



NetUnity WSRP .NET Consumer

WSRP Portlet Consumer for .NET

The NetUnity WSRP .NET Consumer allows businesses to build custom WSRP compliant .NET portals or add WSRP consumer services to existing ASP.NET applications for such projects as B2B/B2C portals, executive dashboards, content aggregation and integration applications and other e-business initiatives.

Executive Summary

There are two popular approaches for companies deploying custom portals for e-business initiatives. The first approach is to build a solution around an existing enterprise or open source portal platform. The second approach is to develop a custom portal architecture in-house.

The problem with using enterprise or open source portals is that these solutions require companies to buy into that platform in terms of operating systems, databases, development tools, deployment procedure and ongoing maintenance. Most of these portals are designed to work with their content management, search and other subsystems which become unnecessary baggage for a company that already has its own content and other related business systems in place. The result is a highly complex, costly and massive undertaking that ties the solution to a specific portal platform well into the foreseeable future.

The problem with creating a custom portal architecture in-house is one of feasibility. Does the organization have the experienced resources to build, deploy and maintain a high performance scalable portal architecture? Can the organization afford to take on and maintain a portal development project outside of its core business competency? Is time-to-market critical to the success of the business initiative? For most organizations, building a portal architecture from scratch is a large, high risk and expensive undertaking that is not cost effective, feasible or justifiable.

NetUnity offers businesses an alternative solution to using large scale portals or developing a custom portal or portal services architecture in-house. The WSRP .NET Consumer is specifically designed for those customers wanting to implement custom portals or add portal-based services to existing ASP.NET applications based on open standards.

Why WSRP?

Web Services for Remote Portlets (WSRP) is a standard that defines a common interface and protocol for creating pluggable, user-facing, interactive remote portlets using XML web services that is platform and development tools independent.

The WSRP standard is developed by the Organization for the Advancement of Structured Information Standards (OASIS) - an international consortium that advances the development and adoption of XML and web service standards. Its members and sponsors include Microsoft, IBM, Oracle, SAP, Nokia, Boeing and other international private, public and governmental organizations inside and outside the software industry that develop and promote open standards.

The WSRP version 1.0 specification was approved as an OASIS standard in August 2003. The standard was created to enable businesses to provide content and application portlets to consumers in a form that does not require the use of proprietary interfaces or require consumer specific adaptation. Over the years, the standard continued to evolve culminating in the release of WSRP version 2.0 in April 2008. The WSRP 2.0 standard focused extensively on support for portlet-to-portlet communication and coordination: the ability to pass data and coordinate activities between WSRP portlets.

A major benefit of the WSRP specification is that it allows application and content providers to publish portlets to any consumer regardless of location or platform. Another benefit is that it allows developers to write portlets using popular development environments such as Java/J2EE or Microsoft's .NET Framework without having any knowledge of the consumer application and its environment.

WSRP for Businesses

WSRP is good for businesses because content and applications written to the WSRP standard will interoperate across a potentially multi-portal enterprise. It also minimizes the risk of relying on any one portal vendor implementation. Business portlets written for one department and deployed on one portal platform can be used in another area of the company that uses a different portal platform. Because WSRP is based on web services, it is easier to build solutions that work both within and outside the corporate firewall when considering projects such as customer portals, supplier portals and other IT-based initiatives.

WSRP for Content Syndication

WSRP provides visual, user facing web services making it an excellent choice for providing a richer content delivery mechanism than the often used Really Simple Syndication (RSS) standard. Using WSRP, content publishers can deliver rich, interactive content-based portlets to paying and non-paying subscribers anywhere in the world, regardless of their customer's platform.

WSRP for Composite Applications

The WSRP specification opens up new ways of building and delivering applications. It provides content aggregation, personalization, navigation, caching and other portal-based services to any web application. By leveraging the openness of WSRP, composite applications can be rapidly built using portlets developed within the organization as well as by using portlets developed by business partners, software vendors, content providers or any other third party regardless of the platform or location.

WSRP for Deployment

By being a web service standard, WSRP portlets can be deployed separate from the portal or consumer application. This separation lessens the dependence on the consumer hardware and software platform. It also permits more granular deployments of specific applications without affecting other applications or the consumer itself. The end result is simpler, less costly and less risky deployments.

WSRP for Scalability

A significant advantage of WSRP, especially in large scale operations with thousands or even millions of users such as B2C portals, is that portlets can be load balanced independently from the portal. Often capacity issues are related to highly used portlets and not the portal or consumer itself. WSRP permits more flexible and highly optimized load balanced configurations that maximizes throughput while reducing costs by minimizing both hardware and software requirements.

Need the flexibility to increase and decrease processing capacity during peak and non-peak times? Need to scale to potentially thousands of servers? Because WSRP is based on web services, it can be easily scaled like ordinary web sites to tens, hundreds or even thousands of servers.

It's also the right architecture for future cloud computing platforms like the Microsoft Windows Azure™ that rely heavily on application being built as a collection of scalable web services.

WSRP and .NET

At NetUnity, we believe solutions can be built that leverage the advantages of .NET with the open standard of WSRP. A WSRP-enabled application should be capable of hosting an unlimited number of application portlets regardless of the portlet platform. Now, these goals can be achieved using the NetUnity WSRP .NET Consumer.

The NetUnity WSRP .NET Consumer

The NetUnity WSRP .NET Consumer allows businesses to build custom WSRP compliant .NET portals or add WSRP consumer services to existing .NET applications for such projects as B2B/B2C portals, executive dashboards, content aggregation and integration applications and other e-business initiatives.

The WSRP .NET Consumer is responsible for managing and presenting WSRP portlets and provides standard services for navigation, interaction, portlet-to-portlet communication, resources, portlet subscription, personalization, layout, session management, caching, user profiles and all the other services required for a complete WSRP consumer implementation.

Use the WSRP .NET Consumer standalone to host WSRP application portlets to rapidly implement custom portals or embed it in existing ASP.NET applications to provide content aggregation and personalization based on WSRP. The WSRP .NET Consumer is positioned for companies wanting to build custom portals or add portal services to existing ASP.NET applications based on WSRP.

Standalone WSRP Consumer Portal

Rapidly create a custom portal solution by using the WSRP .NET Consumer as a standalone portal hosting your application portlets. This mode of operation provides the fastest implementation of a custom portal solution based on WSRP. Quickly build composite applications by consuming internally developed portlets as well as portlets provided by third party application vendors and content providers.

Embed in ASP.NET Applications

Many organizations have existing ASP.NET applications but need to provide portal-based services such as aggregation and personalization in a few select areas. The WSRP .NET Consumer can be embedded in existing ASP.NET applications to surface WSRP portlets in select areas of the application. Control the exact layout of WSRP portlets by adding individual portlets to any part of an application page.



WSRP .Net Consumer – Displaying WSRP portlets

ASP.NET Membership and Role Provider Model

The WSRP .NET Consumer support standard ASP.NET authentication and adheres to the ASP.NET membership and role provider model. This means it is capable of using integrated security, LDAP and SSO solutions that adhere to this ASP.NET provider model.

WSRP Version 1.0 and Version 2.0

The WSRP .NET Consumer supports the WSRP version 1 and version 2 specifications including all forms of portlet-to-portlet communication and coordination. You can even consume both version 1 and version 2 WSRP portlets in the same page. Supporting both specifications allows you to preserve your investment in version 1 portlets as well as take full advantage and obtain the most benefit from the new features in the version 2 specification.

Deployment and Scalability

The WSRP .NET Consumer was designed to be compact for rapid deployment by reducing its file system footprint and eliminating dependencies on specialized non-standard libraries, services and third party components. This

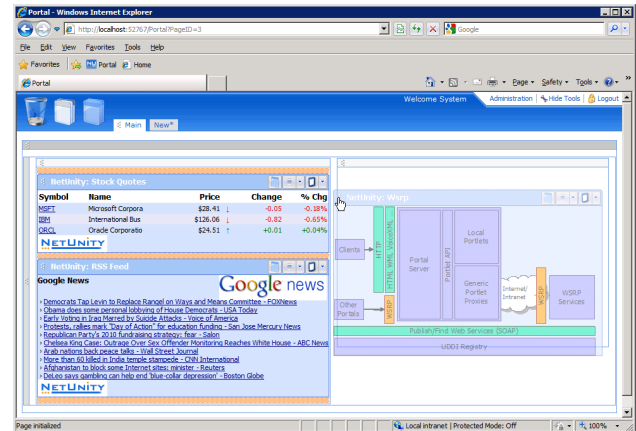
design goal makes it very simple to deploy the WSRP .NET Consumer as part of your application.

Fully Managed Code Implementation

The WSRP .NET Consumer is written in fully managed C# code for high performance and high availability. The architecture provides the highest level of asynchronous and parallel processing while adhering to the blocking nature of certain WSRP operations. The WSRP .NET Consumer delivers a scalable, robust WSRP consumer implementation for use as a standalone portal consumer or to embed in ASP.NET applications.

Source Code License

For those organizations wanting to build custom solutions based on the WSRP .NET Consumer, NetUnity provides a source code license purchase option and the consulting services to assist in understanding and applying the architecture.



WSRP .Net Consumer – Editing layout

Key Features and Benefits

WSRP .NET Consumer

Solutions

- Build custom WSRP portals and dashboard solutions
- Add content aggregation and personalization based on WSRP to existing applications
- Use as a standalone core portal to host your custom application portlets
- Consume Java-based portlets in .NET

Features

- Supports the 1.0 and 2.0 WSRP specification
- Fully asynchronous processing of WSRP operations
- Highly parallel scalable architecture for high demand
- Compact with minimal dependencies and easily deployed
- Point-n-click interface for consuming and subscribing to portlets
- Implement complete mandatory WSRP operations
- Provide aggregation, personalization, navigation, interaction, caching and administration
- Use standalone or integrate into existing ASP.NET applications
- Supports ASP.NET authentication and the membership and role provider model

Benefits

- Rapidly build custom portal and dashboard solutions
- Easily integrate .NET, Java-based and third party portlets based on WSRP
- Adopt open standards
- Isolate portal from portlets for high availability
- Load balance content independently of portal

System Requirements

- Windows 2000, Windows 2003, Windows 2008 Server
- SQL Server 2000/2005/2008
- IIS 5.x and higher
- .NET Framework 2.0/3.0/3.5

About NetUnity Software

NetUnity Software is an innovator in Web Services for Remote Portlets (WSRP) software. NetUnity provides products and services that enable businesses to develop and deploy portal solutions based on the open standard - Web Services for Remote Portlet (WSRP) - using the Microsoft .NET platform. NetUnity is committed to helping customers and partners deliver high-quality, easily maintainable, WSRP applications and integration solutions. NetUnity is member of OASIS WSRP Committee and an active participant in the development of the WSRP Specification.

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