

**ASN.1  
4G  
FAST & COMPACT XML**



DELIVERING THE TECHNOLOGY YOU  
NEED TO CONNECT **THINGS**



OSS offers a suite of tools and IDEs that assist in the development of applications and protocols using ASN.1, 4G and binary XML.

The **OSS ASN.1 Tools**, available for C, C++, C#, and Java, offer a powerful development package for building ASN.1-based applications.

Building on our 25+ years of ASN.1 expertise and our high-performance PER encoder/decoder, OSS offers several 4G Products – **ASN.1/C Tools with S1/X2, NAS Encoder Decoder Library**, and **NAS-1Step**.

Now you can take advantage of two complementary, proven technologies – XML and binary encoding. OSS offers two Fast & Compact XML solutions: **Efficient XML Interchange (EXI) Tools**, and **Fast Infoset (FI) Tools**.

OSS' commitment to providing reliable products and services has earned us a reputation for excellence. We invite you to see for yourself - download a **Free 30-Day Trial** of our products.

## Technology at work for you

**OSS Nokalva®**, Inc. a privately held company located in Somerset, New Jersey, has been offering the highest quality standards-based software, support and services since 1988. OSS has been instrumental in shaping and developing ASN.1, 4G, XML, and biometric standards and standards-based solutions.

We support, on a 24x7 basis, more than 1500 customers worldwide. Whether you are a Fortune 500 company, or a tech startup with a great idea, OSS has your solution for success.

## Flexible solutions for your business needs

### OSS ASN.1 PRODUCTS

The **OSS ASN.1 Tools**, available for C, C++, C#, and Java, offer a powerful development package for building ASN.1-based applications. These tools, ported to over 500 platforms, provide true ASN.1 2008, 2002, 1997, and 1990 support for all ASN.1 encoding rules. The OSS tools offer powerful features such as an intuitive IDE (ASN.1 Studio), unsurpassed speed, compact size, quality tracing and precise error messages, automatic encoding/decoding, partial/selective decoding, multi-threading, dynamic memory options, and an interpretive ASN.1 API. The OSS ASN.1 products meet the most demanding needs of organizations worldwide. It is no wonder that so many organizations have selected OSS Nokalva products for applications such as: 3G/4G Mobile Systems (3GPP), Aviation, Intelligent Transportation, Security and Financial Services, Telecommunication Networks, Space Communication, Military applications, and many more.

**OSS Nokalva®**

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# Connect to the World with OSS

## Why choose OSS Nokalva?

OSS is the supplier chosen by the most demanding organizations worldwide because we do not deliver just software – we deliver our expertise.

- OSS delivers **reliability**. We have developed a robust software testing methodology that is applied to every one of our products. All software is subject to extensive automated testing that is repeated daily, not only for new products but also for existing ones, so as to ensure that code changes never introduce errors.
- OSS delivers **experience**. We know how to write high-quality code that can be safely ported to any existing software/hardware platform, and we have completed hundreds of such portings ourselves. Our ASN.1 codec libraries are already available on over 500 platforms, and this number steadily increases.
- OSS delivers **performance**. We know how to write code that runs fast on any computing device, including embedded systems, making optimum use of the available computing resources.

## Specialized Products

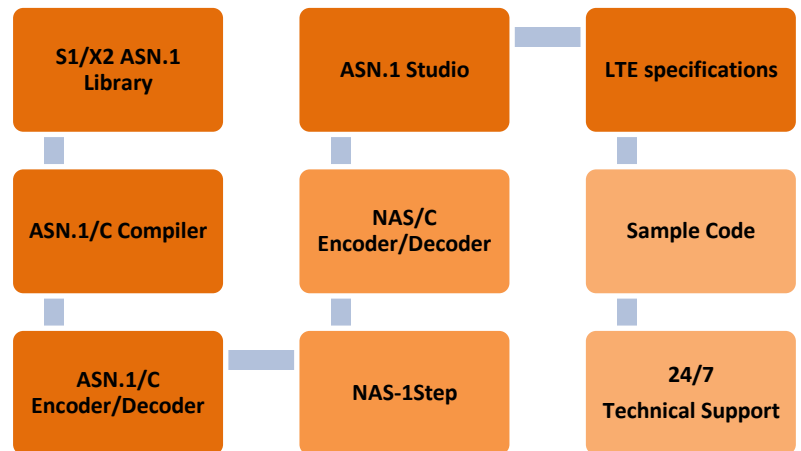
The **ASN-1Step** product, offering the intuitive IDE, ASN.1 Studio, is a powerful tool for ASN.1 analysis and development.

The **OSS PER Analyzer** add-on tool is highly recommended for protocol analysis and parsing PER (Packed Encoding Rule) messages at runtime.

**OSS' CAGL (Compile-And-Go-Library)** is the best solution for dynamically compiling your ASN.1 specification at runtime – a perfect solution for CDR (Call Detail Record) processing applications.

**OSS NOKALVA, INC.**

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**4G Products** - Get all you need to support 4G ASN.1 and NAS development, all in one place, and all from a company whose commitment to quality and service you know you can rely on.

## OSS 4G PRODUCTS

Building on our 25+ years of ASN.1 expertise and our high-performance PER encoder/decoder, OSS offers several 4G Products – our ASN.1 Tools with S1/X2, our NAS Encoder Decoder Library, and our NAS-1Step product. These 3GPP Release 8 - 13 compliant products offer the same performance, reliability, and quality that companies worldwide know they can expect from OSS.

The **OSS 4G Products** present a complete, powerful, yet easy to use 4G ASN.1 and NAS product suite that delivers everything you need to jump start your LTE development together with LTE schema, sample code, and technical support. The 4G Products available include:

- **ASN.1/C Tools with S1/X2**
  - ASN.1/C Compiler
  - ASN.1/C Encoder/Decoder Library
  - ASN.1 Studio IDE
  - ASN.1 S1/X2 Library, including API samples targeting eNodeB and MME development
- **NAS-1Step**, a visual tool for debugging NAS messages
- **NAS/C Encoder/Decoder Library**.

## OSS FAST & COMPACT XML PRODUCTS

Now you can take advantage of two complementary, proven technologies – XML and binary encoding. OSS offers two Fast & Compact XML solutions: **Efficient XML Interchange (EXI) Tools**, and **Fast Infoset (FI) Tools**. The OSS Fast & Compact XML products available for, C, C++, and C# efficiently compress your XML using the EXI and FI standards. You achieve cost reduction without losing XML's many benefits such as inherent self-description and interoperability.