



# **2SHARE™ 3.0**

# SYSTEM ADMINISTRATOR'S GUIDE

# 2 B R I D G E

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# 1 INTRODUCTION

This Chapter covers introductory material, including the following:

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# **About This Guide**

This Guide is for the 2Share System Administrator. The 2Share System Administrator (SA) is often a database administrator or IT/MIS professional and is typically the same person who manages the network server and server applications. As System Administrator, you should be familiar with the system environment and have a good understanding of the platform (NT or Unix) and database applications in general.

In this Guide, "the user" refers to the end-user, while "you" refers to you, the System Administrator.

At the end of this chapter is a short list of terms and definitions that can aid your understanding ("Essential Vocabulary and Terminology," page 36).

Appendix A, page 147 contains a full glossary.

# What's In This Guide

The purpose of this Guide is to advise the System Administrator on the administration and support of 2Share. This Guide includes the following topics:

- A review of 2Share architecture and where components are installed for the various configurations.
- How to modify 2Share properties files.
- How to add users and define access privileges.
- How to backup important information.
- Tips for helping users.
- Tips for troubleshooting.
- Tips for scaling and performance tuning for small- to large-scale workgroup environments.

This Guide was designed for use as a "how-to," a handy reference, and a training aid.

- Chapters 1-4 cover introductory and background material.
- Chapters 5-8 cover 2Share administrative procedures with "how-to" instructions plus additional background material as required.

As 2Share System Administrator, you must be familiar with your 2Share system hardware and software configuration and the 2Share properties files. This information is covered in *Chapter 2*, "2Share Configurations", page 39 and Chapter 3, "Properties Files", page 53.

This Guide assumes that you have already installed 2Share on your system. (If not, see the 2Share Installation Guide for 2Share installation instructions.)

Since you may not be familiar with 2Share, this document introduces the product from two points of view. First, we discuss 2Share from the end-user's perspective, then we describe 2Share from the System Administrator's perspective.

You may find the following information helpful in establishing context for the various discussions and explanations in this guide:

- The 2Share architecture (Discussed in this chapter.)
- 2Share terminology (See Glossary in Appendix A.)
- Common Internet terminology (See Glossary in Appendix A.)
- Any 2Share Applications your company has purchased. (Sales Edge, Advisor's Edge, Client Edge, etc.)
- How your organization uses 2Share. (Once your company has used 2Share for a while, 2Share Managers or Publishers can probably provide this information.)

# **How the 2Share Server Works**

2Share works with a database and a web server to automate the process of retrieving, assembling, publishing, viewing, and personalizing of document-based information in HTML format. The typical *user* views 2Share as a streamlined web publishing and distribution tool. The *System Administrator* views 2Share as a system to provide these user services. Here is how the process works:

- Users communicate with 2Share through a standard web browser such as Netscape Navigator or Microsoft Internet Explorer. Users can assemble 2Share Sites (pages with static and dynamic content) from components created in various file formats, such as Word, Excel, etc. Site components can even be retrieved from a relational database. (A 2Share Site is a container for topic-related pages that can be organized, categorized and indexed.)
- 2. 2Share stores all content (text files, spreadsheets, images, etc.) or links contributed by users in a content store. When a published 2Share Site is modified, 2Share archives (and provides links to) all previous versions of that site. Communication between 2Share and the content store is transparent and instantaneous.
- 3. A web server then delivers personalized views of the Site to the users, based on their personal profile, preferences, and access level. Users view the resulting HTML pages in a standard web browser.

There is no proprietary software to distribute or install on users' computers. Users only need a standard browser to access 2Share.

Following are brief overviews, discussing 2Share from two perspectives: the 2Share user, and the 2Share System Administrator.

# 2Share from the End-User's Point of View

The following description gives you an overview of how 2Share appears to endusers.

2Share leverages standard Internet technology so users can collaborate on and distribute information—without the need for technical training on HTML, web servers etc.

2Share simplifies the creation, publishing, viewing, and personalization of information on an intranet, extranet, or the Internet using a standard web browser. 2Share allows dynamic integration and distribution of information from disparate sources, creating an *enterprise portal for each user*.

# Specifically, users can:

- Create, edit and publish information authored in their favorite tools, such as MS Word, Excel, or PowerPoint, etc. (for a complete list of file types see Appendix B, Supported File Formats, page 163.)
- Gather information dynamically from different sources such as databases, network file systems, and the user's local machine.
- Organize information into meaningful structures, based on a hierarchy of containers.
- Distribute information to the right people quickly and easily.
- Manage information throughout its life cycle.
- Protect information from unauthorized access.

**NOTE:** To experience 2Share as a user, you can perform the steps in the Quick Tour (tutorial) contained in *Chapter 3* of the 2Share 3.0 User's Guide,.

# The 2Share Centers: InfoCenter and WorkCenter

2Share users use two main "centers," InfoCenter and WorkCenter, to access information sources, then assemble and share the information as shown in *Figure 1-1* below.

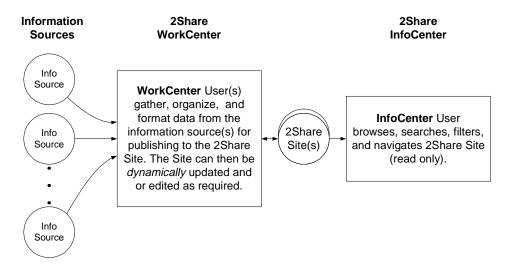


Figure 1-1 Information Assembly and Sharing using WorkCenter & InfoCenter

The following describes the centers' hierarchy and option modules from the users point of view. Figure 1-2 below shows the two centers under 2Share.

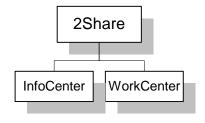


Figure 1-2 InfoCenter and WorkCenter, Two Main Centers

Each center displays various modules and functions, typically activated when the user clicks a button or selects a function.

#### 2Share's InfoCenter

The **InfoCenter** allows users to browse, search, filter, and navigate 2Share Sites (read-only). Figure 1-3 below shows the structure of the InfoCenter modules. The InfoCenter's button display is shown in Figure 1-4. (For details on how to use these modules, see the 2Share User's Guide.)

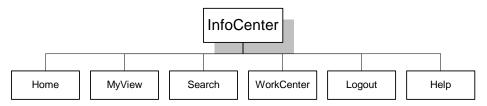


Figure 1-3 InfoCenter Modules



Figure 1-4 InfoCenter Module Buttons

#### Home

Clicking *Home* brings up the start-up site window in the 2Share InfoCenter. The *Home* page is customizable.

#### MyView

Clicking MyView invokes the user's *personal* home page (customizable for each user) that shows only 2Share Sites of interest to that user. MyView lets users specify which sites to display.

#### Search

Search lets users find sites based on:

- Site name.
- Page name.
- Keyword.
- Site description within a time range specified by the users.
- Author name for a page within a site.

#### WorkCenter

The WorkCenter button is displayed only for those users having the proper authorization. When clicked, 2Share opens the WorkCenter (discussed below).

## Logout

Clicking Logout logs out the user, then 2Share closes the session. While it is possible to exit 2Share by clicking the browser's Close button, it is not recommended because it denies 2Share a chance to properly close the session.

### Help

Clicking the Help button launches 2Share's Online Help System.

#### 2Share's WorkCenter

The **WorkCenter** lets users design, create, edit, and publish 2Share Sites. Users access various modules to perform these activities. The structure of the WorkCenter modules is shown below in *Figure 1-5*. The WorkCenter's button display is shown in *Figure 1-6*.

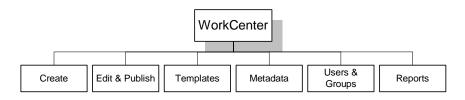


Figure 1-5 WorkCenter Modules



Figure 1-6 WorkCenter Module Buttons

Following are brief descriptions of each module. (For complete details on how to use the WorkCenter modules, see the 2Share User's Guide.)

#### Create

In the Create module, authorized users can create 2Share Pages and the sites that contain them. This module can also be used to assign keywords to sites for later searching. Finally, viewing and editing access can be assigned here by associating appropriate users and groups with each site. (For an explanation of terms such as 2Share Page and site, see "Anatomy of a 2Share Site," page 17.)

#### Edit & Publish

In the Edit & Publish module, individual components (Word documents, Excel spreadsheets, etc.) can be added to 2Share Pages. Users can check on their workflow for each site to which they are assigned. Authorized users can then approve and publish sites for viewing by readers or exporting from 2Share Sites as static HTML files.

### **Templates**

In the Templates module, authorized users modify and upload templates. All 2Share Pages based on the same template will have the same layout and structure. 2Share templates define the "look and feel" content, and structure of 2Share Pages.

A template allows two kinds of content items:

- Those items that display identically in every page created from that template, such as, logo, headers, footers, etc.
- Those items that display differently from page to page. For example, consider a template in which one of the content items is defined as a general file upload. Each page based on the template could upload and display a different file in that position—e.g., a quarterly report in MS Word, a sales chart in MS Excel, etc.

Templates separate layout and page design from page contents. Some users design templates, while other users use templates to upload content into a 2Share Page. For more information see "2Share Pluglets," page 19 in this chapter. For user-oriented details, consult the 2Share User's Guide.

#### Metadata

In the Metadata module, users assign "metadata"—or, data that describes other data—to 2Share Sites. Metadata can consist of the file name, the creator's name, creation date, keywords, etc. Keywords, a kind of metadata that resemble index entries in a book, are assigned to sites.

Metadata helps users manage, locate, and report on information within the 2Share system. Further, when a user exports a 2Share Site as static HTML, the metadata is output as XML files that can then be imported into a database and/or processed by a program external to 2Share.

#### Users & Groups

In the Users & Groups module, authorized users can create users and user groups.

#### Reports

In the Reports module, users can track activity by site data and user data, such as what content was added to a site and which users accessed it. This allows users to track user activity and content contribution and modifications for every current and archived 2Share Site. Users can obtain the following types of reports:

- User Profile WorkCenter Activity.
- User Profile InfoCenter Activity.
- InfoCenter Quick View.
- Site Profile.

# 2Share Roles

Not all modules of the WorkCenter are accessible to all users. Five roles define 2Share users: Reader, Author, Designer, Publisher, and Manager. According to their role, users have access to InfoCenter and the various WorkCenter modules. Thus, a user's role determines permissible viewing and editing activities. In this manual, specific user roles are capitalized an italicized. (Example: Designer.)

Readers have read-only access and will not see the WorkCenter on their screens. Designers design the templates that give the HTML pages their look and feel and allow Authors to upload content. Authors contribute content, usually components that make up an HTML page. Publishers approve pages and make them available for viewing by Readers. Managers have access to all modules and can create and administer users and groups.

# **Mapping Roles to Modules**

Table 1-1 below maps 2Share Roles to the WorkCenter modules they can access.

Roles Module Reader Author Designer **Publisher** Manager InfoCenter YES YES YES YES YES Create No No YES YES YES YES Edit & Publish: In Progress tab No YES YES YES YES Edit & Publish: Published tab No No No YES No No YES YES YES Templates Metadata No YES YES YES YES No YES YES YES Reports No

*Table 1-1* Mapping of Roles to Modules

Table 1-1 Mapping of Roles to Modules

#### **Roles and WorkCenter Buttons**

Users access all modules from the button bar at the top of the WorkCenter display (see Figure 1-7 below). A user's role determines which module buttons are displayed. The following figure shows the WorkCenter as a Manger might see it. The view of a Publisher would look the same, except the Users & Groups button would not be displayed.

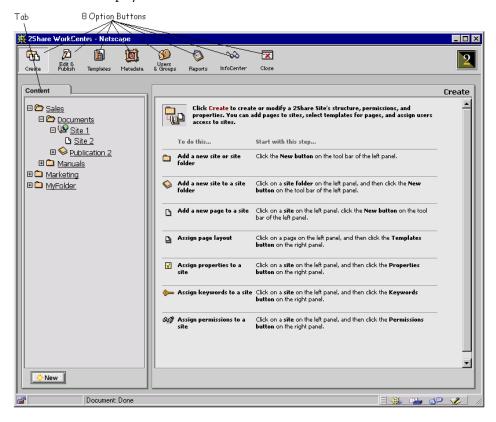


Figure 1-7 Manager's View of Typical WorkCenter Window with Module Buttons and Tabs

# Hierarchy of 2Share Containers

The most familiar container is the 2Share Page. (See Figure 1-8 below.) When requested by an end-user, a 2Share Page dynamically generates an HTML file for display in a web browser. The content items assembled on a 2Share Page may be Word documents, Excel Spreadsheets, PowerPoint slides, the result sets of an SQL query, etc. The HTML will display each content item as follows:

- converted to HTML format
- as a clickable link that downloads the content in its original format
- or both.

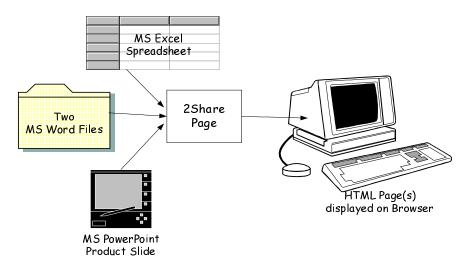


Figure 1-8 Various Content Items Composing a 2Share Page

Figure 1-9 below shows the 2Share container hierarchy: 2Share Folders, Sites, and Pages. These items are the "containers" used by 2Share to organize information.

At the top level is the 2Share Folder. It is an organizational unit, containing sites or folders or both. Folders allow users to build hierarchies of varying complexity that provide a systematic way to organize and access 2Share Pages.

The next level in the hierarchy is the 2Share Site that consists of one or more pages. The 2Share Site is a conceptual unit while the page is a display unit dictated by the nature of the web browser. The site unites several pages according to their content so they may be read, referenced, and revised throughout an enterprise.

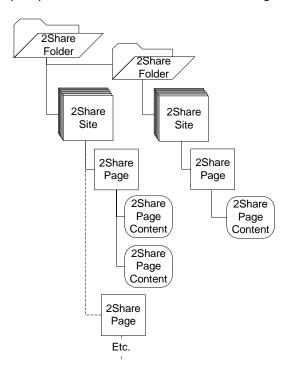


Figure 1-9 2Share Folder/ Site/Page/Hierarchy

The next figure, *Figure 1-10*, shows folders, sites, and page links as they display in the WorkCenter.

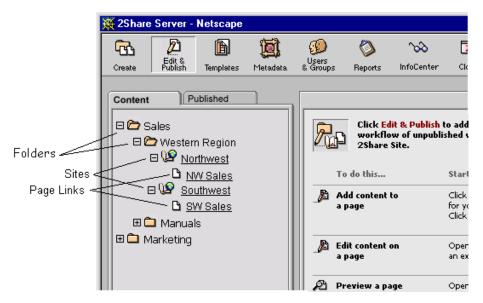


Figure 1-10 Portion of 2Share WorkCenter Panel Showing Folders, Sites, and Pages

# In this example:

- The folder Sales contains two sub-folders: Western Region and Manuals.
- The folder Western Region contains two sites: Northwest and Southwest.
- Site Northwest contains page NW Sales.
- Site Southwest contains page SW Sales.

To display a 2Share Page, the user clicks its page link. The page displays in the right panel.

# Anatomy of a 2Share Site

Sites are the fundamental unit of organization and communication in 2Share. Thus, it is important that you understand the life cycle of a site. A site augments the power of an individual page by providing context, cohesion and continuity. *Figure 1-11* below summarizes the life cycle and components of a site. All the terms, except for versions, have been discussed in preceding pages.

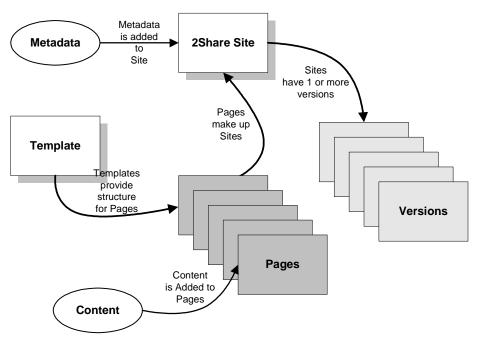


Figure 1-11 Life Cycle of a Site

#### **Versions**

Notice in Figure 1-11 above, that a 2Share Site may have one or more versions. Each version can have different content and components. (For example, a Sales report might have several versions: last week's update, Monday's update, today's update, etc.) Each version can have several pages, each defined by a template.

# Life Cycle of a Typical 25hare Site

Although there are several variations possible, users typically collaborate in creating a site as follows:

## The Designer:

- Selects a folder in the Create module or creates a new one.
- Names the 2Share Site.
- Assigns users to work collaboratively on the new 2Share Site, by choosing users with correct permissions.
- Assigns reading groups (read only) from the list of available reading groups.
- Adds pages (each with its own name) and picks a template to describe the page format.
- Categorizes the 2Share Site by adding keywords.

#### The Author:

- Adds dynamic content item(s) to each content position on a page.
- Changes his or her workflow status for the site, thereby notifying assigned *Publishers* that material is ready for review.

#### The Publisher:

- Grants approval to officially publish sites. Several *Manager* approvals may be required.
- Publishes the 2Share Site, making them viewable by authorized users.

# 2Share Pluglets

2Share includes a feature called *pluglets*. Pluglets automate page assembly and extend content contribution across the enterprise. Pluglets can accomplish this task because they are:

- collaborative.
- dynamic,
- and completely server-side

### Collaborative Tool

Pluglets enable 2Share to separate page layout and structure (defined by template *Designer*) from page content (provided by an *Author*).

### Designer's View of Pluglets

To the *Designer*, a pluglet is a markup tag to be inserted in a template along-side the HTML tags. *Table 1-2* below shows five pluglet tags that generate the five pluglet drop-down menus shown in *Figure 1-12* below.

Table 1-2 Sample Pluglet Tags in HTML Code

```
.
.
<Pluglet id=2pluglet>
<Pluglet allowed='PgEmail' id=4pluglet>
<Pluglet allowed='PgNotes' id=5pluglet>
<Pluglet id=secondpluglet>
<Pluglet id=3pluglet>
.
.
.
```

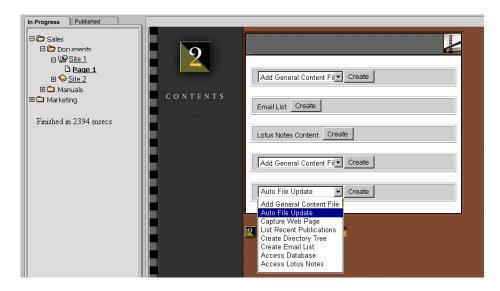


Figure 1-12 Drop-Down Menus Generated by the Pluglets shown in Table 1-2 (above)

### **Configuring Pluglet Properties**

As shown in *Table 1-2*, a pluglet tag can have properties, which are implemented as tag attributes. Like the attributes in an HTML tag, a pluglet tag attribute is a name-value pair that the *Designer* uses to assign a value to a pre-defined name. Certain properties (such as bgcolor and fontcolor) are found in all pluglets, while other properties are limited to a subset of all pluglets.

For an overview of configuring properties, see "Pluglet Display Properties," page 74. For details on the properties of particular pluglets, see the 2Share User's Guide.

#### Scope of Properties

The *Designer* can specify pluglet properties in several locations, depending on whether the properties should apply locally or globally. For example, if the properties should apply to all instances of a pluglet type in all templates, the

Designer must specify values in properties files that reside on the 2Share Server. When specified in other locations, properties have decreasingly lesser scope. (A pluglet's scope is illustrated in Chapter 2, Figure 2-10, Pluglet Priority Search Process, page 77.)

### Author's View of Pluglets

To a 2Share Author, a pluglet typically appears as either:

- A drop-down list of pluglet types available at that content position (see *Figure 1-13.*), or,
- A button that the Author clicks to start a pluglet wizard.

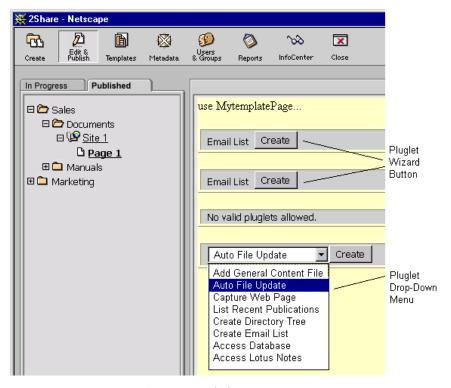


Figure 1-13 Pluglet Buttons

If a pluglet has no wizard, the *Author* sees explanatory text. If the user clicks a pluglet wizard button, 2Share displays a wizard dialog box similar to that shown in *Figure 1-14* below.

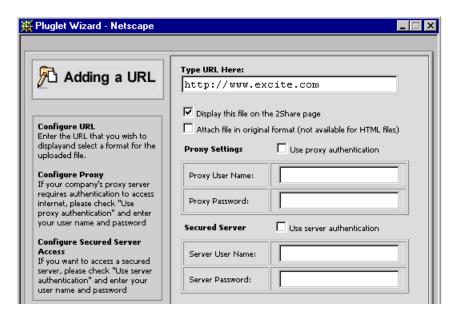


Figure 1-14 Pluglet Wizard Dialog Box

#### Reader's View

A Reader sees the results of the pluglet as actual content on a 2Share Page. In fact, Readers probably have no idea that pluglets exist. For example, notice in Figure 1-14 above that the pluglet points to excite.com. The 2Share Reader would see the image pointed to by that pluglet (in this case excite.com), such as that shown in Figure 1-15 below.



Figure 1-15 2Share Page generated by Pluglet Wizard (above)

The URL given to the pluglet wizard (Figure 1-14) causes 2Share to load the excite.com homepage shown in Figure 1-15.

- 1. Notice that the browser's Location (top of Figure 1-15 above) shows the 2Share Site, NOT excite.com.
- 2. Notice also 2Share's InfoCenter navigation bar (Home, MyView, etc.) along the bottom of the display.

# **Dynamic Content**

Pluglets also provide *dynamic* content. For example, the pluglet (pgToc) displays an automatically updating list of pages in a site. Another pluglet, (pgAutoFileUpload) allows an *Author* to upload a source file, update the source file on the file system, and have updates reflected automatically in the 2Share Page. Database pluglets can query a relational database and display resulting sets. As you can see, 2Share Pages are not limited to displaying the static content available at edit-time.

# Pluglets are Server-Side

Pluglets exist entirely on the 2Share Server. Once content is retrieved and assembled, 2Share delivers standard HTML via HTTP to the client's web browser.

# A Pictorial Example of Pluglets

Figure 1-16 below represents a sample use of pluglets. For this example, assume the goal is to publish a weekly 2-page sales report to the web, consisting of:

- an MS Word file,
- an MS Excel spreadsheet,
- an MS PowerPoint product photo, and
- an "as-of" date.(See Figure 1-16.)

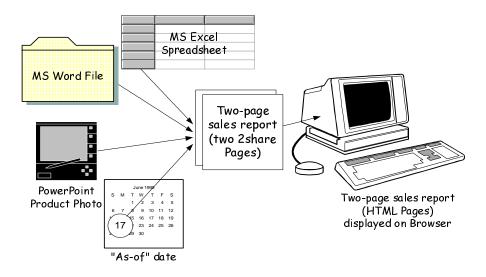


Figure 1-16 MS Word/Excel/Graphic Files to Sales Report

Let's further assume that Page 1 of the sales report should contain the date and the Word file, while Page 2 should contain the PowerPoint, and Excel files.

The Designer would need two types of Pluglets:

PgFile for the Word, PowerPoint, and Excel files

• PgNewAsOf for the date

Examine Figure 1-17 below that shows how the Designer uses a template to determine the layout of the Sales Report; how the Author specifies the content of the Sales report; and what the Reader sees via the browser.

To accomplish this, the *Designer* would add the necessary pluglets to either a standard 2Share template or a specially designed template. *Figure 1-17* below shows how the Template defines the two 2Share Pages, which in turn determine what displays on the *Reader's* browser.

Figure 1-17 also shows the relationship of templates, pluglets, pages, and content items, and the *roles* that can perform each function. Note: different templates, page names, pluglet types, and actual content items could be used.

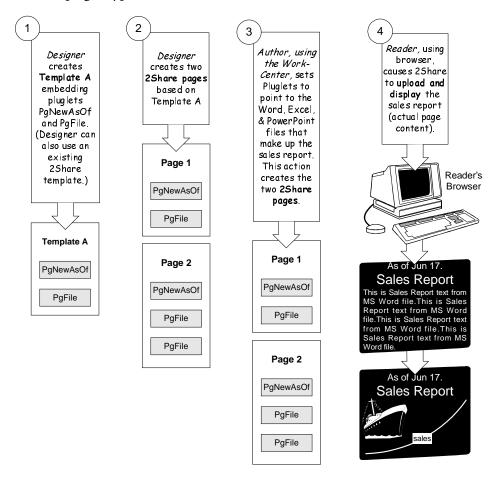


Figure 1-17 Template Determines Browser's Display

Referring to Figure 1-17 above, after creation Template A could be used to create any number of 2Share Pages. PgFile could point to any MS Word, MS Excel, or PowerPoint files.

# Pluglet Extensibility

2Share allows integration of new pluglets. These new pluglets can be developed by 2Bridge or by your company's developers, using the 2Connect API.

# Summary of User's Point of View

2Share consists of two main "centers," **InfoCenter** and **WorkCenter**. The InfoCenter allows users to browse, search, filter, and navigate 2Share Sites. The WorkCenter lets users design, create, edit, and publish 2Share Sites. Each center provides module buttons. The user's role determines the user's privileges to accomplish these tasks.

A 2Share Folder is an organizational unit, containing sites or folders or both. Folders allow users to build hierarchies of varying complexity that provide a systematic way to organize and access 2Share Pages which contain page content. A 2Share Site may have one or more versions.

Pluglets automate page assembly, provide dynamic content, and extend content contribution. Pluglets are: collaborative, dynamic, and completely server-side.

**NOTE:** To experience 2Share as a user, you can also perform the steps in the Quick Tour (tutorial) contained in Chapter 3 of the 2Share 3.0 User's Guide.

In the process, you in the *Publisher* role, create a 2Share Site sharing competitive information with your department. To ensure that everyone can easily locate the information, you put the site in a Competition folder.

The next section discusses 2Share from the Systems Administrator's point of view.

# 2Share from the System Administrator's Point of View

2Share works with a web server and database, and builds on the open-standards Internet technology and its industry-standard client-server model.

As System Administrator, you may be called upon to perform any of the following:

- Create one or more users who have the role of Manager.
- Coordinate access to certain server directories and files for users who have the role of *Designer*.
- Integrate corporate authentication systems to unify user authentication.
- Backup persistent data using standard database tools.
- Modify 2Share properties files to provide special features to users.
- Modify system configuration to enhance performance

# 2Share Requires No Client-Side Installation

2Share is easily installed, with initial installation in less than one hour (consult 2Share 3.0 Installation Guide). The client's workstation requires no client-side deployment or installation. Thus, clients need only a Netscape or Microsoft Internet Explorer<sup>1</sup> browser. After 2Share is installed and deployed, the System Administrator can broadcast the 2Share URL to all users via an email message.

1. Netscape 4.0x, Netscape 4.5 or later; IE 4.0x, IE 5.0 or later

**NOTE:** 2Share allows aliases in the URL to invoke the 2Share login. Example: http://www.YourServerName.com/Alias where Alias can be any of the following 6 aliases: 2Share, 2share, TwoShare, Twoshare, twoShare, twoshare.

# System Administrator's First Login

Upon installation, 2Share has one default account: the name is system and the password is manager.

**NOTE:** As System Administrator, you should login to 2Share with username "system" and password "manager." Then do the following: 1) create a 2Share account for yourself with the role of Manager. 2) Change the password of the system account. Write down the password in a secure location. If you lose it, you risk losing access to your 2Share database. (See Chapter 4, "System Administration Tasks", page 81 for instructions.

# Managers and Designers Share System Administrator's Privileges

Unlike the traditional, LAN-based client/server model, 2Share distributes the power to retrieve, assemble, and publish content throughout the enterprise. Accordingly, certain end-users have expanded capabilities. In particular, two of the 2Share roles enjoy privileges previously associated with System Administrators. These roles are 2Share Managers and 2Share Designers, discussed in the following paragraphs.

#### Managers

Managers create 2Share users and user groups. Even if users are created through self-registration, a Manager decides what role (beyond Reader) to assign them.

The "system" account has *Manager* privileges, but you should start by creating a *Manager* account for yourself, as System Manager (described above). The System Administrator's first decision about users is whether to create other *Managers* and, if so, how many. See "System Administration Tasks," page 81 for instructions.

You should only create *Manager* accounts for those you trust to create and administer users and user groups. If you are using an LDAP server for authentication, the *Managers* should also have some knowledge of LDAP and how it affects 2Share administration. At the very least, you should instruct them not to create accounts in 2Share's Users & Groups module for users that are on, or will subsequently be on, the LDAP server. For details, see "LDAP Authentication," page 138 and "LDAP Overview," page 173.

## Designers

The Designer's role is the only role that may need to modify files on the file system of the 2Share Server machine. Specifically, Designers may need to modify 2Share's properties files such as ic.properties and <plugletname>.properties files. Sometimes, they may also need to copy to the server files (ex: header/footer) and source documents for automatic uploading.

**NOTE:** As System Administrator, you should develop a policy for controlling access to these files. For possibilities, see "Helping Users," page 101.

# **End-Users Can Self-Register**

When a user logs in, the *Login* dialog box requests a username and password. A user with no registered username and password may invoke a self-registration page to request "public" access to the system. You control such access.

# **Authentication**

2Share provides three forms of user authentication as follows:

- 2Share Only—all user information resides within 2Share.
- LDAP Only—all user information resides on LDAP Server(s).
- 2Share and LDAP combination.

See Chapter 8, "Security & Authentication", page 137 for details.

# 2Share System Architecture

Figure 1-18 below shows the basic 2Share architecture. Various optional configurations are described in Chapter 2, "2Share Configurations", page 39.

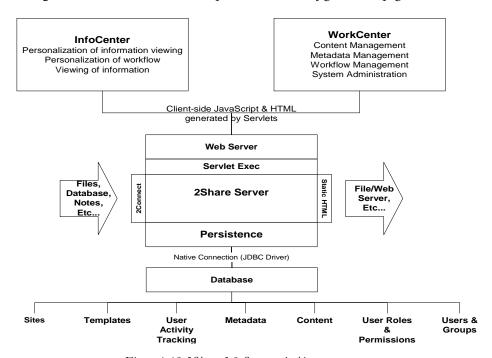


Figure 1-18 2Share 3.0 System Architecture

Note that the *InfoCenter* and *WorkCenter* (top of *Figure 1-18*) are the users' interface to 2Share via a standard web browser. The web server, 2Share Server, database, etc., are transparent to the user. While the WorkCenter and InfoCenter provide views of, and access to, the database information, the database structure is transparent to end-users and System Administrator.

Note also, the database contains such items as: sites, Templates, User Activity Tracking, Metadata, etc. (bottom of *Figure 1-18*).

### **Servlets**

A servlet is similar to an "applet," except servlets are loaded and initiated by the web server on the server-side. A servlet accepts requests from the user's browser (via web server), performs some task(s), and returns the results (via web server) to the browser. Since the web browser does not communicate directly with the servlet, if the web server is behind a firewall, the servlet is as secure as the web server. See Figure 1-19 below.

Java Servlets are platform independent and fast because they are persistent (loaded just once by the web server).

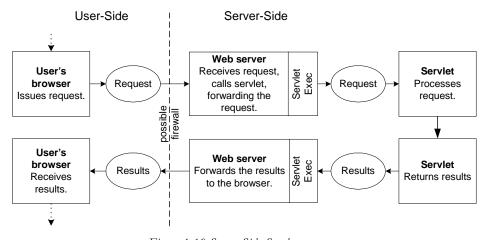


Figure 1-19 Server-Side Servlets

#### **JDBC**

JDBC means Java DataBase Connectivity. JDBC is a programming interface that lets 2Share's Java applications access the database using the SQL language. This allows platform-independent database application.

# Summary of System Administrator's Point of View

2Share works with a web server and database, and builds on the open-standards Internet technology and its industry-standard client-server model.

2Share is easily installed in less than one hour. The client's workstation requires no client-side deployment or installation. Clients (users) need only a standard Netscape or Microsoft Internet Explorer browser.

As System Administrator, you should immediately change your default password by logging into 2Share with username "system" and password "manager."

Managers and Designers share some System Administrator's Privileges

2Share provides three forms of user authentication.

The web server, 2Share Server, database, etc., are transparent to the user. The WorkCenter and InfoCenter provide views of, and access to, the database information, while the database structure is transparent to end-users and System Administrator.

2Share servlets accept requests from the user's browser (via web server), perform some task, and returns the results (via web server) to the browser. If the web server is behind a firewall, the servlet is as secure as the web server.