

Flattening The Information Landscape

Inconsistent access protocols and data formats create barriers to information access.

RSSBus provides ready-to-use connectors to dozens of Internet and Enterprise information sources, while hiding differences of data organization, formatting, and access protocols.

In his iconic book, "The World Is Flat"¹, Thomas Friedman lists the World Wide Web as one of the ten key world flatteners making a wealth of information available to anyone and everyone no matter where they live. He compares HTTP to the railroad track and HTML to the boxcar that carries information from everywhere to anywhere.

However, while HTML does a good job of presenting formatted pages of information to browsers, professional information providers know how difficult it is to extract the raw data from HTML for follow-up processing like filtering or merging - and this is only one of the limitations of today's web: there are countless databases, news groups, personal mail files, text documents, and spreadsheets lurking throughout the network that are not served via HTTP. While most of these repositories can be accessed directly via SQL, Internet protocols or custom API's, the inconsistency of access protocols and formats create a barrier to quick and seamless data access.

RSSBus Provides Universal Data Access

RSSBus is a suite of information access products that provide ready-to-use connectors to several dozen Internet and Enterprise information sources while hiding differences of data organization and access protocols. The RSSBus developer learns only one call mechanism, using it to access SQL databases, office documents, network protocols, message queues, email systems, news groups, blogs, financial services, web services like the ones from Amazon, Google, Yahoo, and FedEx, and dozens of other resources.

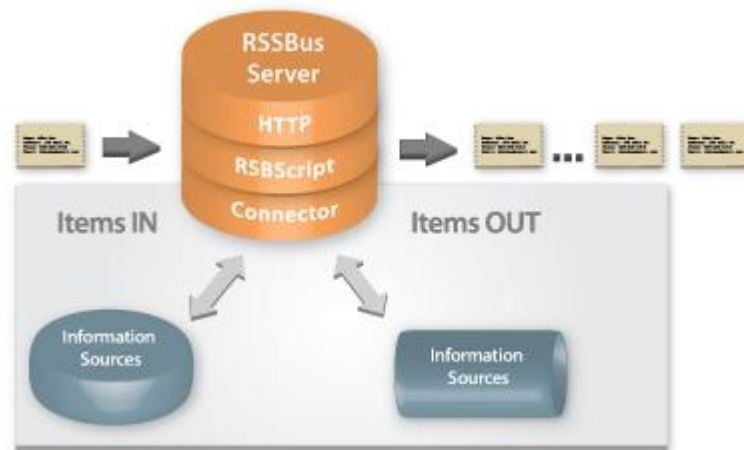
All RSSBus connectors send and return data in a common structure based on the popular RSS "item" format, which is essentially an extensible list of name-value pairs. RSSBus presents these items as tables that are easy to filter or combine in any way that your application might require. RSSBus can also convert items into ATOM, HTML, CSV, and several other formats directly useable by spreadsheets, browsers, RSS readers, and portals.

¹ Friedman, T, 2005. *The World is Flat: A Brief History of the Twenty-First Century*. New York: Farrar, Straus and Giroux.



Information providers can benefit from the simplicity and uniformity of RSSBus.

The simple format used by RSSBus makes it easy to gather and merge information from multiple sources. Because many RSSBus connectors can write as well as read information, it is just as easy to broadcast updates to multiple connector targets. Since the RSSBus call and return constructs are the same, it is easy to chain sequences of calls together to form Internet and Enterprise applications that leverage the full power of varied information sources.



All information providers can benefit from the simplicity and uniformity of RSSBus, from the most technical programmer to the most business-oriented communications specialist. Anyone with a basic understanding of the web can learn to use RSSBus connectors. Furthermore, RSSBus includes full connector-building support so that third party developers can create custom connectors to new information sources whenever needed.

RSSBus is Different from SOAP and RSS

SOAP works best with stable domain types and call signatures.

It is helpful to compare the RSSBus approach to several other web data access technologies in common use.

SOAP uses remote procedures to access network information, similar to RPC, CORBA or EJB2. Remote procedures pass data through argument lists where the type and

RSSBus accommodates change and simplifies signature management.

order of each argument is predefined and agreed upon by the caller and provider. For SOAP, these call signatures are recorded using Web Service Description Language (WSDL) and stored in a central library (UDDI) where all programmers and applications can read them.

SOAP has been successful for stable services such as user authorization or remote print services. However, uptake has been slower for Enterprise or Internet applications, which often rely on inconsistent or evolving data types.

By reducing all information to simplified RSS-based data formats, RSSBus accommodates change and eliminates an entire layer of signature management complexity.

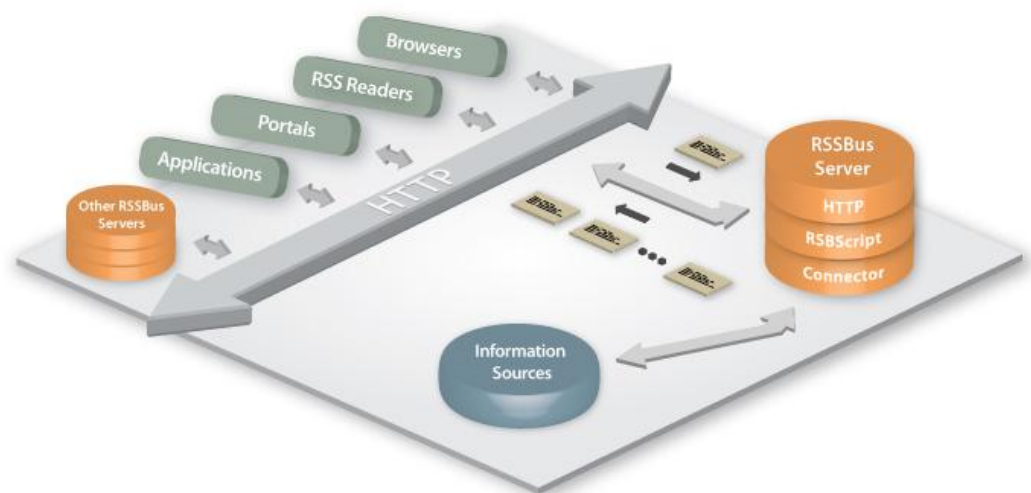
And in case you are thinking that RSSBus is nothing more than RSS feed generation, that's definitely not the case. RSSBus allows for input parameters and it can pipe the output of one connector as the input to the next, so it can be used to build advanced information processing systems.

In short, RSSBus combines the best features of SOAP web services and RSS Feeds to provide what we call *"Really Simple Services"*.

Using RSSBus

RSSBus technology is available as a complete information access framework.

RSSBus technology is available as a complete information access framework. Revolving around the RSSBus Server, the framework includes connectors for accessing a variety of information sources, a configuration scripting facility for invoking connectors and creating simple workflows, all running within a standard web server and publishing results in a variety of formats.



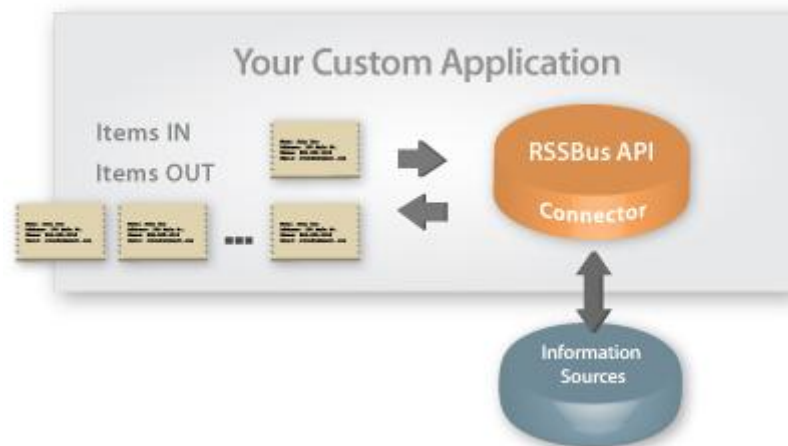
A simple use of the RSSBus Server may be to flatten several information sources to a simple format. Separate scripts are written for each information source, where each

The RSSBus SDK provides access to the connectors and a programming API for calling them.

script 1) configures and calls the appropriate connector, 2) filters the returned items to ensure consistent item names, and 3) republishes the information via the server in RSS format. Browsers, readers, custom programs, and other RSSBus servers can access these different information sources using the uniform call and return format.

In a more advanced scenario, we may call two or more connectors from the same script. The returned information can be filtered, merged or otherwise processed via RSBScript before being re-published by the server. Scripts can be configured to read information from one connector, transform it, and write it to another.

Technical users who are writing their own applications may find the software components in the RSSBus SDK more to their liking. The SDK is fully compatible with the RSSBus server framework, but includes only the connectors and a programming API for calling them. The API makes the extensive RSSBus connector library directly accessible to the programmer who codes in a programming language of their choice and deploys their application in a manner and format of their choosing. The components in the RSSBus SDK provide complete freedom for designing new information processing models based on the uniform item format of RSSBus.



The “Flat” Prerogative

The web has brought us a long way towards universal information access through adoption of a simple and extensible communications protocol, HTTP, and a simple and extensible data formatting language, HTML.

RSSBus extends this model by adopting RSS, a similarly simple and extensible data exchange format to facilitate program-to-program information exchange.

RSSBus is available and ready to deploy today. Because it is built on public standards and technology, there is no risk of proprietary lock-in or future obsolescence.

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