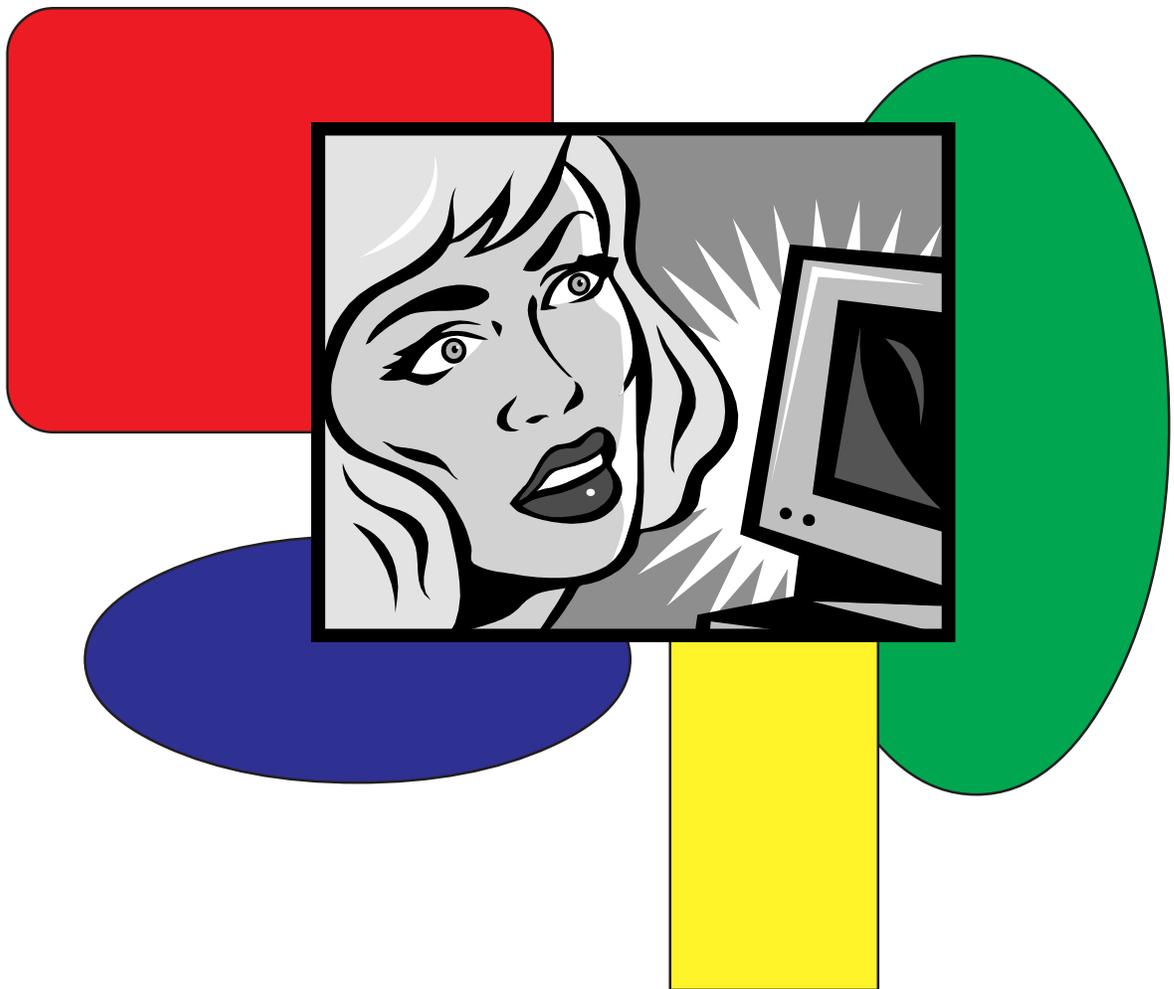


# ***Missiontrek Cartagio Enterprise***

***Internet  
Productivity  
Tool\****



***\*Taking frustration and futility out of cruising the Internet....***

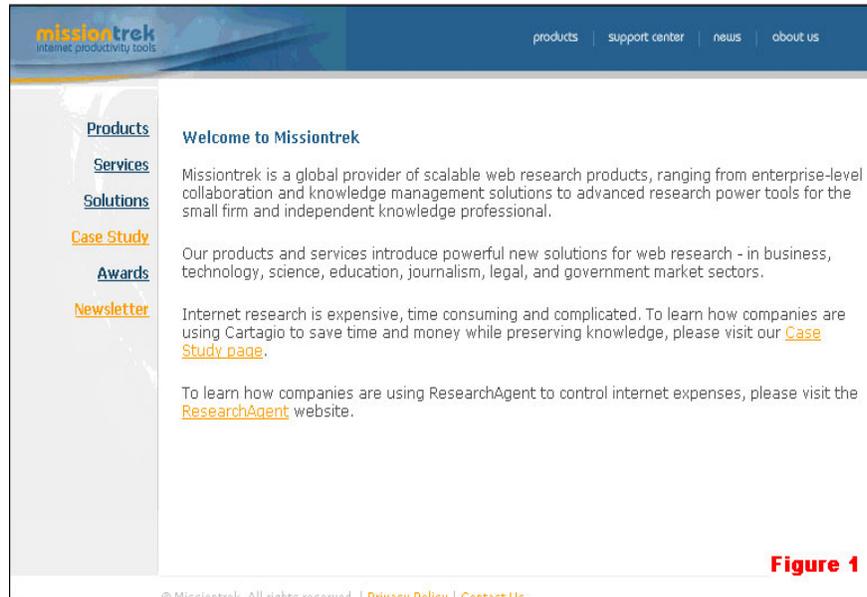
***KMS Evaluation: Missiontrek Cartagio Enterprise***  
***Anne Marie Donovan***  
***April 1, 2003***

***LIS 385T, Knowledge Management Systems***  
***Dr. D. Turnbull***

***Graduate School of Information***  
***University of Texas at Austin***

## Product Overview

Missiontrek Limited is a Switzerland-based software company with offices in the United States, Australia, and Switzerland (<http://www.missiontrek.com/>). Missiontrek advertises itself as “a global provider of scalable web research products, ranging from enterprise-level knowledge workflow solutions to advanced research power tools for the small firm and independent knowledge professional” (Missiontrek, n.d., About Us). Its flagship products, *Cartagio* and *ResearchAgent*, are also being further developed by Missiontrek for specialized uses in the legal, technology, and medical information niche markets (Products).



Missiontrek also offers a range of professional services to its clients including accounting integration with their products and on-site training (Figure 1).

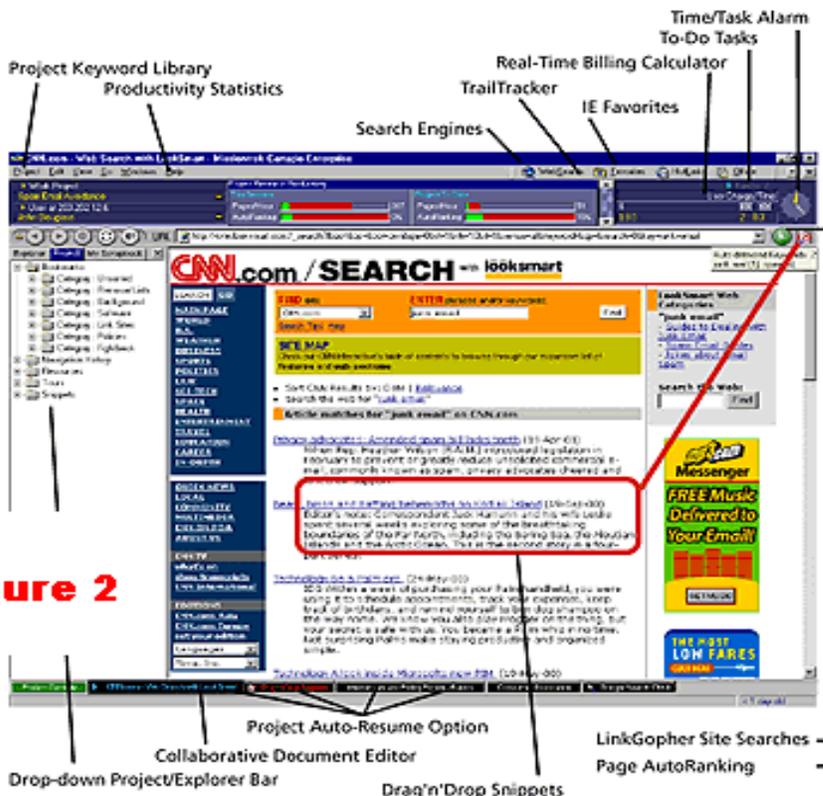
The Cartagio family of products includes *Cartagio Lite* (free shareware), *Cartagio Home* (\$75.00); *Cartagio Pro* (\$175.00); and *Cartagio Enterprise* (\$395.00). A review of *Cartagio Pro* at Softpile.com describes this software package as, “the ultimate web browser for professional Internet users and knowledge workers” stating that it “provides the tools you need to focus on the task at hand and efficiently manage and capitalize on your online research” (Softpile.com, 2003, Cartagio Pro). While *Cartagio Lite* offers robust tools for organizing and sharing Web research, purchase of the *Cartagio Home* license removes limits on the number of bookmarks and project categories that can be used. *Cartagio Pro* adds tools for professional Web researchers including project statistics, a to-do task list, time tracking, and a built-in document editor. The *Cartagio Enterprise* package allows multiple users and group access to projects as well as administration facilities. With the addition of *Cartagio Centrale* (\$1975.00) to *Pro* or *Enterprise*, team collaboration facilities are extended beyond documents, files, and Web research to include project chat rooms and forums that allow teams to communicate privately. Members can also share and discuss screenshots and images, assign and schedule to-do tasks, and leave sticky note reminders for absent workgroup members (Products).

The software's collaborative features are extended even further with *Cartagio Collaboration Centrale* (\$3450.00) which lets users work together on both sides of a firewall and allows research results to be published to the Web. Interestingly, this particular package is marketed to research librarians who, in the words of Missiontrek, are "transforming research into knowledge" (Missiontrek, n.d., Products). This enhancement can be used to organize and publish a variety of file formats in a Web-accessible form-- "With Cartagio, you can capture, organize and summarize research done anywhere on the Web. Whether a pdf, dynamic web page, image or sound file, Cartagio lets you incorporate your sources and your findings into an HTML project file. You can annotate your bookmarks documents, arrange them into a logical Tour, and deliver them, along with your conclusions, securely, to one person or one million." (Products). Missiontrek also offers a separate product called *Research Agent* which allows users (or administrators) to track browsing activity, including time spent on specific Web sites. This feature would be particularly useful for organizations that want to track use of expensive subscription services that are Web-served.

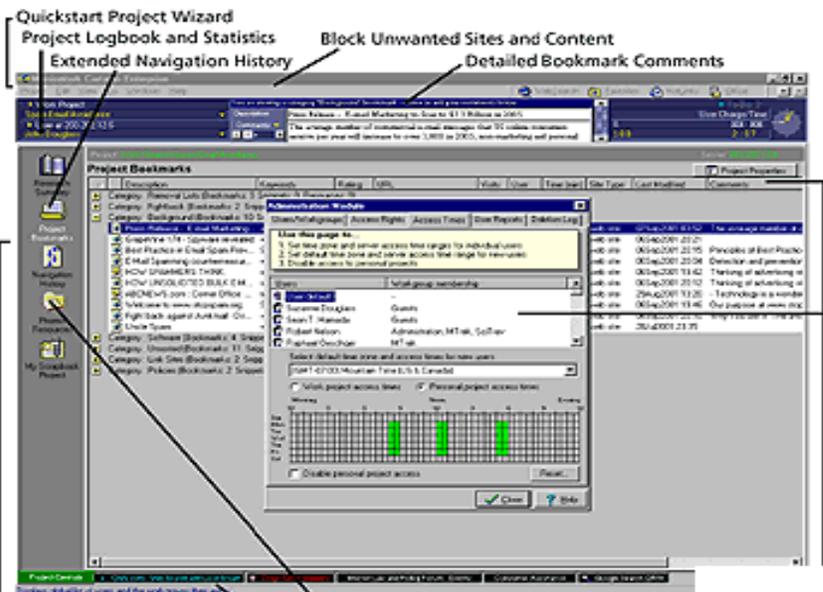
For this evaluation, I examined a fully functional trial download of *Cartagio Enterprise*. I used the product for three weeks during which I conducted research for two term papers as well as two work projects. I found the toolset sufficiently helpful that I have purchased *Cartagio Home* and will seriously consider purchasing *Cartagio Pro* should I find myself doing work-related Web research at home. The *Cartagio Enterprise* suite provides very easy to use Web navigation support and project collaboration tools that allow sharing not only of Web research, but also of documents and other project resources. I would recommend it for small companies or groups that need a collaboration tool for Web research-based projects; it provides a broad range of facilities, requires minimal setup, and essentially no user training because the online help and tutorials provide ample guidance for using even the more complex features of the program.

## **Product Features**

*Cartagio Enterprise* is an enhanced version of Missiontrek's personal Web research toolset that enables project-based browsing and site tracking including: automatic creation of categorized, annotated, searchable navigation histories; drag-and-drop "snippets" that let you organize and annotate portions of Web content; the ability to create project-based "Web tours" for others; a range of Web search tools; and automatic keyword ratings for visited sites. Designed to help the searcher focus on relevant content, this toolset runs on the backbone of Internet Explorer and allows full integration with all IE features. *Cartagio* can also be integrated with an email server for a very seamless project management environment. *Enterprise* is essentially a personal knowledge management (PKM) toolset with added collaboration features, so I found it useful to evaluate the software in the context of Steve Barth's framework for PKM tools (Barth, 2003). This framework describes seven principle KM processes that a PKM tool should enhance if it is to be of value: **accessing** information and ideas; **evaluating** information and ideas; **organizing** information and ideas; **analyzing** information and idea; **conveying** information and ideas; **collaborating** information and ideas; and **securing** information and ideas (p. 21). Figures 2 and 3 show the main and project management screens of *Enterprise* with many of its primary functionalities highlighted; even from this high-level view it is evident that *Cartagio Enterprise* provides value-added functionality to each principle KM process.



**Figure 2**



**Figure 3**

**Accessing-** *Enterprise* provides a variety of search engine tools. More than 50 commonly used search engines are supplied by default, but you can add your own favorites. The search engines are organized into 6 categories on 3 tabs (Figures 4 & 5). You can also access or add to your IE favorites while navigating in *Enterprise*.

While navigating, the *SiteMiner* feature (a yellow icon) will flash to indicate a page you have previously visited; it also autogenerates a sitemap. Searching is enhanced with a series of "find" functionalities such as "find word" which locates and highlights multiple searchwords or project keywords in the active page.

*LinkGopher* drills into Web page hyperlinks to locate project keywords or search words in pages down to a pre-specified depth. It then generates a report for later use. A "polite query" option enables a slowed query rate for sites which reject excessive search requests. If you find something of particular note that you will want to return to soon, you can take a *PlaceMarker Snapshot* (Figure 6) to save the currently open set of web page URLs for later recall; you can store up to 5 sets of placemaker URLs with each project. Another feature that enables non-synchronous access and greatly enhances organization is *Drag'n'Drop Snippets* (Figure 7).

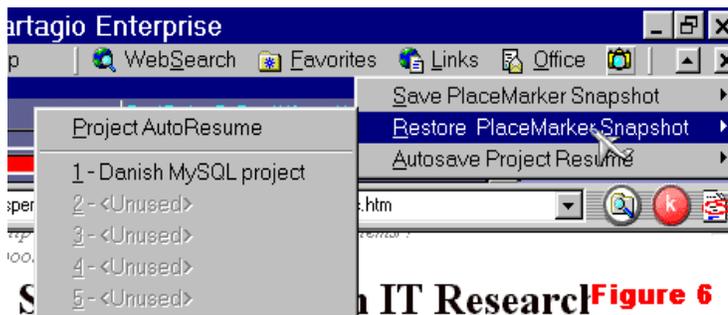
As you navigate a Web page you can highlight and drag to the Snippets folder any content from the page (images are included only when selected). This tool is particularly useful for collecting transient information like news reports for which the URLs may not persist. You can edit the Snippet title and add annotation. A copyright warning level can also be set to alert the user to how much of the page content is being copied.



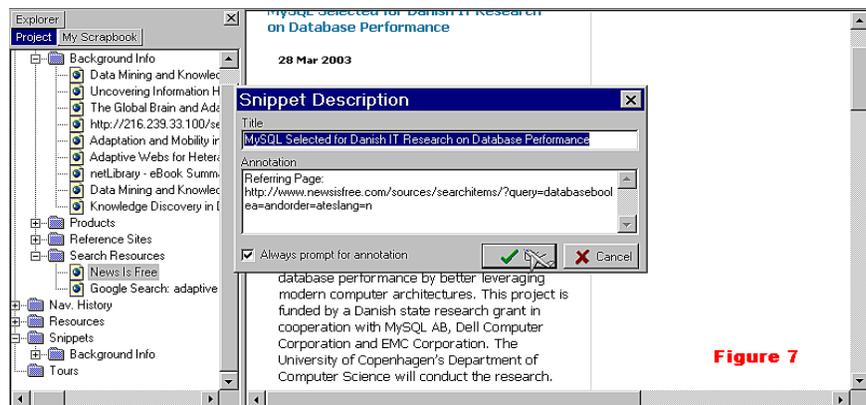
**Figure 4**



**Figure 5**



**Figure 6**



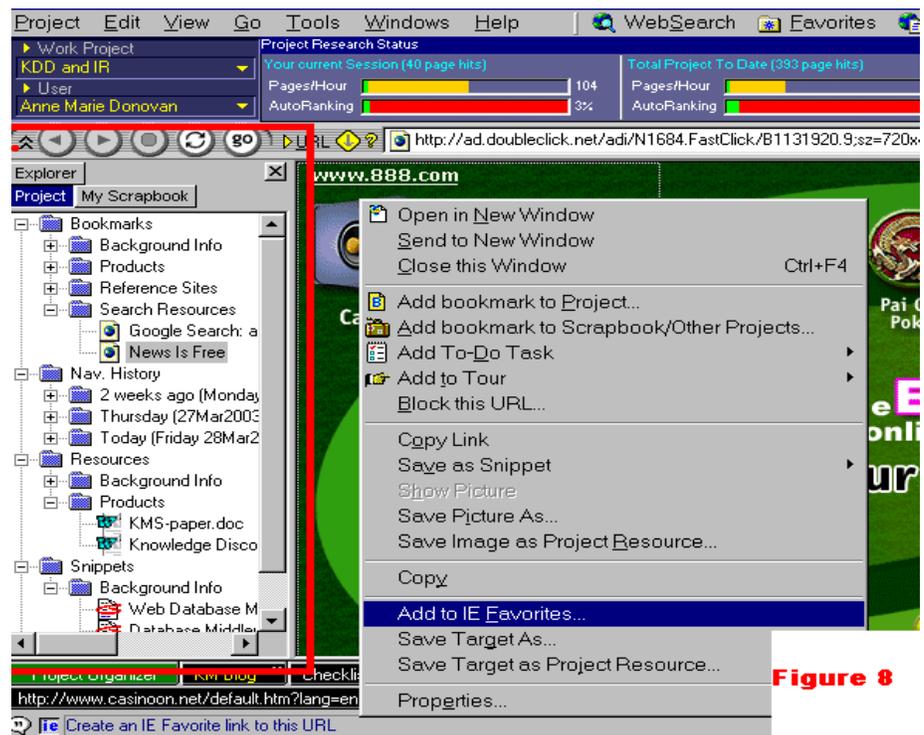
**Figure 7**

**Evaluating-** Evaluation is enabled on two levels-- autogenerated ratings and user-provided ratings. A user-defined project keyword/key phrase library is used by the software to automatically rate visited Web pages for project relevance. Six keyword relevancies are assessed: frequency (the number of times each keyword appears in a document); user relevance (user-provided assessment data); proximity (the proximity of located keywords); matches (the number of keywords found); density (the number of keywords matched in relation to the document size); and autoranking (a weighted combination of the other factors).

**Organizing-** A project wizard can be used to create a new project, open existing projects, or import external project files into the project database. Projects are maintained in a project database so

that they can be efficiently searched and project statistics can be reviewed individually or in comparison to other projects. For the user, project resources are organized graphically in a tabbed navigation window (Figure 8).

The Explorer tab allows the user to browse their IE Favorites, My Computer and Network Neighborhood folders. The Project tab allows the user to browse project bookmarks, navigation history, project resources, snippets and tours. The user can drag and drop Web page URLs, files and text onto the Project tab, to add as bookmark, resources or snippets and can also double-click a project item to view it in a browser or external application window (e.g. a Word document). The My Scrapbook tab allows the user to access/save bookmarks, snippets, or other resources that they do not want to be made public to the workgroup.



**Figure 8**

The system interface provides organization value on several levels, primarily through enabling added context and tool customization. The user is able to provide extensive project description information for context (e.g., title, description, keyword library, folio and billing references, workgroup identity) as well as select across a broad range of configuration options including user identity (full name, user name, description, email address, cost/billing unit, password) and interface preferences (project auto-resume, default browser at startup, tight navigation focus, project start tab, email options, inactivity timeout, project cache limits, billing currency, blocked URLs, and Web search engine customization).

The IE backbone of the software is enhanced with extended navigation history tools that also enable better resource organization. A complete navigation history is saved with each project (including page descriptions, URLs and keyword matches) so that a data search function can be used to search the history of one or several projects and sort the history display by any searchable category, e.g., keyword ranking.

The program allows detailed bookmark annotations which are displayed whenever a bookmarked URL is visited. This annotation includes the name of the bookmark creator and time of creation; it is searchable and can be edited freely. Descriptive information can be highlighted on the Web page and dragged to the annotation fields. The user can also add a variety of project resources to the project database, e.g. Microsoft Word documents, images, entire web pages, sound files, .zip, .exe, XML, .eml, and .pdf files (Figure 9). The user or workgroup can also establish a project-related to-do task database that enables automatic reminders such as emails or "sticky notes" that pop-up whenever the program is initiated. Offline access to project resources is provided through the *Briefcase Synch* functionality. The user can temporarily import project files from another project or export their own project to a laptop for work on the road. Changes are automatically synchronized with the source project when the files are re-imported.

**Analyzing-** User analysis of search activity is enabled through a *Trail Tracker* that permits the user to review bookmarked pages for their projects, as well as saved project snippets and resources. This tool also permits the user to review a contiguous history of pages previously navigated and filter those pages by category, site, date of creation, or users. The auto-ranking function can be used to sort bookmarks and navigation history in a variety of ways to enable the user to track patterns in information presentation or resource use. Overall project statistics, such as session times, site visitation frequencies, and billing costs can be generated and pasted into a spreadsheet.

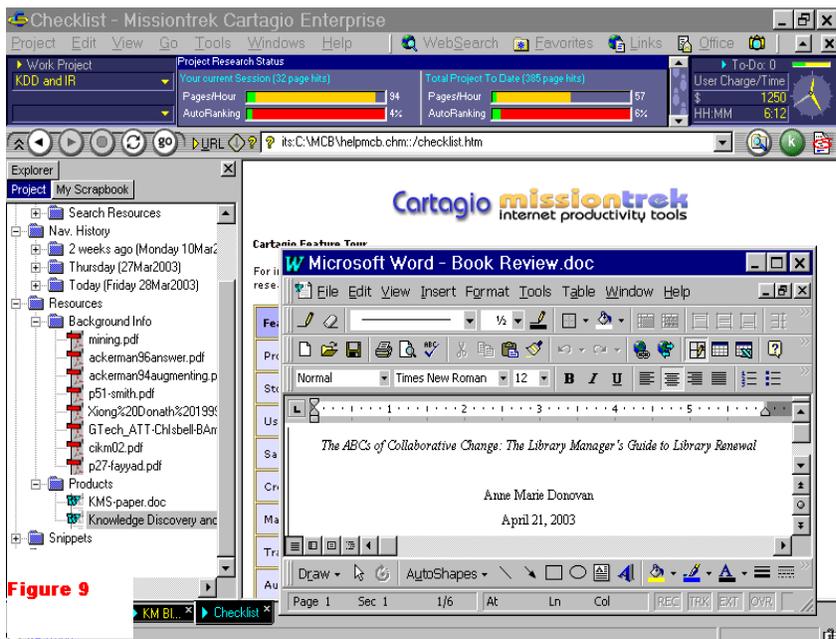
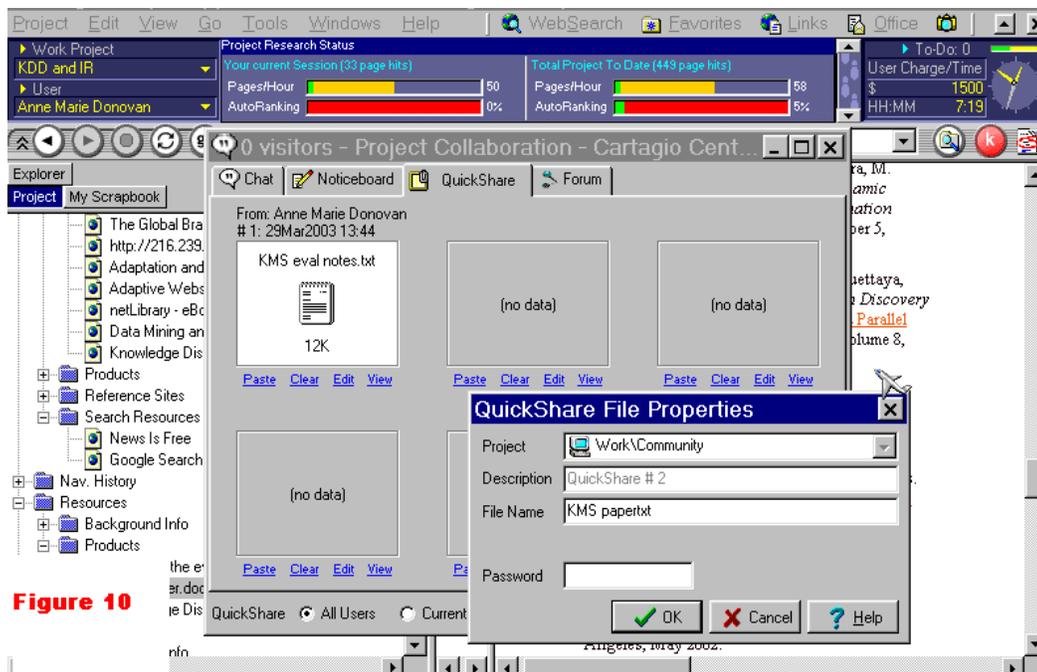


Figure 9

The auto-ranking function can be used to sort bookmarks and navigation history in a variety of ways to enable the user to track patterns in information presentation or resource use. Overall project statistics, such as session times, site visitation frequencies, and billing costs can be generated and pasted into a spreadsheet.

**Conveying-** The *Briefcase Synch* functionality described above can also be used to email projects to clients for review or provide a quick project update to a colleague. Projects are compressed when exported to maximize transmission efficiency. A free viewer (*Cartagio Lite*) is available from the company Web site so that non-team members can access an exported project. A user can also email snippet files, which are saved in HTML, to colleagues. Many of the collaboration tools described in the next section also have value for conveying project information and ideas.

**Collaborating-** When *Enterprise* is connected to a multi-user project database, all users connected to the database server can use four online collaboration tools that provide ample opportunity for informal sharing of ideas and commentary on project resources. The *Chat Tab* lists users connected to the server, allows online chat with all or a selected number of those users, and allows a user to send an alert to another selected user. All chats are archived and searchable. The *Collaboration Noticeboard* provides a workgroup information sharing facility that can include email and hyperlinks as well as text. *Quickshare* allows posting of digital objects that can be locked for editing and then reposted. The *Forum* tab provides access to a discussion board-type facility that allows threaded posting of messages with attachments and the possibility of email notification of new content. *Forum* access can be public or limited to a designated workgroup. Enterprise also provides an inbuilt document editor functionality that allows export in RTF or Word 2000 format, thereby facilitating document collaboration.



**Figure 10**

**Securing-** A project author has the option of enabling a project lock that prevents other users from modifying the project title, description and project document as well as protecting any specific bookmarks, snippets and resources added by the author from being modified or deleted. When a user adds resource files, they can also be password protected and encrypted for network transmission. Projects can also be encrypted for export and program communication between collaboration users is always encrypted. Security is also provided by the administrator functions for workgroups. Administration tools include: user and workgroup administration; project access administration; URL and content blocking; guest/client collaboration account administration; server configuration and connection status; lockout of server remote connections; configuration of project database size limits; deletion and restoration of work project content; and report generation of user system statistics. Personal projects are excluded from administrator access although administrators can set access times when users may access their personal projects, e.g. outside work hours only.

## ***Cartagio Enterprise and Personal Knowledge Management Tools***

Designed specifically to enhance the creation, organization, use, and dissemination of information obtained during Web research tasks, Missiontrek's *Cartagio* family of products represent a subset of the PKM software tools available today. Similar products include iMiser (<http://www.weborganizer.biz/>), and Surfsaver (<http://www.surfsaver.com/>) although these products do not include collaboration tools. Increased focus on user-centered computer interface design methods over the past decade has resulted in a plethora of PKM software packages designed to accommodate individual preferences and cognitive styles in information acquisition, handling and knowledge creation. The development of PKM software has been greatly influenced by a growing body of empirical and theoretical studies in human cognition and human-computer interaction-- above all, PKM tools are intended to enhance human cognitive capabilities and creativity through the application of highly individualized information handling technologies. Missiontrek's *Cartagio* products reflect two rather recent trends in the design of these technologies. The first is the trend toward software that is highly user-responsive (see Mitchell, 1997 for a diverse collection of essays on user-responsive design). The second is the trend toward divorcing system and software functionality from information content and interface design. In the context of these two trends, PKM software is becoming highly malleable-- the intent of the software designers is to enable users to collaborate and to create their own contextual interface as well as to repurpose and disseminate their knowledge work effortlessly. The *Enterprise* software package accomplishes those goals through a relatively lightweight but effective architecture and a familiar toolset that interfaces seamlessly with a firm's existing KM applications (e.g., Internet Explorer, email and document editing programs).

### ***Example Application and Use***

*Cartagio Enterprise* provides a broad range of highly usable PKM tools that can be extended effortlessly beyond the individual desktop to the workgroup and even farther to a designated client base. The robust search tools, workgroup configuration, collaboration features, multi-format support and organization flexibility add great value to the process of **accessing** information and ideas. I found this toolset to be extremely useful for organizing and accessing resources for both school and work projects. The tools for **evaluating** information and ideas, especially the autogenerated ranking features, were very useful for doing a quick survey of a batch of Web resources. I was able to move quickly through them, bookmarking those that ranked as highly relevant for closer scrutiny at a later time. The features for **organizing** information and ideas, especially the malleability of the filing system, provides a seamless flow between Web resources and project resources and products. The toolset that allows annotation and sorting of Web resources is very useful when comparing and **analyzing** information and ideas from disparate sources. The simple interface with email, collaboration tools, web publishing, and project export makes it easy to **convey** information and ideas to colleagues, team members, or clients. The **collaboration** toolset, while not extremely robust, would be more than adequate for the collaboration needs of most of the projects I have worked on. The integrated chat feature is especially useful since it provides a great deal of situational awareness for team members vis-a-vis the activity of other team members. The integrated document editor is also a nice feature, especially since it allows import/export of RTF or Word 2000 formatted documents.

The security features integral to *Enterprise* allow an organization to forgo the purchase of more expensive third-party software or hardware for **securing** information and ideas. This feature, which provides a peer-to-peer security solution for any workgroup communication, would be especially useful for protection of workproduct in research industries.

A U.S.-based law firm with an international clientele is using *Cartagio Enterprise Collaboration Centrale* to enable its highly mobile workforce to collaborate on cases from multiple client locations. The Web-accessible, centralized project library allows legal researchers to provide case research materials to lawyers at remote locations. The collaboration tools allow researchers to provide real-time search support to both clients and employees. The firm is also using *Enterprise's* built-in encryption and security features to provide its clients access to case materials and work product. (Missiontrek, n.d., Case Study).

## ***References***

Barth, S. (2003, January). Personal toolkit: A framework for personal knowledge management tools. *KMWorld*, 12(1). Retrieved March 12, 2003 from [http://www.kmworld.com/publications/magazine/index.cfm?action=readarticle&Article\\_ID=1406&Publication\\_ID=83](http://www.kmworld.com/publications/magazine/index.cfm?action=readarticle&Article_ID=1406&Publication_ID=83)

Missiontrek. (n.d.). *Missiontrek Internet productivity tools: Welcome to Missiontrek*. Retrieved March 27, 2003 from <http://www.missiontrek.com/>

Mitchell, C.T. (1997). *New thinking in design: Conversations on theory and practice*. New York: Joh Wiley & Sons.

Softpile.com. (2003). *Cartagio Pro*. Retrieved March 25, 2003 from [http://www.softpile.com/Business/Applications/Review\\_12027\\_index.html](http://www.softpile.com/Business/Applications/Review_12027_index.html)