



## **A Web Services Framework for Extending RSS to Microsoft Office™ Documents**

A Case Study and Technical Brief  
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### **Executive Summary**

RSS has begun to emerge in a variety of ways that provide alternative and productive methods for information discovery. The array of RSS feeds that companies currently provide through various media brands represents an information source that can be leveraged in ways beyond that of newsreaders.

MyST SmartSpace™ is a service built on MySmartChannels™ that provides a unified information space for collections of content such as RSS feeds. MyST SmartSpace™ makes it possible to search and discover RSS items through Microsoft Office applications such as Microsoft Word™ and Microsoft Outlook™. RSS feeds are used to create a unified information resource that integrates RSS items with Microsoft Office™ 2003 Smart Tags and Microsoft Office™ Research Task panes.

This white paper provides an introduction to using SmartSpace™ and how this technology can be applied in real-world scenarios.

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## Introduction

Content consumers are beginning to exhibit a propensity for specifically identifying information sources that are meaningful to their work. They're doing this for many reasons but most compelling is the benefit of a publish-subscribe<sup>1</sup> model that creates awareness of, and access to content with less time and effort. The use of RSS syndication is catching on rapidly as a way to eliminate time-intensive Web surfing to get the information you value. But there are many forms of syndication services that can benefit information workers. MyST SmartSpace™ opens new doors to leverage existing content such as RSS feeds.

## MyST SmartSpace™

MyST SmartSpace™ is a MyST service built on MySmartChannels™ that provides a unified information space for collections of content such as RSS feeds. MyST SmartSpace™ makes it possible to search and discover RSS items through Microsoft Office applications including Microsoft Word™ and Microsoft Outlook™.

To demonstrate the benefits of leveraging RSS in Microsoft Office™ applications, we created a simple demo environment that uses eWeek's RSS feeds to create a unified RSS information resource that integrates with Microsoft Office 2003 Smart Tags and Office Research Task panes.

## What Are Smart Tags?

Microsoft Office Smart Tags are automatically generated links between recognized keywords and phrases in Microsoft Office documents and MyST SmartSpace™. As Microsoft Office users type (or see) recognized terms, they are automatically linked to related items in MyST SmartSpace™.

More information about Smart Tags technology is available at:

[http://www.devx.com/codemag/Article/18232?trk=DXRSS\\_LATEST](http://www.devx.com/codemag/Article/18232?trk=DXRSS_LATEST)

## What are Office Research Task Panes?

Microsoft Office Research Task Panes provide instant access to enabled information sources from any Office document including Outlook, Excel, Word, and Publisher. More information about Office Research technology is available at:

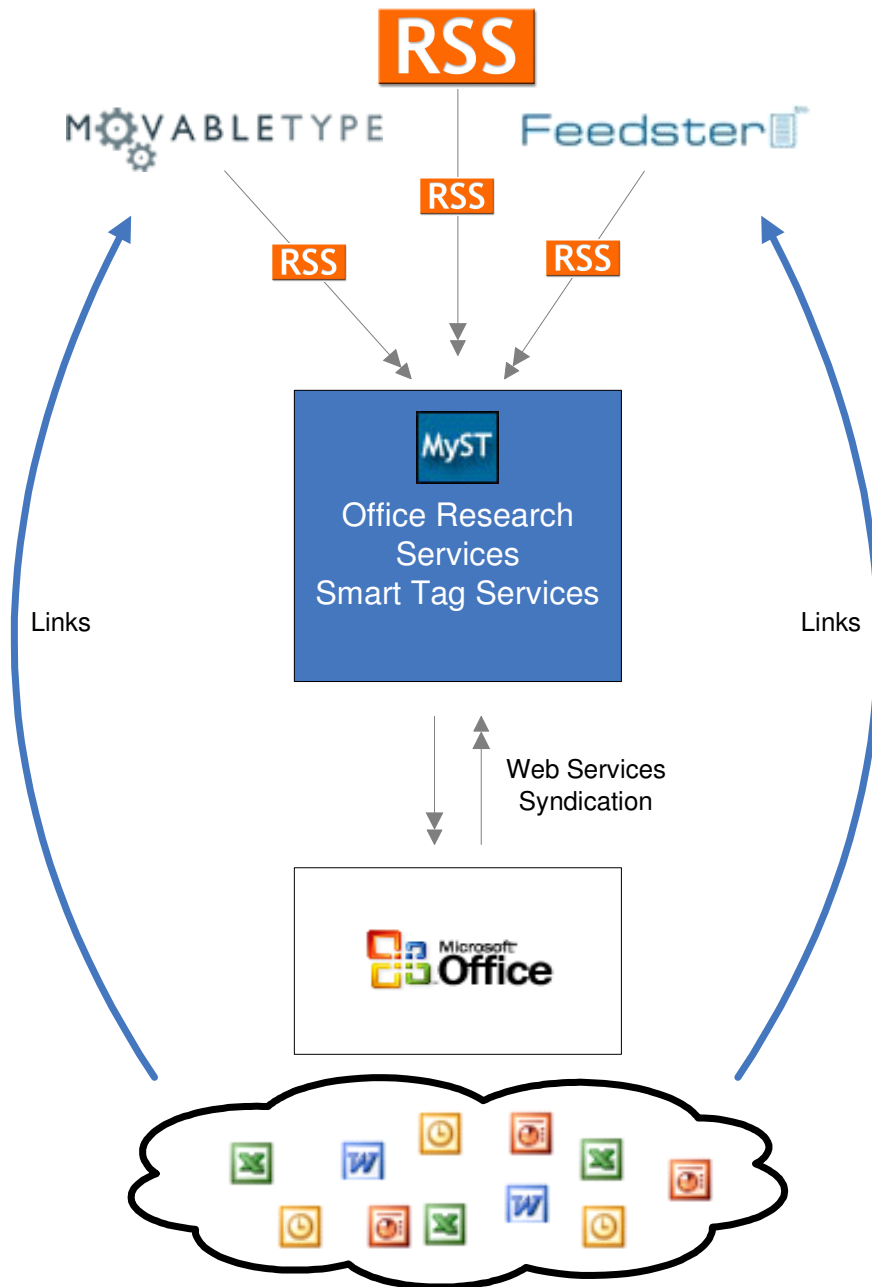
<http://www.microsoft.com/office/editions/prodinfo/technologies/research.msp>.

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<sup>1</sup> In the last years, a growing attention has been paid to the publish/subscribe (pub/sub) communication paradigm as a mean for disseminating information (also called events) through distributed systems on wide-area networks. Participants to the communication can act as publishers, that submit information to the system, and as subscribers, that express their interest in specific types of information. Main characteristics of such many-to-many communication paradigm are: the interacting parties do not need to know each other (anonymity), partners do not need to be up at the same time (decoupling in time), and the sending/receipt does not block participants (decoupling in flow). So, the publish/subscribe paradigm has been largely recognized as the most promising application-level communication paradigm for integration of information systems.

### Anatomy of a SmartSpace™

Creating a SmartSpace™ is relatively simple and performed by MyST Professional Services or through a MyST VAR. SmartSpace™ provides the aggregation machinery and management services necessary to collect RSS feed items on a regular schedule. Additionally, as each feed item is collected, the item link is used to evaluate the target page for keyword assignment. Keywords are determined and applied to the SmartSpace™ objects which form the basis for subscriptions available to Office 2003 users.



## User Benefits

These are some of the benefits of creating a unified integration space connecting RSS feeds and Microsoft Office.

- eWeek RSS content is extended as a rich advisory resource for businesses that use Microsoft Office.
- eWeek brand is extended to the Microsoft Office platform.
- Microsoft Office users can search across all eWeek feeds for information relating to their jobs or other interests. Searches can be launched against MyST SmartSpace™ directly from words and phrases in documents. Search results are confined to eWeek RSS content.
- As Microsoft Office users read or write email and Word documents, Smart Tags instantly call out relationships between document terms and eWeek RSS items. Smart Tags are presented based solely on the feeds subscribed to by each user.
- The MyST SmartSpace™ service provides virtual RSS subscription options that allow users to subscribe to search results that cut across all eWeek (or Ziff) RSS feeds. This capability makes it possible for Office users to manufacture custom RSS feeds based on specific subjects that collect items into a new feed regardless of the feed categories provided by eWeek.
- Research Task Panes are accessible from all Office 2003 applications.

## Business and Architectural Benefits

Additional business and architectural benefits accrue through MyST SmartSpace™ in the following ways.

- MyST SmartSpace™ can host RSS aggregations that are secure or publicly available.
- MyST SmartSpace™ creates the possibility of aggregating premium content that is accessible only through secure connections from Microsoft Office or RSS readers.
- Secure access to MyST SmartSpace™ content through Office Research Task panes provides for single sign-on capabilities. Users need only authenticate once and credentials are visible in all Office applications.
- MyST SmartSpace™ creates additional agility for hosting content feeds in other XML formats such as OPML, KlipFolio, and other DTD's.

- MyST SmartSpace™ can optionally perform feed-splicing tasks based on feed keywords. This makes it possible to augment RSS feeds with new RSS items such as advertising or other content sources relevant to the content in the feed at the time it is searched or requested.
- MyST SmartSpace™ can optionally aggregate other information sources such as SQL data, Web pages, and even Microsoft Word documents.

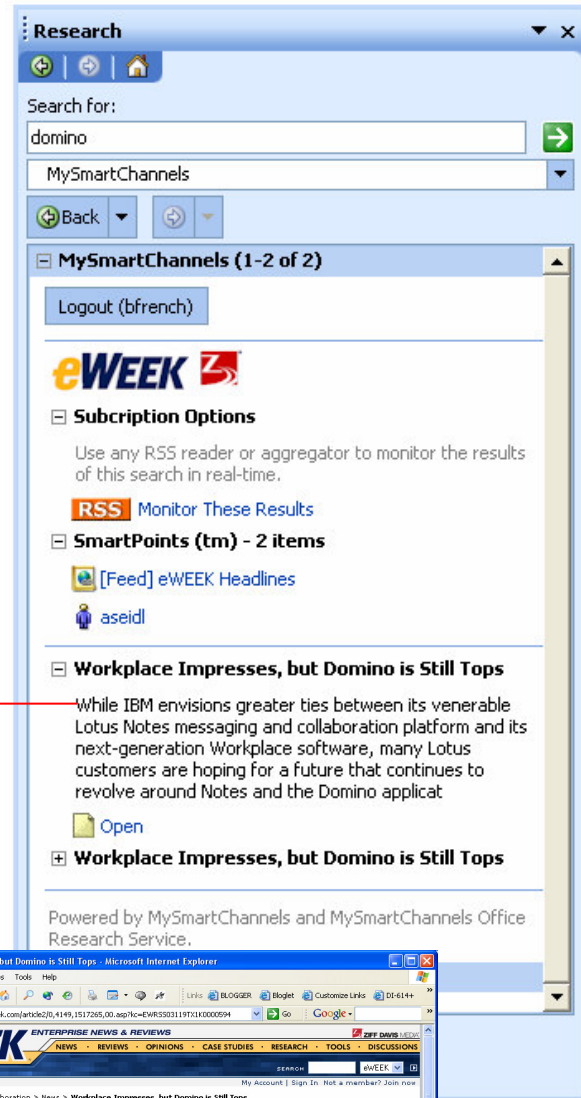
**Example Research Task Pane**

The Research Task Pane at the right is an example of what an office worker would see when searching the eWeek syndication feeds in Microsoft Office documents.

The eWeek and Ziff Davis brands are prominently displayed in the search results in addition to providing additional RSS subscription options.

SmartPoints™ call out specific channels and people who know about, or contain the most relevant information concerning the research task query. *Note - this eWeek demo is limited in scope so it doesn't show the complete behavior and benefit of SmartPoints™.*

Each item in the results pane links the user directly to the information item in the original eWeek RSS feed.



While IBM envisions greater ties between its venerable Lotus Notes messaging and collaboration platform and its next-generation Workplace software, many Lotus customers are hoping for a future that continues to revolve around Notes and the Domino applicat

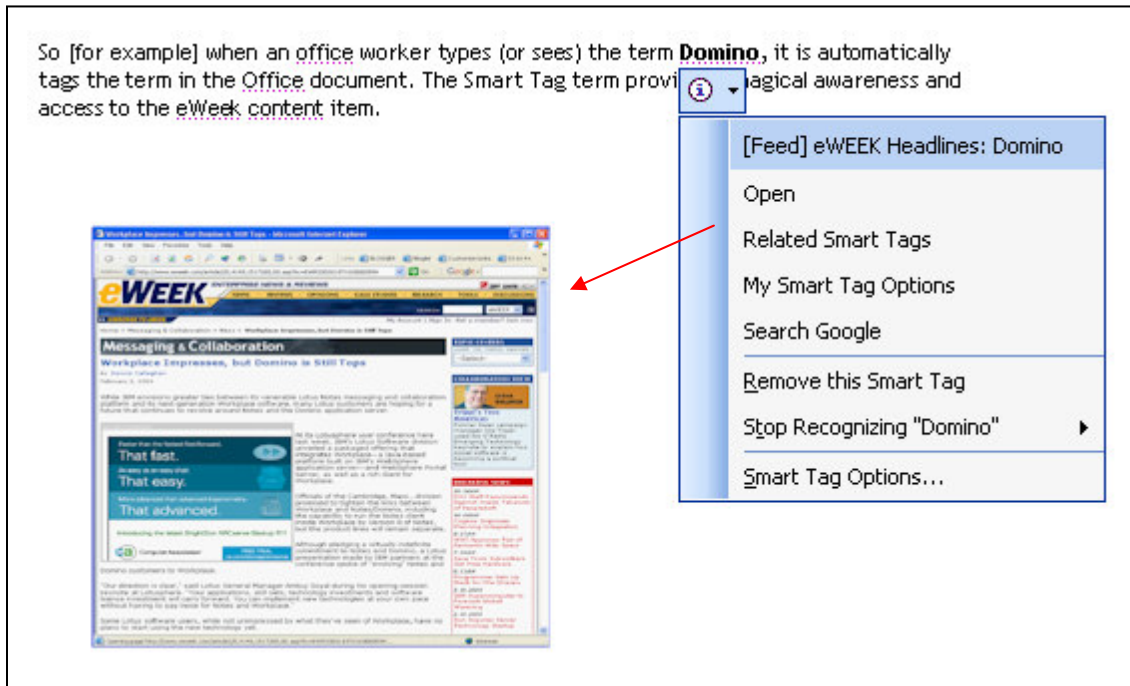


### Example Smart Tags

Microsoft Office Smart Tags are automatically generated links between recognized keywords and phrases in Microsoft Office documents and eWeek content in MyST SmartSpace™. Because users decide which feeds to subscribe to, the tags that each sees are dependent upon the declared feeds. This means that user only see tags that are meaningful to their interests and jobs.

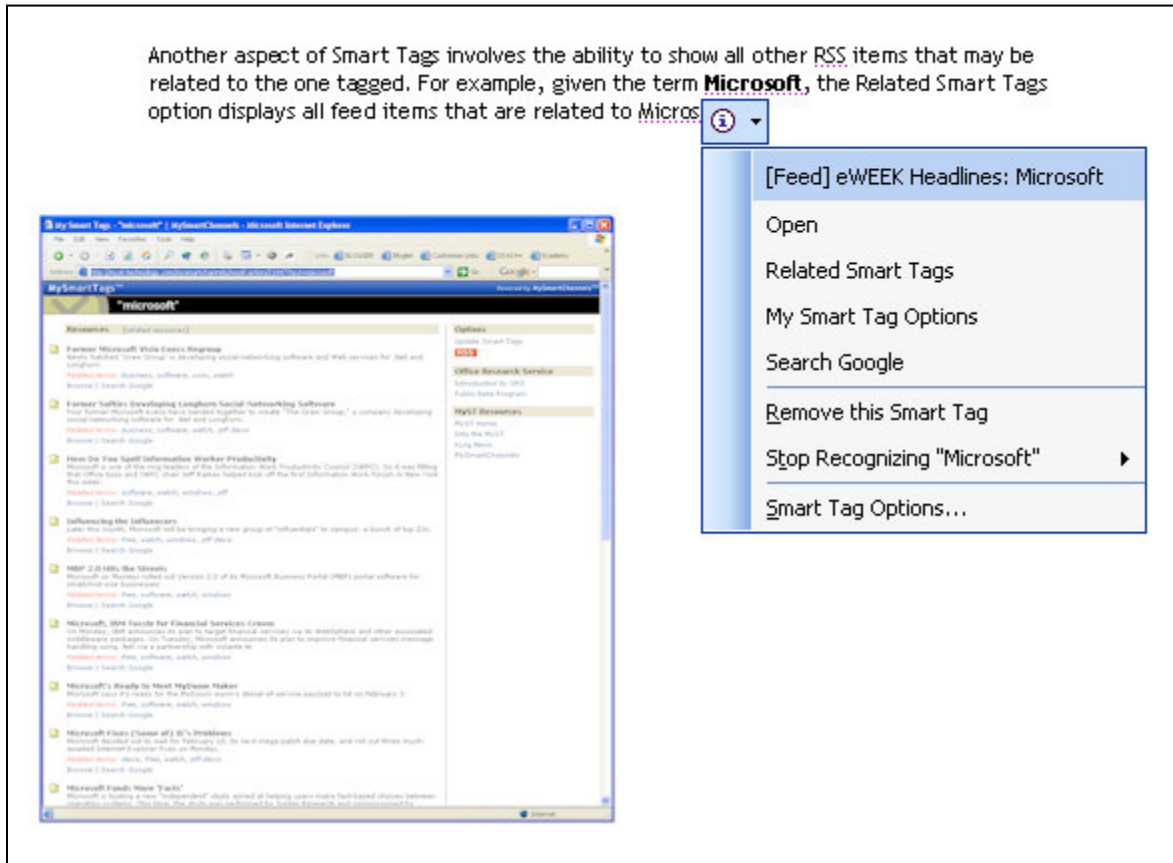
To achieve integration with Microsoft Office Smart Tags, MyST SmartSpace™ harvests the eWeek feeds and automatically determines relevant keywords and terms for each RSS item. The keywords and RSS item titles are transformed into Smart Tag subscriptions which are easily selected from a landing page similar to the eWeek RSS web page.

So [for example] when an office worker types or sees the term **Domino**, it automatically tags the term in the Office document. The Smart Tag term provides a mouse-over popup that allows the user to drill into eWeek content via the RSS item link producing a magical awareness and access to timely eWeek content.



## Smart Tags and Related RSS Items

Another aspect of Smart Tags involves the ability to show all other RSS items that may be related to a given keyword tag. For example, given the term **Microsoft**, the Related Smart Tags option displays all current feed items that are related to Microsoft.



## Summary

The interconnected business is one that will build increasingly powerful linkages to content creators and content consumers, enhancing end-to-end business processes that flow within a delicate connection between people who have questions and people who have answers. SmartSpace™ delivers the ability to aggregate RSS and other semantic content to provide unified visibility of Weblogs and other knowledge systems. Empowering Microsoft Office users with a publish-subscribe service allows them to make choices concerning important information resources and access those resources in the normal course of their work.

SmartSpace™ is built with open-standards so it comes ready to integrate with other business and content management processes.

To learn more about SmartSpace™ and the MyST Web Services platform, to obtain a free MyST user account, or to explore how your organization might benefit from these technologies, visit the MyST Technology Partners Web site at [HTTP://MYST-TECHNOLOGY.COM](http://MYST-TECHNOLOGY.COM) or send e-mail to [INFO@MYST-TECHNOLOGY.COM](mailto:INFO@MYST-TECHNOLOGY.COM).

### **Forward-looking Statements**

This white paper contains “forward-looking statements.” All statements that are not historical are forward-looking. Forward-looking statements represent reasonable beliefs of the authors at the time of publication of this white paper but do not constitute an obligation of any kind on the part of the authors or any other party. The authors are under no obligation to alter any forward-looking statements or notify any parties under any circumstances.