



SmartPoints and Knowledge Discovery

Executive Summary

MySmartChannels is an innovative knowledge awareness framework that makes it easy to publish, organize, and subscribe to high-velocity business information.

Key to the success of MySmartChannels and knowledge initiatives built upon it is its ability to provide knowledge workers with tools to discover knowledge in new ways.

This document is a technology brief that describes MySmartChannels search and discovery features including a new and innovative concept called SmartPoints.

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INTRODUCTION

MySmartChannels v1.1 includes a new search feature as well as a compelling model that naturally identifies relationships and connections between domains of expertise and users. The business driver for search and discovery is to create deep awareness of knowledge in channels while making it a virtually friction-free process to find relevant content on simple keyword searches.

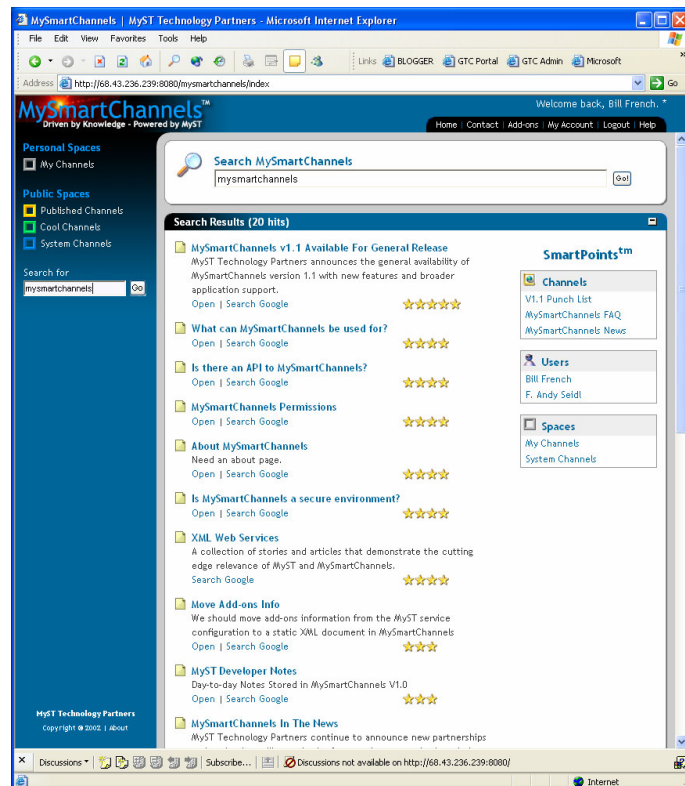
FULL-TEXT SEARCH

MySmartChannels provides a full-text indexing engine that generates search results for a wide range of information types in the MySmartChannels system. This approach provides the ability to discover peripheral resources [such as users] as well as primary ones like channel items. Peripheral resources searched include key users that have contributed to channels that contain relevant hits.

SEARCH RESULTS

Search results are ranked based on relevance to the query string entered by the user and the results page provide traditional links directly to the information discovered.

However, extended linking options are also provided that deliver added value to the discovery process depending on the nature of the objects found. For example, a channel item includes links to display the item as well as edit it (if the user has edit permissions). Item names can also be passed directly to Google for immediate external queries. Channels included in the search results include links to display the blog view of the channel as well as the application's channel page. Additional search extensions include such actions as - *what channels has this knowledge-author created?, or what channel items has this user authored?*



SEARCH SECURITY

A key feature of MySmartChannels is the security model - information access and visibility permissions may be granted at very high or at granular levels of the

information space. The search results user interface factors in all aspects of the security model including visibility of information objects as well as read, write, and edit permissions. Search results and extended links are always presented in association with the user's security context.

MEASURING KNOWLEDGE


Streamlining the discovery process is critical to the success of finding specific information objects. Eliminating friction in the search process for information and the actual resources - whether people or information - requires a new approach. MySmartChannels Search integrates a new concept that provides special call-outs to resources that it has detected as relevant. While specific channel items may be highly relevant to a search query, a preponderance of items written by a specific knowledge-author is also of great importance and is presented as a relevant source of knowledge. This technology discloses visible [and meaningful] relationships in the absence of keyword hits. MySmartChannels v1.1 delivers on this vision through SmartPoints, a dynamic model for measuring the importance of peripheral relationships between channels, items, and knowledge-authors and the role they play in relation to the search query.

SMARTPOINTS AND SEARCH


SmartPoints (coupled with MySmartChannels Search) provides a natural connection between pools of knowledge and individual search hits. SmartPoints are knowledge-aware gizmos that appear in conjunction with a collection of relevant keyword hits. SmartPoints act like guideposts for users as they search for relevant information. For example, given a collection of hits to channel items, users may also benefit by knowing such things as *which author has written the most content on this subject?* Or, *which channels produced the greatest number of hits?* SmartPoints provide answers to these and many additional questions through a series of dynamic statistical findings based on the search.

SmartPoints appear in MySmartChannels search results as small (but highly visible) windows leading to knowledge-authors and channels that score the highest on a given keyword search. SmartPoints are calculated based on a proprietary knowledge-measuring process that factors in many details about content in the MySmartChannels domain. In addition to traditional search results that are also ranked in terms of relevance, SmartPoints adds another dimension by calling out specific points of light in the MySmartChannels information space. To make it to the SmartPoints display, a channel, author, or space must meet a statistical threshold that guarantees extremely high relevance to the search query.

SmartPoints*

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|---|
|  Channels |
| V1.1 Punch List |
| MySmartChannels FAQ |
| MySmartChannels News |

| |
|--|
|  Users |
| Bill French |
| F. Andy Seidl |

| |
|---|
|  Spaces |
| My Channels |
| System Channels |

SMARTPOINTS ARE EMERGENT

As is the case in free-markets, successful knowledge-teams and authors are measured based on the value of their content output. SmartPoints transforms the mundane act of capturing knowledge artifacts, into a game of domain-expertise superiority where teams and channel owners strive for the highest degree of awareness. Other advantages of greater awareness include better inter-departmental integration, increased productivity and efficiency (i.e., people that are well informed don't have to ask many interruptive questions). The basic nature of the SmartPoints design causes a quest for meta-data and knowledge capture because it naturally measures knowledge output. This fosters an emergent collection of relationships because successful knowledge producers will also be the ones that have [or know about] the best ideas, gain a wider appreciation for other information within the enterprise, and fully articulate their expertise in specific domains of intelligence.

KNOWLEDGE COMES TO LIFE

SmartPoints provides a back-plane similar to pheromones in an ant colony, where each channel and knowledge-author dynamically emerge as specific expert resources depending on actual search queries. The environment naturally grows smarter based on three factors -

- 1) Humans engaged in the act of creating content in a naturally classifying domain of expertise.
- 2) Gauging activity and interests based on careful tracking of click-throughs from SmartPoints to channels and knowledge-authors.
- 3) Measurements of helpfulness (i.e., each click-through provides the ability to record the value of the information to the consumer and some way of ranking the helpfulness results).

SEARCH SUBSCRIPTIONS

The MySmartChannels architecture provides pervasive (but secure) access to all content and resources through XML. Using technology standards such as RSS, channel content can be utilized in nearly any application. The search system also follows

this approach, making it possible to subscribe to specific MySmartChannels search queries. The benefits are clear - desktop applications such as KlipFolio can present real-time updates to searches of MySmartChannels content. Users can set up notification tools that continually bring new search hits to their desktops.



THE SEARCH GATEWAY

As described earlier, the MySmartChannels search interface provides numerous ways that streamline the use of information once it's been discovered. This diagram demonstrates how the search page expands the activities that are possible following a search.

