName="opc:String" />
<opc:Field Name="TargetNodeId" TypeName="ua:NodeId" />
<opc:Field Name="AttributeId" TypeName="opc:UInt32" />
<opc:Field Name="WriteIndexRange" TypeName="opc:String" />
<opc:Field Name="OverrideValueHandling" TypeName="tns:OverrideValueHandling" />
<opc:Field Name="OverrideValue" TypeName="ua:Variant" />
</opc:StructuredType>

<opc:EnumeratedType Name="OverrideValueHandling" LengthInBits="32">
<opc:EnumeratedValue Name="Disabled" Value="0" />
<opc:EnumeratedValue Name="LastUsableValue" Value="1" />
<opc:EnumeratedValue Name="OverrideValue" Value="2" />
</opc:EnumeratedType>

```

```
<opc:StructuredType Name="SubscribedDataSetMirrorDataType" BaseType="tns:SubscribedDataSetDataType">
  <opc:Field Name="ParentNodeName" TypeName="opc:String" />
  <opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="PubSubConfigurationDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfPublishedDataSets" TypeName="opc:Int32" />
  <opc:Field Name="PublishedDataSets" TypeName="tns:PublishedDataSetDataType"
LengthField="NoOfPublishedDataSets" />
  <opc:Field Name="NoOfConnections" TypeName="opc:Int32" />
  <opc:Field Name="Connections" TypeName="tns:PubSubConnectionDataType"
LengthField="NoOfConnections" />
  <opc:Field Name="Enabled" TypeName="opc:Boolean" />
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="DataSetOrderingType" LengthInBits="32">
  <opc:EnumeratedValue Name="Undefined" Value="0" />
  <opc:EnumeratedValue Name="AscendingWriterId" Value="1" />
  <opc:EnumeratedValue Name="AscendingWriterIdSingle" Value="2" />
</opc:EnumeratedType>
```

```
<opc:EnumeratedType Name="UadpNetworkMessageContentMask" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="PublisherId" Value="1" />
  <opc:EnumeratedValue Name="GroupHeader" Value="2" />
  <opc:EnumeratedValue Name="WriterGroupId" Value="4" />
  <opc:EnumeratedValue Name="GroupVersion" Value="8" />
  <opc:EnumeratedValue Name="NetworkMessageNumber" Value="16" />
  <opc:EnumeratedValue Name="SequenceNumber" Value="32" />
  <opc:EnumeratedValue Name="PayloadHeader" Value="64" />
  <opc:EnumeratedValue Name="Timestamp" Value="128" />
  <opc:EnumeratedValue Name="PicoSeconds" Value="256" />
  <opc:EnumeratedValue Name="DataSetClassId" Value="512" />
  <opc:EnumeratedValue Name="PromotedFields" Value="1024" />
</opc:EnumeratedType>
```

```
<opc:StructuredType Name="UadpWriterGroupMessageDataType"
BaseType="tns:WriterGroupMessageDataType">
  <opc:Field Name="GroupVersion" TypeName="opc:UInt32" />
  <opc:Field Name="DataSetOrdering" TypeName="tns:DataSetOrderingType" />
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:UadpNetworkMessageContentMask" />
  <opc:Field Name="SamplingOffset" TypeName="opc:Double" />
  <opc:Field Name="NoOfPublishingOffset" TypeName="opc:Int32" />
  <opc:Field Name="PublishingOffset" TypeName="opc:Double" LengthField="NoOfPublishingOffset" />
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="UadpDataSetMessageContentMask" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="Timestamp" Value="1" />
  <opc:EnumeratedValue Name="PicoSeconds" Value="2" />
  <opc:EnumeratedValue Name="Status" Value="4" />
  <opc:EnumeratedValue Name="MajorVersion" Value="8" />
  <opc:EnumeratedValue Name="MinorVersion" Value="16" />
  <opc:EnumeratedValue Name="SequenceNumber" Value="32" />
</opc:EnumeratedType>
```

```
<opc:StructuredType Name="UadpDataSetWriterMessageDataType"
BaseType="tns:DataSetWriterMessageDataType">
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:UadpDataSetMessageContentMask" />
  <opc:Field Name="ConfiguredSize" TypeName="opc:UInt16" />
  <opc:Field Name="NetworkMessageNumber" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetOffset" TypeName="opc:UInt16" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="UadpDataSetReaderMessageDataType"
BaseType="tns:DataSetReaderMessageDataType">
  <opc:Field Name="GroupVersion" TypeName="opc:UInt32" />
  <opc:Field Name="NetworkMessageNumber" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetOffset" TypeName="opc:UInt16" />
  <opc:Field Name="DataSetClassId" TypeName="opc:Guid" />
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:UadpNetworkMessageContentMask" />
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:UadpDataSetMessageContentMask" />
  <opc:Field Name="PublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="ReceiveOffset" TypeName="opc:Double" />
  <opc:Field Name="ProcessingOffset" TypeName="opc:Double" />
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="JsonNetworkMessageContentMask" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="NetworkMessageHeader" Value="1" />
  <opc:EnumeratedValue Name="DataSetMessageHeader" Value="2" />
  <opc:EnumeratedValue Name="SingleDataSetMessage" Value="4" />
  <opc:EnumeratedValue Name="PublisherId" Value="8" />
  <opc:EnumeratedValue Name="DataSetClassId" Value="16" />
  <opc:EnumeratedValue Name="ReplyTo" Value="32" />
</opc:EnumeratedType>
```

```
<opc:StructuredType Name="JsonWriterGroupMessageDataType"
BaseType="tns:WriterGroupMessageDataType">
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:JsonNetworkMessageContentMask" />
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="JsonDataSetMessageContentMask" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
```

```

<opc:EnumeratedValue Name="DataSetWriterId" Value="1" />
<opc:EnumeratedValue Name="MetaDataVersion" Value="2" />
<opc:EnumeratedValue Name="SequenceNumber" Value="4" />
<opc:EnumeratedValue Name="Timestamp" Value="8" />
<opc:EnumeratedValue Name="Status" Value="16" />
</opc:EnumeratedType>

<opc:StructuredType Name="JsonDataSetWriterMessageDataType"
BaseType="tns:DataSetWriterMessageDataType">
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:JsonDataSetMessageContentMask" />
</opc:StructuredType>

<opc:StructuredType Name="JsonDataSetReaderMessageDataType"
BaseType="tns:DataSetReaderMessageDataType">
  <opc:Field Name="NetworkMessageContentMask" TypeName="tns:JsonNetworkMessageContentMask" />
  <opc:Field Name="DataSetMessageContentMask" TypeName="tns:JsonDataSetMessageContentMask" />
</opc:StructuredType>

<opc:StructuredType Name="DatagramConnectionTransportDataType"
BaseType="tns:ConnectionTransportDataType">
  <opc:Field Name="DiscoveryAddress" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="DatagramWriterGroupTransportDataType"
BaseType="tns:WriterGroupTransportDataType">
  <opc:Field Name="MessageRepeatCount" TypeName="opc:Byte" />
  <opc:Field Name="MessageRepeatDelay" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="BrokerConnectionTransportDataType"
BaseType="tns:ConnectionTransportDataType">
  <opc:Field Name="ResourceUri" TypeName="opc:String" />
  <opc:Field Name="AuthenticationProfileUri" TypeName="opc:String" />
</opc:StructuredType>

<opc:EnumeratedType Name="BrokerTransportQualityOfService" LengthInBits="32">
  <opc:EnumeratedValue Name="NotSpecified" Value="0" />
  <opc:EnumeratedValue Name="BestEffort" Value="1" />
  <opc:EnumeratedValue Name="AtLeastOnce" Value="2" />
  <opc:EnumeratedValue Name="AtMostOnce" Value="3" />
  <opc:EnumeratedValue Name="ExactlyOnce" Value="4" />
</opc:EnumeratedType>

<opc:StructuredType Name="BrokerWriterGroupTransportDataType"
BaseType="tns:WriterGroupTransportDataType">
  <opc:Field Name="QueueName" TypeName="opc:String" />
  <opc:Field Name="ResourceUri" TypeName="opc:String" />
  <opc:Field Name="AuthenticationProfileUri" TypeName="opc:String" />

```

```

    <opc:Field Name="RequestedDeliveryGuarantee" TypeName="tns:BrokerTransportQualityOfService" />
</opc:StructuredType>

<opc:StructuredType Name="BrokerDataSetWriterTransportDataType"
BaseType="tns:DataSetWriterTransportDataType">
    <opc:Field Name="QueueName" TypeName="opc:String" />
    <opc:Field Name="ResourceUri" TypeName="opc:String" />
    <opc:Field Name="AuthenticationProfileUri" TypeName="opc:String" />
    <opc:Field Name="RequestedDeliveryGuarantee" TypeName="tns:BrokerTransportQualityOfService" />
    <opc:Field Name="MetaDataQueueName" TypeName="opc:String" />
    <opc:Field Name="MetaDataUpdateTime" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="BrokerDataSetReaderTransportDataType"
BaseType="tns:DataSetReaderTransportDataType">
    <opc:Field Name="QueueName" TypeName="opc:String" />
    <opc:Field Name="ResourceUri" TypeName="opc:String" />
    <opc:Field Name="AuthenticationProfileUri" TypeName="opc:String" />
    <opc:Field Name="RequestedDeliveryGuarantee" TypeName="tns:BrokerTransportQualityOfService" />
    <opc:Field Name="MetaDataQueueName" TypeName="opc:String" />
</opc:StructuredType>

<opc:EnumeratedType Name="DiagnosticsLevel" LengthInBits="32">
    <opc:EnumeratedValue Name="Basic" Value="0" />
    <opc:EnumeratedValue Name="Advanced" Value="1" />
    <opc:EnumeratedValue Name="Info" Value="2" />
    <opc:EnumeratedValue Name="Log" Value="3" />
    <opc:EnumeratedValue Name="Debug" Value="4" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="PubSubDiagnosticsCounterClassification" LengthInBits="32">
    <opc:EnumeratedValue Name="Information" Value="0" />
    <opc:EnumeratedValue Name="Error" Value="1" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="IdType" LengthInBits="32">
    <opc:Documentation>The type of identifier used in a node id.</opc:Documentation>
    <opc:EnumeratedValue Name="Numeric" Value="0" />
    <opc:EnumeratedValue Name="String" Value="1" />
    <opc:EnumeratedValue Name="Guid" Value="2" />
    <opc:EnumeratedValue Name="Opaque" Value="3" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="NodeClass" LengthInBits="32">
    <opc:Documentation>A mask specifying the class of the node.</opc:Documentation>
    <opc:EnumeratedValue Name="Unspecified" Value="0" />
    <opc:EnumeratedValue Name="Object" Value="1" />
    <opc:EnumeratedValue Name="Variable" Value="2" />

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<opc:EnumeratedValue Name="Method" Value="4" />
<opc:EnumeratedValue Name="ObjectType" Value="8" />
<opc:EnumeratedValue Name="VariableType" Value="16" />
<opc:EnumeratedValue Name="ReferenceType" Value="32" />
<opc:EnumeratedValue Name="DataType" Value="64" />
<opc:EnumeratedValue Name="View" Value="128" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="PermissionType" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="Browse" Value="1" />
  <opc:EnumeratedValue Name="ReadRolePermissions" Value="2" />
  <opc:EnumeratedValue Name="WriteAttribute" Value="4" />
  <opc:EnumeratedValue Name="WriteRolePermissions" Value="8" />
  <opc:EnumeratedValue Name="WriteHistorizing" Value="16" />
  <opc:EnumeratedValue Name="Read" Value="32" />
  <opc:EnumeratedValue Name="Write" Value="64" />
  <opc:EnumeratedValue Name="ReadHistory" Value="128" />
  <opc:EnumeratedValue Name="InsertHistory" Value="256" />
  <opc:EnumeratedValue Name="ModifyHistory" Value="512" />
  <opc:EnumeratedValue Name="DeleteHistory" Value="1024" />
  <opc:EnumeratedValue Name="ReceiveEvents" Value="2048" />
  <opc:EnumeratedValue Name="Call" Value="4096" />
  <opc:EnumeratedValue Name="AddReference" Value="8192" />
  <opc:EnumeratedValue Name="RemoveReference" Value="16384" />
  <opc:EnumeratedValue Name="DeleteNode" Value="32768" />
  <opc:EnumeratedValue Name="AddNode" Value="65536" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="AccessLevelType" LengthInBits="8" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="CurrentRead" Value="1" />
  <opc:EnumeratedValue Name="CurrentWrite" Value="2" />
  <opc:EnumeratedValue Name="HistoryRead" Value="4" />
  <opc:EnumeratedValue Name="HistoryWrite" Value="8" />
  <opc:EnumeratedValue Name="SemanticChange" Value="16" />
  <opc:EnumeratedValue Name="StatusWrite" Value="32" />
  <opc:EnumeratedValue Name="TimestampWrite" Value="64" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="AccessLevelExType" LengthInBits="32" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="CurrentRead" Value="1" />
  <opc:EnumeratedValue Name="CurrentWrite" Value="2" />
  <opc:EnumeratedValue Name="HistoryRead" Value="4" />
  <opc:EnumeratedValue Name="HistoryWrite" Value="8" />
  <opc:EnumeratedValue Name="SemanticChange" Value="16" />
  <opc:EnumeratedValue Name="StatusWrite" Value="32" />

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<opc:EnumeratedValue Name="TimestampWrite" Value="64" />
<opc:EnumeratedValue Name="NonatomicRead" Value="256" />
<opc:EnumeratedValue Name="NonatomicWrite" Value="512" />
<opc:EnumeratedValue Name="WriteFullArrayOnly" Value="1024" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="EventNotifierType" LengthInBits="8" IsOptionSet="true">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="SubscribeToEvents" Value="1" />
  <opc:EnumeratedValue Name="HistoryRead" Value="4" />
  <opc:EnumeratedValue Name="HistoryWrite" Value="8" />
</opc:EnumeratedType>

<opc:StructuredType Name="RolePermissionType" BaseType="ua:ExtensionObject">
  <opc:Field Name="RoleId" TypeName="ua:NodeId" />
  <opc:Field Name="Permissions" TypeName="tns:PermissionType" />
</opc:StructuredType>

<opc:EnumeratedType Name="AccessRestrictionType" LengthInBits="32">
  <opc:EnumeratedValue Name="SigningRequired" Value="0" />
  <opc:EnumeratedValue Name="EncryptionRequired" Value="1" />
  <opc:EnumeratedValue Name="SessionRequired" Value="2" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="StructureType" LengthInBits="32">
  <opc:EnumeratedValue Name="Structure" Value="0" />
  <opc:EnumeratedValue Name="StructureWithOptionalFields" Value="1" />
  <opc:EnumeratedValue Name="Union" Value="2" />
</opc:EnumeratedType>

<opc:StructuredType Name="StructureField" BaseType="ua:ExtensionObject">
  <opc:Field Name="Name" TypeName="opc:String" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="DataType" TypeName="ua:NodeId" />
  <opc:Field Name="ValueRank" TypeName="opc:Int32" />
  <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
  <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
  <opc:Field Name="MaxStringLength" TypeName="opc:UInt32" />
  <opc:Field Name="IsOptional" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="StructureDefinition" BaseType="tns:DataTypeDefinition">
  <opc:Field Name="DefaultEncodingId" TypeName="ua:NodeId" />
  <opc:Field Name="BaseDataType" TypeName="ua:NodeId" />
  <opc:Field Name="StructureType" TypeName="tns:StructureType" />
  <opc:Field Name="NoOfFields" TypeName="opc:Int32" />
  <opc:Field Name="Fields" TypeName="tns:StructureField" LengthField="NoOfFields" />
</opc:StructuredType>

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<opc:StructuredType Name="EnumDefinition" BaseType="tns:DataTypeDefinition">
  <opc:Field Name="NoOfFields" TypeName="opc:Int32" />
  <opc:Field Name="Fields" TypeName="tns:EnumField" LengthField="NoOfFields" />
</opc:StructuredType>

<opc:StructuredType Name="Node" BaseType="ua:ExtensionObject">
  <opc:Documentation>Specifies the attributes which belong to all nodes.</opc:Documentation>
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
  <opc:Field Name="NodeClass" TypeName="tns:NodeClass" />
  <opc:Field Name="BrowseName" TypeName="ua:QualifiedName" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" />
  <opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
  <opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
  <opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" />
  <opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
  <opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
</opc:StructuredType>

<opc:StructuredType Name="InstanceNode" BaseType="tns:Node">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
  <opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
  <opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
  <opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
  <opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
  <opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
  <opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
  <opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
</opc:StructuredType>

<opc:StructuredType Name="TypeNode" BaseType="tns:Node">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
  <opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />

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<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="ObjectNode" BaseType="tns:InstanceNode">
<opc:Documentation>Specifies the attributes which belong to object nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="EventNotifier" TypeName="opc:Byte" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="ObjectTypeNode" BaseType="tns:TypeNode">
<opc:Documentation>Specifies the attributes which belong to object type nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"

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LengthField="NoOfRolePermissions" />
  <opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
  <opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
  <opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
  <opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
  <opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="VariableNode" BaseType="tns:InstanceNode">
  <opc:Documentation>Specifies the attributes which belong to variable nodes.</opc:Documentation>
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
  <opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
  <opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
  <opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
  <opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
  <opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
  <opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
  <opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
  <opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
  <opc:Field Name="Value" TypeName="ua:Variant" />
  <opc:Field Name="DataType" TypeName="ua:NodeId" />
  <opc:Field Name="ValueRank" TypeName="opc:Int32" />
  <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
  <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
  <opc:Field Name="AccessLevel" TypeName="opc:Byte" />
  <opc:Field Name="UserAccessLevel" TypeName="opc:Byte" />
  <opc:Field Name="MinimumSamplingInterval" TypeName="opc:Double" />
  <opc:Field Name="Historizing" TypeName="opc:Boolean" />
  <opc:Field Name="AccessLevelEx" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="VariableTypeNode" BaseType="tns:TypeNode">
  <opc:Documentation>Specifies the attributes which belong to variable type nodes.</opc:Documentation>
  <opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
  <opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
  <opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />

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<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="Value" TypeName="ua:Variant" />
<opc:Field Name="DataType" TypeName="ua:NodeId" />
<opc:Field Name="ValueRank" TypeName="opc:Int32" />
<opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
<opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>

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<opc:StructuredType Name="ReferenceTypeNode" BaseType="tns:TypeNode">
<opc:Documentation>Specifies the attributes which belong to reference type nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
<opc:Field Name="Symmetric" TypeName="opc:Boolean" />
<opc:Field Name="InverseName" TypeName="ua:LocalizedText" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="MethodNode" BaseType="tns:InstanceNode">
<opc:Documentation>Specifies the attributes which belong to method nodes.</opc:Documentation>
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />

```

```

<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="Executable" TypeName="opc:Boolean" />
<opc:Field Name="UserExecutable" TypeName="opc:Boolean" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="ViewNode" BaseType="tns:InstanceNode">
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
<opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
<opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
<opc:Field Name="ContainsNoLoops" TypeName="opc:Boolean" />
<opc:Field Name="EventNotifier" TypeName="opc:Byte" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="DataTypeNode" BaseType="tns:TypeNode">
<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:Node" />
<opc:Field Name="NodeClass" TypeName="tns:NodeClass" SourceType="tns:Node" />
<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" SourceType="tns:Node" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:Node" />
<opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:Node" />
<opc:Field Name="NoOfRolePermissions" TypeName="opc:Int32" />
<opc:Field Name="RolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfRolePermissions" />
<opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />

```

```

    <opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"
LengthField="NoOfUserRolePermissions" />
    <opc:Field Name="AccessRestrictions" TypeName="opc:UInt16" SourceType="tns:Node" />
    <opc:Field Name="NoOfReferences" TypeName="opc:Int32" />
    <opc:Field Name="References" TypeName="tns:ReferenceNode" LengthField="NoOfReferences" />
    <opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
    <opc:Field Name="DataTypeDefinition" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="ReferenceNode" BaseType="ua:ExtensionObject">
    <opc:Documentation>Specifies a reference which belongs to a node.</opc:Documentation>
    <opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
    <opc:Field Name="IsInverse" TypeName="opc:Boolean" />
    <opc:Field Name="TargetId" TypeName="ua:ExpandedNodeId" />
</opc:StructuredType>

<opc:StructuredType Name="Argument" BaseType="ua:ExtensionObject">
    <opc:Documentation>An argument for a method.</opc:Documentation>
    <opc:Field Name="Name" TypeName="opc:String" />
    <opc:Field Name="DataType" TypeName="ua:NodeId" />
    <opc:Field Name="ValueRank" TypeName="opc:Int32" />
    <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
    <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
    <opc:Field Name="Description" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:StructuredType Name="EnumValueType" BaseType="ua:ExtensionObject">
    <opc:Documentation>A mapping between a value of an enumerated type and a name and
description.</opc:Documentation>
    <opc:Field Name="Value" TypeName="opc:Int64" />
    <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />
    <opc:Field Name="Description" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:StructuredType Name="EnumField" BaseType="tns:EnumValueType">
    <opc:Field Name="Value" TypeName="opc:Int64" SourceType="tns:EnumValueType" />
    <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:EnumValueType" />
    <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:EnumValueType" />
    <opc:Field Name="Name" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="OptionSet" BaseType="ua:ExtensionObject">
    <opc:Documentation>This abstract Structured DataType is the base DataType for all DataTypes representing a bit
mask.</opc:Documentation>
    <opc:Field Name="Value" TypeName="opc:ByteString" />
    <opc:Field Name="ValidBits" TypeName="opc:ByteString" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="Union" BaseType="ua:ExtensionObject">
  <opc:Documentation>This abstract DataType is the base DataType for all union
DataTypes.</opc:Documentation>
</opc:StructuredType>

<opc:OpaqueType Name="NormalizedString">
  <opc:Documentation>A string normalized based on the rules in the unicode specification.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="DecimalString">
  <opc:Documentation>An arbitrary numeric value.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="DurationString">
  <opc:Documentation>A period of time formatted as defined in ISO 8601-2000.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="TimeString">
  <opc:Documentation>A time formatted as defined in ISO 8601-2000.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="DateString">
  <opc:Documentation>A date formatted as defined in ISO 8601-2000.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="Duration">
  <opc:Documentation>A period of time measured in milliseconds.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="UtcTime">
  <opc:Documentation>A date/time value specified in Universal Coordinated Time (UTC).</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="LocaleId">
  <opc:Documentation>An identifier for a user locale.</opc:Documentation>
</opc:OpaqueType>

<opc:StructuredType Name="TimeZoneDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Offset" TypeName="opc:Int16" />
  <opc:Field Name="DaylightSavingInOffset" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:OpaqueType Name="Index">
  <opc:Documentation>This primitive data type is a UInt32 that identifies an element of an
array.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="IntegerId">

```

```
<opc:Documentation>A numeric identifier for an object.</opc:Documentation>
</opc:OpaqueType>
```

```
<opc:EnumeratedType Name="ApplicationType" LengthInBits="32">
  <opc:Documentation>The types of applications.</opc:Documentation>
  <opc:EnumeratedValue Name="Server" Value="0" />
  <opc:EnumeratedValue Name="Client" Value="1" />
  <opc:EnumeratedValue Name="ClientAndServer" Value="2" />
  <opc:EnumeratedValue Name="DiscoveryServer" Value="3" />
</opc:EnumeratedType>
```

```
<opc:StructuredType Name="ApplicationDescription" BaseType="ua:ExtensionObject">
  <opc:Documentation>Describes an application and how to find it.</opc:Documentation>
  <opc:Field Name="ApplicationUri" TypeName="opc:String" />
  <opc:Field Name="ProductUri" TypeName="opc:String" />
  <opc:Field Name="ApplicationName" TypeName="ua:LocalizedText" />
  <opc:Field Name="ApplicationType" TypeName="tns:ApplicationType" />
  <opc:Field Name="GatewayServerUri" TypeName="opc:String" />
  <opc:Field Name="DiscoveryProfileUri" TypeName="opc:String" />
  <opc:Field Name="NoOfDiscoveryUrls" TypeName="opc:Int32" />
  <opc:Field Name="DiscoveryUrls" TypeName="opc:String" LengthField="NoOfDiscoveryUrls" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="RequestHeader" BaseType="ua:ExtensionObject">
  <opc:Documentation>The header passed with every server request.</opc:Documentation>
  <opc:Field Name="AuthenticationToken" TypeName="ua:NodeId" />
  <opc:Field Name="Timestamp" TypeName="opc:DateTime" />
  <opc:Field Name="RequestHandle" TypeName="opc:UInt32" />
  <opc:Field Name="ReturnDiagnostics" TypeName="opc:UInt32" />
  <opc:Field Name="AuditEntryId" TypeName="opc:String" />
  <opc:Field Name="TimeoutHint" TypeName="opc:UInt32" />
  <opc:Field Name="AdditionalHeader" TypeName="ua:ExtensionObject" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="ResponseHeader" BaseType="ua:ExtensionObject">
  <opc:Documentation>The header passed with every server response.</opc:Documentation>
  <opc:Field Name="Timestamp" TypeName="opc:DateTime" />
  <opc:Field Name="RequestHandle" TypeName="opc:UInt32" />
  <opc:Field Name="ServiceResult" TypeName="ua:StatusCode" />
  <opc:Field Name="ServiceDiagnostics" TypeName="ua:DiagnosticInfo" />
  <opc:Field Name="NoOfStringTable" TypeName="opc:Int32" />
  <opc:Field Name="StringTable" TypeName="opc:String" LengthField="NoOfStringTable" />
  <opc:Field Name="AdditionalHeader" TypeName="ua:ExtensionObject" />
</opc:StructuredType>
```

```
<opc:OpaqueType Name="VersionTime">
</opc:OpaqueType>
```

```

<opc:StructuredType Name="ServiceFault" BaseType="ua:ExtensionObject">
  <opc:Documentation>The response returned by all services when there is a service level
error.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

<opc:StructuredType Name="SessionlessInvokeRequestType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfUrisVersion" TypeName="opc:Int32" />
  <opc:Field Name="UrisVersion" TypeName="opc:UInt32" LengthField="NoOfUrisVersion" />
  <opc:Field Name="NoOfNamespaceUris" TypeName="opc:Int32" />
  <opc:Field Name="NamespaceUris" TypeName="opc:String" LengthField="NoOfNamespaceUris" />
  <opc:Field Name="NoOfServerUris" TypeName="opc:Int32" />
  <opc:Field Name="ServerUris" TypeName="opc:String" LengthField="NoOfServerUris" />
  <opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
  <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
  <opc:Field Name="ServiceId" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="SessionlessInvokeResponseType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfNamespaceUris" TypeName="opc:Int32" />
  <opc:Field Name="NamespaceUris" TypeName="opc:String" LengthField="NoOfNamespaceUris" />
  <opc:Field Name="NoOfServerUris" TypeName="opc:Int32" />
  <opc:Field Name="ServerUris" TypeName="opc:String" LengthField="NoOfServerUris" />
  <opc:Field Name="ServiceId" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Finds the servers known to the discovery server.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
  <opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
  <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
  <opc:Field Name="NoOfServerUris" TypeName="opc:Int32" />
  <opc:Field Name="ServerUris" TypeName="opc:String" LengthField="NoOfServerUris" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Finds the servers known to the discovery server.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfServers" TypeName="opc:Int32" />
  <opc:Field Name="Servers" TypeName="tns:ApplicationDescription" LengthField="NoOfServers" />
</opc:StructuredType>

<opc:StructuredType Name="ServerOnNetwork" BaseType="ua:ExtensionObject">
  <opc:Field Name="RecordId" TypeName="opc:UInt32" />
  <opc:Field Name="ServerName" TypeName="opc:String" />
  <opc:Field Name="DiscoveryUrl" TypeName="opc:String" />
  <opc:Field Name="NoOfServerCapabilities" TypeName="opc:Int32" />

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```

    <opc:Field Name="ServerCapabilities" TypeName="opc:String" LengthField="NoOfServerCapabilities" />
</opc:StructuredType>

<opc:StructuredType Name="FindServersOnNetworkRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="StartingRecordId" TypeName="opc:UInt32" />
  <opc:Field Name="MaxRecordsToReturn" TypeName="opc:UInt32" />
  <opc:Field Name="NoOfServerCapabilityFilter" TypeName="opc:Int32" />
  <opc:Field Name="ServerCapabilityFilter" TypeName="opc:String" LengthField="NoOfServerCapabilityFilter"
/>
</opc:StructuredType>

<opc:StructuredType Name="FindServersOnNetworkResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="LastCounterResetTime" TypeName="opc:DateTime" />
  <opc:Field Name="NoOfServers" TypeName="opc:Int32" />
  <opc:Field Name="Servers" TypeName="tns:ServerOnNetwork" LengthField="NoOfServers" />
</opc:StructuredType>

<opc:OpaqueType Name="ApplicationInstanceCertificate">
  <opc:Documentation>A certificate for an instance of an application.</opc:Documentation>
</opc:OpaqueType>

<opc:EnumeratedType Name="MessageSecurityMode" LengthInBits="32">
  <opc:Documentation>The type of security to use on a message.</opc:Documentation>
  <opc:EnumeratedValue Name="Invalid" Value="0" />
  <opc:EnumeratedValue Name="None" Value="1" />
  <opc:EnumeratedValue Name="Sign" Value="2" />
  <opc:EnumeratedValue Name="SignAndEncrypt" Value="3" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="UserTokenType" LengthInBits="32">
  <opc:Documentation>The possible user token types.</opc:Documentation>
  <opc:EnumeratedValue Name="Anonymous" Value="0" />
  <opc:EnumeratedValue Name="UserName" Value="1" />
  <opc:EnumeratedValue Name="Certificate" Value="2" />
  <opc:EnumeratedValue Name="IssuedToken" Value="3" />
</opc:EnumeratedType>

<opc:StructuredType Name="UserTokenPolicy" BaseType="ua:ExtensionObject">
  <opc:Documentation>Describes a user token that can be used with a server.</opc:Documentation>
  <opc:Field Name="PolicyId" TypeName="opc:String" />
  <opc:Field Name="TokenType" TypeName="tns:UserTokenType" />
  <opc:Field Name="IssuedTokenType" TypeName="opc:String" />
  <opc:Field Name="IssuerEndpointUrl" TypeName="opc:String" />
  <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="EndpointDescription" BaseType="ua:ExtensionObject">
  <opc:Documentation>The description of a endpoint that can be used to access a server.</opc:Documentation>
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
  <opc:Field Name="Server" TypeName="tns:ApplicationDescription" />
  <opc:Field Name="ServerCertificate" TypeName="opc:ByteString" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
  <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
  <opc:Field Name="NoOfUserIdentityTokens" TypeName="opc:Int32" />
  <opc:Field Name="UserIdentityTokens" TypeName="tns:UserTokenPolicy"
LengthField="NoOfUserIdentityTokens" />
  <opc:Field Name="TransportProfileUri" TypeName="opc:String" />
  <opc:Field Name="SecurityLevel" TypeName="opc:Byte" />
</opc:StructuredType>

<opc:StructuredType Name="GetEndpointsRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Gets the endpoints used by the server.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
  <opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
  <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
  <opc:Field Name="NoOfProfileUris" TypeName="opc:Int32" />
  <opc:Field Name="ProfileUris" TypeName="opc:String" LengthField="NoOfProfileUris" />
</opc:StructuredType>

<opc:StructuredType Name="GetEndpointsResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Gets the endpoints used by the server.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfEndpoints" TypeName="opc:Int32" />
  <opc:Field Name="Endpoints" TypeName="tns:EndpointDescription" LengthField="NoOfEndpoints" />
</opc:StructuredType>

<opc:StructuredType Name="RegisteredServer" BaseType="ua:ExtensionObject">
  <opc:Documentation>The information required to register a server with a discovery server.</opc:Documentation>
  <opc:Field Name="ServerUri" TypeName="opc:String" />
  <opc:Field Name="ProductUri" TypeName="opc:String" />
  <opc:Field Name="NoOfServerNames" TypeName="opc:Int32" />
  <opc:Field Name="ServerNames" TypeName="ua:LocalizedText" LengthField="NoOfServerNames" />
  <opc:Field Name="ServerType" TypeName="tns:ApplicationType" />
  <opc:Field Name="GatewayServerUri" TypeName="opc:String" />
  <opc:Field Name="NoOfDiscoveryUrls" TypeName="opc:Int32" />
  <opc:Field Name="DiscoveryUrls" TypeName="opc:String" LengthField="NoOfDiscoveryUrls" />
  <opc:Field Name="SemaphoreFilePath" TypeName="opc:String" />
  <opc:Field Name="IsOnline" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="RegisterServerRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Registers a server with the discovery server.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />

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    <opc:Field Name="Server" TypeName="tns:RegisteredServer" />
  </opc:StructuredType>

  <opc:StructuredType Name="RegisterServerResponse" BaseType="ua:ExtensionObject">
    <opc:Documentation>Registers a server with the discovery server.</opc:Documentation>
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  </opc:StructuredType>

  <opc:StructuredType Name="DiscoveryConfiguration" BaseType="ua:ExtensionObject">
    <opc:Documentation>A base type for discovery configuration information.</opc:Documentation>
  </opc:StructuredType>

  <opc:StructuredType Name="MdnsDiscoveryConfiguration" BaseType="tns:DiscoveryConfiguration">
    <opc:Documentation>The discovery information needed for mDNS registration.</opc:Documentation>
    <opc:Field Name="MdnsServerName" TypeName="opc:String" />
    <opc:Field Name="NoOfServerCapabilities" TypeName="opc:Int32" />
    <opc:Field Name="ServerCapabilities" TypeName="opc:String" LengthField="NoOfServerCapabilities" />
  </opc:StructuredType>

  <opc:StructuredType Name="RegisterServer2Request" BaseType="ua:ExtensionObject">
    <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
    <opc:Field Name="Server" TypeName="tns:RegisteredServer" />
    <opc:Field Name="NoOfDiscoveryConfiguration" TypeName="opc:Int32" />
    <opc:Field Name="DiscoveryConfiguration" TypeName="ua:ExtensionObject"
    LengthField="NoOfDiscoveryConfiguration" />
  </opc:StructuredType>

  <opc:StructuredType Name="RegisterServer2Response" BaseType="ua:ExtensionObject">
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="NoOfConfigurationResults" TypeName="opc:Int32" />
    <opc:Field Name="ConfigurationResults" TypeName="ua:StatusCode"
    LengthField="NoOfConfigurationResults" />
    <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
    <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
  </opc:StructuredType>

  <opc:EnumeratedType Name="SecurityTokenRequestType" LengthInBits="32">
    <opc:Documentation>Indicates whether a token if being created or renewed.</opc:Documentation>
    <opc:EnumeratedValue Name="Issue" Value="0" />
    <opc:EnumeratedValue Name="Renew" Value="1" />
  </opc:EnumeratedType>

  <opc:StructuredType Name="ChannelSecurityToken" BaseType="ua:ExtensionObject">
    <opc:Documentation>The token that identifies a set of keys for an active secure channel.</opc:Documentation>
    <opc:Field Name="ChannelId" TypeName="opc:UInt32" />
    <opc:Field Name="TokenId" TypeName="opc:UInt32" />
    <opc:Field Name="CreatedAt" TypeName="opc:DateTime" />
    <opc:Field Name="RevisedLifetime" TypeName="opc:UInt32" />
  </opc:StructuredType>

```

</opc:StructuredType>

```
<opc:StructuredType Name="OpenSecureChannelRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a secure channel with a server.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="ClientProtocolVersion" TypeName="opc:UInt32" />
  <opc:Field Name="RequestType" TypeName="tns:SecurityTokenRequestType" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
  <opc:Field Name="ClientNonce" TypeName="opc:ByteString" />
  <opc:Field Name="RequestedLifetime" TypeName="opc:UInt32" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="OpenSecureChannelResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a secure channel with a server.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="ServerProtocolVersion" TypeName="opc:UInt32" />
  <opc:Field Name="SecurityToken" TypeName="tns:ChannelSecurityToken" />
  <opc:Field Name="ServerNonce" TypeName="opc:ByteString" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="CloseSecureChannelRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Closes a secure channel.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="CloseSecureChannelResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Closes a secure channel.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="SignedSoftwareCertificate" BaseType="ua:ExtensionObject">
  <opc:Documentation>A software certificate with a digital signature.</opc:Documentation>
  <opc:Field Name="CertificateData" TypeName="opc:ByteString" />
  <opc:Field Name="Signature" TypeName="opc:ByteString" />
</opc:StructuredType>
```

```
<opc:OpaqueType Name="SessionAuthenticationToken">
  <opc:Documentation>A unique identifier for a session used to authenticate requests.</opc:Documentation>
</opc:OpaqueType>
```

```
<opc:StructuredType Name="SignatureData" BaseType="ua:ExtensionObject">
  <opc:Documentation>A digital signature.</opc:Documentation>
  <opc:Field Name="Algorithm" TypeName="opc:String" />
  <opc:Field Name="Signature" TypeName="opc:ByteString" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="CreateSessionRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a new session with the server.</opc:Documentation>
```

```

<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="ClientDescription" TypeName="tns:ApplicationDescription" />
<opc:Field Name="ServerUri" TypeName="opc:String" />
<opc:Field Name="EndpointUrl" TypeName="opc:String" />
<opc:Field Name="SessionName" TypeName="opc:String" />
<opc:Field Name="ClientNonce" TypeName="opc:ByteString" />
<opc:Field Name="ClientCertificate" TypeName="opc:ByteString" />
<opc:Field Name="RequestedSessionTimeout" TypeName="opc:Double" />
<opc:Field Name="MaxResponseMessageSize" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="CreateSessionResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Creates a new session with the server.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="AuthenticationToken" TypeName="ua:NodeId" />
  <opc:Field Name="RevisedSessionTimeout" TypeName="opc:Double" />
  <opc:Field Name="ServerNonce" TypeName="opc:ByteString" />
  <opc:Field Name="ServerCertificate" TypeName="opc:ByteString" />
  <opc:Field Name="NoOfServerEndpoints" TypeName="opc:Int32" />
  <opc:Field Name="ServerEndpoints" TypeName="tns:EndpointDescription"
LengthField="NoOfServerEndpoints" />
  <opc:Field Name="NoOfServerSoftwareCertificates" TypeName="opc:Int32" />
  <opc:Field Name="ServerSoftwareCertificates" TypeName="tns:SignedSoftwareCertificate"
LengthField="NoOfServerSoftwareCertificates" />
  <opc:Field Name="ServerSignature" TypeName="tns:SignatureData" />
  <opc:Field Name="MaxRequestMessageSize" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="UserIdentityToken" BaseType="ua:ExtensionObject">
  <opc:Documentation>A base type for a user identity token.</opc:Documentation>
  <opc:Field Name="PolicyId" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="AnonymousIdentityToken" BaseType="tns:UserIdentityToken">
  <opc:Documentation>A token representing an anonymous user.</opc:Documentation>
  <opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
</opc:StructuredType>

<opc:StructuredType Name="UserNameIdentityToken" BaseType="tns:UserIdentityToken">
  <opc:Documentation>A token representing a user identified by a user name and password.</opc:Documentation>
  <opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
  <opc:Field Name="UserName" TypeName="opc:String" />
  <opc:Field Name="Password" TypeName="opc:ByteString" />
  <opc:Field Name="EncryptionAlgorithm" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="X509IdentityToken" BaseType="tns:UserIdentityToken">

```

```

<opc:Documentation>A token representing a user identified by an X509 certificate.</opc:Documentation>
<opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
<opc:Field Name="CertificateData" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="IssuedIdentityToken" BaseType="tns:UserIdentityToken">
<opc:Documentation>A token representing a user identified by a WS-Security XML token.</opc:Documentation>
<opc:Field Name="PolicyId" TypeName="opc:String" SourceType="tns:UserIdentityToken" />
<opc:Field Name="TokenData" TypeName="opc:ByteString" />
<opc:Field Name="EncryptionAlgorithm" TypeName="opc:String" />
</opc:StructuredType>

<opc:OpaqueType Name="RsaEncryptedSecret">
</opc:OpaqueType>

<opc:StructuredType Name="ActivateSessionRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Activates a session with the server.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="ClientSignature" TypeName="tns:SignatureData" />
<opc:Field Name="NoOfClientSoftwareCertificates" TypeName="opc:Int32" />
<opc:Field Name="ClientSoftwareCertificates" TypeName="tns:SignedSoftwareCertificate"
LengthField="NoOfClientSoftwareCertificates" />
<opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
<opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
<opc:Field Name="UserIdentityToken" TypeName="ua:ExtensionObject" />
<opc:Field Name="UserTokenSignature" TypeName="tns:SignatureData" />
</opc:StructuredType>

<opc:StructuredType Name="ActivateSessionResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Activates a session with the server.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
<opc:Field Name="ServerNonce" TypeName="opc:ByteString" />
<opc:Field Name="NoOfResults" TypeName="opc:Int32" />
<opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
<opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
<opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="CloseSessionRequest" BaseType="ua:ExtensionObject">
<opc:Documentation>Closes a session with the server.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="DeleteSubscriptions" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="CloseSessionResponse" BaseType="ua:ExtensionObject">
<opc:Documentation>Closes a session with the server.</opc:Documentation>
<opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="CancelRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Cancels an outstanding request.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="RequestHandle" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="CancelResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Cancels an outstanding request.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="CancelCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:EnumeratedType Name="NodeAttributesMask" LengthInBits="32">
  <opc:Documentation>The bits used to specify default attributes for a new node.</opc:Documentation>
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="AccessLevel" Value="1" />
  <opc:EnumeratedValue Name="ArrayDimensions" Value="2" />
  <opc:EnumeratedValue Name="BrowseName" Value="4" />
  <opc:EnumeratedValue Name="ContainsNoLoops" Value="8" />
  <opc:EnumeratedValue Name="DataType" Value="16" />
  <opc:EnumeratedValue Name="Description" Value="32" />
  <opc:EnumeratedValue Name="DisplayName" Value="64" />
  <opc:EnumeratedValue Name="EventNotifier" Value="128" />
  <opc:EnumeratedValue Name="Executable" Value="256" />
  <opc:EnumeratedValue Name="Historizing" Value="512" />
  <opc:EnumeratedValue Name="InverseName" Value="1024" />
  <opc:EnumeratedValue Name="IsAbstract" Value="2048" />
  <opc:EnumeratedValue Name="MinimumSamplingInterval" Value="4096" />
  <opc:EnumeratedValue Name="NodeClass" Value="8192" />
  <opc:EnumeratedValue Name="NodeId" Value="16384" />
  <opc:EnumeratedValue Name="Symmetric" Value="32768" />
  <opc:EnumeratedValue Name="UserAccessLevel" Value="65536" />
  <opc:EnumeratedValue Name="UserExecutable" Value="131072" />
  <opc:EnumeratedValue Name="UserWriteMask" Value="262144" />
  <opc:EnumeratedValue Name="ValueRank" Value="524288" />
  <opc:EnumeratedValue Name="WriteMask" Value="1048576" />
  <opc:EnumeratedValue Name="Value" Value="2097152" />
  <opc:EnumeratedValue Name="DataTypeDefinition" Value="4194304" />
  <opc:EnumeratedValue Name="RolePermissions" Value="8388608" />
  <opc:EnumeratedValue Name="AccessRestrictions" Value="16777216" />
  <opc:EnumeratedValue Name="All" Value="33554431" />
  <opc:EnumeratedValue Name="BaseNode" Value="26501220" />
  <opc:EnumeratedValue Name="Object" Value="26501348" />
  <opc:EnumeratedValue Name="ObjectType" Value="26503268" />
  <opc:EnumeratedValue Name="Variable" Value="26571383" />
  <opc:EnumeratedValue Name="VariableType" Value="28600438" />
  <opc:EnumeratedValue Name="Method" Value="26632548" />

```

```
<opc:EnumeratedValue Name="ReferenceType" Value="26537060" />
<opc:EnumeratedValue Name="View" Value="26501356" />
</opc:EnumeratedType>
```

```
<opc:StructuredType Name="NodeAttributes" BaseType="ua:ExtensionObject">
  <opc:Documentation>The base attributes for all nodes.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="ObjectAttributes" BaseType="tns:NodeAttributes">
  <opc:Documentation>The attributes for an object node.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="EventNotifier" TypeName="opc:Byte" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="VariableAttributes" BaseType="tns:NodeAttributes">
  <opc:Documentation>The attributes for a variable node.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Value" TypeName="ua:Variant" />
  <opc:Field Name="DataType" TypeName="ua:NodeId" />
  <opc:Field Name="ValueRank" TypeName="opc:Int32" />
  <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
  <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
  <opc:Field Name="AccessLevel" TypeName="opc:Byte" />
  <opc:Field Name="UserAccessLevel" TypeName="opc:Byte" />
  <opc:Field Name="MinimumSamplingInterval" TypeName="opc:Double" />
  <opc:Field Name="Historizing" TypeName="opc:Boolean" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="MethodAttributes" BaseType="tns:NodeAttributes">
  <opc:Documentation>The attributes for a method node.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
</opc:StructuredType>
```

```
<opc:Field Name="Executable" TypeName="opc:Boolean" />
<opc:Field Name="UserExecutable" TypeName="opc:Boolean" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="ObjectTypeAttributes" BaseType="tns:NodeAttributes">
  <opc:Documentation>The attributes for an object type node.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="VariableTypeAttributes" BaseType="tns:NodeAttributes">
  <opc:Documentation>The attributes for a variable type node.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Value" TypeName="ua:Variant" />
  <opc:Field Name="DataType" TypeName="ua:NodeId" />
  <opc:Field Name="ValueRank" TypeName="opc:Int32" />
  <opc:Field Name="NoOfArrayDimensions" TypeName="opc:Int32" />
  <opc:Field Name="ArrayDimensions" TypeName="opc:UInt32" LengthField="NoOfArrayDimensions" />
  <opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="ReferenceTypeAttributes" BaseType="tns:NodeAttributes">
  <opc:Documentation>The attributes for a reference type node.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
  <opc:Field Name="Symmetric" TypeName="opc:Boolean" />
  <opc:Field Name="InverseName" TypeName="ua:LocalizedText" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="DataTypeAttributes" BaseType="tns:NodeAttributes">
  <opc:Documentation>The attributes for a data type node.</opc:Documentation>
  <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
  <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
  <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
```

```

    <opc:Field Name="IsAbstract" TypeName="opc:Boolean" />
  </opc:StructuredType>

  <opc:StructuredType Name="ViewAttributes" BaseType="tns:NodeAttributes">
    <opc:Documentation>The attributes for a view node.</opc:Documentation>
    <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
    <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
    <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
    <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
    <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
    <opc:Field Name="ContainsNoLoops" TypeName="opc:Boolean" />
    <opc:Field Name="EventNotifier" TypeName="opc:Byte" />
  </opc:StructuredType>

  <opc:StructuredType Name="GenericAttributeValue" BaseType="ua:ExtensionObject">
    <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
    <opc:Field Name="Value" TypeName="ua:Variant" />
  </opc:StructuredType>

  <opc:StructuredType Name="GenericAttributes" BaseType="tns:NodeAttributes">
    <opc:Field Name="SpecifiedAttributes" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
    <opc:Field Name="DisplayName" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
    <opc:Field Name="Description" TypeName="ua:LocalizedText" SourceType="tns:NodeAttributes" />
    <opc:Field Name="WriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
    <opc:Field Name="UserWriteMask" TypeName="opc:UInt32" SourceType="tns:NodeAttributes" />
    <opc:Field Name="NoOfAttributeValues" TypeName="opc:Int32" />
    <opc:Field Name="AttributeValues" TypeName="tns:GenericAttributeValue"
LengthField="NoOfAttributeValues" />
  </opc:StructuredType>

  <opc:StructuredType Name="AddNodesItem" BaseType="ua:ExtensionObject">
    <opc:Documentation>A request to add a node to the server address space.</opc:Documentation>
    <opc:Field Name="ParentNodeId" TypeName="ua:ExpandedNodeId" />
    <opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
    <opc:Field Name="RequestedNewNodeId" TypeName="ua:ExpandedNodeId" />
    <opc:Field Name="BrowseName" TypeName="ua:QualifiedName" />
    <opc:Field Name="NodeClass" TypeName="tns:NodeClass" />
    <opc:Field Name="NodeAttributes" TypeName="ua:ExtensionObject" />
    <opc:Field Name="TypeDefinition" TypeName="ua:ExpandedNodeId" />
  </opc:StructuredType>

  <opc:StructuredType Name="AddNodesResult" BaseType="ua:ExtensionObject">
    <opc:Documentation>A result of an add node operation.</opc:Documentation>
    <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
    <opc:Field Name="AddedNodeId" TypeName="ua:NodeId" />
  </opc:StructuredType>

  <opc:StructuredType Name="AddNodesRequest" BaseType="ua:ExtensionObject">

```

```

<opc:Documentation>Adds one or more nodes to the server address space.</opc:Documentation>
<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
<opc:Field Name="NoOfNodesToAdd" TypeName="opc:Int32" />
<opc:Field Name="NodesToAdd" TypeName="tns:AddNodesItem" LengthField="NoOfNodesToAdd" />
</opc:StructuredType>

<opc:StructuredType Name="AddNodesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Adds one or more nodes to the server address space.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:AddNodesResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="AddReferencesItem" BaseType="ua:ExtensionObject">
  <opc:Documentation>A request to add a reference to the server address space.</opc:Documentation>
  <opc:Field Name="SourceNodeId" TypeName="ua:NodeId" />
  <opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
  <opc:Field Name="IsForward" TypeName="opc:Boolean" />
  <opc:Field Name="TargetServerUri" TypeName="opc:String" />
  <opc:Field Name="TargetNodeId" TypeName="ua:ExpandedNodeId" />
  <opc:Field Name="TargetNodeClass" TypeName="tns:NodeClass" />
</opc:StructuredType>

<opc:StructuredType Name="AddReferencesRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Adds one or more references to the server address space.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfReferencesToAdd" TypeName="opc:Int32" />
  <opc:Field Name="ReferencesToAdd" TypeName="tns:AddReferencesItem"
LengthField="NoOfReferencesToAdd" />
</opc:StructuredType>

<opc:StructuredType Name="AddReferencesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Adds one or more references to the server address space.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteNodesItem" BaseType="ua:ExtensionObject">
  <opc:Documentation>A request to delete a node to the server address space.</opc:Documentation>
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
  <opc:Field Name="DeleteTargetReferences" TypeName="opc:Boolean" />
</opc:StructuredType>

```

```
<opc:StructuredType Name="DeleteNodesRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Delete one or more nodes from the server address space.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfNodesToDelete" TypeName="opc:Int32" />
  <opc:Field Name="NodesToDelete" TypeName="tns>DeleteNodesItem" LengthField="NoOfNodesToDelete" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="DeleteNodesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Delete one or more nodes from the server address space.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="DeleteReferencesItem" BaseType="ua:ExtensionObject">
  <opc:Documentation>A request to delete a node from the server address space.</opc:Documentation>
  <opc:Field Name="SourceNodeId" TypeName="ua:NodeId" />
  <opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
  <opc:Field Name="IsForward" TypeName="opc:Boolean" />
  <opc:Field Name="TargetNodeId" TypeName="ua:ExpandedNodeId" />
  <opc:Field Name="DeleteBidirectional" TypeName="opc:Boolean" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="DeleteReferencesRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Delete one or more references from the server address space.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfReferencesToDelete" TypeName="opc:Int32" />
  <opc:Field Name="ReferencesToDelete" TypeName="tns>DeleteReferencesItem"
LengthField="NoOfReferencesToDelete" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="DeleteReferencesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Delete one or more references from the server address space.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="AttributeWriteMask" LengthInBits="32" IsOptionSet="true">
  <opc:Documentation>Define bits used to indicate which attributes are writable.</opc:Documentation>
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="AccessLevel" Value="1" />
  <opc:EnumeratedValue Name="ArrayDimensions" Value="2" />
  <opc:EnumeratedValue Name="BrowseName" Value="4" />
```

```

<opc:EnumeratedValue Name="ContainsNoLoops" Value="8" />
<opc:EnumeratedValue Name="DataType" Value="16" />
<opc:EnumeratedValue Name="Description" Value="32" />
<opc:EnumeratedValue Name="DisplayName" Value="64" />
<opc:EnumeratedValue Name="EventNotifier" Value="128" />
<opc:EnumeratedValue Name="Executable" Value="256" />
<opc:EnumeratedValue Name="Historizing" Value="512" />
<opc:EnumeratedValue Name="InverseName" Value="1024" />
<opc:EnumeratedValue Name="IsAbstract" Value="2048" />
<opc:EnumeratedValue Name="MinimumSamplingInterval" Value="4096" />
<opc:EnumeratedValue Name="NodeClass" Value="8192" />
<opc:EnumeratedValue Name="NodeId" Value="16384" />
<opc:EnumeratedValue Name="Symmetric" Value="32768" />
<opc:EnumeratedValue Name="UserAccessLevel" Value="65536" />
<opc:EnumeratedValue Name="UserExecutable" Value="131072" />
<opc:EnumeratedValue Name="UserWriteMask" Value="262144" />
<opc:EnumeratedValue Name="ValueRank" Value="524288" />
<opc:EnumeratedValue Name="WriteMask" Value="1048576" />
<opc:EnumeratedValue Name="ValueForVariableType" Value="2097152" />
<opc:EnumeratedValue Name="DataTypeDefinition" Value="4194304" />
<opc:EnumeratedValue Name="RolePermissions" Value="8388608" />
<opc:EnumeratedValue Name="AccessRestrictions" Value="16777216" />
<opc:EnumeratedValue Name="AccessLevelEx" Value="33554432" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="BrowseDirection" LengthInBits="32">
  <opc:Documentation>The directions of the references to return.</opc:Documentation>
  <opc:EnumeratedValue Name="Forward" Value="0" />
  <opc:EnumeratedValue Name="Inverse" Value="1" />
  <opc:EnumeratedValue Name="Both" Value="2" />
  <opc:EnumeratedValue Name="Invalid" Value="3" />
</opc:EnumeratedType>

<opc:StructuredType Name="ViewDescription" BaseType="ua:ExtensionObject">
  <opc:Documentation>The view to browse.</opc:Documentation>
  <opc:Field Name="ViewId" TypeName="ua:NodeId" />
  <opc:Field Name="Timestamp" TypeName="opc:DateTime" />
  <opc:Field Name="ViewVersion" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseDescription" BaseType="ua:ExtensionObject">
  <opc:Documentation>A request to browse the the references from a node.</opc:Documentation>
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
  <opc:Field Name="BrowseDirection" TypeName="tns:BrowseDirection" />
  <opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
  <opc:Field Name="IncludeSubtypes" TypeName="opc:Boolean" />
  <opc:Field Name="NodeClassMask" TypeName="opc:UInt32" />
  <opc:Field Name="ResultMask" TypeName="opc:UInt32" />

```

</opc:StructuredType>

<opc:EnumeratedType Name="BrowseResultMask" LengthInBits="32">

<opc:Documentation>A bit mask which specifies what should be returned in a browse response.</opc:Documentation>

<opc:EnumeratedValue Name="None" Value="0" />

<opc:EnumeratedValue Name="ReferenceTypeId" Value="1" />

<opc:EnumeratedValue Name="IsForward" Value="2" />

<opc:EnumeratedValue Name="NodeClass" Value="4" />

<opc:EnumeratedValue Name="BrowseName" Value="8" />

<opc:EnumeratedValue Name="DisplayName" Value="16" />

<opc:EnumeratedValue Name="TypeDefinition" Value="32" />

<opc:EnumeratedValue Name="All" Value="63" />

<opc:EnumeratedValue Name="ReferenceTypeInfo" Value="3" />

<opc:EnumeratedValue Name="TargetInfo" Value="60" />

</opc:EnumeratedType>

<opc:StructuredType Name="ReferenceDescription" BaseType="ua:ExtensionObject">

<opc:Documentation>The description of a reference.</opc:Documentation>

<opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />

<opc:Field Name="IsForward" TypeName="opc:Boolean" />

<opc:Field Name="NodeId" TypeName="ua:ExpandedNodeId" />

<opc:Field Name="BrowseName" TypeName="ua:QualifiedName" />

<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />

<opc:Field Name="NodeClass" TypeName="tns:NodeClass" />

<opc:Field Name="TypeDefinition" TypeName="ua:ExpandedNodeId" />

</opc:StructuredType>

<opc:OpaqueType Name="ContinuationPoint">

<opc:Documentation>An identifier for a suspended query or browse operation.</opc:Documentation>

</opc:OpaqueType>

<opc:StructuredType Name="BrowseResult" BaseType="ua:ExtensionObject">

<opc:Documentation>The result of a browse operation.</opc:Documentation>

<opc:Field Name="StatusCode" TypeName="ua:StatusCode" />

<opc:Field Name="ContinuationPoint" TypeName="opc:ByteString" />

<opc:Field Name="NoOfReferences" TypeName="opc:Int32" />

<opc:Field Name="References" TypeName="tns:ReferenceDescription" LengthField="NoOfReferences" />

</opc:StructuredType>

<opc:StructuredType Name="BrowseRequest" BaseType="ua:ExtensionObject">

<opc:Documentation>Browse the references for one or more nodes from the server address space.</opc:Documentation>

<opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />

<opc:Field Name="View" TypeName="tns:ViewDescription" />

<opc:Field Name="RequestedMaxReferencesPerNode" TypeName="opc:UInt32" />

<opc:Field Name="NoOfNodesToBrowse" TypeName="opc:Int32" />

<opc:Field Name="NodesToBrowse" TypeName="tns:BrowseDescription" LengthField="NoOfNodesToBrowse"

```

/>
</opc:StructuredType>

<opc:StructuredType Name="BrowseResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Browse the references for one or more nodes from the server address
space.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:BrowseResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseNextRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Continues one or more browse operations.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="ReleaseContinuationPoints" TypeName="opc:Boolean" />
  <opc:Field Name="NoOfContinuationPoints" TypeName="opc:Int32" />
  <opc:Field Name="ContinuationPoints" TypeName="opc:ByteString" LengthField="NoOfContinuationPoints" />
</opc:StructuredType>

<opc:StructuredType Name="BrowseNextResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Continues one or more browse operations.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:BrowseResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="RelativePathElement" BaseType="ua:ExtensionObject">
  <opc:Documentation>An element in a relative path.</opc:Documentation>
  <opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
  <opc:Field Name="IsInverse" TypeName="opc:Boolean" />
  <opc:Field Name="IncludeSubtypes" TypeName="opc:Boolean" />
  <opc:Field Name="TargetName" TypeName="ua:QualifiedName" />
</opc:StructuredType>

<opc:StructuredType Name="RelativePath" BaseType="ua:ExtensionObject">
  <opc:Documentation>A relative path constructed from reference types and browse names.</opc:Documentation>
  <opc:Field Name="NoOfElements" TypeName="opc:Int32" />
  <opc:Field Name="Elements" TypeName="tns:RelativePathElement" LengthField="NoOfElements" />
</opc:StructuredType>

<opc:StructuredType Name="BrowsePath" BaseType="ua:ExtensionObject">
  <opc:Documentation>A request to translate a path into a node id.</opc:Documentation>
  <opc:Field Name="StartingNode" TypeName="ua:NodeId" />
  <opc:Field Name="RelativePath" TypeName="tns:RelativePath" />

```

</opc:StructuredType>

```
<opc:StructuredType Name="BrowsePathTarget" BaseType="ua:ExtensionObject">
  <opc:Documentation>The target of the translated path.</opc:Documentation>
  <opc:Field Name="TargetId" TypeName="ua:ExpandedNodeId" />
  <opc:Field Name="RemainingPathIndex" TypeName="opc:UInt32" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="BrowsePathResult" BaseType="ua:ExtensionObject">
  <opc:Documentation>The result of a translate operation.</opc:Documentation>
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="NoOfTargets" TypeName="opc:Int32" />
  <opc:Field Name="Targets" TypeName="tns:BrowsePathTarget" LengthField="NoOfTargets" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="TranslateBrowsePathsToNodeIdsRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Translates one or more paths in the server address space.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfBrowsePaths" TypeName="opc:Int32" />
  <opc:Field Name="BrowsePaths" TypeName="tns:BrowsePath" LengthField="NoOfBrowsePaths" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="TranslateBrowsePathsToNodeIdsResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Translates one or more paths in the server address space.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:BrowsePathResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="RegisterNodesRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Registers one or more nodes for repeated use within a session.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfNodesToRegister" TypeName="opc:Int32" />
  <opc:Field Name="NodesToRegister" TypeName="ua:NodeId" LengthField="NoOfNodesToRegister" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="RegisterNodesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Registers one or more nodes for repeated use within a session.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfRegisteredNodeIds" TypeName="opc:Int32" />
  <opc:Field Name="RegisteredNodeIds" TypeName="ua:NodeId" LengthField="NoOfRegisteredNodeIds" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="UnregisterNodesRequest" BaseType="ua:ExtensionObject">
  <opc:Documentation>Unregisters one or more previously registered nodes.</opc:Documentation>
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
```

```

<opc:Field Name="NoOfNodesToUnregister" TypeName="opc:Int32" />
<opc:Field Name="NodesToUnregister" TypeName="ua:NodeId" LengthField="NoOfNodesToUnregister" />
</opc:StructuredType>

<opc:StructuredType Name="UnregisterNodesResponse" BaseType="ua:ExtensionObject">
  <opc:Documentation>Unregisters one or more previously registered nodes.</opc:Documentation>
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
</opc:StructuredType>

<opc:OpaqueType Name="Counter">
  <opc:Documentation>A monotonically increasing value.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="NumericRange">
  <opc:Documentation>Specifies a range of array indexes.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="Time">
  <opc:Documentation>A time value specified as HH:MM:SS.SSS.</opc:Documentation>
</opc:OpaqueType>

<opc:OpaqueType Name="Date">
  <opc:Documentation>A date value.</opc:Documentation>
</opc:OpaqueType>

<opc:StructuredType Name="EndpointConfiguration" BaseType="ua:ExtensionObject">
  <opc:Field Name="OperationTimeout" TypeName="opc:Int32" />
  <opc:Field Name="UseBinaryEncoding" TypeName="opc:Boolean" />
  <opc:Field Name="MaxStringLength" TypeName="opc:Int32" />
  <opc:Field Name="MaxByteStringLength" TypeName="opc:Int32" />
  <opc:Field Name="MaxArrayLength" TypeName="opc:Int32" />
  <opc:Field Name="MaxMessageSize" TypeName="opc:Int32" />
  <opc:Field Name="MaxBufferSize" TypeName="opc:Int32" />
  <opc:Field Name="ChannelLifetime" TypeName="opc:Int32" />
  <opc:Field Name="SecurityTokenLifetime" TypeName="opc:Int32" />
</opc:StructuredType>

<opc:StructuredType Name="QueryDataDescription" BaseType="ua:ExtensionObject">
  <opc:Field Name="RelativePath" TypeName="tns:RelativePath" />
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
  <opc:Field Name="IndexRange" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="NodeTypeDescription" BaseType="ua:ExtensionObject">
  <opc:Field Name="TypeDefinitionNode" TypeName="ua:ExpandedNodeId" />
  <opc:Field Name="IncludeSubTypes" TypeName="opc:Boolean" />
  <opc:Field Name="NoOfDataToReturn" TypeName="opc:Int32" />
  <opc:Field Name="DataToReturn" TypeName="tns:QueryDataDescription" LengthField="NoOfDataToReturn" />

```

```

/>
</opc:StructuredType>

<opc:EnumeratedType Name="FilterOperator" LengthInBits="32">
  <opc:EnumeratedValue Name="Equals" Value="0" />
  <opc:EnumeratedValue Name="IsNull" Value="1" />
  <opc:EnumeratedValue Name="GreaterThan" Value="2" />
  <opc:EnumeratedValue Name="LessThan" Value="3" />
  <opc:EnumeratedValue Name="GreaterThanOrEqual" Value="4" />
  <opc:EnumeratedValue Name="LessThanOrEqual" Value="5" />
  <opc:EnumeratedValue Name="Like" Value="6" />
  <opc:EnumeratedValue Name="Not" Value="7" />
  <opc:EnumeratedValue Name="Between" Value="8" />
  <opc:EnumeratedValue Name="InList" Value="9" />
  <opc:EnumeratedValue Name="And" Value="10" />
  <opc:EnumeratedValue Name="Or" Value="11" />
  <opc:EnumeratedValue Name="Cast" Value="12" />
  <opc:EnumeratedValue Name="InView" Value="13" />
  <opc:EnumeratedValue Name="OfType" Value="14" />
  <opc:EnumeratedValue Name="RelatedTo" Value="15" />
  <opc:EnumeratedValue Name="BitwiseAnd" Value="16" />
  <opc:EnumeratedValue Name="BitwiseOr" Value="17" />
</opc:EnumeratedType>

<opc:StructuredType Name="QueryDataSet" BaseType="ua:ExtensionObject">
  <opc:Field Name="NodeId" TypeName="ua:ExpandedNodeId" />
  <opc:Field Name="TypeDefinitionNode" TypeName="ua:ExpandedNodeId" />
  <opc:Field Name="NoOfValues" TypeName="opc:Int32" />
  <opc:Field Name="Values" TypeName="ua:Variant" LengthField="NoOfValues" />
</opc:StructuredType>

<opc:StructuredType Name="NodeReference" BaseType="ua:ExtensionObject">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
  <opc:Field Name="ReferenceTypeId" TypeName="ua:NodeId" />
  <opc:Field Name="IsForward" TypeName="opc:Boolean" />
  <opc:Field Name="NoOfReferencedNodeIds" TypeName="opc:Int32" />
  <opc:Field Name="ReferencedNodeIds" TypeName="ua:NodeId" LengthField="NoOfReferencedNodeIds" />
</opc:StructuredType>

<opc:StructuredType Name="ContentFilterElement" BaseType="ua:ExtensionObject">
  <opc:Field Name="FilterOperator" TypeName="tns:FilterOperator" />
  <opc:Field Name="NoOfFilterOperands" TypeName="opc:Int32" />
  <opc:Field Name="FilterOperands" TypeName="ua:ExtensionObject" LengthField="NoOfFilterOperands" />
</opc:StructuredType>

<opc:StructuredType Name="ContentFilter" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfElements" TypeName="opc:Int32" />
  <opc:Field Name="Elements" TypeName="tns:ContentFilterElement" LengthField="NoOfElements" />

```

</opc:StructuredType>

<opc:StructuredType Name="FilterOperand" BaseType="ua:ExtensionObject">  
</opc:StructuredType>

<opc:StructuredType Name="ElementOperand" BaseType="tns:FilterOperand">  
  <opc:Field Name="Index" TypeName="opc:UInt32" />  
</opc:StructuredType>

<opc:StructuredType Name="LiteralOperand" BaseType="tns:FilterOperand">  
  <opc:Field Name="Value" TypeName="ua:Variant" />  
</opc:StructuredType>

<opc:StructuredType Name="AttributeOperand" BaseType="tns:FilterOperand">  
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />  
  <opc:Field Name="Alias" TypeName="opc:String" />  
  <opc:Field Name="BrowsePath" TypeName="tns:RelativePath" />  
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />  
  <opc:Field Name="IndexRange" TypeName="opc:String" />  
</opc:StructuredType>

<opc:StructuredType Name="SimpleAttributeOperand" BaseType="tns:FilterOperand">  
  <opc:Field Name="TypeDefinitionId" TypeName="ua:NodeId" />  
  <opc:Field Name="NoOfBrowsePath" TypeName="opc:Int32" />  
  <opc:Field Name="BrowsePath" TypeName="ua:QualifiedName" LengthField="NoOfBrowsePath" />  
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />  
  <opc:Field Name="IndexRange" TypeName="opc:String" />  
</opc:StructuredType>

<opc:StructuredType Name="ContentFilterElementResult" BaseType="ua:ExtensionObject">  
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />  
  <opc:Field Name="NoOfOperandStatusCodes" TypeName="opc:Int32" />  
  <opc:Field Name="OperandStatusCodes" TypeName="ua:StatusCode" LengthField="NoOfOperandStatusCodes" />  
  <opc:Field Name="NoOfOperandDiagnosticInfos" TypeName="opc:Int32" />  
  <opc:Field Name="OperandDiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfOperandDiagnosticInfos" />  
</opc:StructuredType>

<opc:StructuredType Name="ContentFilterResult" BaseType="ua:ExtensionObject">  
  <opc:Field Name="NoOfElementResults" TypeName="opc:Int32" />  
  <opc:Field Name="ElementResults" TypeName="tns:ContentFilterElementResult" LengthField="NoOfElementResults" />  
  <opc:Field Name="NoOfElementDiagnosticInfos" TypeName="opc:Int32" />  
  <opc:Field Name="ElementDiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfElementDiagnosticInfos" />  
</opc:StructuredType>

```
<opc:StructuredType Name="ParsingResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="NoOfDataStatusCodes" TypeName="opc:Int32" />
  <opc:Field Name="DataStatusCodes" TypeName="ua:StatusCode" LengthField="NoOfDataStatusCodes" />
  <opc:Field Name="NoOfDataDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DataDiagnosticInfos" TypeName="ua:DiagnosticInfo"
LengthField="NoOfDataDiagnosticInfos" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="QueryFirstRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="View" TypeName="tns:ViewDescription" />
  <opc:Field Name="NoOfNodeTypes" TypeName="opc:Int32" />
  <opc:Field Name="NodeTypes" TypeName="tns:NodeTypeDescription" LengthField="NoOfNodeTypes" />
  <opc:Field Name="Filter" TypeName="tns:ContentFilter" />
  <opc:Field Name="MaxDataSetsToReturn" TypeName="opc:UInt32" />
  <opc:Field Name="MaxReferencesToReturn" TypeName="opc:UInt32" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="QueryFirstResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfQueryDataSets" TypeName="opc:Int32" />
  <opc:Field Name="QueryDataSets" TypeName="tns:QueryDataSet" LengthField="NoOfQueryDataSets" />
  <opc:Field Name="ContinuationPoint" TypeName="opc:ByteString" />
  <opc:Field Name="NoOfParsingResults" TypeName="opc:Int32" />
  <opc:Field Name="ParsingResults" TypeName="tns:ParsingResult" LengthField="NoOfParsingResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
  <opc:Field Name="FilterResult" TypeName="tns:ContentFilterResult" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="QueryNextRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="ReleaseContinuationPoint" TypeName="opc:Boolean" />
  <opc:Field Name="ContinuationPoint" TypeName="opc:ByteString" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="QueryNextResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfQueryDataSets" TypeName="opc:Int32" />
  <opc:Field Name="QueryDataSets" TypeName="tns:QueryDataSet" LengthField="NoOfQueryDataSets" />
  <opc:Field Name="RevisedContinuationPoint" TypeName="opc:ByteString" />
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="TimestampsToReturn" LengthInBits="32">
  <opc:EnumeratedValue Name="Source" Value="0" />
  <opc:EnumeratedValue Name="Server" Value="1" />
  <opc:EnumeratedValue Name="Both" Value="2" />
</opc:EnumeratedType>
```

```

    <opc:EnumeratedValue Name="Neither" Value="3" />
    <opc:EnumeratedValue Name="Invalid" Value="4" />
</opc:EnumeratedType>

<opc:StructuredType Name="ReadValueId" BaseType="ua:ExtensionObject">
    <opc:Field Name="NodeId" TypeName="ua:NodeId" />
    <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
    <opc:Field Name="IndexRange" TypeName="opc:String" />
    <opc:Field Name="DataEncoding" TypeName="ua:QualifiedName" />
</opc:StructuredType>

<opc:StructuredType Name="ReadRequest" BaseType="ua:ExtensionObject">
    <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
    <opc:Field Name="MaxAge" TypeName="opc:Double" />
    <opc:Field Name="TimestampsToReturn" TypeName="tns:TimestampsToReturn" />
    <opc:Field Name="NoOfNodesToRead" TypeName="opc:Int32" />
    <opc:Field Name="NodesToRead" TypeName="tns:ReadValueId" LengthField="NoOfNodesToRead" />
</opc:StructuredType>

<opc:StructuredType Name="ReadResponse" BaseType="ua:ExtensionObject">
    <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
    <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
    <opc:Field Name="Results" TypeName="ua:DataValue" LengthField="NoOfResults" />
    <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
    <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryReadValueId" BaseType="ua:ExtensionObject">
    <opc:Field Name="NodeId" TypeName="ua:NodeId" />
    <opc:Field Name="IndexRange" TypeName="opc:String" />
    <opc:Field Name="DataEncoding" TypeName="ua:QualifiedName" />
    <opc:Field Name="ContinuationPoint" TypeName="opc:ByteString" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryReadResult" BaseType="ua:ExtensionObject">
    <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
    <opc:Field Name="ContinuationPoint" TypeName="opc:ByteString" />
    <opc:Field Name="HistoryData" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryReadDetails" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="ReadEventDetails" BaseType="tns:HistoryReadDetails">
    <opc:Field Name="NumValuesPerNode" TypeName="opc:UInt32" />
    <opc:Field Name="StartTime" TypeName="opc:DateTime" />
    <opc:Field Name="EndTime" TypeName="opc:DateTime" />
    <opc:Field Name="Filter" TypeName="tns:EventFilter" />

```

```

</opc:StructuredType>

<opc:StructuredType Name="ReadRawModifiedDetails" BaseType="tns:HistoryReadDetails">
  <opc:Field Name="IsReadModified" TypeName="opc:Boolean" />
  <opc:Field Name="StartTime" TypeName="opc:DateTime" />
  <opc:Field Name="EndTime" TypeName="opc:DateTime" />
  <opc:Field Name="NumValuesPerNode" TypeName="opc:UInt32" />
  <opc:Field Name="ReturnBounds" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="ReadProcessedDetails" BaseType="tns:HistoryReadDetails">
  <opc:Field Name="StartTime" TypeName="opc:DateTime" />
  <opc:Field Name="EndTime" TypeName="opc:DateTime" />
  <opc:Field Name="ProcessingInterval" TypeName="opc:Double" />
  <opc:Field Name="NoOfAggregateType" TypeName="opc:Int32" />
  <opc:Field Name="AggregateType" TypeName="ua:NodeId" LengthField="NoOfAggregateType" />
  <opc:Field Name="AggregateConfiguration" TypeName="tns:AggregateConfiguration" />
</opc:StructuredType>

<opc:StructuredType Name="ReadAtTimeDetails" BaseType="tns:HistoryReadDetails">
  <opc:Field Name="NoOfReqTimes" TypeName="opc:Int32" />
  <opc:Field Name="ReqTimes" TypeName="opc:DateTime" LengthField="NoOfReqTimes" />
  <opc:Field Name="UseSimpleBounds" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryData" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfDataValues" TypeName="opc:Int32" />
  <opc:Field Name="DataValues" TypeName="ua:DataValue" LengthField="NoOfDataValues" />
</opc:StructuredType>

<opc:StructuredType Name="ModificationInfo" BaseType="ua:ExtensionObject">
  <opc:Field Name="ModificationTime" TypeName="opc:DateTime" />
  <opc:Field Name="UpdateType" TypeName="tns:HistoryUpdateType" />
  <opc:Field Name="UserName" TypeName="opc:String" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryModifiedData" BaseType="tns:HistoryData">
  <opc:Field Name="NoOfDataValues" TypeName="opc:Int32" />
  <opc:Field Name="DataValues" TypeName="ua:DataValue" LengthField="NoOfDataValues" />
  <opc:Field Name="NoOfModificationInfos" TypeName="opc:Int32" />
  <opc:Field Name="ModificationInfos" TypeName="tns:ModificationInfo"
LengthField="NoOfModificationInfos" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryEvent" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfEvents" TypeName="opc:Int32" />
  <opc:Field Name="Events" TypeName="tns:HistoryEventFieldList" LengthField="NoOfEvents" />
</opc:StructuredType>

```

```
<opc:StructuredType Name="HistoryReadRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="HistoryReadDetails" TypeName="ua:ExtensionObject" />
  <opc:Field Name="TimestampsToReturn" TypeName="tns:TimestampsToReturn" />
  <opc:Field Name="ReleaseContinuationPoints" TypeName="opc:Boolean" />
  <opc:Field Name="NoOfNodesToRead" TypeName="opc:Int32" />
  <opc:Field Name="NodesToRead" TypeName="tns:HistoryReadValueId" LengthField="NoOfNodesToRead" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="HistoryReadResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:HistoryReadResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="WriteValue" BaseType="ua:ExtensionObject">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
  <opc:Field Name="AttributeId" TypeName="opc:UInt32" />
  <opc:Field Name="IndexRange" TypeName="opc:String" />
  <opc:Field Name="Value" TypeName="ua:DataValue" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="WriteRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfNodesToWrite" TypeName="opc:Int32" />
  <opc:Field Name="NodesToWrite" TypeName="tns:WriteValue" LengthField="NoOfNodesToWrite" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="WriteResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="HistoryUpdateDetails" BaseType="ua:ExtensionObject">
  <opc:Field Name="NodeId" TypeName="ua:NodeId" />
</opc:StructuredType>
```

```
<opc:EnumeratedType Name="HistoryUpdateType" LengthInBits="32">
  <opc:EnumeratedValue Name="Insert" Value="1" />
  <opc:EnumeratedValue Name="Replace" Value="2" />
  <opc:EnumeratedValue Name="Update" Value="3" />
  <opc:EnumeratedValue Name="Delete" Value="4" />
```

</opc:EnumeratedType>

<opc:EnumeratedType Name="PerformUpdateType" LengthInBits="32">

<opc:EnumeratedValue Name="Insert" Value="1" />

<opc:EnumeratedValue Name="Replace" Value="2" />

<opc:EnumeratedValue Name="Update" Value="3" />

<opc:EnumeratedValue Name="Remove" Value="4" />

</opc:EnumeratedType>

<opc:StructuredType Name="UpdateDataDetails" BaseType="tns:HistoryUpdateDetails">

<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />

<opc:Field Name="PerformInsertReplace" TypeName="tns:PerformUpdateType" />

<opc:Field Name="NoOfUpdateValues" TypeName="opc:Int32" />

<opc:Field Name="UpdateValues" TypeName="ua:DataValue" LengthField="NoOfUpdateValues" />

</opc:StructuredType>

<opc:StructuredType Name="UpdateStructureDataDetails" BaseType="tns:HistoryUpdateDetails">

<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />

<opc:Field Name="PerformInsertReplace" TypeName="tns:PerformUpdateType" />

<opc:Field Name="NoOfUpdateValues" TypeName="opc:Int32" />

<opc:Field Name="UpdateValues" TypeName="ua:DataValue" LengthField="NoOfUpdateValues" />

</opc:StructuredType>

<opc:StructuredType Name="UpdateEventDetails" BaseType="tns:HistoryUpdateDetails">

<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />

<opc:Field Name="PerformInsertReplace" TypeName="tns:PerformUpdateType" />

<opc:Field Name="Filter" TypeName="tns:EventFilter" />

<opc:Field Name="NoOfEventData" TypeName="opc:Int32" />

<opc:Field Name="EventData" TypeName="tns:HistoryEventFieldList" LengthField="NoOfEventData" />

</opc:StructuredType>

<opc:StructuredType Name="DeleteRawModifiedDetails" BaseType="tns:HistoryUpdateDetails">

<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />

<opc:Field Name="IsDeleteModified" TypeName="opc:Boolean" />

<opc:Field Name="StartTime" TypeName="opc:DateTime" />

<opc:Field Name="EndTime" TypeName="opc:DateTime" />

</opc:StructuredType>

<opc:StructuredType Name="DeleteAtTimeDetails" BaseType="tns:HistoryUpdateDetails">

<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />

<opc:Field Name="NoOfReqTimes" TypeName="opc:Int32" />

<opc:Field Name="ReqTimes" TypeName="opc:DateTime" LengthField="NoOfReqTimes" />

</opc:StructuredType>

<opc:StructuredType Name="DeleteEventDetails" BaseType="tns:HistoryUpdateDetails">

<opc:Field Name="NodeId" TypeName="ua:NodeId" SourceType="tns:HistoryUpdateDetails" />

<opc:Field Name="NoOfEventIds" TypeName="opc:Int32" />

<opc:Field Name="EventIds" TypeName="opc:ByteString" LengthField="NoOfEventIds" />

```

</opc:StructuredType>

<opc:StructuredType Name="HistoryUpdateResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="NoOfOperationResults" TypeName="opc:Int32" />
  <opc:Field Name="OperationResults" TypeName="ua:StatusCode" LengthField="NoOfOperationResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryUpdateRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfHistoryUpdateDetails" TypeName="opc:Int32" />
  <opc:Field Name="HistoryUpdateDetails" TypeName="ua:ExtensionObject"
LengthField="NoOfHistoryUpdateDetails" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryUpdateResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:HistoryUpdateResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="CallMethodRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="ObjectId" TypeName="ua:NodeId" />
  <opc:Field Name="MethodId" TypeName="ua:NodeId" />
  <opc:Field Name="NoOfInputArguments" TypeName="opc:Int32" />
  <opc:Field Name="InputArguments" TypeName="ua:Variant" LengthField="NoOfInputArguments" />
</opc:StructuredType>

<opc:StructuredType Name="CallMethodResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="NoOfInputArgumentResults" TypeName="opc:Int32" />
  <opc:Field Name="InputArgumentResults" TypeName="ua:StatusCode"
LengthField="NoOfInputArgumentResults" />
  <opc:Field Name="NoOfInputArgumentDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="InputArgumentDiagnosticInfos" TypeName="ua:DiagnosticInfo"
LengthField="NoOfInputArgumentDiagnosticInfos" />
  <opc:Field Name="NoOfOutputArguments" TypeName="opc:Int32" />
  <opc:Field Name="OutputArguments" TypeName="ua:Variant" LengthField="NoOfOutputArguments" />
</opc:StructuredType>

<opc:StructuredType Name="CallRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfMethodsToCall" TypeName="opc:Int32" />
  <opc:Field Name="MethodsToCall" TypeName="tns:CallMethodRequest" LengthField="NoOfMethodsToCall"

```

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/>
</opc:StructuredType>

<opc:StructuredType Name="CallResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:CallMethodResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:EnumeratedType Name="MonitoringMode" LengthInBits="32">
  <opc:EnumeratedValue Name="Disabled" Value="0" />
  <opc:EnumeratedValue Name="Sampling" Value="1" />
  <opc:EnumeratedValue Name="Reporting" Value="2" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="DataChangeTrigger" LengthInBits="32">
  <opc:EnumeratedValue Name="Status" Value="0" />
  <opc:EnumeratedValue Name="StatusValue" Value="1" />
  <opc:EnumeratedValue Name="StatusValueTimestamp" Value="2" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="DeadbandType" LengthInBits="32">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="Absolute" Value="1" />
  <opc:EnumeratedValue Name="Percent" Value="2" />
</opc:EnumeratedType>

<opc:StructuredType Name="MonitoringFilter" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataChangeFilter" BaseType="tns:MonitoringFilter">
  <opc:Field Name="Trigger" TypeName="tns:DataChangeTrigger" />
  <opc:Field Name="DeadbandType" TypeName="opc:UInt32" />
  <opc:Field Name="DeadbandValue" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="EventFilter" BaseType="tns:MonitoringFilter">
  <opc:Field Name="NoOfSelectClauses" TypeName="opc:Int32" />
  <opc:Field Name="SelectClauses" TypeName="tns:SimpleAttributeOperand" LengthField="NoOfSelectClauses" />
/>
  <opc:Field Name="WhereClause" TypeName="tns:ContentFilter" />
</opc:StructuredType>

<opc:StructuredType Name="AggregateConfiguration" BaseType="ua:ExtensionObject">
  <opc:Field Name="UseServerCapabilitiesDefaults" TypeName="opc:Boolean" />
  <opc:Field Name="TreatUncertainAsBad" TypeName="opc:Boolean" />

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<opc:Field Name="PercentDataBad" TypeName="opc:Byte" />
<opc:Field Name="PercentDataGood" TypeName="opc:Byte" />
<opc:Field Name="UseSlopedExtrapolation" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="AggregateFilter" BaseType="tns:MonitoringFilter">
  <opc:Field Name="StartTime" TypeName="opc:DateTime" />
  <opc:Field Name="AggregateType" TypeName="ua:NodeId" />
  <opc:Field Name="ProcessingInterval" TypeName="opc:Double" />
  <opc:Field Name="AggregateConfiguration" TypeName="tns:AggregateConfiguration" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoringFilterResult" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="EventFilterResult" BaseType="tns:MonitoringFilterResult">
  <opc:Field Name="NoOfSelectClauseResults" TypeName="opc:Int32" />
  <opc:Field Name="SelectClauseResults" TypeName="ua:StatusCode" LengthField="NoOfSelectClauseResults" />
</opc:StructuredType>
  <opc:Field Name="NoOfSelectClauseDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="SelectClauseDiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfSelectClauseDiagnosticInfos" />
  <opc:Field Name="WhereClauseResult" TypeName="tns:ContentFilterResult" />
</opc:StructuredType>

<opc:StructuredType Name="AggregateFilterResult" BaseType="tns:MonitoringFilterResult">
  <opc:Field Name="RevisedStartTime" TypeName="opc:DateTime" />
  <opc:Field Name="RevisedProcessingInterval" TypeName="opc:Double" />
  <opc:Field Name="RevisedAggregateConfiguration" TypeName="tns:AggregateConfiguration" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoringParameters" BaseType="ua:ExtensionObject">
  <opc:Field Name="ClientHandle" TypeName="opc:UInt32" />
  <opc:Field Name="SamplingInterval" TypeName="opc:Double" />
  <opc:Field Name="Filter" TypeName="ua:ExtensionObject" />
  <opc:Field Name="QueueSize" TypeName="opc:UInt32" />
  <opc:Field Name="DiscardOldest" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoredItemCreateRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="ItemToMonitor" TypeName="tns:ReadValueId" />
  <opc:Field Name="MonitoringMode" TypeName="tns:MonitoringMode" />
  <opc:Field Name="RequestedParameters" TypeName="tns:MonitoringParameters" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoredItemCreateResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="MonitoredItemId" TypeName="opc:UInt32" />

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<opc:Field Name="RevisedSamplingInterval" TypeName="opc:Double" />
<opc:Field Name="RevisedQueueSize" TypeName="opc:UInt32" />
<opc:Field Name="FilterResult" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="CreateMonitoredItemsRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="TimestampsToReturn" TypeName="tns:TimestampsToReturn" />
  <opc:Field Name="NoOfItemsToCreate" TypeName="opc:Int32" />
  <opc:Field Name="ItemsToCreate" TypeName="tns:MonitoredItemCreateRequest"
LengthField="NoOfItemsToCreate" />
</opc:StructuredType>

<opc:StructuredType Name="CreateMonitoredItemsResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:MonitoredItemCreateResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoredItemModifyRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="MonitoredItemId" TypeName="opc:UInt32" />
  <opc:Field Name="RequestedParameters" TypeName="tns:MonitoringParameters" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoredItemModifyResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="RevisedSamplingInterval" TypeName="opc:Double" />
  <opc:Field Name="RevisedQueueSize" TypeName="opc:UInt32" />
  <opc:Field Name="FilterResult" TypeName="ua:ExtensionObject" />
</opc:StructuredType>

<opc:StructuredType Name="ModifyMonitoredItemsRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="TimestampsToReturn" TypeName="tns:TimestampsToReturn" />
  <opc:Field Name="NoOfItemsToModify" TypeName="opc:Int32" />
  <opc:Field Name="ItemsToModify" TypeName="tns:MonitoredItemModifyRequest"
LengthField="NoOfItemsToModify" />
</opc:StructuredType>

<opc:StructuredType Name="ModifyMonitoredItemsResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:MonitoredItemModifyResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />

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    <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="SetMonitoringModeRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="MonitoringMode" TypeName="tns:MonitoringMode" />
  <opc:Field Name="NoOfMonitoredItemIds" TypeName="opc:Int32" />
  <opc:Field Name="MonitoredItemIds" TypeName="opc:UInt32" LengthField="NoOfMonitoredItemIds" />
</opc:StructuredType>

<opc:StructuredType Name="SetMonitoringModeResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="SetTriggeringRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="TriggeringItemId" TypeName="opc:UInt32" />
  <opc:Field Name="NoOfLinksToAdd" TypeName="opc:Int32" />
  <opc:Field Name="LinksToAdd" TypeName="opc:UInt32" LengthField="NoOfLinksToAdd" />
  <opc:Field Name="NoOfLinksToRemove" TypeName="opc:Int32" />
  <opc:Field Name="LinksToRemove" TypeName="opc:UInt32" LengthField="NoOfLinksToRemove" />
</opc:StructuredType>

<opc:StructuredType Name="SetTriggeringResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfAddResults" TypeName="opc:Int32" />
  <opc:Field Name="AddResults" TypeName="ua:StatusCode" LengthField="NoOfAddResults" />
  <opc:Field Name="NoOfAddDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="AddDiagnosticInfos" TypeName="ua:DiagnosticInfo"
LengthField="NoOfAddDiagnosticInfos" />
  <opc:Field Name="NoOfRemoveResults" TypeName="opc:Int32" />
  <opc:Field Name="RemoveResults" TypeName="ua:StatusCode" LengthField="NoOfRemoveResults" />
  <opc:Field Name="NoOfRemoveDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="RemoveDiagnosticInfos" TypeName="ua:DiagnosticInfo"
LengthField="NoOfRemoveDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteMonitoredItemsRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="NoOfMonitoredItemIds" TypeName="opc:Int32" />
  <opc:Field Name="MonitoredItemIds" TypeName="opc:UInt32" LengthField="NoOfMonitoredItemIds" />

```

</opc:StructuredType>

```
<opc:StructuredType Name="DeleteMonitoredItemsResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="CreateSubscriptionRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="RequestedPublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="RequestedLifetimeCount" TypeName="opc:UInt32" />
  <opc:Field Name="RequestedMaxKeepAliveCount" TypeName="opc:UInt32" />
  <opc:Field Name="MaxNotificationsPerPublish" TypeName="opc:UInt32" />
  <opc:Field Name="PublishingEnabled" TypeName="opc:Boolean" />
  <opc:Field Name="Priority" TypeName="opc:Byte" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="CreateSubscriptionResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="RevisedPublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="RevisedLifetimeCount" TypeName="opc:UInt32" />
  <opc:Field Name="RevisedMaxKeepAliveCount" TypeName="opc:UInt32" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="ModifySubscriptionRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="RequestedPublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="RequestedLifetimeCount" TypeName="opc:UInt32" />
  <opc:Field Name="RequestedMaxKeepAliveCount" TypeName="opc:UInt32" />
  <opc:Field Name="MaxNotificationsPerPublish" TypeName="opc:UInt32" />
  <opc:Field Name="Priority" TypeName="opc:Byte" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="ModifySubscriptionResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="RevisedPublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="RevisedLifetimeCount" TypeName="opc:UInt32" />
  <opc:Field Name="RevisedMaxKeepAliveCount" TypeName="opc:UInt32" />
</opc:StructuredType>
```

```
<opc:StructuredType Name="SetPublishingModeRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="PublishingEnabled" TypeName="opc:Boolean" />
</opc:StructuredType>
```

```

<opc:Field Name="NoOfSubscriptionIds" TypeName="opc:Int32" />
<opc:Field Name="SubscriptionIds" TypeName="opc:UInt32" LengthField="NoOfSubscriptionIds" />
</opc:StructuredType>

<opc:StructuredType Name="SetPublishingModeResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="NotificationMessage" BaseType="ua:ExtensionObject">
  <opc:Field Name="SequenceNumber" TypeName="opc:UInt32" />
  <opc:Field Name="PublishTime" TypeName="opc:DateTime" />
  <opc:Field Name="NoOfNotificationData" TypeName="opc:Int32" />
  <opc:Field Name="NotificationData" TypeName="ua:ExtensionObject" LengthField="NoOfNotificationData" />
</opc:StructuredType>

<opc:StructuredType Name="NotificationData" BaseType="ua:ExtensionObject">
</opc:StructuredType>

<opc:StructuredType Name="DataChangeNotification" BaseType="tns:NotificationData">
  <opc:Field Name="NoOfMonitoredItems" TypeName="opc:Int32" />
  <opc:Field Name="MonitoredItems" TypeName="tns:MonitoredItemNotification"
LengthField="NoOfMonitoredItems" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="MonitoredItemNotification" BaseType="ua:ExtensionObject">
  <opc:Field Name="ClientHandle" TypeName="opc:UInt32" />
  <opc:Field Name="Value" TypeName="ua:DataValue" />
</opc:StructuredType>

<opc:StructuredType Name="EventNotificationList" BaseType="tns:NotificationData">
  <opc:Field Name="NoOfEvents" TypeName="opc:Int32" />
  <opc:Field Name="Events" TypeName="tns:EventFieldList" LengthField="NoOfEvents" />
</opc:StructuredType>

<opc:StructuredType Name="EventFieldList" BaseType="ua:ExtensionObject">
  <opc:Field Name="ClientHandle" TypeName="opc:UInt32" />
  <opc:Field Name="NoOfEventFields" TypeName="opc:Int32" />
  <opc:Field Name="EventFields" TypeName="ua:Variant" LengthField="NoOfEventFields" />
</opc:StructuredType>

<opc:StructuredType Name="HistoryEventFieldList" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfEventFields" TypeName="opc:Int32" />

```

```

    <opc:Field Name="EventFields" TypeName="ua:Variant" LengthField="NoOfEventFields" />
</opc:StructuredType>

<opc:StructuredType Name="StatusChangeNotification" BaseType="tns:NotificationData">
  <opc:Field Name="Status" TypeName="ua:StatusCode" />
  <opc:Field Name="DiagnosticInfo" TypeName="ua:DiagnosticInfo" />
</opc:StructuredType>

<opc:StructuredType Name="SubscriptionAcknowledgement" BaseType="ua:ExtensionObject">
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="SequenceNumber" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="PublishRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfSubscriptionAcknowledgements" TypeName="opc:Int32" />
  <opc:Field Name="SubscriptionAcknowledgements" TypeName="tns:SubscriptionAcknowledgement"
LengthField="NoOfSubscriptionAcknowledgements" />
</opc:StructuredType>

<opc:StructuredType Name="PublishResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="NoOfAvailableSequenceNumbers" TypeName="opc:Int32" />
  <opc:Field Name="AvailableSequenceNumbers" TypeName="opc:UInt32"
LengthField="NoOfAvailableSequenceNumbers" />
  <opc:Field Name="MoreNotifications" TypeName="opc:Boolean" />
  <opc:Field Name="NotificationMessage" TypeName="tns:NotificationMessage" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="RepublishRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="RetransmitSequenceNumber" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="RepublishResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NotificationMessage" TypeName="tns:NotificationMessage" />
</opc:StructuredType>

<opc:StructuredType Name="TransferResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="NoOfAvailableSequenceNumbers" TypeName="opc:Int32" />

```

```

    <opc:Field Name="AvailableSequenceNumbers" TypeName="opc:UInt32"
LengthField="NoOfAvailableSequenceNumbers" />
</opc:StructuredType>

<opc:StructuredType Name="TransferSubscriptionsRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfSubscriptionIds" TypeName="opc:Int32" />
  <opc:Field Name="SubscriptionIds" TypeName="opc:UInt32" LengthField="NoOfSubscriptionIds" />
  <opc:Field Name="SendInitialValues" TypeName="opc:Boolean" />
</opc:StructuredType>

<opc:StructuredType Name="TransferSubscriptionsResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="tns:TransferResult" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteSubscriptionsRequest" BaseType="ua:ExtensionObject">
  <opc:Field Name="RequestHeader" TypeName="tns:RequestHeader" />
  <opc:Field Name="NoOfSubscriptionIds" TypeName="opc:Int32" />
  <opc:Field Name="SubscriptionIds" TypeName="opc:UInt32" LengthField="NoOfSubscriptionIds" />
</opc:StructuredType>

<opc:StructuredType Name="DeleteSubscriptionsResponse" BaseType="ua:ExtensionObject">
  <opc:Field Name="ResponseHeader" TypeName="tns:ResponseHeader" />
  <opc:Field Name="NoOfResults" TypeName="opc:Int32" />
  <opc:Field Name="Results" TypeName="ua:StatusCode" LengthField="NoOfResults" />
  <opc:Field Name="NoOfDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="DiagnosticInfos" TypeName="ua:DiagnosticInfo" LengthField="NoOfDiagnosticInfos" />
</opc:StructuredType>

<opc:StructuredType Name="BuildInfo" BaseType="ua:ExtensionObject">
  <opc:Field Name="ProductUri" TypeName="opc:String" />
  <opc:Field Name="ManufacturerName" TypeName="opc:String" />
  <opc:Field Name="ProductName" TypeName="opc:String" />
  <opc:Field Name="SoftwareVersion" TypeName="opc:String" />
  <opc:Field Name="BuildNumber" TypeName="opc:String" />
  <opc:Field Name="BuildDate" TypeName="opc:DateTime" />
</opc:StructuredType>

<opc:EnumeratedType Name="RedundancySupport" LengthInBits="32">
  <opc:EnumeratedValue Name="None" Value="0" />
  <opc:EnumeratedValue Name="Cold" Value="1" />
  <opc:EnumeratedValue Name="Warm" Value="2" />
  <opc:EnumeratedValue Name="Hot" Value="3" />
  <opc:EnumeratedValue Name="Transparent" Value="4" />

```

```

    <opc:EnumeratedValue Name="HotAndMirrored" Value="5" />
</opc:EnumeratedType>

<opc:EnumeratedType Name="ServerState" LengthInBits="32">
  <opc:EnumeratedValue Name="Running" Value="0" />
  <opc:EnumeratedValue Name="Failed" Value="1" />
  <opc:EnumeratedValue Name="NoConfiguration" Value="2" />
  <opc:EnumeratedValue Name="Suspended" Value="3" />
  <opc:EnumeratedValue Name="Shutdown" Value="4" />
  <opc:EnumeratedValue Name="Test" Value="5" />
  <opc:EnumeratedValue Name="CommunicationFault" Value="6" />
  <opc:EnumeratedValue Name="Unknown" Value="7" />
</opc:EnumeratedType>

<opc:StructuredType Name="RedundantServerDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="ServerId" TypeName="opc:String" />
  <opc:Field Name="ServiceLevel" TypeName="opc:Byte" />
  <opc:Field Name="ServerState" TypeName="tns:ServerState" />
</opc:StructuredType>

<opc:StructuredType Name="EndpointUrlListDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="NoOfEndpointUrlList" TypeName="opc:Int32" />
  <opc:Field Name="EndpointUrlList" TypeName="opc:String" LengthField="NoOfEndpointUrlList" />
</opc:StructuredType>

<opc:StructuredType Name="NetworkGroupDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="ServerUri" TypeName="opc:String" />
  <opc:Field Name="NoOfNetworkPaths" TypeName="opc:Int32" />
  <opc:Field Name="NetworkPaths" TypeName="tns:EndpointUrlListDataType"
LengthField="NoOfNetworkPaths" />
</opc:StructuredType>

<opc:StructuredType Name="SamplingIntervalDiagnosticsDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="SamplingInterval" TypeName="opc:Double" />
  <opc:Field Name="MonitoredItemCount" TypeName="opc:UInt32" />
  <opc:Field Name="MaxMonitoredItemCount" TypeName="opc:UInt32" />
  <opc:Field Name="DisabledMonitoredItemCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="ServerDiagnosticsSummaryDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="ServerViewCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="CumulatedSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="SecurityRejectedSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="RejectedSessionCount" TypeName="opc:UInt32" />
  <opc:Field Name="SessionTimeoutCount" TypeName="opc:UInt32" />
  <opc:Field Name="SessionAbortCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentSubscriptionCount" TypeName="opc:UInt32" />

```

```

<opc:Field Name="CumulatedSubscriptionCount" TypeName="opc:UInt32" />
<opc:Field Name="PublishingIntervalCount" TypeName="opc:UInt32" />
<opc:Field Name="SecurityRejectedRequestsCount" TypeName="opc:UInt32" />
<opc:Field Name="RejectedRequestsCount" TypeName="opc:UInt32" />
</opc:StructuredType>

<opc:StructuredType Name="ServerStatusDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="StartTime" TypeName="opc:DateTime" />
  <opc:Field Name="CurrentTime" TypeName="opc:DateTime" />
  <opc:Field Name="State" TypeName="tns:ServerState" />
  <opc:Field Name="BuildInfo" TypeName="tns:BuildInfo" />
  <opc:Field Name="SecondsTillShutdown" TypeName="opc:UInt32" />
  <opc:Field Name="ShutdownReason" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:StructuredType Name="SessionDiagnosticsDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="SessionName" TypeName="opc:String" />
  <opc:Field Name="ClientDescription" TypeName="tns:ApplicationDescription" />
  <opc:Field Name="ServerUri" TypeName="opc:String" />
  <opc:Field Name="EndpointUrl" TypeName="opc:String" />
  <opc:Field Name="NoOfLocaleIds" TypeName="opc:Int32" />
  <opc:Field Name="LocaleIds" TypeName="opc:String" LengthField="NoOfLocaleIds" />
  <opc:Field Name="ActualSessionTimeout" TypeName="opc:Double" />
  <opc:Field Name="MaxResponseMessageSize" TypeName="opc:UInt32" />
  <opc:Field Name="ClientConnectionTime" TypeName="opc:DateTime" />
  <opc:Field Name="ClientLastContactTime" TypeName="opc:DateTime" />
  <opc:Field Name="CurrentSubscriptionsCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentMonitoredItemsCount" TypeName="opc:UInt32" />
  <opc:Field Name="CurrentPublishRequestsInQueue" TypeName="opc:UInt32" />
  <opc:Field Name="TotalRequestCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="UnauthorizedRequestCount" TypeName="opc:UInt32" />
  <opc:Field Name="ReadCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="HistoryReadCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="WriteCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="HistoryUpdateCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="CallCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="CreateMonitoredItemsCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="ModifyMonitoredItemsCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="SetMonitoringModeCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="SetTriggeringCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="DeleteMonitoredItemsCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="CreateSubscriptionCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="ModifySubscriptionCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="SetPublishingModeCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="PublishCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="RepublishCount" TypeName="tns:ServiceCounterDataType" />
  <opc:Field Name="TransferSubscriptionsCount" TypeName="tns:ServiceCounterDataType" />

```

```

<opc:Field Name="DeleteSubscriptionsCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="AddNodesCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="AddReferencesCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="DeleteNodesCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="DeleteReferencesCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="BrowseCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="BrowseNextCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="TranslateBrowsePathsToNodeIdsCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="QueryFirstCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="QueryNextCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="RegisterNodesCount" TypeName="tns:ServiceCounterDataType" />
<opc:Field Name="UnregisterNodesCount" TypeName="tns:ServiceCounterDataType" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="SessionSecurityDiagnosticsDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="ClientUserIdOfSession" TypeName="opc:String" />
  <opc:Field Name="NoOfClientUserIdHistory" TypeName="opc:Int32" />
  <opc:Field Name="ClientUserIdHistory" TypeName="opc:String" LengthField="NoOfClientUserIdHistory" />
  <opc:Field Name="AuthenticationMechanism" TypeName="opc:String" />
  <opc:Field Name="Encoding" TypeName="opc:String" />
  <opc:Field Name="TransportProtocol" TypeName="opc:String" />
  <opc:Field Name="SecurityMode" TypeName="tns:MessageSecurityMode" />
  <opc:Field Name="SecurityPolicyUri" TypeName="opc:String" />
  <opc:Field Name="ClientCertificate" TypeName="opc:ByteString" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="ServiceCounterDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="TotalCount" TypeName="opc:UInt32" />
  <opc:Field Name="ErrorCount" TypeName="opc:UInt32" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="StatusResult" BaseType="ua:ExtensionObject">
  <opc:Field Name="StatusCode" TypeName="ua:StatusCode" />
  <opc:Field Name="DiagnosticInfo" TypeName="ua:DiagnosticInfo" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="SubscriptionDiagnosticsDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="SessionId" TypeName="ua:NodeId" />
  <opc:Field Name="SubscriptionId" TypeName="opc:UInt32" />
  <opc:Field Name="Priority" TypeName="opc:Byte" />
  <opc:Field Name="PublishingInterval" TypeName="opc:Double" />
  <opc:Field Name="MaxKeepAliveCount" TypeName="opc:UInt32" />
  <opc:Field Name="MaxLifetimeCount" TypeName="opc:UInt32" />
  <opc:Field Name="MaxNotificationsPerPublish" TypeName="opc:UInt32" />
  <opc:Field Name="PublishingEnabled" TypeName="opc:Boolean" />
  <opc:Field Name="ModifyCount" TypeName="opc:UInt32" />
  <opc:Field Name="EnableCount" TypeName="opc:UInt32" />

```

```

<opc:Field Name="DisableCount" TypeName="opc:UInt32" />
<opc:Field Name="RepublishRequestCount" TypeName="opc:UInt32" />
<opc:Field Name="RepublishMessageRequestCount" TypeName="opc:UInt32" />
<opc:Field Name="RepublishMessageCount" TypeName="opc:UInt32" />
<opc:Field Name="TransferRequestCount" TypeName="opc:UInt32" />
<opc:Field Name="TransferredToAltClientCount" TypeName="opc:UInt32" />
<opc:Field Name="TransferredToSameClientCount" TypeName="opc:UInt32" />
<opc:Field Name="PublishRequestCount" TypeName="opc:UInt32" />
<opc:Field Name="DataChangeNotificationsCount" TypeName="opc:UInt32" />
<opc:Field Name="EventNotificationsCount" TypeName="opc:UInt32" />
<opc:Field Name="NotificationsCount" TypeName="opc:UInt32" />
<opc:Field Name="LatePublishRequestCount" TypeName="opc:UInt32" />
<opc:Field Name="CurrentKeepAliveCount" TypeName="opc:UInt32" />
<opc:Field Name="CurrentLifetimeCount" TypeName="opc:UInt32" />
<opc:Field Name="UnacknowledgedMessageCount" TypeName="opc:UInt32" />
<opc:Field Name="DiscardedMessageCount" TypeName="opc:UInt32" />
<opc:Field Name="MonitoredItemCount" TypeName="opc:UInt32" />
<opc:Field Name="DisabledMonitoredItemCount" TypeName="opc:UInt32" />
<opc:Field Name="MonitoringQueueOverflowCount" TypeName="opc:UInt32" />
<opc:Field Name="NextSequenceNumber" TypeName="opc:UInt32" />
<opc:Field Name="EventQueueOverFlowCount" TypeName="opc:UInt32" />
</opc:StructuredType>

```

```

<opc:EnumeratedType Name="ModelChangeStructureVerbMask" LengthInBits="32">
  <opc:EnumeratedValue Name="NodeAdded" Value="1" />
  <opc:EnumeratedValue Name="NodeDeleted" Value="2" />
  <opc:EnumeratedValue Name="ReferenceAdded" Value="4" />
  <opc:EnumeratedValue Name="ReferenceDeleted" Value="8" />
  <opc:EnumeratedValue Name="DataTypeChanged" Value="16" />
</opc:EnumeratedType>

```

```

<opc:StructuredType Name="ModelChangeStructureDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Affected" TypeName="ua:NodeId" />
  <opc:Field Name="AffectedType" TypeName="ua:NodeId" />
  <opc:Field Name="Verb" TypeName="opc:Byte" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="SemanticChangeStructureDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Affected" TypeName="ua:NodeId" />
  <opc:Field Name="AffectedType" TypeName="ua:NodeId" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="Range" BaseType="ua:ExtensionObject">
  <opc:Field Name="Low" TypeName="opc:Double" />
  <opc:Field Name="High" TypeName="opc:Double" />
</opc:StructuredType>

```

```

<opc:StructuredType Name="EUInformation" BaseType="ua:ExtensionObject">

```

```

<opc:Field Name="NamespaceUri" TypeName="opc:String" />
<opc:Field Name="UnitId" TypeName="opc:Int32" />
<opc:Field Name="DisplayName" TypeName="ua:LocalizedText" />
<opc:Field Name="Description" TypeName="ua:LocalizedText" />
</opc:StructuredType>

<opc:EnumeratedType Name="AxisScaleEnumeration" LengthInBits="32">
  <opc:EnumeratedValue Name="Linear" Value="0" />
  <opc:EnumeratedValue Name="Log" Value="1" />
  <opc:EnumeratedValue Name="Ln" Value="2" />
</opc:EnumeratedType>

<opc:StructuredType Name="ComplexNumberType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Real" TypeName="opc:Float" />
  <opc:Field Name="Imaginary" TypeName="opc:Float" />
</opc:StructuredType>

<opc:StructuredType Name="DoubleComplexNumberType" BaseType="ua:ExtensionObject">
  <opc:Field Name="Real" TypeName="opc:Double" />
  <opc:Field Name="Imaginary" TypeName="opc:Double" />
</opc:StructuredType>

<opc:StructuredType Name="AxisInformation" BaseType="ua:ExtensionObject">
  <opc:Field Name="EngineeringUnits" TypeName="tns:EUInformation" />
  <opc:Field Name="EURange" TypeName="tns:Range" />
  <opc:Field Name="Title" TypeName="ua:LocalizedText" />
  <opc:Field Name="AxisScaleType" TypeName="tns:AxisScaleEnumeration" />
  <opc:Field Name="NoOfAxisSteps" TypeName="opc:Int32" />
  <opc:Field Name="AxisSteps" TypeName="opc:Double" LengthField="NoOfAxisSteps" />
</opc:StructuredType>

<opc:StructuredType Name="XVType" BaseType="ua:ExtensionObject">
  <opc:Field Name="X" TypeName="opc:Double" />
  <opc:Field Name="Value" TypeName="opc:Float" />
</opc:StructuredType>

<opc:StructuredType Name="ProgramDiagnosticDataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="CreateSessionId" TypeName="ua:NodeId" />
  <opc:Field Name="CreateClientName" TypeName="opc:String" />
  <opc:Field Name="InvocationCreationTime" TypeName="opc:DateTime" />
  <opc:Field Name="LastTransitionTime" TypeName="opc:DateTime" />
  <opc:Field Name="LastMethodCall" TypeName="opc:String" />
  <opc:Field Name="LastMethodSessionId" TypeName="ua:NodeId" />
  <opc:Field Name="NoOfLastMethodInputArguments" TypeName="opc:Int32" />
  <opc:Field Name="LastMethodInputArguments" TypeName="tns:Argument"
LengthField="NoOfLastMethodInputArguments" />
  <opc:Field Name="NoOfLastMethodOutputArguments" TypeName="opc:Int32" />
  <opc:Field Name="LastMethodOutputArguments" TypeName="tns:Argument"

```

```

LengthField="NoOfLastMethodOutputArguments" />
  <opc:Field Name="LastMethodCallTime" TypeName="opc:DateTime" />
  <opc:Field Name="LastMethodReturnStatus" TypeName="tns:StatusResult" />
</opc:StructuredType>

<opc:StructuredType Name="ProgramDiagnostic2DataType" BaseType="ua:ExtensionObject">
  <opc:Field Name="CreateSessionId" TypeName="ua:NodeId" />
  <opc:Field Name="CreateClientName" TypeName="opc:String" />
  <opc:Field Name="InvocationCreationTime" TypeName="opc:DateTime" />
  <opc:Field Name="LastTransitionTime" TypeName="opc:DateTime" />
  <opc:Field Name="LastMethodCall" TypeName="opc:String" />
  <opc:Field Name="LastMethodSessionId" TypeName="ua:NodeId" />
  <opc:Field Name="NoOfLastMethodInputArguments" TypeName="opc:Int32" />
  <opc:Field Name="LastMethodInputArguments" TypeName="tns:Argument"
LengthField="NoOfLastMethodInputArguments" />
  <opc:Field Name="NoOfLastMethodOutputArguments" TypeName="opc:Int32" />
  <opc:Field Name="LastMethodOutputArguments" TypeName="tns:Argument"
LengthField="NoOfLastMethodOutputArguments" />
  <opc:Field Name="NoOfLastMethodInputValues" TypeName="opc:Int32" />
  <opc:Field Name="LastMethodInputValues" TypeName="ua:Variant"
LengthField="NoOfLastMethodInputValues" />
  <opc:Field Name="NoOfLastMethodOutputValues" TypeName="opc:Int32" />
  <opc:Field Name="LastMethodOutputValues" TypeName="ua:Variant"
LengthField="NoOfLastMethodOutputValues" />
  <opc:Field Name="LastMethodCallTime" TypeName="opc:DateTime" />
  <opc:Field Name="LastMethodReturnStatus" TypeName="tns:StatusResult" />
</opc:StructuredType>

<opc:StructuredType Name="Annotation" BaseType="ua:ExtensionObject">
  <opc:Field Name="Message" TypeName="opc:String" />
  <opc:Field Name="UserName" TypeName="opc:String" />
  <opc:Field Name="AnnotationTime" TypeName="opc:DateTime" />
</opc:StructuredType>

<opc:EnumeratedType Name="ExceptionDeviationFormat" LengthInBits="32">
  <opc:EnumeratedValue Name="AbsoluteValue" Value="0" />
  <opc:EnumeratedValue Name="PercentOfValue" Value="1" />
  <opc:EnumeratedValue Name="PercentOfRange" Value="2" />
  <opc:EnumeratedValue Name="PercentOfEURange" Value="3" />
  <opc:EnumeratedValue Name="Unknown" Value="4" />
</opc:EnumeratedType>

</opc:TypeDictionary>

```

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```
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under certain conditions; type `show c' for details.
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## 1.49 azure-iot-sdk-c 1.3.9

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Upstream-Name: azure-iot-sdk-c

Source: <https://github.com/Azure/azure-iot-sdk-c.git>

Files: \*

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Upstream-Name: iotHub-client-sample-firmware-update

Source: <https://github.com/Azure/azure-iot-sdks.git>

Files: \*

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## 1.56 apk-tools 2.10.5-r2

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## 1.62 balanced-match 1.0.0

## 1.63 glob 7.1.6

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# 1.65 debug 3.2.6

# 1.66 moment-timezone 0.5.28

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## 1.82 popsicle-content-encoding 1.0.0

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## 1.85 whatwg-fetch 2.0.4

## 1.86 prettier 2.0.2

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## 1.87 servie 4.3.2

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## 1.88 popsicle-cookie 1.0.0

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