NVDCMS

NVDCMS 2.0 Technical fact sheet

Dynamic Presentation Features

XML/XSL translation for dynamic presentation and multi-format document production

Stylesheet based presentation of content powered by an open standard (XSLT) enables to alter the design of a whole site (or a whole set of sites) thanks to the modification of a single file. XSLT can translate XML structured content to HTML (XHTML) as well as any other XML based format (SVG, RSS/RDF, WML, FO…). XSL stylesheets can easily be processed in chain (XML to FO and then FO to HTML for instance).

Native support for multi-format rendering of FO documents to produce on the fly PDF, RTF, text ...

XSL Formatting Object is a standard way to compose documents for printing or publishing. It is a common XML syntax describing complex layouts. Any FO document on a Novadeck CMS platform (either static or dynamically generated through an XSLT stylesheet) can be converted on the fly by the server to a variety of helpful formats such as Acrobat PDF or Word compatible RTF.

Image handling

Images uploaded on the platform can be automatically resized to fit a specified presentation template. Images dimensions can also be easily extracted to be used as a reference for display.

SVG rasterisation

Scalable Vector Graphic (SVG) is a standard for two dimensionnal vector graphic and charts description. As an XML based language, SVG can be used on an XML/XSL platform such as NVDCMS to produce custom graphics generated on the fly, to be embedded into HTML pages or PDF documents. To avoid plug-in compatibility problems (SVG browser plug-in is not widely spread yet), NVDCMS enables transparent rasterisation of SVG to common graphic file format such as PNG or JPEG. Though, a complex graphic object can be computed from database content (result of a poll for instance) and displayed seemlessly into a standard web page as a JPEG image.

Content management

Data Structure

Dynamic Data structure allows the creation of persistent objects with versatile right management for each site.

Multilanguage

CMS allows full multilanguage content (for any encoding and country) management with lossless data storage.

Privilege management

Privilege can be hierarchically defined for each site an associated for read/write data, allowing complete control on publication chain.

Single sign on

A user that authenticates on any one site of a NVDCMS platform is automatically recongnized on every sites of tha platform, without the need to authenticate again, even if the sites don't belong to the same domain. Cross domain single sing on also allow

porwerful user tracking across large platforms.

Virtual hosting

Virtual hosting on NVDCMS allow sites to be created and hosted in multiple shared domains. Additionnal domains can be parked dynamically for any sites on the platform, allowing sites to be accessed from different domain names.

Advanced publication

Syndication of content

NVDCMS support versatile import or export of live content through XML based standard such as RSS or RDF.

Message board

Versioning of content

All contents can be versionned: user can get history of all modification and get back if required.

Multi site Data flow

One to many : diffusion from one site to many sub-sites
Many to one : aggregation from many sub-sites to one portal site

Advanced Functionality

Internal search engine to allow fine grain search feature
PDF file indexing.
Dynamical hierarchical right management
Calendar data structure
Mail sending (allow newsletter, mail alias, auto reply, mail alert)
Multi-database SQL query with recursive tree request
Document element XML Sign

Database action log (for polling feature)

Filesystem

Per site WebDAV server support
Per site file command management

Business Process and transaction

Programmable process with scripting feature or on the fly dynamic java code compilation
Transactional command execution
Multiple context execution
Scheduled job with periodical execution

Connectivity

Remote IMAP server consultation
Full LDAP read/write support

Management

JMX monitoring

NVDCMS support the JMX standard to monitor server activity (memory/cache usage, network byte rate, CPU usage...). An included JMX Management Console allows easy web based monitoring of any CMS server of a platform.

Web Service Support

Web Service Invocation via WSDL

NVDCMS features a native support for WSDL (Web Service Description Language). Through the use of a single descriptive tag, Web Service call and response can be inserted easily in any page, without additionnal programming.

SOAP support

NVDCMS support SOAP both as a way to access remote web services and as a way to provide web services to remote sites. Any page on the plateform can be set to generate a well formed SOAP response instead of delivering a standard HTML web page.

SOAP data structure

NVDCMS features SOAP data structure (marshalling/un marshalling) management for easy access to content from Web Services requests.

Encryption and signature

The CM features encryption/decryption function to protect content in persistent storage and back office process.

Also integrated in the software, content signature is set to authenticate a user.

Bridging feature

SMTP server to SOAP (allow email management and publication)
POP3 server to SOAP (allow pop3 reading data)

Statistical log analysis tools

Web log to XML statistical sheet converter (allows XSL or SVG graphical presentation)
Per site log extraction with user tracking, search keyword, page count, request and browser analysis.

Technical Features

Distributed cache: avoid container server access

Server side statefull session variables (allow basket management, and avoid cookie data storage)
Multilevel cache: container server, process level, document level
Fine grain SQL query caching system
Gzip output data