BREIN

Business objective driven REliable and Intelligent grids for real busiNess

PROJECT WEB SITE

D 6.2.1

WP 6.2 - DISSEMINATION & COMMUNICATION

08/01/07

Dissemination Level: Public

Lead Editor: José Miguel Suárez R., ADEI

Status of Document: Final

SIXTH FRAMEWORK PROGRAMME
PRIORITY IST-2005-2.5.4

Advanced Grid Technologies, Systems and Services
Contract No.: 0034556

© ADEI, TID, CRMPA, HLRS, 2007

This is a public deliverable that is provided to the community under the license Attribution-NoDerivs 2.5 defined by creative commons http://www.creativecommons.org

This license allows you to

- to copy, distribute, display, and perform the work
- to make commercial use of the work

Under the following conditions:

Attribution. You must attribute the work by indicating that this work originated from the IST-BREIN project and has been partially funded by the European Commission under contract number IST-FP6-034556

No Derivative Works. You may not alter, transform, or build upon this work without explicit permission of the companies involved in the editing of the document.

- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

This is a human-readable summary of the Legal Code below:

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

1. Definitions

a. **"Collective Work"** means a work, such as a periodical issue, anthology or encyclopedia, in which the Work in its entirety in unmodified form, along with a number of other contributions, constituting separate and independent works in themselves, are assembled into a collective whole. A work that constitutes a Collective Work will not be considered a Derivative Work (as defined below) for the purposes of this License.
b. **"Derivative Work"** means a work based upon the Work or upon the Work and other pre-existing works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which the Work may be recast, transformed, or adapted, except that a work that constitutes a Collective Work will not be considered a Derivative Work for the purpose of this License. For the avoidance of doubt, where the Work is a musical composition or sound recording, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered a Derivative Work for the purpose of this License.
c. **"Licensor"** means all partners of the BREIN consortium that have participated in the production of this text
d. **"Original Author"** means the individual or entity who created the Work.
e. **"Work"** means the copyrightable work of authorship offered under the terms of this License.
f. **"You"** means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation.

2. Fair Use Rights. Nothing in this license is intended to reduce, limit, or restrict any rights arising from fair use, first sale or other limitations on the exclusive rights of the copyright owner under copyright law or other applicable laws.

3. License Grant. Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

a. to reproduce the Work, to incorporate the Work into one or more Collective Works, and to reproduce the Work as incorporated in the Collective Works;
b. to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission the Work including as incorporated in Collective Works.
c. For the avoidance of doubt, where the work is a musical composition:
    i. **Performance Royalties Under Blanket Licenses**. Licensor waives the exclusive right to collect, whether individually or via a performance rights society (e.g. ASCAP, BMI, SESAC), royalties for the public performance or public digital performance (e.g. webcast) of the Work.
    ii. **Mechanical Rights and Statutory Royalties**. Licensor waives the exclusive right to collect, whether individually or via a music rights society or designated agent (e.g. Harry Fox Agency), royalties for any phonorecord You create from the Work

("cover version") and distribute, subject to the compulsory license created by 17 USC Section 115 of the US Copyright Act (or the equivalent in other jurisdictions).

d. **Webcasting Rights and Statutory Royalties**. For the avoidance of doubt, where the Work is a sound recording, Licensor waives the exclusive right to collect, whether individually or via a performance-rights society (e.g. SoundExchange), royalties for the public digital performance (e.g. webcast) of the Work, subject to the compulsory license created by 17 USC Section 114 of the US Copyright Act (or the equivalent in other jurisdictions).

The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats, but otherwise you have no rights to make Derivative Works. All rights not expressly granted by Licensor are hereby reserved.

4. Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

a. You may distribute, publicly display, publicly perform, or publicly digitally perform the Work only under the terms of this License, and You must include a copy of, or the Uniform Resource Identifier for, this License with every copy or phonorecord of the Work You distribute, publicly display, publicly perform, or publicly digitally perform. You may not offer or impose any terms on the Work that alter or restrict the terms of this License or the recipients' exercise of the rights granted hereunder. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties. You may not distribute, publicly display, publicly perform, or publicly digitally perform the Work with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this License Agreement. The above applies to the Work as incorporated in a Collective Work, but this does not require the Collective Work apart from the Work itself to be made subject to the terms of this License. If You create a Collective Work, upon notice from any Licensor You must, to the extent practicable, remove from the Collective Work any credit as required by clause 4(b), as requested.

b. If you distribute, publicly display, publicly perform, or publicly digitally perform the Work or Collective Works, You must keep intact all copyright notices for the Work and provide, reasonable to the medium or means You are utilizing: (i) the name of the Original Author (or pseudonym, if applicable) if supplied, and/or (ii) if the Original Author and/or Licensor designate another party or parties (e.g. a sponsor institute, publishing entity, journal) for attribution in Licensor's copyright notice, terms of service or by other reasonable means, the name of such party or parties; the title of the Work if supplied; and to the extent reasonably practicable, the Uniform Resource Identifier, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work. Such credit may be implemented in any reasonable manner; provided, however, that in the case of a Collective Work, at a minimum such credit will appear where any other comparable authorship credit appears and in a manner at least as prominent as such other comparable authorship credit.

5. Representations, Warranties and Disclaimer. UNLESS OTHERWISE MUTUALLY AGREED TO BY THE PARTIES IN WRITING, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE MATERIALS, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTIBILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO SUCH EXCLUSION MAY NOT APPLY TO YOU.

6. Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. Termination

a. This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Collective Works from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License.

b. Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.

8. Miscellaneous

a. Each time You distribute or publicly digitally perform the Work, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.

b. If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

c. No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.

d. This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensor and You.

Contributors:

Beatriz Soler, ADEI

José Miguel Suárez Rodríguez, ADEI

Internal Reviewer(s):

Eduardo Oliveros, TID

Giuseppe Laria, CRMPA

Bastian Koller, HLRS

Version History

Version	Date	Changes	Author
	DD/MM/YY		

© ADEI, TID, CRMPA, HLRS, 2007

TABLE OF CONTENT

1. Project web site 9
1.1 Technology chosen 9
1.1.1. The tools 9
1.1.1.1. Jommla 9
1.1.1.2. Windows Sharepoint Services 11
1.1.2. Comparison 20
1.1.3. Decision 25
1.2 URL Web Site 25
1.3 Structure of the web 25
1.3.1. Public 25
1.3.2. Private 26
1.3.3. Generals 27
1.4 Design Studies 27
1.5 Contributions procedures 27

LIST OF FIGURES

Figure 1 - Windows SharePoint Services in Context of Windows Server 2003 and the Microsoft Office System 12
Figure 2 - Windows SharePoint Services is a single place to manage team information 14
Figure 3 - Windows SharePoint Services Helps Improve Business Process Integration 16

LIST OF TABLES

Table 1 – CMS Comparison 24

Abbreviations

BREIN	Business objective driven reliable and intelligent grids for real business
CMS	Content Management System
FTP	File Transfer Protocol
RSS	Really Simple Syndication. A format for notifying new content at a website

1. Project web site

1.1 Technology chosen

For the development of the Brein Web Site two CMS tools were evaluated. They were two of the most employed nowadays: Joomla and Windows SharePoint.

1.1.1. The tools

In the beginning of the project two CMS system were evaluated in order to choose on of them to develop and maintain the web and information about Brein Project.

The two CMS tools evaluated were:

- Joomla and
- Windows SharePoint Services

A short description of these tools:

1.1.1.1. Jommla

Joomla is Content Management System (CMS) that will help to build websites and other powerful online applications easily. Besides Joomla is an open source solution that is freely available to everybody. Joomla is an award-winning Content Management System (CMS).

Joomla! is a production of Open Source Matters, the same team that brought you the award winning Mambo Content Management System. OSM has taken their final stable version of Mambo (4.5.2.3), given it a spring clean and named it Joomla! 1.0 In addition, several small features that were going to be released in Joomla! 1.1 have been brought forward and included in this release.

Joomla is based on three elements: a web server, a script language and a database. The web server is connected to the internet and makes the site available there, the script language consists of the programs and functions, and the database stores the content.

First, a user requests the Joomla page by entering the URL. The browser then connects to the web server. The URL contains the parameters of the content - what section, which article and so on. Based on those parameters, Joomla's script system contacts the database and gets the content. Then, the content and the template are merged together, and this returns as a plain HTML and CSS page.

Joomla! will support installation and use with PHP 5 and MySQL 4.1.

<u>Joomla! Site (Front End)</u>

- MadeYourWeb template contest winner added

- The site is now visible to Administrators even when the site is in Offline mode.
- Front end Users can select the WYSIWYG editor they want to use rather than having to use the default.
- An `Apply` button has been added for front end content editing.
- The search page now supports pagination

Joomla! Administrator (Back End)

- The System Information link has been added back to the System Menu.
- "Force Logout" in the User Manager Toolbar has been renamed to simply "Logout".
- "Submit - Content" is a new menu type available
- HTML output is now buffered to improve performance of non-display actions (like saving content)
- Users can select the WYSIWYG editor they want to use rather than having to use the default.
- Contact component: added parameter to define a certain category for a contact menu.
- Media Manager now has support for XCF, ODG, ODT, ODS, ODP file formats
- Added new menu item to clear all caches (used by 3rd party addons)

Usability and Accessibility

A huge thrust is being made to make Joomla! compliant with web standards for usability and accessibility. While much more will be done in future versions, the following first steps have been taken to achieve this goal:

- Label tags have been added to Site module and component output
- mosHTML::selectList and mosHTML::radioList automatically provide the correct label tags

Developer Extras

A number of new things are available for developers. These include:

- patHTML class provides several utility methods for handling selection lists
- mosAbstractTasker class now auto-maps public methods to tasks
- setTemplateVars method has been added to both the Site and Administrator page navigation classes
- mosHash function provides a convenient method for producing secure hashes

- A now separates content items in lists
- mosParameter::_mos_filelist has been added to supportXML params
- Paramater files can now use the root element <mosparams>. This enables you to have more than one XML params file in your component installation files.
- A number of new mambot triggers have been included: onStart, onAfterMainframe
- A number of new toolbar icons have been added
- The mosToolBar::help method now correctly supports local help files in a components /help folder.
- mosDBTable::isCheckedOut method has been added
- CSS styles have been added to the administrator template to support Joomla! 1.1-like (Mambo 4.5.3-like) screen layouts.
- The dTree javascript tree library has been added
- database:setQuery now takes arguments for query limit offset and number of records to be returned.
- PHP 5 compatibility functions file_put_contents and file_get_contents have been added (you can use these functions in your addons regardless of the PHP version).
- JS Calendar 1.0 has been added (they existing calendar still remains for backward compatibility)
- mosAbstractTasker::setAccessControl method has been added
- mosUser::getUserListFromGroup method has been added
- mosParameters::toObject and mosParameters::toArray have been added
- database:NameQuote method added to quote field names (improves database portability)
- database:getNullDate method added (improves database portability)
- mosAbstractLog class added

1.1.1.2. Windows Sharepoint Services

Windows® SharePoint® Services, the new Web-based collaboration solution of Microsoft Windows Server 2003, enables organizations to take file sharing and collaboration to a new level by helping to improve process efficiency and information worker productivity, increase business agility, and reduce operations costs. This paper outlines Microsoft's vision of integrated innovation for improving team collaboration—a set of technologies that are designed to work together, from Windows Server 2003 with Windows SharePoint Services to enterprise application servers, smart client applications such as Microsoft Office 2003, and industry-leading development tools.

Microsoft's guiding vision of integrated innovation addresses these challenges by delivering a comprehensive set of technologies that are designed to work together, from Microsoft® Windows Server™ 2003 with Windows SharePoint® Services, to a full set of plug-and-play enterprise application servers, smart client applications such as Microsoft Office 2003, and industry-leading development tools. Within this integrated technology environment, Windows SharePoint Services provides an extensible foundation for centrally managed collaboration and communication services that are delivered across the full range of client applications and enterprise servers—right to the desktop. Next illustrates this unified platform.

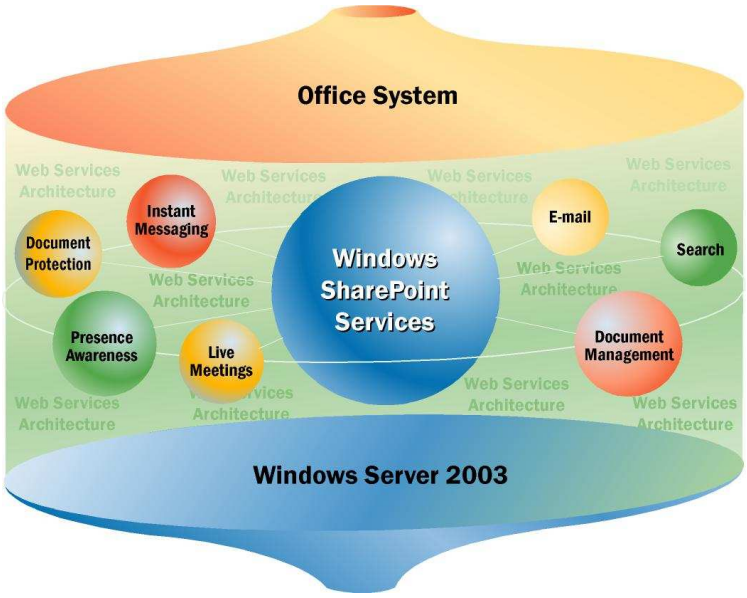


Figure 1 - Windows SharePoint Services in Context of Windows Server 2003 and the Microsoft Office System

This unique and powerful architecture is an example of Microsoft's integrated innovation, a development approach that provides building-block technologies and tools that are designed to work together to help organizations achieve greater process efficiency, market responsiveness, and lower operation costs. This unified platform provides the following advantages:

- **Rich out-of-the-box functionality**, which enables information workers to become productive quickly and assures IT professionals of quick, cost-effective deployment.
- **Integration with everyday tools** enables information workers to get started quickly by using familiar tools that enable users to share information and collaborate with peers easily.
- **Organization-wide standards** provide persistent security, management, and integration as well as uniform retention and compliance policies on a reliable and scalable platform.

- **Incremental deployment options** enable IT professionals to implement collaboration capabilities within the timeframe and budget determined by their organization.
- **Easy and cost-effective extensibility,** which is made possible by a rich development and customization environment. These capabilities enable IT professionals to build solutions specific to the needs of any organization and develop managed, hosted services that connect the organization with its customers, partners, and suppliers throughout the value chain.

Foundation for a Smart Workspace

Out-of-the-box Windows SharePoint Services capabilities provide the foundation for a smart workspace, a single intranet location that serves as a centralized information hub, where individuals and teams can collaborate and communicate more easily and productively.

Windows SharePoint Services incorporates all of the essential collaboration and communication technologies that information workers use every day in a single Web-based environment that integrates easily with smart client applications such as Microsoft Office. Windows SharePoint Services also integrates with server databases and specialized business applications. This integration enables information workers to access network resources easily, quickly, and efficiently.

Basic Windows SharePoint Services functionality can be extended readily and cost-effectively by adding other Microsoft technologies and services such as Microsoft Exchange® Server 2003, Microsoft Office Live Communications Server 2003, Microsoft Office SharePoint Portal Server 2003, and Microsoft Office Live Meeting 2003 (formerly PlaceWare Conferencing Service), Microsoft Office Project Server 2003, and more.

Through built-in functionality and the extensions provided by Microsoft product and partner solutions, the following key user benefits are possible:

- **Better discoverability.** Users can easily deploy unified collaborative workspaces to share and manage all of their team information from a single location.
- **Better communication.** Powerful and flexible tools help keep teams connected and productive, enabling better decisions and stronger relationships with customers, partners, and suppliers.
- **Better structured processes.** Improved business processes help to increase team efficiency and improve business continuity.
- **Better user experience.** Delivering collaboration and communication technologies in everyday tools such as Microsoft Office 2003 makes it easy for users to adopt new functionality that can improve their productivity.

Better Discoverability

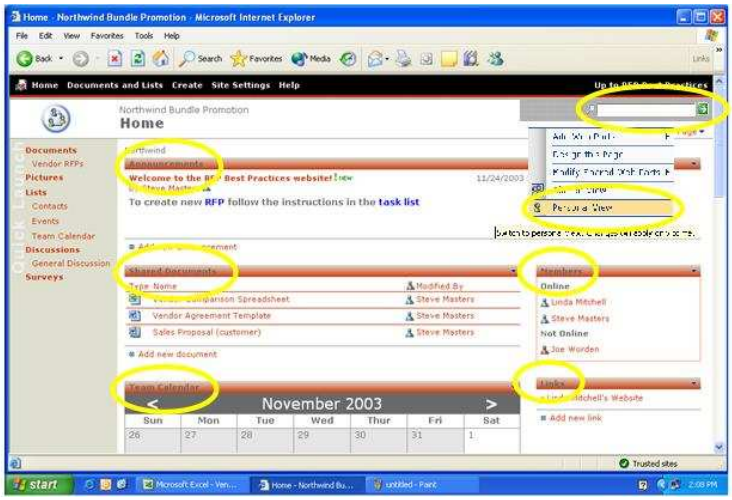
Information workers require immediate access to the information they use every day as well as access to data that is not on their team site but is stored on the corporate intranet. Windows SharePoint Services enhances information discoverability by

providing users with a single Web-based team environment, where they can manage, find, and share their team information. In addition, users can collaborate on documents as well as manage information such as team member availability, calendars, tasks, and lists. This approach provides users with faster, more efficient searches than are possible by using traditional network file shares. Platform capabilities that support better discoverability include:

- **Easily customized team workspaces** that fit team and individual discovery needs.
- **Built-in search capabilities** that make it easy for users to find the information they need within a workspace quickly and efficiently.
- **Extended search capabilities of Microsoft Office SharePoint Portal Server** 2003 that provide additional discoverability by helping users search across team workspaces and other information sources.

One place for all team information

Full text search built-in



Easily adapt your workspace

Extend search with SharePoint Portal Server 2003

Figure 2 - Windows SharePoint Services is a single place to manage team information

Better Communication

Windows SharePoint Services provides powerful and flexible collaboration and communication capabilities to keep teams connected. Team members can stay informed and up-to-date more easily as they articulate issues and strategies develop consensus, and share vision and responsibilities.

- **Keep team members updated and informed.** By using built-in alert capabilities, users can be notified when information is added, modified, or deleted. Announcements, surveys, and discussion boards keep team members informed. Users can create shared meeting workspaces to manage agenda items and follow-up actions. Users can also track meeting attendance from within Microsoft Office Outlook® 2003.
- **Connect people and information in real time by using Office Live Communication Server 2003.** Teams can communicate instantly using audio, video, and data without leaving the programs in which they are working. Microsoft Office Live Communications Server 2003 enables users to share presence status so that everyone knows who is online to work on issues immediately and who is busy, away, on the phone, or at lunch.

Integration of presence awareness and instant messaging exists for Microsoft Office 2003 applications including Microsoft Outlook, Microsoft Word, and Microsoft Office SharePoint Portal Server 2003.

Improved Business Processes

Organizations can improve the efficiency of structured team processes and improve business continuity by using build-in and extended Windows SharePoint Services capabilities to improve the efficiency of document creation, review, and protection.

- **Create and review documents.** Users can more easily and efficiently create and review any type of document with built-in document versioning and check-in and check-out capabilities integrated into team workspaces.
- **Extend document protection.** Available in Microsoft Office 2003 Professional Edition, Information Rights Management, enabled by Windows Rights Management Services (RMS), lets authors determine how their documents are distributed and used by others. This approach ensures that intellectual property can be classified and used with consistency and security throughout and beyond an organization. When documents are distributed by e-mail or by instant messages, organizations can enforce distribution and handling policies without incurring the costs of additional systems management and support.

Organizations can extend the capabilities of Windows SharePoint Services with specialized programs that make data capture, data management, and project management tasks more efficient.

- **Streamline structured workflow processes by using Microsoft Office InfoPath™ 2003 or Microsoft BizTalk® Server 2004.** Business processes can be made more efficient by automating formerly manual data capture, description, analysis, and reporting tasks. By integrating structured workflow data collection tools such as Office InfoPath 2003 with Windows SharePoint Services, users can create dynamic forms and publish them in many team sites simultaneously.

  BizTalk Server 2004 helps information workers define, monitor, coordinate, and improve business processes in real time.
- **Improve business responsiveness and project management by integrating Microsoft Office Project Server 2003 and Microsoft Office Project 2003.** Through advanced file management and improved project-related issue and risk tracking, users of team workspaces gain greater visibility into projects and initiatives throughout an organization. This approach provides improved insight into business data and faster, more accurate business decisions.

Figure 3 shows a typical Windows SharePoint Services workspace configured for integrated workflow. Microsoft Office InfoPath 2003 captures data that can be incorporated into server databases.

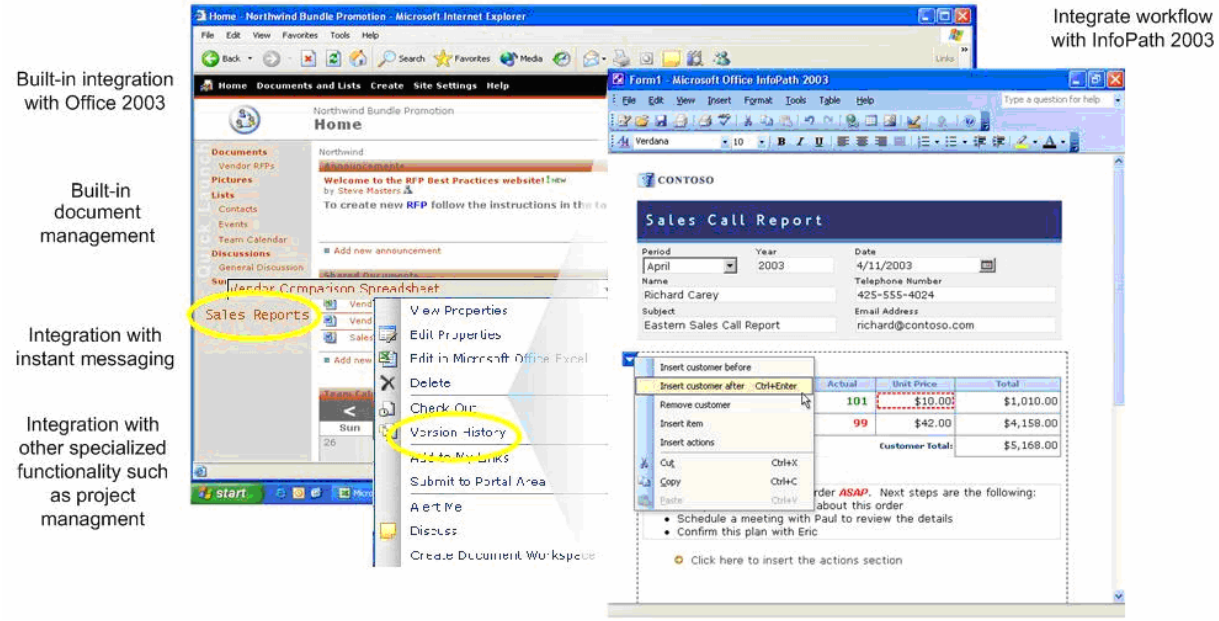


Figure 3.

Figure 3 - Windows SharePoint Services Helps Improve Business Process Integration

Easier User Adoption

Windows SharePoint Services provides a better user experience by making it easy for users to adopt, use, and modify collaboration services.

- **Easy user adoption.** It is easy for users to adopt new collaboration tools and services by integrating Web-based team collaboration services into everyday tools such as Microsoft Office, which includes e-mail, instant messaging, and information rights management. The familiar Microsoft Office interface eliminates the need for training to acquaint users with new software and helps users avoids the delays that erode productivity and slow document or project delivery.
- **Web browser access.** The browser-based interface empowers users to create, access, and modifies shared team workspaces on demand and provides users with a single point of access to all of the rich information stored in team workspaces.
- **Adapt workspaces to meet team needs.** Users can easily adapt team workspaces to fit the needs of specific projects and communities by using built-in and extensible templates, Web Parts, views, and custom lists.

A Reliable and Scalable Platform

A reliable and scalable infrastructure enables IT professionals to establish a foundation that can help to reduce network administration effort and total cost of ownership and accommodate future collaboration needs, such as an organization-wide portal strategy or inter-organization communications.

Establishing Windows SharePoint Services team sites provides IT professionals with the following reliability and scalability benefits:

- **Cost-effective scale-up.** With Microsoft System Architecture and ASP.NET stateless front ends, IT professionals can provide scalable team workspace services in environments that range from a single computer to a clustered server farm. Even in very large environments, system administrators can set up Windows SharePoint Services configurations with multiple, stateless front-end Web servers that support large numbers of user connections and as many database servers as required. Organizations can scale up their Windows SharePoint Services workspace environment without compromising system reliability, security, and performance and without committing substantial additional systems management effort. These capabilities can help IT professionals to expand Windows SharePoint Services and keep systems administration costs under control.
- **Continuous system operations of large sites.** Windows Server 2003 and SQL Server 2000 technologies such as load balancing and failover enable system administrators to maintain enterprise-class reliability for all team workspace infrastructures. By detecting host failures and redistributing traffic to operational hosts automatically, Windows Server 2003 load balancing capabilities ensure that team sites and mission critical-services based on Windows SharePoint Services are available when and where users need them. The resulting increase in system availability reduces system administration effort and its related costs.
- **Reduced site maintenance costs.** The Windows Server 2003 platform provides Windows SharePoint Services with a wide variety of infrastructure services help systems administrators manage team workspaces more efficiently. Capabilities such as ASP.NET stateless front ends enable IT professionals to add new computers to a server farm and remove others for upgrades or repair with less time and effort. Faster server setup and maintenance enables organizations to add team sites but keep systems maintenance costs and overall total cost of ownership low.

By using the distributed architecture and flexible deployment options of SharePoint Portal Server 2003, IT professionals can also reduce the costs of connecting, organizing, and supporting large numbers of new Windows SharePoint Services team workspaces. The ability to support server farms with distributed job servers, database servers, search and indexing functionality and multiple Web interfaces across many Windows SharePoint Services team sites simultaneously enables IT professionals to deliver services to more users more efficiently and reduce repetitive systems management tasks.

Easy to Manage

Simple and easy to use, built-in Windows SharePoint Services functionality enables IT professionals to reduce the complexity and costs of establishing and managing collaborative team sites. With Windows SharePoint Services, IT teams can establish organization-wide standards more easily and enable easier administration by using

standardized modular plug-and-play components. Specific systems management benefits include:

- **Lower site provisioning costs.** Standardized site design templates and easy-to-use site operations tools help IT administrators to provision Windows SharePoint team workspaces quickly. With Windows SharePoint Services, system administrators can help users create sites, control site membership, directly monitor site usage, and moderate content submissions with minimal IT effort and site provisioning costs.
- **Reduced site-related support costs.** After workspace startup, self-service tools of Windows SharePoint Services enable users to create site templates, share them with one another, and reuse customized, proven site solutions. Because teams handle day-to-day site functionality and administration, user rely less on the IT staff and IT support costs decrease.
- **Lower operational costs and TCO.** Using the underlying management technologies and tools of the Windows Server 2003 platform, IT professionals can monitor and troubleshoot Windows SharePoint Services team sites with less time and effort. IT professionals can configure Windows SharePoint Services from a centralized location by using Group Policy and the familiar Microsoft Management Console (MMC) graphical user interface, monitor sites with Windows Management Instrumentation (WMI), and administer them remotely with scripts and command-line tools.
- **Lower site backup and restore costs.** Per-site backup and restore and the centralized user administration capabilities of Windows SharePoint Services help IT professionals to back up and restore team workspaces individually. As a result, IT administrators can avoid the effort and related system management costs of restoring an entire database rather than a small subset of data.
- **Lower site management and support costs.** IT professionals can use the Microsoft .NET object model to create custom scripts that automate common site management functions and build custom applications on the Windows SharePoint Services platform. Most list data and site settings offer full read/write access. IT administrators can use browser-based administration tools or the command line to manage workspace sites and site collections. These capabilities reduce the effort and costs of site management.

Easy to Extend and Integrate

Windows SharePoint Services provides IT professionals with a collaboration environment that is easy to extend and that can connect disparate applications, solutions, and systems into an integrated platform with less administrative time and effort. Windows SharePoint Services provide these systems management benefits:

- **Faster time to usability and reduced development costs.** To build integrated collaboration applications quickly and easily, IT professionals can use the development tools of the Microsoft .NET Framework, standard data formats such as Extensible Markup Language (XML), and common tools. The strategy of using the Microsoft .NET Framework, Web services, Microsoft

Visual Studio® .NET, and Windows Server 2003 to build SharePoint products and technologies reduces the time, effort, and costs of developing Windows SharePoint Services solutions. Integration of Windows SharePoint Services with Microsoft Office FrontPage® 2003 enables IT professionals to customize team workspaces with less development effort and cost.

- **Accelerated return on IT investments.** Industry-standard protocols such as XML that enable data exchange between different platforms or applications help IT professionals to extend the value of existing business data and computing systems by linking formerly isolated silos of data and making them available through a Web browser or a traditional productivity program.

Benefits for IT Professionals

Windows SharePoint Services helps to increase the control and security of an organization's information resources by deploying a dependable, scalable collaboration infrastructure with easy-to-use administration tools and services.

Powerful Administrative Control and Security

Windows SharePoint Services is built on the Windows Server 2003 platform. As a result, the rich variety of improved security and administrative capabilities built into Windows Server 2003 enable IT professionals to define, monitor, and enforce rules and policies consistently throughout an organization. Specific benefits include:

- **More efficient and consistent administrative control.** Role-based policies of the Active Directory® directory service enable IT administrators to use pre-established rules and policies to limit access to proprietary information assets. The centralized administration of Active Directory enables IT professionals to establish data access rules once for an entire organization and monitor the rules from a single location. Centralized policy definition enables enforcement throughout organizations of any size and reduces systems management effort and related costs.
- **More efficient site life cycle management.** Team-based site administrators can maximize Windows SharePoint site efficiency by using automatic e-mail messaging alert capabilities built into Windows SharePoint Services to provide site owners with site status information. By eliminating unused site capacity and the effort of manual site checks and status notification, these automated site monitoring processes help to reduce systems operations and management costs.
- **Improved network and site performance.** Site quotas and content blocking provide increased control of an organization's information resources by preventing acceptance of attachments containing restricted file types. Rejecting video and other bulky files rather than storing them on a server and transmitting them on a network can reduce bandwidth usage and storage costs. Rejecting harmful executable (.exe) files can reduce liability and virus-related help desk support requests or system administrator costs.
- **Lower systems management costs.** Advanced virus protection built into Windows SharePoint Services helps IT professionals deliver system-wide protective services. When IT administrators install an antivirus scanner that is compatible with Windows SharePoint Services, they can also enable the

antivirus protection feature for a server, which helps protect all the resources on that server. Fewer virus-related incidents translate into reduced system downtime, higher system availability, fewer help desk calls, and lower systems management costs.

- **A more secure extranet solution.** Administrators can use cross-forest authentication of Windows Server 2003 to extend extranet collaboration solutions to partners, suppliers, and customers. When deploying Windows SharePoint Services with Live Communications Server 2003, administrators can encrypt server-to-server instant messaging traffic and client-to-server traffic using Transport Layer Security (TLS) and Kerberos or NTLM authentication. Live Communications Server 2003 also delivers text logging and archiving and integrates these features within existing Windows Server 2003 infrastructure and management tools.

Extending faster, more reliable network access with Windows SharePoint Services, Live Communications Server, and MSN® Connect to a wider circle of users can expedite business processes, improve business partner satisfaction, and reduce virus-related and intruder-related system downtime.

1.1.2. Comparison

The next table summaries the most important points to take a count in order to choose the more convenience CMS for the Brein Project:

Product		Joomla! 1.0.7	Share Point Portal Server
Last Updated		1/16/2006	12/ 7/2005
System Requirements			
	Application Server	Apache recommended, any server that supports PHP and MySQL	.NET
	Database	MySQL	Microsoft SQL Server 2000
	License	GNU GPL	Commercial, per CPU
	Operating System	Any	Windows Server 2003
	Programming Language	PHP	C#, ASP.NET, ASP, apps written in almost any language can be integrated.
	Root Access	No	Yes
	Shell Access	No	Yes
	Web Server	Apache	MS-IIS
Security			

	Audit Trail	No	Yes
	Captcha	Yes	Yes
	Content Approval	Yes	Yes
	Email Verification	Yes	No
	Granular Privileges	No	Yes
	Kerberos Authentication	No	Yes
	LDAP Authentication	Free Add On	Yes
	Login History	Yes	Yes
	NIS Authentication	No	No
	NTLM Authentication	No	Yes
	Pluggable Authentication	No	Yes
	Problem Notification	No	Yes
	Sandbox	No	Yes
	Session Management	Yes	No
	SMB Authentication	No	No
	SSL Compatible	No	Yes
	SSL Logins	No	Yes
	SSL Pages	No	Yes
	Versioning	Yes	Limited
Support			
	Certification Program	No	Yes
	Code Skeletons	No	Yes
	Comercial Manuals	Yes	Yes
	Comercial Support	Yes	Yes
	Comercial Training	Yes	Yes
	Developer Community	Yes	Yes
	Online Help	Yes	Yes
	Pluggable API	Yes	Yes
	Professional Hosting	Yes	Yes
	Professional Services	Yes	Yes
	Public Forum	Yes	Yes
	Public Mailing List	No	Yes
	Test Framework	No	No
	Third-Party Developers	Yes	Yes
	Users Conference	Yes	Limited
Ease of Use			
	Drag-N-Drop Content	No	Yes

	Email To Discussion	Free Add On	Limited
	Friendly URLs	Yes	Limited
	Image Resizing	Yes	Yes
	Macro Language	Yes	Yes
	Mass Upload	No	Yes
	Prototyping	Yes	Yes
	Server Page Language	Yes	Yes
	Spell Checker	No	No
	Style Wizard	No	Limited
	Subscriptions	No	Yes
	Template Language	Yes	Yes
	UI Levels	No	Yes
	Undo	No	No
	WYSIWYG Editor	Yes	Yes
	Zip Archives	No	Yes
Performance			
	Advanced Caching	Yes	Yes
	Database Replication	No	Yes
	Load Balancing	No	Yes
	Page Caching	Yes	Yes
	Static Content Export	No	Yes
Management			
	Advertising Management	Yes	No
	Asset Management	Yes	Limited
	Clipboard	No	Limited
	Content Scheduling	Yes	Yes
	Content Staging	No	No
	Inline Administration	Yes	Yes
	Online Administration	Yes	Yes
	Package Deployment	No	Yes
	Sub-sites / Roots	Yes	Yes
	Themes / Skins	Yes	Yes
	Trash	Yes	No
	Web Statistics	Yes	Yes
	Web-based Style/Template Management	Yes	Yes
	Web-based Translation Management	Free Add On	No

	Workflow Engine	No	Limited
Interoperability			
	Content Syndication (RSS)	Yes	Yes
	FTP Support	Free Add On	No
	UTF-8 Support	Yes	Yes
	WAI Compliant	No	Limited
	WebDAV Support	No	Yes
	XHTML Compliant	No	Yes
Flexibility			
	CGI-mode Support	No	No
	Content Reuse	Yes	Yes
	Extensible User Profiles	Yes	Yes
	Interface Localization	Yes	No
	Metadata	Yes	Yes
	Multi-lingual Content	Free Add On	Yes
	Multi-lingual Content Integration	Free Add On	Yes
	Multi-Site Deployment	Free Add On	Yes
	URL Rewriting	Yes	Yes
	Wiki Aware	Free Add On	No
Built-in Applications			
	Blog	Yes	No
	Chat	Free Add On	Costs Extra
	Classifieds	Free Add On	Yes
	Contact Management	Yes	No
	Data Entry	Free Add On	Yes
	Database Reports	Free Add On	No
	Discussion / Forum	Free Add On	Yes
	Document Management	Free Add On	Yes
	Events Calendar	Free Add On	Yes
	Events Management		
	Expense Reports	Free Add On	No
	FAQ Management	Yes	Yes
	File Distribution	Free Add On	Yes
	Graphs and Charts	Free Add On	Yes
	Groupware	Free Add On	Yes
	Guest Book	Free Add On	Yes

	Help Desk / Bug Reporting	Free Add On	Yes
	HTTP Proxy	No	Yes
	In/Out Board	No	Yes
	Job Postings	Free Add On	Yes
	Link Management	Yes	Yes
	Mail Form	Yes	Yes
	Matrix	No	Yes
	My Page / Dashboard	No	Yes
	Newsletter	Free Add On	Yes
	Photo Gallery	Free Add On	Yes
	Polls	Yes	Yes
	Product Management	Yes	Yes
	Project Tracking	Free Add On	Yes
	Search Engine	Yes	Yes
	Site Map	Free Add On	Yes
	Stock Quotes	No	Yes
	Surveys	Free Add On	Yes
	Syndicated Content (RSS)	Yes	Yes
	Tests / Quizzes	Free Add On	Yes
	Time Tracking	No	No
	User Contributions	Yes	Yes
	Weather	No	Yes
	Web Services Front End	Free Add On	Yes
Commerce			
	Affiliate Tracking	Free Add On	No
	Inventory Management	Free Add On	Limited
	Pluggable Payments	Free Add On	Limited
	Pluggable Shipping	Free Add On	Limited
	Pluggable Tax	Free Add On	Limited
	Point of Sale	Free Add On	Limited
	Shopping Cart	Free Add On	No
	Subscriptions	Free Add On	Limited
	Wish Lists	Free Add On	Limited

Table 1 – CMS Comparison

1.1.3. Decision

The decision to use Joomla for the development and maintaining the information of Brein web site were basically related with:

- The fact that Joomla is an Open Source product
- Not license needed neither to the web server, application server, database, and CMS
- Doesn't need special requirements to operating system of the server were it is installed.
- Permit FTP protocol to transfers files.
- Have more built-in applications or the possibility to get it for free in the developer's community. For example: Blog, Chat, Contact Management, Database reports, and some others.

1.2 URL Web Site

The Brein Project has two internet addresses which information about the project can be accessed. They are:

www.eu-brein.com

www.gridsforbusiness.eu

1.3 Structure of the web

The Brein Project web has different sections which allow managed all the necessary information related to the project, not only by the team but the general public who could be interesting to know the goal, progress and result of it. The sections are explaining bellow:

1.3.1. Public

The goal of this section is to share relevant information for the project, the progress, results and things that can be read bye the general public.

The public section has the next options:

Home	The main page of the web site. An explanation about the project and their goals is shown.
Background Material	This section contains all documents that were used to development the proposal of the Brein Project.
Partners	Show all partners who are working on the Brein Project.
Contacts	Necessary information to contact with the responsible persons of the project.
News	Section where all news related to the project will

	be displayed.
Events	Section where all events related to the project will be displayed.
Documents	Allow all partners download documents of the project to make them publics. Allow all visitants to upload these documents.
Search	Allow all visitants to make a search using key words to find information in all documentation of the project existing on the web site.
Press	Links to news, advertisements or sections that appear in different media.
Publication and Presentations	Publications and presentation that will be generated for the project during its execution.
Links	Links that are interesting for the project or that are related to it.
Wikipedia	It is a link to a section in Wikipedia Web Page where some information of the Brein Project may be found.
Blog	It is a blog to be used for all partners to share information, ideas or to discuss some topics of the project.
Map web	Show a map web site.

1.3.2. Private

This section allow to all the partners involved in the Brein Project share and reach private information which help then to achieve mentioned aims.

The private section has then following options:

Your details	The users (partners) can manage their own personal information.
Specific Contents	Section design to put internals reviews documents.
WP Structure	A static section where all the Work Packages involved in the project are showed.
Deliverables	It will show the different deliverables that the Brein Project has.
Milestones	This section will have the all deliverables documents for each Work Package.
Submit news	Allow register users to write news that will be read by the publication manager in order to proceed to publicise them or not.
Submit Blog	Allow register users to submit information that will be showed in the public blog.
Logout	To leave the private section.

1.3.3. Generals

The web site has some general sections. They are:

Legal Notice	Show a legal notice about the web and its contents.
Copyright	Show the copyright of the web and its contents.
Syndicate	Allow visitants to syndicate the news and information published in the web. It uses the latest versions of RSS.

1.4 Design Studies

The design studies for the Website were carrying out with the support of both co-ordinators, TID and HLRS that collaborated in the final selection.

This design selected is easy to manage, adaptable and useful for our purposes.

The design is the best way to use Joomla applications.

1.5 Contributions procedures

Due to the interaction and importance of this WP, all partners should collaborate in the maintenance of the Website, providing useful information related to the BREIN topics.

All partners can check the updated information and suggest all that they considerer useful for the project.

ADEI, as leader of this WP, and both co-ordinators, have to validate and control the information suggested by partners.

After 2nd BREIN meeting, Valencia 28th-30th November 2006, the consortium decided:

- In order to updated the Website, we have selected 3 people to coordinate different areas of interest with news and events:
    - Grid – Bastian Koller (HLRS)
    - Agents – Thomas Bieser (UHOH)
    - Semantic Web – Donal K. Fellows (UMAN)
- Syndication section added and operative
- Focus on the public section