

# **Practical Introduction to SharePoint 2007**

(By Sven Homan, Dinamika Services Inc., June 15, 2008)

## **WHAT ON EARTH IS THAT SHAREPOINT?**

SharePoint coins its name from words share and point, which means a place where something is being shared. That something is often company information in form of documents, reports, calendars, announcements, schedules, and other publishable materials. SharePoint is also a place where employees can come together - in a virtual way - and work together on a project or document, submit a vacation request to human resources, request a computer help from the IT department, or discuss the cool new copy center that has just opened this week. All this could also be done before, but with SharePoint, it has become organized on an entirely new and greatly improved level. Documents are easier to find, latest forms are always available in the same place, and project details are always up-to-date and visible to project members, managers, or other authorized employees.

From the developers' perspective, SharePoint is a platform for quickly assembling permanent as well as ad hoc solutions for common tasks in the company. It is a platform rather than a finished product because it is a collection of tools that allow almost anyone to design solutions that otherwise require a larger team of experts. In that sense, everyday users have also become everyday developers whenever they need some new tool to do their work. Project leaders, who otherwise are not skilled in software design or programming, can for example create in minutes a collaboration space for their entire team, which may include a discussion board, a list of project members and their assigned tasks, project schedules with milestones and deadlines, and possibly a custom feature for monitoring the budgets.

### Versions

SharePoint is available in two main versions. First version is a free add-on to most Windows server operating systems. The only investment required is into deployment, configuration, maintenance, and education of company employees so they can take advantage of the provided SharePoint functionality. This first version is called Windows SharePoint Services or WSS and it comes with an extensive array of tools. Second version is Microsoft SharePoint Office Server or MOSS. MOSS is further available as the Standard or Enterprise. Many companies will find the free version adequate for their immediate needs. Later, they can upgrade, if more advanced features are needed. There is no simple rule to determine what is needed in any company because size or industry of some company alone does not determine the complexity of everyday tasks. Best is to compare various versions of SharePoint on a feature by feature basis and make decisions based on analyzing the needs of employees which will use the product. Paid versions of SharePoint come with several more templates for various types of sites, lists, and web parts and some will find these alone to make it worth the extra cost. Both versions

however are the benefit to users and to Microsoft, who by the way makes and distributes the SharePoint product. SharePoint extends the Microsoft Office suite of products by way of connecting disparate desktops in a company via SharePoint, and thus directly enhances the Office suite's functionality. All standard office products such as Outlook, Word, Excel, Access, Power Point, and Info Path, can serve as clients to various SharePoint features. We mention this to illustrate that free here does not mean not useful. Microsoft simply wants you to buy the Microsoft Office suite of clients and then make the most out of it.

Next, we will explain the main features of SharePoint and provide some examples for their use. Some features are only available in the paid versions of product and we will point those out for each.

## MAIN FEATURES OF SHAREPOINT 2007

### Sites

Site is a basic container for all SharePoint functionality. If one is to make a projects management application for the whole company, they would start by creating a new site. An intranet for the human Resources department for example would also be done as its own site. Each site can contain sub sites and pages and those then contain libraries, and all kinds of standard and custom developed lists. Many of these blocks come as templates already predesigned for certain tasks. One only needs to browse through a collection of these templates and entire blocks of functionality – a project private discussion board for example – can be added to the site with only a few clicks of a mouse.

### Document Management

The whole idea of SharePoint probably started with how to better manage documents and other company files. So today, SharePoint sports preconfigured libraries of documents that can be simply added to any site and where they come with such sophisticated features as check in/checkout, versioning, and approval workflows. Days are certainly numbered for the old good X: drive. Workspaces below describe some more about documents.

### Project Management

Managing projects is one of the most basic endeavors in any company, and sophisticated tools have been developed through time in order to support it. Microsoft itself has a mature project management software product that is widely used around the world. In comparison, SharePoint provides only the most basic features for managing projects: Tasks, Gantt charts, members and task assignments, and few more. However, many users want just that – a simple and straightforward tool for their personal or small team project that can be learned in minutes and deployed to their sites in no longer time. With

automatic integration of the robust windows security and a possible discussion board, this may be just the perfect tool that they and their team were looking for.

### Calendars and Schedules

Outlook and Exchange Server have been for years the standard for online collaboration in companies using mostly Microsoft products. Now Outlook can also be a client to SharePoint where schedules and calendars may be shared among any number of authorized users.

### Workspaces

Workspaces extend the idea of a single record of data. Each meeting in your calendar or each document in your document library can be associated with its own workspace. Workspace means that features such as discussion forums, additional files and their management, or a list of tasks can be easily associated with a single specific record. An example is a monthly board meeting where each occurrence of a meeting can hold its own list of attendees, agenda items, and a list of conclusions.

### Workflows

Workflows are everywhere. Rarely is anything done that does not require the input of several employees, or that does not have multiple interconnected steps that need to be performed in specific sequence and by certain employees. Approving of a new product brochure might be a good example of such sequence. Workflows were traditionally hard to automate even with the help of software. Someone had to design the steps and the sequence, assign who is responsible for each step, and finally track at which step in the process is the entire assignment. SharePoint makes design and implementation of such processes as simple as possible. One only needs to assign the workflow to a specific record, or in this case document, and then configure the steps. SharePoint keeps track of steps, notifies employees when it is their turn to provide input, and generally makes certain that everything is done according to the prescribed sequence and rules.

### Blogs, Wikis, and Discussion Forums

We will not spend much time describing these features. They have been around since the advent of the Internet and I assume everyone is familiar with their basic intent or idea. As blocks of functionality that can be added to any site or workspace inside the SharePoint, they however enhance the communication aspect of everything one can do with SharePoint. Blogs can be used to post important developments on the project, Wikis can be configured to provide important external or internal resources for project members, and a discussion forum can be an important 'share-point' for everyone working on the project.

### InfoPath

InfoPath is a form design and data collection technology that allows users to submit the requested information via predesigned forms to some central repository of data. This repository of filled out forms and collected data can be a simple forms library in SharePoint. The enterprise version of SharePoint allows InfoPath forms to be opened, filled-in, and submitted to SharePoint with any standard internet browser and without the need for a dedicated InfoPath viewer. Viewer is still required when InfoPath is used with the free version of SharePoint.

### Security

To provide and assure proper security on an array of applications provided in the company, can be a complex and time consuming task for even the best of IT employees. SharePoint however integrates with the security of the outside operating system to which it is deployed and then extends it internally to objects and sites inside the SharePoint. Same security rules are followed as in other Microsoft products. New SharePoint users can be imported from the central repository of network user accounts in a matter of seconds. Most common and best such known central repository is of course the Active Directory.

### Integration with other Enterprise Software

SharePoint was designed to be able to integrate various resources in the company wherever they might be located on the network. SharePoint was also designed to be a presentation and delivery platform of such resources and therefore it provides features where such data can be easily displayed or manipulated inside the SharePoint. Business Data Catalog (BDC) is one such SharePoint technology where other sources of data can be displayed as native lists of SharePoint and as such further used in development of SharePoint applications. SAP for example, has specifically worked with Microsoft so their products' stored data can be integrated with SharePoint. These features are not available in the free version of SharePoint.

### Extensions

SharePoint, as we explained, is by design a product that can be configured to display data from various sources. On the functionality level however, new features can be programmed and added to SharePoint in form of web parts. Web parts are encapsulated pieces of functionality that perform one or more functions and usually come with their own user interface. Web part that displays a particular list as part of a custom designed page in SharePoint is one example. Another form of extension is the so called 'Single Sign On' which is a standard new feature that allows user to access other applications via SharePoint while not needing to go through the login process for each application. There are other ways to integrate SharePoint with external data or applications. SharePoint was after all designed to be the presentation hub for the enterprise

Most features described here are not available in the free version of SharePoint.

### Business Intelligence

SharePoint allows for development of dashboards. SharePoint dashboards usually consist of reports, key performance indicators, and excel spreadsheets. Key performance indicators are the standard element of SharePoint and they can get data from a number of sources including the external analytical databases. Excel client has undergone a significant upgrade in the latest version and can function as a tool for analyzing and charting data through the use of pivot tables. On the server side, the SharePoint excel services can host these excel workbooks, keep them synchronized with data sources, and deliver their functionality to the end users.

Business intelligence features are only available in the enterprise version of SharePoint.

### Search

Any content uploaded, entered, or connected to SharePoint; that is documents, user profiles information, and even external sources of data, can be indexed and then searched by the users. Search results are returned in form of a list of resources with relevance ranking that match the specified search criteria. Paid versions of SharePoint support more sophisticated configurations of search criteria, indexing and search on external data sources such as web sites, file shares, and databases, building of search pages through search display web parts, and more.

## CONCLUSION

Many things that SharePoint does, we were able to do in some form before. Therefore we must ask ourselves the obvious question: Why fix it when it is not broken? To properly respond, one must first realize that when it comes to software everything we do today was in some shape or form already present in the past. Letters were sent for centuries. With email they just go faster. A house is a higher form of functionality than its building materials alone, and by analogy, SharePoint is an integrated platform of tools where the whole is much greater than its parts. Work tasks are performed faster. Order is introduced into otherwise mostly chaotic workflows. Information is delivered and found when and where it is needed. Decisions are consequently more timely and better.

If you are new to SharePoint and just got motivated by this paper then you can start exploring with the free version of SharePoint and try to see how it may improve your work organization and with that you working habits. Time spent will not be lost since at a minimum you will learn what is definitely to become a standard for how we will all organize ourselves at work in the future. If you were already kicking the tires of SharePoint, then this might be the day when you may make some important further decisions. Take a break from your routine and start implementing this efficiency-boosting

technology in your organization. Time spent will be returned to you shortly and from then on, I guarantee it will be more savings and a bucket of fun.

#### Further Readings

1. SharePoint 2007 User's Guide, Bates and Smith, Apress 2007. This is an excellent written account of all SharePoint functionality for power users plus a great reference for most commonly used features in both WSS and MOSS.
2. Excel 2007 Pivot Tables and Pivot Charts, Paul McFedries, Wiley Publishing 2007. Book that will teach you everything you need to know about the new excel functionality used in business intelligence.

Author, Sven Homan is president and principal consultant for Dinamika Services Inc.; a consultancy for deployment, development, configuration, and training of SharePoint products since 2001. Sven holds a Masters degree in Electrical Engineering from the University of Southern California and a Business and Management certification from UCLA. He teaches programming and databases at a local University and is all around passionate about working with SharePoint. If you would like to ask him a question, you can reach him by Phone: 1.877.396.2149, Email: [shoman@dinamikainc.com](mailto:shoman@dinamikainc.com), Web: [www.dinamikainc.com/sharepoint/](http://www.dinamikainc.com/sharepoint/), or UPS: Dinamika Services Inc., Redondo Beach, CA, 1732 Aviation Blvd. Ste. 214.