UBmatrix XBRL Processing Engine (XPE)

UBPARTNER

A powerful and flexible processor to validate, transform and generate XBRL documents

XPE offers the richest set of XBRL processing features:

* Read, validate and write XBRL instance documents and taxonomies

* Proven performance and scalability for the largest and most complex XBRL systems

* Ability to dynamically load XBRL Formula and to optimize their execution.

* Developer-friendly APIs with comprehensive library of code samples.

* Total support for the complete XBRL Standard

xBRL Certified Software™

The UBPartner XBRL Processing Engine is the platform of choice for government agencies, market regulators and leading application software vendors. It has been designed to make the process of developing and deploying XBRL-based applications as simple as possible.

XPE can support high volume, large-scale collection systems; delivers unrivalled performance for large and complex XBRL taxonomies, and yet, can also plug easily into client applications.

Built upon an extensible object-oriented architecture, it supports both taxonomy and instance document validation and can be used to transform XBRL from and into various formats

Continually updated and tested, XPE fully conforms to all the latest XBRL standards. While UBPartner's XBRL experts work closely with the XBRL Standards Board (XSB) to look to the future needs of the expanding range of projects

Functionally Complete

Organizations that collect, process and generate XBRL documents will benefit from a highly scalable and powerful processing engine, while developers looking to XBRL enable their financial management and spreadsheet applications will find that XPE has all the features and flexibility they are looking for.

Today, XPE is the technology platform for every kind of XBRL project, from Taxonomy design and generation to large scale validation systems.

Total Conformance

XPE supports the complete XBRL standard, including:
 - XBRL Dimensions and Formula Inline XBRL
 - Table Linkbase and Enumerations
XPE is also tightly integrated with XSLT and XPath 2.0, which means it can be readily extended and customized.

Flexible Integration

XPE is delivered with a functionally rich software development kit, so that it can be used to build XBRL-based applications or integrate XBRL capabilities into existing applications or web services. The XPE API is available for both .NET and Java environments.

Unrivalled Performance

In tests, XPE always performs well across a range of real-world tasks and it is continually tested and enhanced to ensure that it meets the requirements of the latest taxonomies. Recent improvements have focused on the efficient handling of very large documents and formula processing optimization. The result is an XBRL processing engine that delivers exceptional performance. In benchmarks against other similar general XBRL platforms.

Advanced XBRL Processing

he UBPartner XBRL Processing Engine has been continually developed to ensure that it meets the growing requirements of the XBRL community. Advanced and innovative features include:

Flexible Validation Levels – enable the systems designer to determine which parts of the validation process are undertaken at each step – XBRL syntax, Formula, Filing Rules or all of them. Enabling multi-phase processing in time critical environments.

DOM or Virtual Object Model (VOM) – Some taxonomies, such as the EBA's CRD4 and EIOPA's Solvency II taxonomies, are highly multi-dimensional and can result in the production of large XBRL documents (> 100mb). VOM mode enables XPE to breakdown the XBRL instance document into smaller objects on which to operate, enabling it to process large and very large instance documents (1GB+) without serious performance degradation. DOM is more efficient at handling smaller documents, such as ESMA annual returns, by holding everything in memory.

XBRL Formulas Pre-processor and Optimizer – Formulas are one of the most powerful of XBRL features and taxonomy authors are including increasing numbers of greater complexity in their taxonomies. XPE formula optimizer first analyses the formulas and then uses in-built intelligence to determine how best to execute them efficiently.

Validation and Formula Partitioning – is another advanced feature to enable larger documents to be validated with a relatively small memory footprint. It optimizes and groups related data sets and formulae into units of work for efficient processing.

Advanced Tracing – As XBRL taxonomies include more complex business rules (XBRL Formulas) developers require more advanced trace and debug modes to help them identify issues.

Flexible Outputs – enable the developer to customize validation reports to suit the needs of the application.

Next Steps in XBRL

The XBRL standard is being continually improved and enhanced and UBPartner plays a major role in feeding requirements and identifying solutions to the XSB.

In the next few years, the major enhancements will include recommendations for the Open Information Model (OIM): initially OIM-JSON and OIM-CSV; and updates to the Calculation Linkbase standard (2.0).

UBPartner's commitment to supporting all of the XBRL standard and certification, protects any partner or customer investment in XBRL systems.

System Requirements

Operating Systems Supported:

Microsoft Windows 7, 10

Microsoft Windows Server System 2003, 2008

Red Hat Linux

Enterprise Linux 5

 Recommended RAM:

Minimum: 4 GB

Recommended 8 GB RAM or greater for large XBRL documents

Disk Space:: 135 MB

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