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Version 2.1, February 1999

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1.3 minizip 1.1

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MiniZip - Copyright (c) 1998-2010 - by Gilles Vollant - version 1.1 64 bits from Mathias Svensson

Introduction

MiniZip 1.1 is built from MiniZip 1.0 by Gilles Vollant (<http://www.winimage.com/zLibDll/minizip.html>)

When adding ZIP64 support into minizip it would result into risk of breaking compatibility with minizip 1.0. All possible work was done for compatibility.

Background

When adding ZIP64 support Mathias Svensson found that Even Rouault have added ZIP64 support for unzip.c into minizip for a open source project called gdal (<http://www.gdal.org/>)

That was used as a starting point. And after that ZIP64 support was added to zip.c some refactoring and code cleanup was also done.

Changed from MiniZip 1.0 to MiniZip 1.1

- * Added ZIP64 support for unzip (by Even Rouault)
- * Added ZIP64 support for zip (by Mathias Svensson)
- * Reverted some changed that Even Rouault did.
- * Bunch of patches received from Gulles Vollant that he received for MiniZip from various users.
- * Added unzip patch for BZIP Compression method (patch create by Daniel Borca)
- * Added BZIP Compress method for zip
- * Did some refactoring and code cleanup

Credits

Gilles Vollant - Original MiniZip author
Even Rouault - ZIP64 unzip Support
Daniel Borca - BZip Compression method support in unzip
Mathias Svensson - ZIP64 zip support
Mathias Svensson - BZip Compression method support in zip

Resources

ZipLayout <http://result42.com/projects/ZipFileLayout>

Command line tool for Windows that shows the layout and information of the headers in a zip archive.
Used when debugging and validating the creation of zip files using MiniZip64

ZIP App Note <http://www.pkware.com/documents/casestudies/APPNOTE.TXT>
Zip File specification

Notes.

- * To be able to use BZip compression method in zip64.c or unzip64.c the BZIP2 lib is needed and HAVE_BZIP2 need to be defined.

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Found in path(s):

* /opt/ws_local/PERMITS_SQL/1081995793_1597853129.04/0/f2i-consulting-minizip-1-1-0-g835d6e4-tar-gz/F2I-Consulting-Minizip-835d6e4/MiniZip64_info.txt

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/* zip.h -- IO on .zip files using zlib

Version 1.1, February 14h, 2010

part of the MiniZip project - (<http://www.winimage.com/zLibDll/minizip.html>)

Copyright (C) 1998-2010 Gilles Vollant (minizip) (<http://www.winimage.com/zLibDll/minizip.html>)

Modifications for Zip64 support

Copyright (C) 2009-2010 Mathias Svensson (<http://result42.com>)

For more info read MiniZip_info.txt

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Changes

See header of zip.h

*/

Found in path(s):

* /opt/ws_local/PERMITS_SQL/1081995793_1597853129.04/0/f2i-consulting-minizip-1-1-0-g835d6e4-tar-gz/F2I-Consulting-Minizip-835d6e4/zip.h

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/* unzip.c -- IO for uncompress .zip files using zlib

Version 1.1, February 14h, 2010

part of the MiniZip project - (<http://www.winimage.com/zLibDll/minizip.html>)

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Modifications of Unzip for Zip64

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Modifications for Zip64 support on both zip and unzip

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For more info read MiniZip_info.txt

Decryption code comes from crypt.c by Info-ZIP but has been greatly reduced in terms of compatibility with older software. The following is from the original crypt.c.

Code woven in by Terry Thorsen 1/2003.

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See the accompanying

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(the contents of which are also included in zip.h) for terms of use.
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crypt.c (full version) by Info-ZIP. Last revised: [see crypt.h]

The encryption/decryption parts of this source code (as opposed to the
non-echoing password parts) were originally written in Europe. The
whole source package can be freely distributed, including from the USA.
(Prior to January 2000, re-export from the US was a violation of US law.)

This encryption code is a direct transcription of the algorithm from
Roger Schlafly, described by Phil Katz in the file appnote.txt. This
file (appnote.txt) is distributed with the PKZIP program (even in the
version without encryption capabilities).

Changes in unzip.c

2007-2008 - Even Rouault - Addition of cpl_unzGetCurrentFileZStreamPos
2007-2008 - Even Rouault - Decoration of symbol names unz* -> cpl_unz*
2007-2008 - Even Rouault - Remove old C style function prototypes
2007-2008 - Even Rouault - Add unzip support for ZIP64

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Oct-2009 - Mathias Svensson - Removed cpl_* from symbol names (Even Rouault added them but since this is
now moved to a new project (minizip64) I renamed them again).

Oct-2009 - Mathias Svensson - Fixed problem if uncompressed size was > 4G and compressed size was <4G
should only read the compressed/uncompressed size from the Zip64 format if
the size from normal header was 0xFFFFFFFF

Oct-2009 - Mathias Svensson - Applied some bug fixes from patches received from Gilles Vollant

Oct-2009 - Mathias Svensson - Applied support to unzip files with compression method
BZIP2 (bzip2 lib is required)

Patch created by Daniel Borca

Jan-2010 - back to unzip and minizip 1.0 name scheme, with compatibility layer

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*/

Found in path(s):

* /opt/ws_local/PERMITS_SQL/1081995793_1597853129.04/0/f2i-consulting-minizip-1-1-0-g835d6e4-tar-gz/F2I-
Consulting-Minizip-835d6e4/unzip.c

No license file was found, but licenses were detected in source scan.

/* unzip.h -- IO for uncompress .zip files using zlib
Version 1.1, February 14h, 2010
part of the MiniZip project - (<http://www.winimage.com/zLibDll/minizip.html>)

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Changes

See header of unzip64.c

*/

Found in path(s):

* /opt/ws_local/PERMITS_SQL/1081995793_1597853129.04/0/f2i-consulting-minizip-1-1-0-g835d6e4-tar-gz/F2I-Consulting-Minizip-835d6e4/unzip.h

1.4 rapidjson 1.1.0

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1.5 net-snmp 5.9

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1.6 mosquito 1.6.12

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1.7 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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1.8 popsicle-cookie 1.0.0

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1.9 cpp-httpplib 0.7.8

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1.10 acatl 0.2.0

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1.11 popt 1.18-r0

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1.12 fmt 7.0.1

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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.

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|----------------|--------------|-----------|------------|---------------------|
| 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 |
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| 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 |

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|-------|-------|------|-----|-----|
| 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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1.14 azure-iot-sdk-c LTS_07_2020_Ref01

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Upstream-Name: azure-iot-sdk-c
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Upstream-Name: iotHub-client-sample-firmware-update

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

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1.16 sqlite 3.35.5

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1.17 pax-utils 1.3.3-r0

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1.18 musl 1.2.2-r7

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Ada Worcester
Alex Dowad
Alex Suykov
Alexander Monakov
Andre McCurdy
Andrew Kelley
Anthony G. Basile
Aric Belsito
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1.19 apk-tools 2.12.7-r3

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bzip2/libbzip2 version 1.0.8 of 13 July 2019

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Aleksey Gurtovoy (agurtovoy@meta-comm.com)
Andrei Alexandrescu (andrewalex - at - hotmail.com) (See Boost list message of August 12, 2004 11:06:58 AM EST)
Andrew Lumsdaine ()
Anthony Williams (anthony -at- justsoftwaresolutions.co.uk)
Beman Dawes (bdawes@acm.org)
Brad King (brad.king -at- kitware.com) (See Boost list message of Wed, 21 Jul 2004 11:15:46 -0400)
Brian Osman (osman -at- vvisions.com) (See CVS log)
Bruce Barr (schmoost -at- yahoo.com) (See Boost list of Mon, 16 Aug 2004 15:06:43 -0500)
Bruno da Silva de Oliveira (bruno - at - esss.com.br)
Christain Engstrom (christian.engstrom -at- glindra.org) (See Boost list message of Mon, 30 Aug 2004 14:31:49 +0200)
Cromwell D Enage (sponage -at- yahoo.com) (See Boost list message of August 12, 2004 11:49:13 AM EST)
Dan Gohman (djg -at- cray.com) (See Boost list message of Sat, 21 Aug 2004 10:54:59 +0100)
Dan Nuffer (dan -at- nuffer.name)
Daniel Frey (d.frey -at- gmx.de, daniel.frey -at- aixigo.de)
Daniel Nuffer (dan -at- nuffer.name)
Darin Adler (darin -at- bentspoon.com) (Email to Andreas Huber, see change log)
Daryle Walker (darylew - at - hotmail.com)
Dave Abrahams (dave@boost-consulting.com)
Dave Moore (dmoore -at- viefinancial.com) (See Boost list message of 18 Dec 2003 15:35:50 -0500)
David Abrahams (dave@boost-consulting.com)
Dietmar Kuehl (dietmar_kuehl -at- yahoo.com) (Email to Andreas Huber, see change log)
Douglas Gregor (gregod -at- cs.rpi.edu, dgregor -at- cs.indiana.edu, doug.gregor -at- gmail.com)
Dr John Maddock (john - at - johnmaddock.co.uk)
Edward D. Brey (brey -at- ductape.net) (Email to Andreas Huber, see change log)
Eric Ford (un5o6n902 -at- sneakemail.com) (See Boost list message of Sun, 15 Aug 2004 10:29:13 +0100)
Eric Friedman (ebf@users.sourceforge.net)
Eric Niebler (eric@boost-consulting.com)
Fernando
Cacciola (fernando_cacciola@ciudad.com.ar)
Fernando Luis Cacciola Carballal (fernando_cacciola@ciudad.com.ar)
Francois Faure (Francois.Faure -at- imag.fr) (See CVS log)
Gary Powell (powellg - at - amazon.com) (See Boost list message of 10 Feb 2004 14:22:46 -0800)
Gennadiy Rozental (rogeeff -at- mail.com) (Email to Andreas Huber, see change log)
Gottfried Ganssaue (Gottfried.Ganssaue -at- HAUFE.DE) (See Boost List message of Mon, 16 Aug 2004 10:09:19 +0200)
Gottfried Ganaue (Gottfried.Ganssaue -at- HAUFE.DE) (Alternative spelling of Gottfried Ganssaue)
Greg Colvin (gregory.colvin -at- oracle.com) (See Boost list message of Sat, 14 Aug 2004 10:57:00 +0100)
Gregory Colvin (gregory.colvin -at- oracle.com) (See Boost list message of Sat, 14 Aug 2004 10:57:00 +0100)
Gunter Winkler (gunter.winkler -at- unibw-muenchen.de) (See Boost List message of Mon, 16 Aug 2004 10:24:17 +0200)
Hartmut Kaiser (hartmut.kaiser -at- gmail.com)
Herve Bronnimann (hbr -at- poly.edu)
Herv

Brnnimann (hbr -at- poly.edu)
Housemarque Oy (Ilari Kuittinen ilari.kuittinen -at- housemarque.fi)
Howard Hinnant (hinnant -at- twcnv.rr.com) (See Boost list message of July 25, 2004 3:44:49 PM EST)
Hubert Holin (hubert_holin -at- users.sourceforge.net)
Indiana University ()
Itay Maman (imaman -at- users.sourceforge.net)
Jaakko Jrv (jajarvi -at- osl.iu.edu)
Jaap Suter (j.suter -at- student.utwente.nl) (See Boost list message of Thu, 16 Sep 2004 09:32:43 -0700)
Jeff Garland (jeff - at - crystalclearsoftware.com) (see Boost list post of July 25, 2004 19:31:09 -0700)
Jens Maurer (Jens.Maurer@gmx.net)
Jeremy G Siek (jsiek@osl.iu.edu)
Jeremy Siek (jsiek@osl.iu.edu)
Joel de Guzman (joel -at- boost-consulting.com) (See Boost list message of July 25, 2004 8:32:00 PM EST)
John Bandela (jbandela-at-ufl.edu)
John Maddock (john - at - johnmaddock.co.uk)
John R Bandela (jbandela-at-ufl.edu)
Jonathan Turkanis (turkanis -at- coderage dot com)
Juergen Hunold (hunold -at- ive.uni-hannover.de) (See Boost List Message of Fri, 13 Aug 2004 19:39:55 +0200)
Kevlin Henney (kevin -at- curbralan.com) (See Boost list message of Wed, 15 Sep 2004 18:15:17 +0200)
Kresimir Fresl (fresl -at- master.grad.hr) (See Boost List message of August 16, 2004 8:23:35 AM EST)
Lars Gullik Bjnnes (larsbj -at- lyx.org) (See Boost list message of Tue, 17 Aug 2004 15:49:02 +0100)
Lie-Quan Lee (liequan - at - slac.stanford.edu, llee - at - cs.indiana.edu)
Maarten Keijzer (mkeijzer -at- cs.vu.nl) (See Boost list message of Wed, 18 Aug 2004 21:43:18 +0100)
Mac Murrett (mmurrett -at- mac.com)
Marc Wintermantel (wintermantel -at- imes.mavt.ethz.ch, wintermantel -at- even-ag.ch) (See CVS log)
Michael Glassford (glassfordm - at - hotmail.com)
Michael Stevens (Michael.Stevens - at - epost.de)
Multi Media Ltd. (pdimov@mmltd.net)
Nicolai M Josuttis (solutions -at- josuttis.com) (See Boost list message of Mon, 30 Aug 2004 10:52:00 +0100)
Nikolay Mladenov (nickm -at- sitius.com) (See Boost list message of Tue, 17 Aug 2004 15:45:33 +0100)
Paul Mensonides (pmenso57 -at- comcast.net) (See Boost list message of July 21, 2004 1:12:21 AM EST)
Pavol Droba (droba -at- topmail.sk)
Peter Dimov (pdimov@mmltd.net)
R W Grosse-Kunsteleve (RWGrosse-Kunsteleve@lbl.gov)
Ralf W. Grosse-Kunsteleve (RWGrosse-Kunsteleve@lbl.gov)
Rational Discovery LLC (Greg Landrum Landrum -at- RationalDiscovery.com) (See Boost list post of Tue, 17 Aug 2004 10:35:36 +0100)
Rene Rivera (grafik/redshift-software.com, rrivera/acm.org)
Robert Ramey (ramey@www.rrsd.com)
Roland Richter (roland -at- fill.jku.at) (See Boost list post of Mon, 16 Aug 2004 22:16:55 +0200)
Roland Schwarz (roland.schwarz -at- chello.at)
Ronald Garcia (garcia -at- cs.indiana.edu) (Email to Andreas Huber, see change log)
Samuel Krempp (krempp -at- crans.ens-cachan.fr) (See Boost list message of Mon, 27 Sep 2004 13:18:36 +0200)
Stefan Seefeld (seefeld -at- sympatico.ca)
Stephen Cleary (scleary -at- jerviswebb.com) (See Boost list message of Tue, 28 Sep 2004 13:11:46 +0100)
Steve

Cleary (Variant of Stephen Cleary)
Sylvain Pion (Sylvain.Pion - at - sophia.inria.fr)
The Trustees of Indiana University ()
Thomas Witt (witt - at - ive.uni-hannover.de, witt - at - acm.org, witt - at - styleadvisor.com)
Thorsten Jrgen Ottosen (nesotto - at - cs.auc.dk)
Thorsten Ottosen (nesotto - at - cs.auc.dk)
Toon Knapen (toon dot knapen - at - fft.be)
Trustees of Indiana University ()
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Vladimir Prus (ghost@cs.msu.su)
William E. Kempf () (email to Beman Dawes, 9/14/2006 4:18 PM)
Joerg Walter (jhr.walter - at - t-online.de : email to ublas mailing list Mon, 17 Sep 2007 10:17:08 +0200)
Mathias Koch (mkoch - at - idesis.de 7 : email to boost-owner@lists.boost.org Sep 2007 13:20:09 +0200)

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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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1.21 alpine-keys 2.4-r1

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1.24 mosquito 2.0.14

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1.25 ca-certificates 20211220-r0

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1.26 openssl 1.1.1n-r0

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```
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```
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```

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1.27 libretls 3.3.4-r3

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1.28 zlib 1.2.12-r0

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1.29 zlib 1.2.12

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* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.12, March 11th, 2022

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Jean-loup Gailly Mark Adler
jloup@gzip.org madler@alumni.caltech.edu

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*/

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1.30 busybox 1.34.1-r5

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jseward@bzip.org

bzip2/libbzip2 version 1.0.4 of 20 December 2006

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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"/>
  <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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```

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```
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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>

<!-- Transport types end -->

</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="array1Size" TypeName="opc:UInt32" />
  <opc:Field Name="array1" TypeName="opc:Double" LengthField="array1Size" />
</opc:StructuredType>
```

</opc:TypeDictionary>

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: open62541

Upstream-Contact: open62541 Team <open62541-core@googlegroups.com>

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```
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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="UABinaryFileDataType" 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>

<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"
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="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" />
<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" />
  <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>

  <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" />
<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" />

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    <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"
LengthField="NoOfRolePermissions" />
    <opc:Field Name="NoOfUserRolePermissions" TypeName="opc:Int32" />
    <opc:Field Name="UserRolePermissions" TypeName="tns:RolePermissionType"

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LengthField="NoOfUserRolePermissions" />
  <opc:Field Name="AccessRestrictions" TypeName="opc:UInt16"
SourceTypes="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>

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<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" />

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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: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>

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```

<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="DataTypeDefintion" 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>

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<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" />

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    <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" />

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    <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" />
  <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 an 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:StructuredType>
  <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" />
  <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:StructuredType>
  <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 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: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>

```

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<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>

```

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<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>

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<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>

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<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>

```

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

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    <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>

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<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>

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<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: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>

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<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" />

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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>

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<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"

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/>
  <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>

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<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" />
</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">

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<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" />
  <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:Field Name="NoOfSelectClauseDiagnosticInfos" TypeName="opc:Int32" />
  <opc:Field Name="SelectClauseDiagnosticInfos" TypeName="ua:DiagnosticInfo"
LengthField="NoOfSelectClauseDiagnosticInfos" />

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    <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" />
    <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"

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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" />
  <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" />

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</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" />
```



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<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:StructuredType>
  <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: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>

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<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">

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    <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" />

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<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">

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<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" />

```

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<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" />

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    <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" />

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<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>

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<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" />

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<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" />

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    <opc:EnumeratedValue Name="PercentOfEURange" Value="3" />
    <opc:EnumeratedValue Name="Unknown" Value="4" />
</opc:EnumeratedType>

</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" />

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    <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>

```

1.32 open62541 v1.2.3-dev-280-gff87c287

1.32.1 Available under license :

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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="NMTSwReset" 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"/>
  <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>

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<opc:TypeDictionary xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:tns="http://opcfoundation.org/UA/AutoID/" DefaultByteOrder="LittleEndian"
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TargetNamespace="http://opcfoundation.org/UA/AutoID/">
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</opc:StructuredType>
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<opc:Field TypeName="opc:Bit" Name="TimestampSpecified"/>
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<opc:Field TypeName="opc:Bit" Name="TimestampSpecified"/>
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Name="Timestamp"/>
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  <opc:Field TypeName="opc:Int32" Name="LatitudeFraction"/>
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Name="Location"/>
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    <opc:Field TypeName="tns:Position" Name="Position"/>
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</opc:StructuredType>
<opc:StructuredType BaseType="tns:OpticalScanResult" Name="OpticalVerifierScanResult">
<opc:Field TypeName="opc:Bit" Name="LocationSpecified"/>
<opc:Field TypeName="opc:Bit" Name="GradeSpecified"/>
<opc:Field TypeName="opc:Bit" Name="PositionSpecified"/>
<opc:Field TypeName="opc:Bit" Name="SymbologySpecified"/>
<opc:Field TypeName="opc:Bit" Name="ImageIdSpecified"/>
<opc:Field Length="27" TypeName="opc:Bit" Name="Reserved1"/>
<opc:Field SourceType="tns:ScanResult" TypeName="opc:CharArray" Name="CodeType"/>
<opc:Field SourceType="tns:ScanResult" TypeName="tns:ScanData" Name="ScanData"/>
<opc:Field SourceType="tns:ScanResult" TypeName="opc:DateTime" Name="Timestamp"/>
<opc:Field SwitchField="LocationSpecified" SourceType="tns:ScanResult" TypeName="tns:Location"
Name="Location"/>
<opc:Field SwitchField="GradeSpecified" SourceType="tns:OpticalScanResult" TypeName="opc:Float"
Name="Grade"/>
<opc:Field SwitchField="PositionSpecified"
SourceType="tns:OpticalScanResult" TypeName="tns:Position" Name="Position"/>
<opc:Field SwitchField="SymbologySpecified" SourceType="tns:OpticalScanResult"
TypeName="opc:CharArray" Name="Symbology"/>
<opc:Field SwitchField="ImageIdSpecified" SourceType="tns:OpticalScanResult" TypeName="ua:NodeId"
Name="ImageId"/>
<opc:Field TypeName="opc:CharArray" Name="IsoGrade"/>
<opc:Field TypeName="opc:Int16" Name="RMin"/>
<opc:Field TypeName="opc:Int16" Name="SymbolContrast"/>
<opc:Field TypeName="opc:Int16" Name="ECMin"/>
<opc:Field TypeName="opc:Int16" Name="Modulation"/>
<opc:Field TypeName="opc:Int16" Name="Defects"/>
<opc:Field TypeName="opc:Int16" Name="Decodability"/>
<opc:Field TypeName="opc:Int16" Name="Decode"/>
<opc:Field TypeName="opc:Int16" Name="PrintGain"/>
</opc:StructuredType>
<opc:StructuredType BaseType="tns:ScanResult" Name="RfidScanResult">
<opc:Field TypeName="opc:Bit" Name="LocationSpecified"/>
<opc:Field Length="31" TypeName="opc:Bit"
Name="Reserved1"/>
<opc:Field SourceType="tns:ScanResult" TypeName="opc:CharArray" Name="CodeType"/>
<opc:Field SourceType="tns:ScanResult" TypeName="tns:ScanData" Name="ScanData"/>
<opc:Field SourceType="tns:ScanResult" TypeName="opc:DateTime" Name="Timestamp"/>
<opc:Field SwitchField="LocationSpecified" SourceType="tns:ScanResult" TypeName="tns:Location"
Name="Location"/>
<opc:Field TypeName="opc:Int32" Name="NoOfSighting"/>
<opc:Field LengthField="NoOfSighting" TypeName="tns:RfidSighting" Name="Sighting"/>
</opc:StructuredType>
<opc:StructuredType BaseType="tns:ScanResult" Name="RtlsLocationResult">
<opc:Field TypeName="opc:Bit" Name="LocationSpecified"/>

```

```

<opc:Field Length="31" TypeName="opc:Bit" Name="Reserved1"/>
<opc:Field SourceType="tns:ScanResult" TypeName="opc:CharArray" Name="CodeType"/>
<opc:Field SourceType="tns:ScanResult" TypeName="tns:ScanData" Name="ScanData"/>
<opc:Field SourceType="tns:ScanResult" TypeName="opc:DateTime" Name="Timestamp"/>
<opc:Field SwitchField="LocationSpecified" SourceType="tns:ScanResult" TypeName="tns:Location"
Name="Location"/>
<opc:Field TypeName="opc:Double" Name="Speed"/>
<opc:Field TypeName="opc:Double" Name="Heading"/>
<opc:Field TypeName="tns:Rotation" Name="Rotation"/>
<opc:Field TypeName="opc:DateTime" Name="ReceiveTime"/>
</opc:StructuredType>
<opc:StructuredType BaseType="ua:ExtensionObject" Name="ScanSettings">
<opc:Field TypeName="opc:Bit" Name="LocationTypeSpecified"/>
<opc:Field Length="31" TypeName="opc:Bit" Name="Reserved1"/>
<opc:Field TypeName="opc:Double" Name="Duration"/>
<opc:Field TypeName="opc:Int32" Name="Cycles"/>
<opc:Field TypeName="opc:Boolean" Name="DataAvailable"/>
<opc:Field SwitchField="LocationTypeSpecified" TypeName="tns:LocationTypeEnumeration"
Name="LocationType"/>
</opc:StructuredType>
<opc:StructuredType BaseType="ua:Union" Name="Location">
<opc:Field TypeName="opc:UInt32" Name="SwitchField"/>
<opc:Field SwitchField="SwitchField"
TypeName="opc:CharArray" SwitchValue="1" Name="NMEA"/>
<opc:Field SwitchField="SwitchField" TypeName="tns:LocalCoordinate" SwitchValue="2" Name="Local"/>
<opc:Field SwitchField="SwitchField" TypeName="tns:WGS84Coordinate" SwitchValue="3" Name="WGS84"/>
<opc:Field SwitchField="SwitchField" TypeName="opc:CharArray" SwitchValue="4" Name="Name"/>
</opc:StructuredType>
<opc:StructuredType BaseType="ua:Union" Name="ScanData">
<opc:Field TypeName="opc:UInt32" Name="SwitchField"/>
<opc:Field SwitchField="SwitchField" TypeName="opc:ByteString" SwitchValue="1" Name="ByteString"/>
<opc:Field SwitchField="SwitchField" TypeName="opc:CharArray" SwitchValue="2" Name="String"/>
<opc:Field SwitchField="SwitchField" TypeName="tns:ScanDataEpc" SwitchValue="3" Name="Epc"/>
<opc:Field SwitchField="SwitchField" TypeName="ua:Variant" SwitchValue="4" Name="Custom"/>
</opc:StructuredType>
<opc:StructuredType BaseType="ua:ExtensionObject" Name="WGS84Coordinate">
<opc:Field TypeName="opc:CharArray"
Name="N/S Hemisphere"/>
<opc:Field TypeName="opc:Double" Name="Latitude"/>
<opc:Field TypeName="opc:CharArray" Name="E/W Hemisphere"/>
<opc:Field TypeName="opc:Double" Name="Longitude"/>
<opc:Field TypeName="opc:Double" Name="Altitude"/>
<opc:Field TypeName="opc:DateTime" Name="Timestamp"/>
<opc:Field TypeName="opc:Double" Name="DilutionOfPrecision"/>
<opc:Field TypeName="opc:Int32" Name="UsefulPrecisionLatLon"/>
<opc:Field TypeName="opc:Int32" Name="UsefulPrecisionAlt"/>
</opc:StructuredType>
<opc:EnumeratedType LengthInBits="32" Name="AutoIdOperationStatusEnumeration">

```

```

<opc:EnumeratedValue Name="SUCCESS" Value="0"/>
<opc:EnumeratedValue Name="MISC_ERROR_TOTAL" Value="1"/>
<opc:EnumeratedValue Name="MISC_ERROR_PARTIAL" Value="2"/>
<opc:EnumeratedValue Name="PERMISSION_ERROR" Value="3"/>
<opc:EnumeratedValue Name="PASSWORD_ERROR" Value="4"/>
<opc:EnumeratedValue Name="REGION_NOT_FOUND_ERROR" Value="5"/>
<opc:EnumeratedValue Name="OP_NOT_POSSIBLE_ERROR"
Value="6"/>
<opc:EnumeratedValue Name="OUT_OF_RANGE_ERROR" Value="7"/>
<opc:EnumeratedValue Name="NO_IDENTIFIER" Value="8"/>
<opc:EnumeratedValue Name="MULTIPLE_IDENTIFIERS" Value="9"/>
<opc:EnumeratedValue Name="READ_ERROR" Value="10"/>
<opc:EnumeratedValue Name="DECODING_ERROR" Value="11"/>
<opc:EnumeratedValue Name="MATCH_ERROR" Value="12"/>
<opc:EnumeratedValue Name="CODE_NOT_SUPPORTED" Value="13"/>
<opc:EnumeratedValue Name="WRITE_ERROR" Value="14"/>
<opc:EnumeratedValue Name="NOT_SUPPORTED_BY_DEVICE" Value="15"/>
<opc:EnumeratedValue Name="NOT_SUPPORTED_BY_TAG" Value="16"/>
<opc:EnumeratedValue Name="DEVICE_NOT_READY" Value="17"/>
<opc:EnumeratedValue Name="INVALID_CONFIGURATION" Value="18"/>
<opc:EnumeratedValue Name="RF_COMMUNICATION_ERROR" Value="19"/>
<opc:EnumeratedValue Name="DEVICE_FAULT" Value="20"/>
<opc:EnumeratedValue Name="TAG_HAS_LOW_BATTERY" Value="21"/>
</opc:EnumeratedType>
<opc:EnumeratedType LengthInBits="32" Name="DeviceStatusEnumeration">
  <opc:EnumeratedValue Name="Idle" Value="0"/>
  <opc:EnumeratedValue Name="Error" Value="1"/>
  <opc:EnumeratedValue Name="Scanning" Value="2"/>
  <opc:EnumeratedValue Name="Busy" Value="3"/>
</opc:EnumeratedType>
<opc:EnumeratedType LengthInBits="32" Name="LocationTypeEnumeration">
  <opc:EnumeratedValue Name="NMEA" Value="0"/>
  <opc:EnumeratedValue Name="LOCAL" Value="1"/>
  <opc:EnumeratedValue Name="WGS84" Value="2"/>
  <opc:EnumeratedValue Name="NAME" Value="3"/>
</opc:EnumeratedType>
<opc:EnumeratedType LengthInBits="32" Name="RfidLockOperationEnumeration">
  <opc:EnumeratedValue Name="Lock" Value="0"/>
  <opc:EnumeratedValue Name="Unlock" Value="1"/>
  <opc:EnumeratedValue Name="PermanentLock" Value="2"/>
  <opc:EnumeratedValue Name="PermanentUnlock" Value="3"/>
</opc:EnumeratedType>
<opc:EnumeratedType LengthInBits="32" Name="RfidLockRegionEnumeration">
  <opc:EnumeratedValue Name="Kill" Value="0"/>
  <opc:EnumeratedValue Name="Access" Value="1"/>
  <opc:EnumeratedValue Name="EPC" Value="2"/>
  <opc:EnumeratedValue Name="TID" Value="3"/>
  <opc:EnumeratedValue Name="User" Value="4"/>

```

```

</opc:EnumeratedType>
<opc:EnumeratedType LengthInBits="32" Name="RfidPasswordTypeEnumeration">
  <opc:EnumeratedValue Name="Access" Value="0"/>
  <opc:EnumeratedValue Name="Kill" Value="1"/>
  <opc:EnumeratedValue Name="Read" Value="2"/>
  <opc:EnumeratedValue Name="Write" Value="3"/>
</opc:EnumeratedType>
</opc:TypeDictionary>
<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:EnumeratedValue Name="INVALID" Value="0x0" />
  </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="AsymmetricAlgorithmSecurityHeader">
<opc:Documentation>Asymmetric 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>Symmetric Security 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>

<!-- Transport types end -->

</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://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:StructuredType BaseType="ua:Union" Name="SelfContainingUnion">
  <opc:Field TypeName="opc:UInt32" Name="SwitchField"/>
  <opc:Field SwitchField="SwitchField" TypeName="opc:Double" SwitchValue="1" Name="Double"/>
  <opc:Field SwitchField="SwitchField" TypeName="opc:Int32" SwitchValue="2" Name="NoOfArray"/>
  <opc:Field LengthField="NoOfArray" SwitchField="SwitchField" TypeName="tns:SelfContainingUnion"
SwitchValue="2"
Name="Array"/>
</opc:StructuredType>
```

```
</opc:TypeDictionary>
```

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Upstream-Contact: open62541 Team <open62541-core@googlegroups.com>

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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://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="UABinaryFileDataType" 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" />

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    <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:DataSetMetaData" />
  <opc:Field Name="NoOfExtensionFields" TypeName="opc:Int32" />
  <opc:Field Name="ExtensionFields" TypeName="tns:KeyValuePair" LengthField="NoOfExtensionFields" />
  <opc:Field Name="DataSetSource" TypeName="ua:ExtensionObject" />

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</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"

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/>
  <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>

<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" />

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<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">

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<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" />

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    <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" />

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    <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>

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<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>

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```
<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" />
  <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" />
  <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>

<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" />
  <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"
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" />
  <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>
```

```
<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" />

```

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<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" />

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    <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 arbitraty 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>

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<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" />

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```

<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" />
  <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 an 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" />
  <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 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" />

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    <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"

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/>
  <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">

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</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" />

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    <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" />

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

<opc:StructuredType Name="ObjectTypeAttributes" BaseType="tns:NodeAttributes">

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<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>

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```
<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>
```

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<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"
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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" />

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    <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>

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<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" />

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<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: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">

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<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>

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<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>

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<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"

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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" />
</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" />

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    <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" />
  <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>

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<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: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" />
  <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" />

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    <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" />
  <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"

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/>
  <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" />

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<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>
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<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>
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<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: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" />

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</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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-->

```
<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>
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