Hyperwave Java Virtual Folders

Java Virtual Folders

Version 2.2

HYPERWAVE
Organize your future

Hyperwave Java Virtual Folders

Document Version 2.2

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1 Installing Java Virtual Folders

Below is a description on how to install Java Virtual Folders on a UNIX operating system, followed by a description on how to install the folders on a Windows NT operating system.

INSTALLING UNDER UNIX

Java Virtual Folders for UNIX is installed as follows:

1. The package file names depend on the platform used, and whether native (`nat`) threads or green (`grn`) threads are used. Examples, where `xxx` means `nat` or `grn,` are as follows:

   a) For a Linux platform: `hwjvfxxx.tgz`

   b) For a Hewlett and Packard platform:`hwjvfHxxx.tgz`

   c) For a Sun platform the options are: `hwjvfSUNxxx.tgz`

Note: For more information on the packages see the Readme file

2. Copy the Java Virtual Folders package for your architecture to the directory where you want to install Java Virtual Folders, e.g. your home directory. If you are a system administrator you can install Java Virtual Folders globally in a directory such as `/usr/local.`

3. Unpack the Java Virtual Folders package. For example, for Linux this is done as follows:

   `gzip -dc hwjvfLINnat.tgz|tar xvf -`

   This will create a directory called `HWJVirtualFolders/.`

4. Add the `HWJVirtualFolders/jvf` script to your path. This is done by extending the path environment variable with the `HWJVirtualFolders/` directory.

   e.g. `setenv path=(~/HWJVirtualFolders $path)`

   Or by linking the script to a directory which is currently in the path.

   e.g. `cd /usr/local/bin`

   `ln -s /usr/local/HWJVirtualFolder/jvf`

The first time you start Java Virtual Folders, a directory called `.hwjava` is created in the user's home directory. This directory is used to store the various configuration files.

Note: It is recommended to set the access rights of the .hwjava directory to have read/write access only for the owner (e.g. cd; chmod 700 .hwjava).

INSTALLING UNDER WINDOWS NT

Java Virtual Folders for Windows NT is installed as follows:

1. Double click on the package with the file name `hwjvf.exe`

2. Wait while the Install Shield Wizard works automatically. The Hyperwave Software License Agreement then appears. See Figure 1.
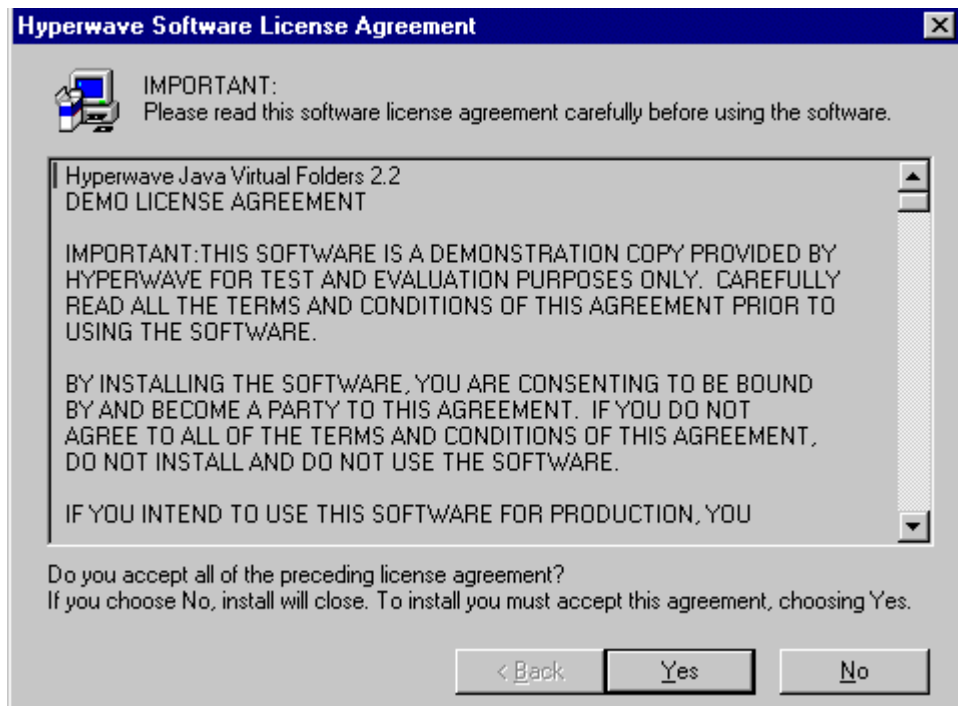
Figure 1: The Hyperwave Software License Agreement

3. Read the license text carefully, then click on the **Yes** button to accept the license agreement. The Hyperwave Setup dialog box appears. See Figure 2 below.
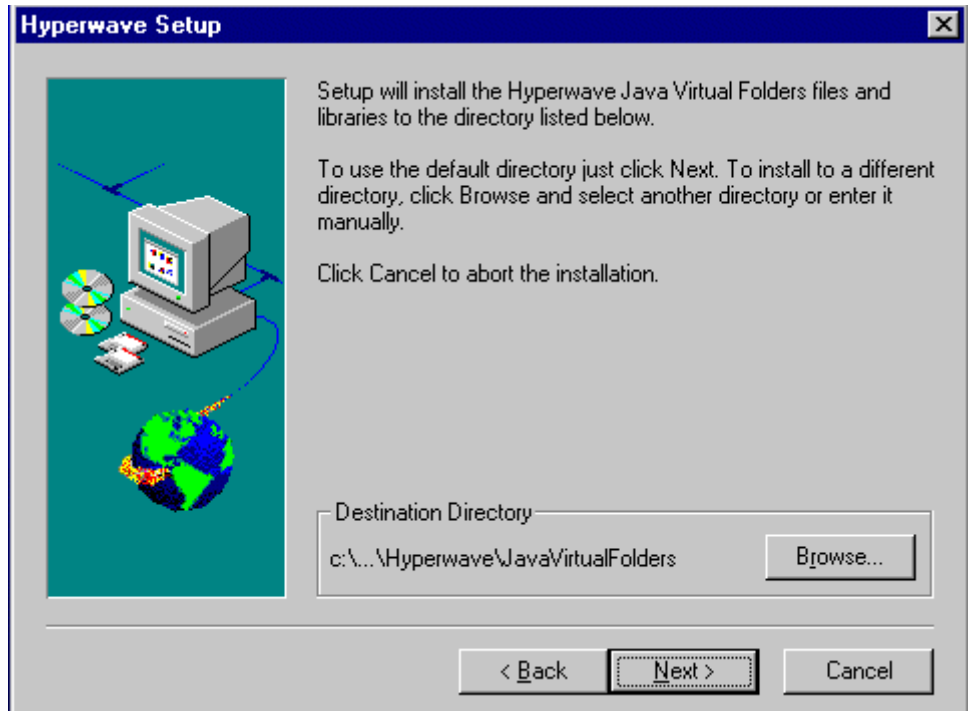
Figure 2: Hyperwave Setup

4. You can save the Virtual Folders files to the default destination directory, or change the path by click on the browse button next to the default path name. Choose your own destination from the list menu displayed in the pop-up dialog box. Click on the **OK** button to process, or cancel to return to the default destination.

5. Click on the **Next** button in t he Hyperwave Setup dialog box; the Java Virtual Folders will be installed on your computer. Wait while the files are copied to your directory destination. See Figure 3.
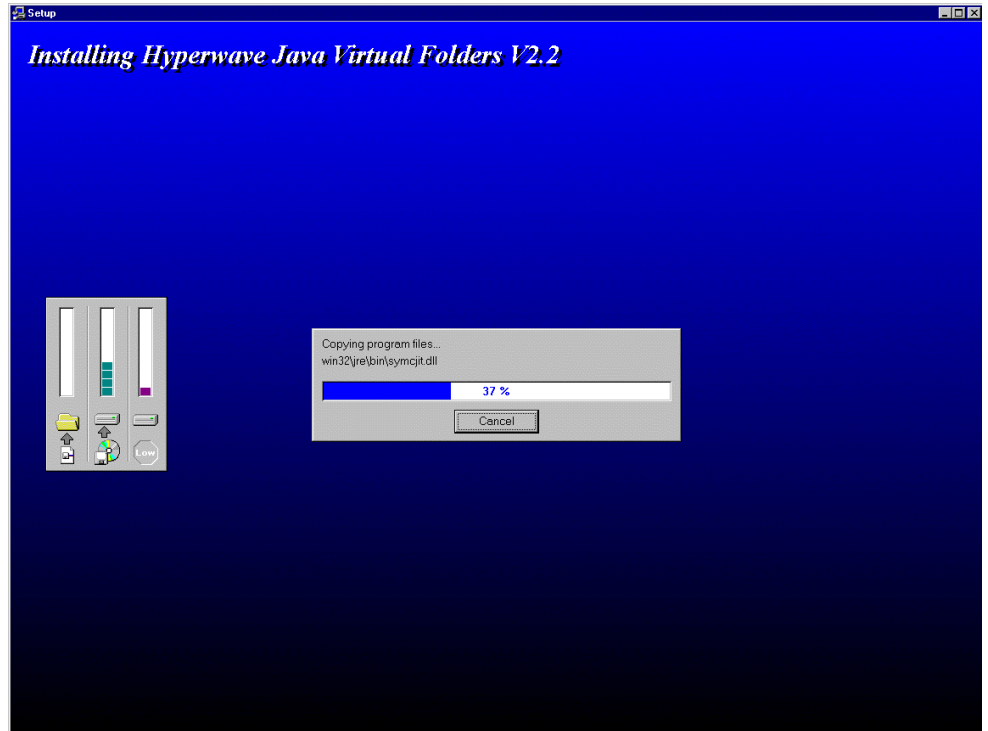
Figure 3: Installing Hyperwave Java Virtual Folders

6. A query dialog box appears which asks you if you wish to view the Hyperwave Java Virtual Folder Readme file now. Depending on your choice, click on the **Yes** or **No** button. If you click on **Yes** the Readme file appears; **X** to close the Readme window.

7. The next dialog box give you the option of rebooting you computer straight away or later. Click the desired option, and click on the **OK** button. If you wish to restart the computer immediately, make sure all other data is saved.
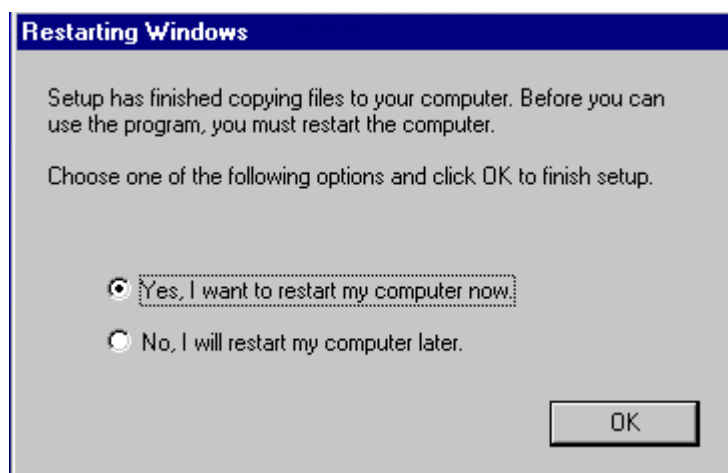
Figure 4: Restarting Windows dialog box

8. The final dialog box informs you the Hyperwave Java Virtual folders were installed successfully; click on the **OK** button to close.

9. You can find the installed files in the destination directory.

Note: It is recommended to set the access rights of the hwjava directory to have read/write access only for the owner (e.g. cd; chmod 700 hwjava).

2 Configuring Java Virtual Folders

2.1 Configuring Viewers

Java Virtual Folders can be configured to open certain document types with certain viewers. Viewers are searched in the following order:

- Java Viewer

- Native Viewer

- Browser

Each viewer component can be configured. You can set entries in the configuration files in:

1. the `$HOME/.hwjava/` directory for UNIX

2. the `$HOME/hwjava/` directory for Windows NT

This will overwrite entries in the global configuration files in following subdirectory of the installation directory:

1. the `.hwjava/subdirectory` for UNIX

2. the `hwjava/subdirectory` for Windows NT

Note: When no files (e.g. `hwjvf.properties` *), are found in the directory* `$HOME/.hwjava` *(UNIX) or* `$HOME/hwjava` *(Windows NT),the data is read from the original global configuration file.*

CONFIGURING THE BROWSER

Note: This section applies to UNIX only.

To configure the browser you wish to use to view documents from Java Virtual Folders:

1. Open the file:

   a) `.hwjava/hwjvf.properties` for UNIX

   b) `hwjava/hwjvf.properties` for Windows NT

2. Create (or modify) the value for the key `application.to_start_for_url`

   The default value for this key is:

   `application.to_start_for_url= netscape -remote "openurl(%u)"`

CONFIGURING NATIVE VIEWERS

To configure the native (non-Java) viewers you wish to use to view documents from Java Virtual Folders:

1. Open the file:

    a) `.hwjava/hwjvf.properties` for UNIX

    b) `hwjava/hwjvf.properties` for Windows NT

2. Add a viewer for a particular mimetype by entering the key
    `application.to_start.[`*mimetype*`]`

    Where [*mimetype*] is the document type for which the new viewer should
    be registered.

3. Enter the viewer command as the value for this entry, for example:

    `application.to_start.text/java=emacs`

    or

    `application.to_start.image/*=xv`

CONFIGURING JAVA VIEWERS

Note: This section on Configuring Java Viewers is for programmers' use only.

A Java viewer is the most efficient way to add viewers. It can also be used to add
additional features such as edit, send mail, print, etc. The Java class which is to
act as a viewer (or editor, or printer) must implement the CommandObject
Interface as defined in the Java Activation Framework.

To configure the Java viewers you wish to use to view documents from the Java
Virtual Folders:

1. Open the file:

    a) `.hwjava/commandmap.txt` for UNIX

    b) `hwjava/commandmap.txt` for Windows NT

    This file uses the same syntax as a mailcap file (RFC 1524).

2. Add the line

    `text/rtf;;x-java-view=com.foo.RTFViewer`

    where `com.foo.RTFViewer` is a Java viewer class you have written for
    viewing RTF documents.

*Note: Make sure your viewer class and its helper classes are in your CLASSPATH
environment variable.*

CONFIGURING EDIT, PRINT COMMANDS

*Note: This section on Configuring Edit print Commands is for programmers' use
only.*

To add any other command to a mimetype, like edit, print, mail etc., you must
enter `x-java-[command]` where `[command]` is to be replaced by the specified
command.

The name of this command will also be used as a menu item name for the context-sensitive menu where you can select a viewer. Registered commands will only be selectable if you have write access to the object. If your command is really only a viewer and does not change the content of the object, you can register it as read-only. Add the command name to the `application.command_readonly` key in the file:

a)   `/.hwjava/hwjvf.properties` for UNIX

b)   `/hwjava/hwjvf.properties` for Windows NT

2.2   Configuring Help Files

It is possible to configure Java Virtual Folders such that your own personal Help files can be accessed while you are working.

1. Open the configuration file:

   a) `/.hwjava/hwjvf.properties` for UNIX

   b) `/hwjava/hwjvf.properties` for Windows NT

2. Find the entry `application.help.URL` and change the value as required:

   Enter the URL (of a Hyperwave Information Server) as the value of this configuration variable, or enter the path (absolute path or path relative to installation directory) to your Help files on the file system as the value for this configuration variable.

   The default value for this variable is `html/help/hwjvf.html`. You can also modify the HTML of this file to include links to other Help files that you have included in the directory.

3   Using Java Virtual Folders

OVERVIEW   Java Virtual Folders are a device for UNIX platforms that works in much the same way as Virtual Folders for Windows NT. Java Virtual Folders allow you to navigate collections, view and delete objects, carry out Version Control and Configuration functions on objects, and view and edit object attributes.

3.1   Starting Java Virtual Folders

To start Java Virtual Folders using UNIX, enter:

```
jvf
```

in the command line prompt. Java Virtual Folders appears as seen in Figure 5. In order to browse HWIS collections and directories in the file system, these must be added as described in the next section.

Figure 5: Starting Java Virtual Folders for the first time(UNIX)

To start Java Virtual Folders using Windows NT, click on the **Start** button of the bottom tool bar then click as follows:

Program → Hyperwave Virtual Folders → [icon] Hyperwave Virtual Folders. Java Virtual Folders appears as seen in Figure 6. In order to browse HWIS collections and directories in the file system, these must be added as described in the next section.
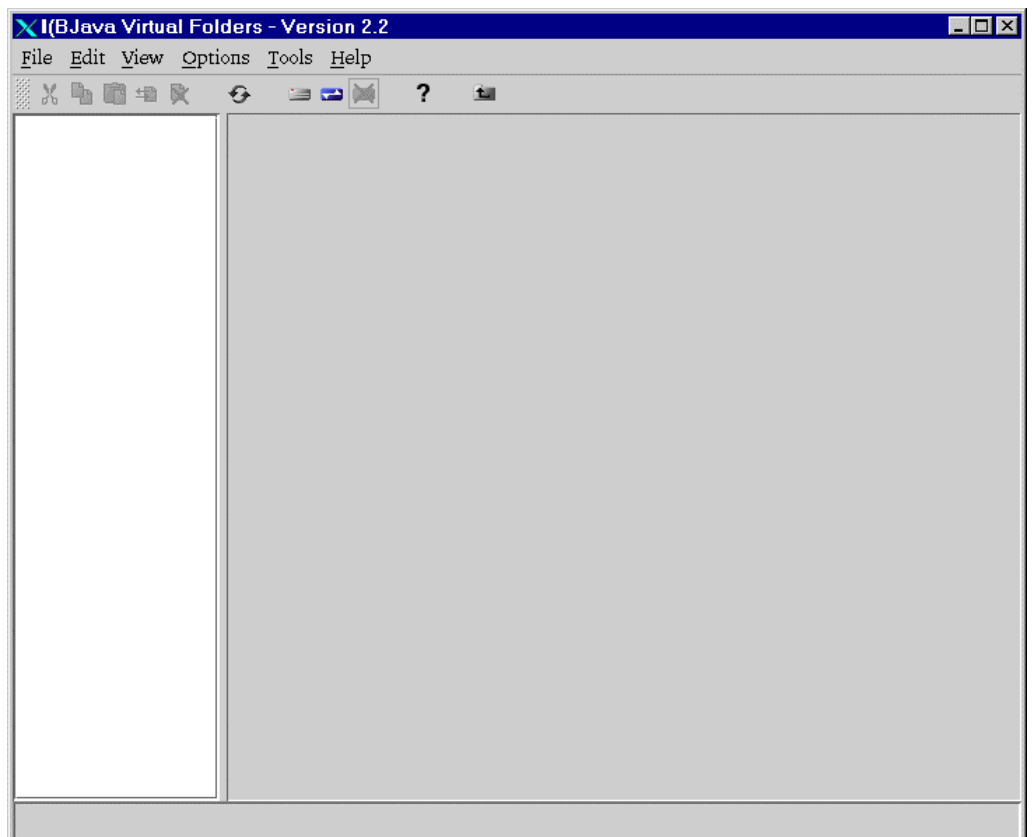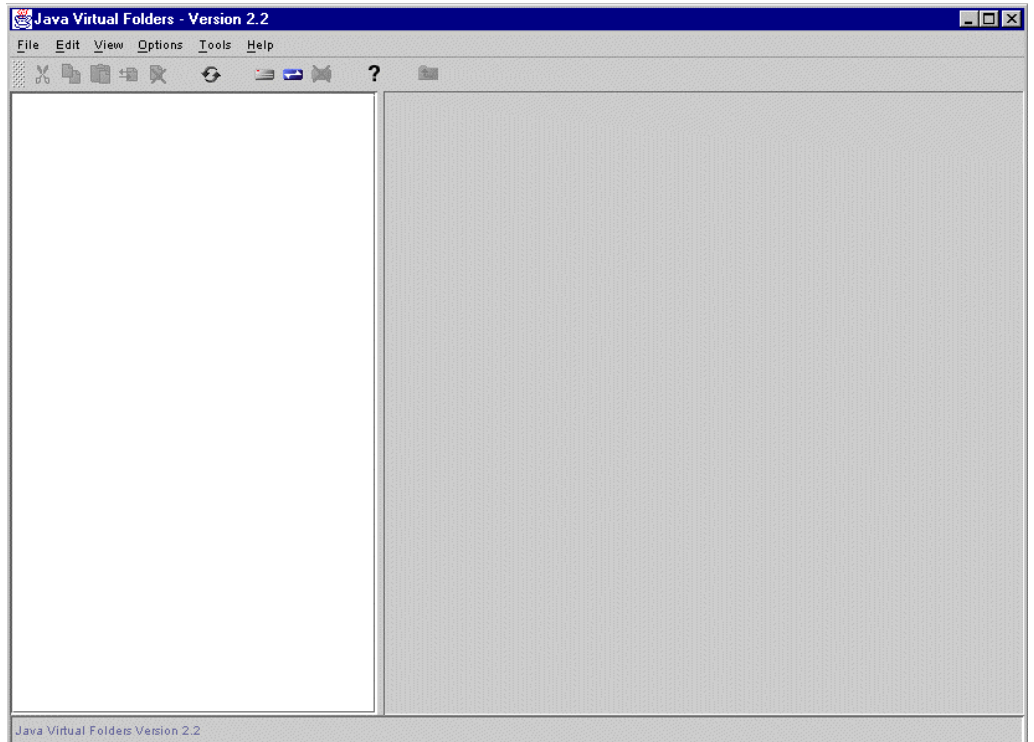

Figure 6: Starting Java Virtual Folders for the first time (Windows NT)

3.2 Adding a Server or File System

In order to access HWIS and file systems through Java Virtual Folders, you must use the procedures described in this section to add them to JVF. Note that Java Virtual Folders "remembers" which Hyperwave Information Servers and file systems you added during your previous sessions, and will display these automatically when started the next time.

3.2.1   Adding a Server

To add (mount) a server in Java Virtual Folders, take the following steps:

1. There are three ways to start this process:

- choose the command **Add Hyperwave Server** from the **Tools** menu

- click on the ▨ icon in the toolbar

- click with the right mouse button in empty space of the Java Virtual Folders view, and choose **Add Hyperwave Information Server (HWIS)** from the context-sensitive menu that appears.
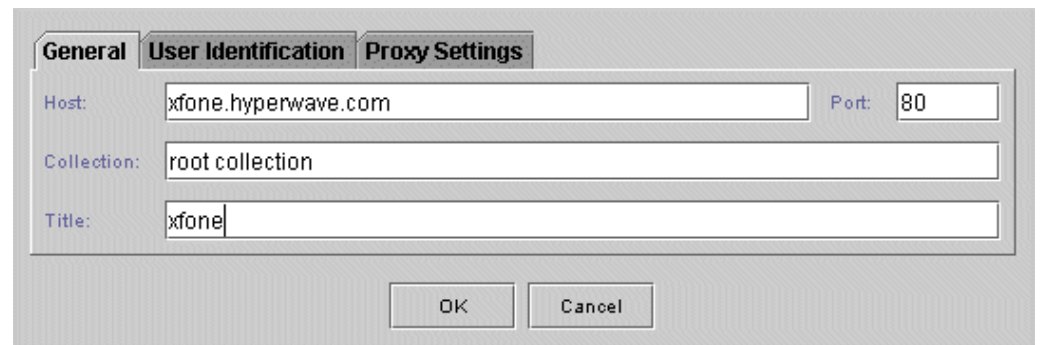
    The dialog box in Figure 7 appears.

Figure 7: The Add Hyperwave Server dialog box

2. This dialog box contains the three tabs **General**, **User Identification**, and **Proxy Settings**.

GENERAL SETTINGS

Under the **General** tab enter the following:

Host: The host name of the HWIS you want to connect to. Do not preface the name with "http://"

Port: The port number of the server you are connecting to (optional). If the protocol you are using is HGCSP, the port number should be 418. For HWTP, enter 80 as the port number. Default is 80.

Collection: Enter the **Name** attribute of the collection you want as your entry point to the server. If no entry is made here, the root collection of the server will be taken as entry point.

Title: After the server is added, this text appears as the title of the server added, so it should be descriptive.

USER IDENTIFICATION

Under **User Identification** (Figure 8), enter the following (optional):

User: Your user name on the HWIS you are connecting to

Password: Your password on the HWIS you are connecting to

Entering this information makes it so that you will automatically be identified on the server during subsequent sessions with Java Virtual Folders.

Figure 8: Adding a Server: User Identification information

PROXY SETTINGS

The tab **Proxy Settings** (Figure 9) allows you to enter information about a proxy server. These entries must only be made if you are connecting to the desired server over a proxy.

Figure 9: Adding a Server: Proxy Setting information

3. When you have entered all the relevant information, click on the **OK** button.

3.2.2   Adding a File System

To add a file system to Java Virtual Folders, take the following steps:

1. There are three ways to start this process:

-   choose the command **Add File System** from the **Tools** menu

-   click on the ▭ icon in the toolbar

-   click with the right mouse button in empty space of the Java Virtual Folders view, and choose **Add Hyperwave Server** from the context-sensitive menu that appears.

    The dialog box in Figure 10 appears.
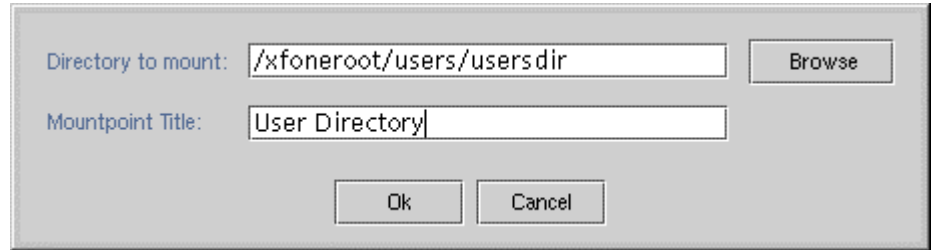
Figure 10: Adding a File System

2. Enter the path of the file system you wish to add to the Java Virtual Folders view (your home directory appears as suggested directory), or browse for it by clicking on the **Browse** button. Add a title under which the file system will be displayed in Java Virtual Folders.

3. Click on the **OK** button.

3.2.3   Displaying a Collection

Once you have added a HWIS collection or file system, Java Virtual Folders displays it in the same way as Microsoft Windows Explorer displays file systems (Figure 11). HWIS collections are displayed with a yellow folder icon. File systems are displayed with a gray folder icon.

Note: When an object has more than one name this is indicated by a "+"next to the relevant name.

Figure 11: Java Virtual Folders displaying Hyperwave Collection listings and a mounted file system

3.2.4   Navigating in Java Virtual Folders

Navigation in Java Virtual Folders is done as follows:

- Single-click on a collection or directory in the left window to display its contents in the right window.

- Click on the ◔ icon, or double-click on the folder icon to list the content of a collection or directory in the left window.
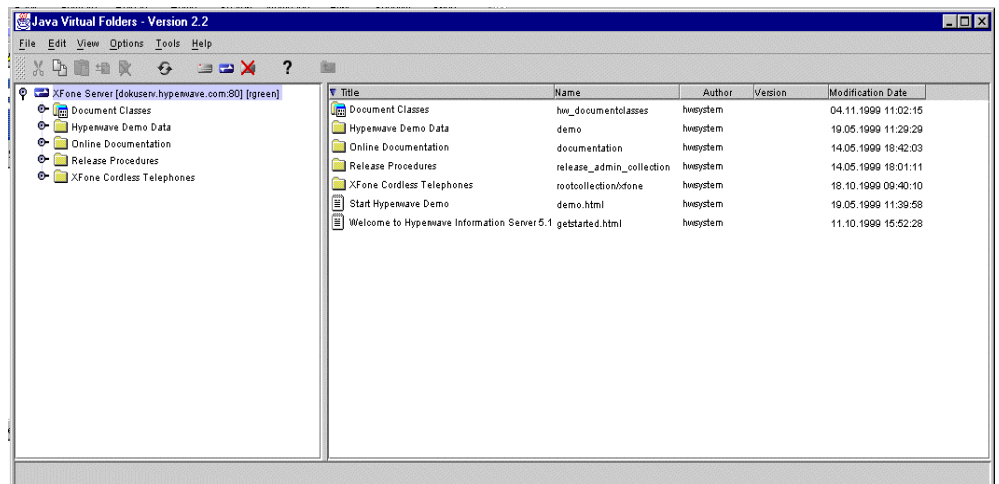
- Choose **Refresh** from the **View** menu or click on the ↻ icon to refresh the Java Virtual Folders view. You can also press the **F5** key on your keyboard to refresh the Java Virtual Folders view.

- Click on the ⬆ toolbar icon to go up one hierarchical level.

3.2.5 Identifying Yourself via Java Virtual Folders

When adding a server, you can enter user identification information, which will be stored with the server entry. In this way, it is not necessary to log in every time you access a collection listing on Java Virtual Folders. However, if you did not store this identification information or if you would like to log in under another user name, you can do this as follows:

1. Click on the added collection name with the right mouse button. The context-sensitive menu seen in Figure 12 appears.

Figure 12: Context-sensitive menu

2. Select **User Identification** from this menu. The dialog box in Figure 13 appears.

3. Enter your user name and password in this dialog box.

4. Click on the **OK** button.

Figure 13: User Identification dialog box

3.3 Displaying Objects in your Web Browser

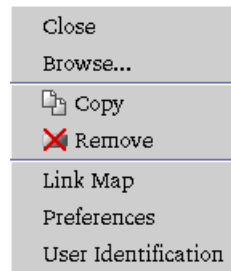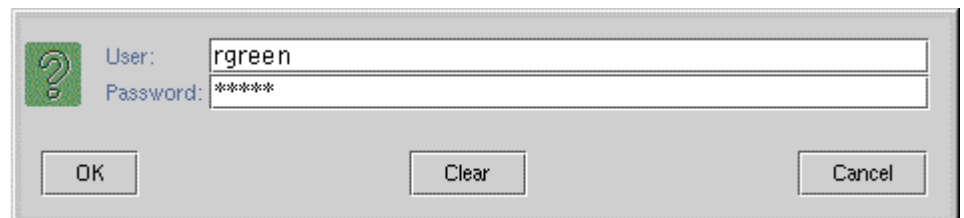To display an object listed in the collection listing, click on its name or icon with your right mouse button and choose the command **Browse** from the context-sensitive menu. The object will be loaded in your browser window.

If the object you selected for display is a collection, its hierarchy (parents and children) will appear in the browser window.

It is possible to configure Java Virtual Folders so that certain file types will always be viewed with certain applications. For more information on configuring Java Virtual Folders, see .

3.4 Java Virtual Folders Menus

3.4.1 Menus on the Menu Bar

The menus in the Java Virtual Folders menu bar are **File**, **Edit**, **View**, **Options**, **Tools** and **Help**.

THE FILE MENU
The File menu contains the commands **New Virtual Folders**, **Close** and **Quit**.

The **New Virtual Folders** command opens a second Java Virtual Folders window.

The **Close** command closes subsequent Java Virtual Folders windows opened with the New Virtual Folders command.

The **Quit** command exits Java Virtual Folders.

THE EDIT MENU
The Edit Menu contains the commands **Cut**, **Copy**, **Paste**, **Link**, **Link Version**, **Delete**, **Select All** and **Invert Selection**.

The **Cut**, **Copy**, **Paste** and **Delete** commands retain their standard Windows functions.

The **Link** command lets you create a shortcut from a collection to a document or collection on the same HWIS. See for a description of how to set links.

With the **Link Version** command, you can create a shortcut to a particular version of a document in any collection on the same Hyperwave Information Server. See for a description of how to set a link to a version.

The **Select All** command selects all objects that are currently displayed in the right-hand Java Virtual Folders window.

The **Invert Selection** command inverts the current selection.

THE VIEW MENU
The View menu contains the commands: **Refresh** and **Refresh All**.

Refresh refreshes the display of the selected object in Java Virtual Folders. You can also refresh the view by. You can also press the **F5** key on your keyboard or click on the ⟳ icon in the toolbar to refresh the Java Virtual Folders view

Refresh All reloads the Java Virtual Folders display for all objects.

THE OPTIONS MENU   The Options menu contains the option **Hyperwave Language,** which allows you to select a display language from a list.

THE TOOLS MENU   The Tools menu contains the commands: **Add Filesystem**, **Add Hyperwave Server** and **Remove**.

The **Add Filesystem** and **Add Hyperwave Server** commands allow you to add file systems and servers to the Java Virtual Folders as described on page 10.

The **Remove** command allows you to remove the selected servers and/or file systems from Java Virtual Folders.

THE HELP MENU   The Help menu gives you access to Java Virtual Folders Help and to information on the Java Virtual Folders version number, etc.

3.4.2   The Context-Sensitive Menu

As with Microsoft Windows Explorer, a context-sensitive menu appears when you click with the right mouse button on a collection, directory or document in Java Virtual Folders. The commands available on this menu depend on what object you have clicked on, whether you have write rights to the object, whether it is version controlled, etc.

The possible commands that will be displayed on the context-sensitive menu are **Open, Close, Open With…, Browse, Cut, Copy, Paste, New ▸ , Delete, Show Properties, Link Map, Properties, Modify Attributes, Version Control, Check In, Check Out, Configuration, Clear DC Cache, Preferences, User Identification, Remove**. What these options do, and which documents they appear on the context-sensitive menu for is explained below.

FILE MANAGEMENT   **Open** opens the selected object in the specified application or browser. If the object is already open when you right click on it and is a collection or directory, the menu option will read **Close**.

Open With… only appears when the object you are clicking on is not a collection or a directory (e.g. a text file, an MSWord document, a picture file, etc.). It allows you to enter the name of an application to open the file.

Browse opens a browser window to view the contents of a document, or the hierarchy of a collection.

Cut, **Copy** and **Paste** carry out their normal Windows functions.

New ▸ has its own sub-menu that allows you to insert a new object. This item only appears if the current object is a collection.

Delete removes the selected object from the collection. If you choose **Delete**, you will be prompted with a dialog box asking if you really want to remove the selected object. If the object you choose to delete is a collection, any descendants will also be deleted.

Edit appears on the context-sensitive menu when an editor exists for the object you have clicked on. This is configurable (see page 7). If you choose this command, the text document (for example) will be opened in a viewer window where you can make changes to the content and then click on **Save** in the **File** menu.

*Note: You can only use the **Edit** command on version controlled documents if you check them out first!*

ATTRIBUTE MANAGEMENT

Show Properties appears on the context-sensitive menu when you do not have write rights for the object, or you are an unidentified user, or the object is under version control. It allows you to view the attributes of an object. When you choose Show Properties from the context-sensitive menu, a dialog box appears where all attributes and values for the object are displayed (Figure 14). It is not possible to modify the attributes from this dialog.
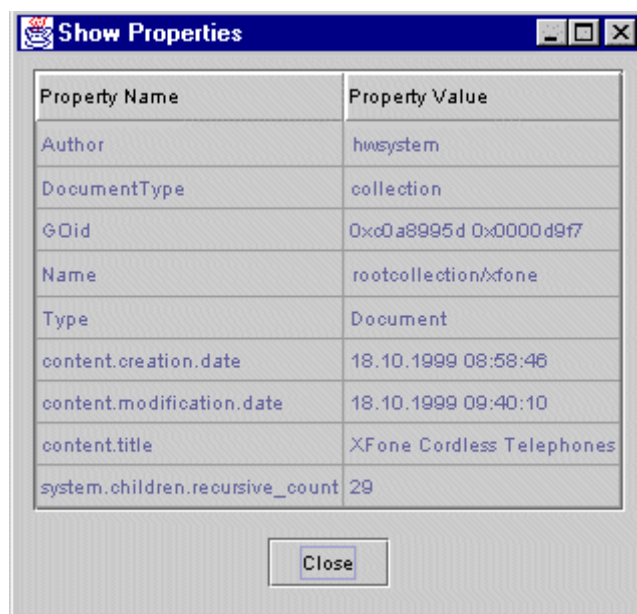

Figure 14: Show Properties dialog box

Properties: the Properties command only appears when you have write rights to the object in question. This command allows you to modify attributes for single objects. If you wish to modify attributes recursively (i.e. for all children of a collection), you must choose the command **Modify Attributes**. The **Properties** command is explained in more detail on page 21.

Link Map is described in more detail on page 43

Modify Attributes only appears in the context-sensitive menu when you click on an object that has children or if you selected multiple objects (and you have write rights for the objects). This command allows you to modify attributes recursively for all children of a collection. It is explained in more detail on page 23.

DOCUMENT MANAGEMENT

Version Control allows you to view the Version History of an object, and to access all other Version Control functions. It is explained in detail on page 29.

Check In appears for documents for which you have write rights, and which are not yet under version control, or which are version controlled and are checked out. This command allows you to check in the document, enter a comment, set a version number etc. (see page 32).

Check Out appears for documents for which you have write rights, and which are version controlled and checked in. This command allows you to check out any version of the document.

Configuration only appears when the object you pick on is a collection or directory. The Configuration command allows you to save collections as configuration files and manage existing configuration files. Using configurations with Java Virtual Folders is described in more detail on <u>page</u> 33.

JAVA VIRTUAL FOLDERS MANAGEMENT

Clear DC Cache appears when you click on a mount point (the HWIS or file system you have added for Java Virtual Folders). This command clears the cache used by the Document Classes feature.

User Identification allows you to identify yourself to the system over the Java Virtual Folders, as explained on <u>page</u> 14.

Remove allows you to remove added HWIS collections or file systems. Remove will only appear on the context-sensitive menu if the object you have clicked on is the root of the added collection. You can also remove selected root collections or directories by clicking on the ✖ icon in the toolbar.

Preferences only appears in the context-sensitive menu when you click on the added HWIS collection. The Preferences command allows you to set preferences for uploading and downloading collections. It is described in more detail on <u>page</u> 33.

3.5 Linking Documents in Java Virtual Folders

It is possible to make a link to a document or to a specific version of a version-controlled document with JVF. These procedures are described below.

3.5.1 Setting Links

To set a link to a particular document:

1. Select the document you are making the link to.

2. Copy the document (**Edit→Copy** or CTRL-c).

3. Select the target collection for the linked document.

4. Select **Edit→Link** (or press CTRL-L).

3.5.2 Linking to a Version

To set a link to a particular version of a version controlled document:

1. Select the document you want to make the version link to.

2. Copy the document (**Edit→Copy** or CTRL-c).

3. Select the target collection for the linked document.

4. Select **Edit→Link Version** (or press CTRL-SHIFT_L). A dialog box listing all the versions of the document appears (see Figure 15).

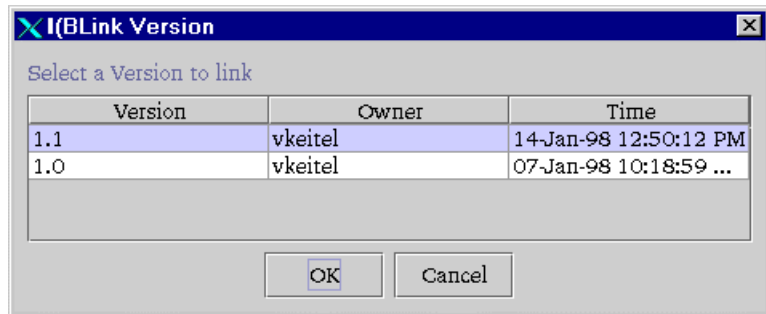5. Select the version you want to make the link to.

6. Click on **OK**.

Figure 15: Selecting a version to link

3.6 Inserting New Objects into HWIS with Java Virtual Folders

It is possible to insert new collections and documents into HWIS with Java Virtual Folders.

Note: When an object has more than one name this is indicated by a "+"next to the relevant name. See Section 3.7 for how to edit an attribute and add an extra name.

3.6.1 Inserting a New Collection

A new collection is inserted as follows:

1. Click with your right mouse button on the collection into which you would like to insert a new collection. A context-sensitive menu appears.

2. Select **New** from this menu. A further menu appears.

3. Select **New Collection** from this menu. The Create a new Collection dialog box appears (Figure 16).

4. Enter a **Name** (URL or path) for the new collection.

5. Choose a two-letter language abbreviation for the title and enter the **Title** in the text box.

6. Choose a **Collection Type** for the collection.
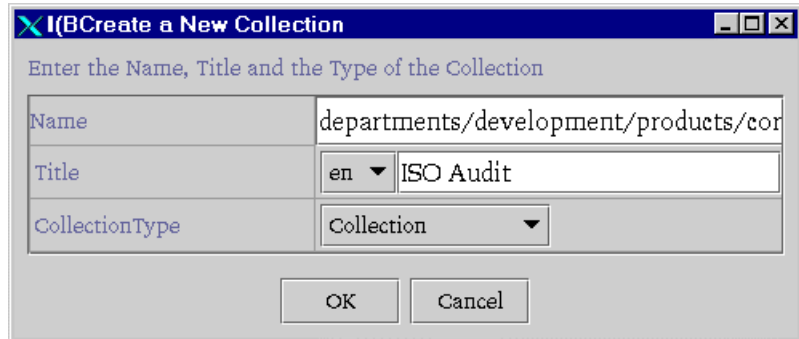
7. Click on the **OK** button.

Figure 16: Creating a new collection

3.6.2   Inserting a New Text

A new text is inserted as follows:

1. Click with your right mouse button on the collection into which you would like to insert a new text. A context-sensitive menu appears.

2. Select **New** from this menu. A further menu appears.

3. Select **New Text** from this menu. The New Text Document dialog box appears. Type your text directly into this dialog and use the menus and toolbar to access basic editing functions (Figure 17).

4. When you have finished creating your text, select **File → Save** or click on the **Save** icon in the toolbar. You will be prompted to enter information about the text.

5. Choose a two-letter language abbreviation for the title and enter the **Title** in the text box.

6. Enter an optional **Description** for the text.
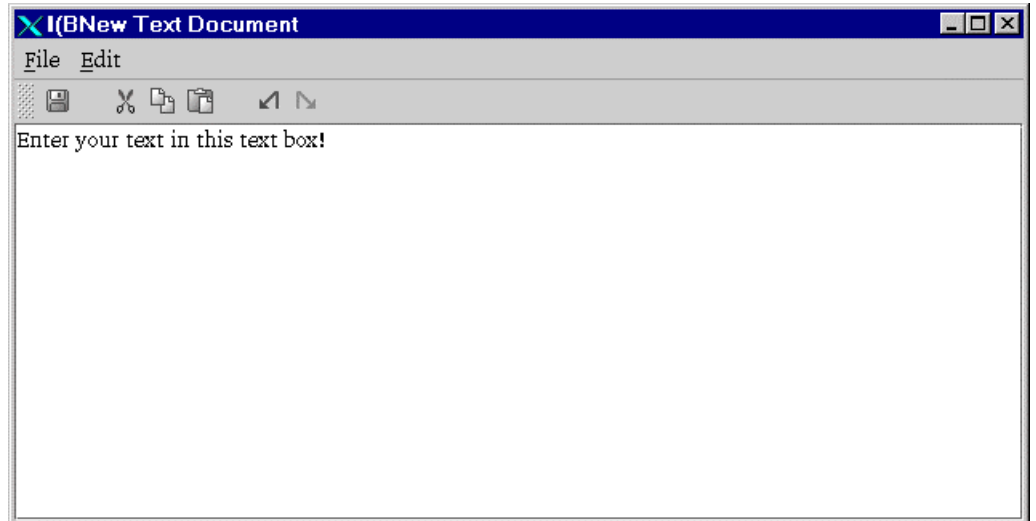
7. Click on the **OK** button.
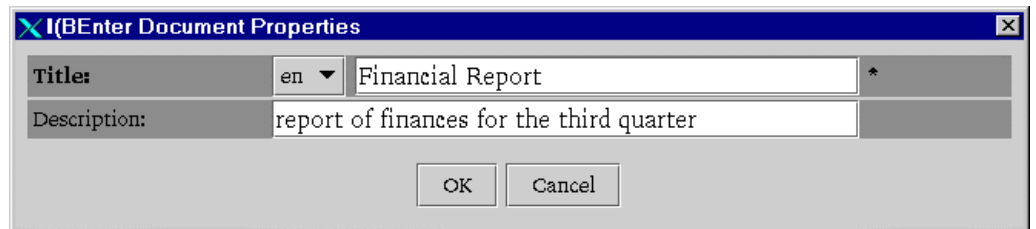
Figure 17: Creating New Text

Figure 18: Entering Title information for new text

INSERTING A NEW HTML TEXT

Inserting **new** HTML is completed in the same way as inserting new text, as described above. The only difference is that the New HTML dialog already contains basic HTML tags.

3.7 Editing Attributes with Java Virtual Folders

With Java Virtual Folders, you can edit the attributes of a single object individually or you can recursively modify the attributes of a collection.

3.7.1 Editing Attributes of a Single Document

Choosing the **Properties** item in the context-sensitive menu allows you to add, remove and modify the attributes of an object. Note that may not edit the attributes of documents if you do not have write rights to the object, or if you are not an identified user, or if the document is version-controlled and checked in.

The properties (attributes) of an object are edited as follows:

1. Click on the object whose properties you wish to change with your right mouse button. A context-sensitive menu appears.

2. Select **Properties** from the menu. The dialog box in Figure 19 appears. This dialog box lists all the attributes for the object. You may modify attributes whose values have a white background. Attributes shown in gray cannot be modified.

3. To add a new attribute, select the attribute type from the listbox at the bottom of the dialog box, or enter an attribute type manually here.

4. Click on the **Add** button. The attribute you have chosen will appear as a new pair of cells in the dialog box (you may have to scroll down to see it).

5. Add the required value for the attribute.

   Note that if the attribute you are adding is a **Rights** attribute, a button labeled **Rights Wizard** will appear. You can use the Rights Wizard to help you set access rights for different users. The Rights Wizard for Java Virtual Folders is explained on .

6. Click on the **Apply** button to apply the changes.

7. To delete an attribute, select the attribute by clicking on it (a blue line will appear around it) and then click on the **Delete** button. The attribute will disappear from the listing.

8. Click on the **Apply** button to apply the changes.

9. Click on the **OK** button to exit the dialog box.

Figure 19: Edit Properties dialog box

3.7.2   Editing Attributes Recursively

It is possible to edit the attributes of all the objects in a collection or those of a group of selected objects with the **Modify Attributes** function.
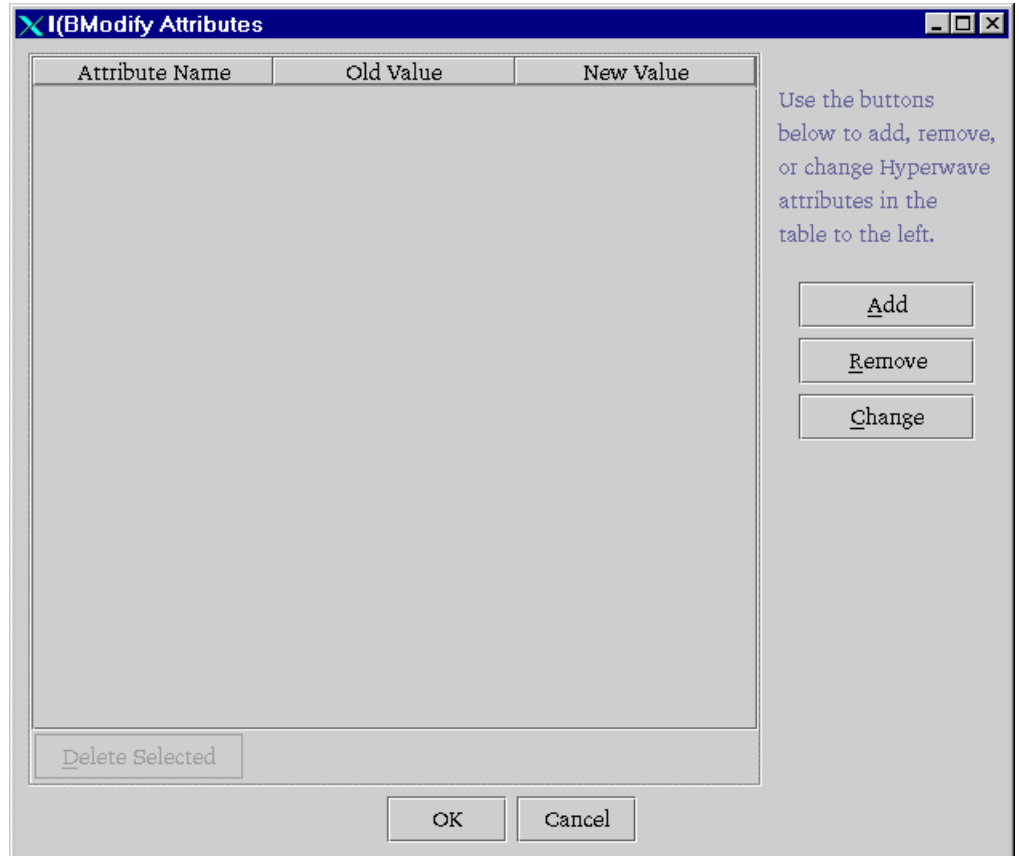
Figure 20: Modify Attributes dialog box

<div style="float:left">

**MODIFYING
ATTRIBUTES OF
COLLECTIONS**

</div>

Attributes of multiple documents or collections are edited as follows:

1. Click with your right mouse button on the collection(s) whose attributes you want to modify. A context-sensitive menu appears.

2. Select **Modify Attributes** from this menu. The Modify Objects dialog box (Figure 20) appears.

3. Make sure you have a list of the attributes you want to add, remove and change. Click on the **Add, Remove** or **Change** button (depending on what you want to do).

   Adding an Attribute:

   a) Click on the **Add** button in the **Modify Objects** dialog box. The **Add Attribute** dialog box appears (Figure 21).

   b) Select an attribute type from the listbox or enter an attribute type manually in the textbox under the attribute listing.

   c) Enter a value for the attribute in the **Attribute Value** textbox. If you are entering a Rights attribute, you can use the Rights Wizard to enter the value by clicking on the **Rights Wizard** button. The Rights Wizard is explained on <u>page </u>27.

   d) Click the **OK** button. The attribute you want to add will appear in the large text box in the **Modify Objects** dialog box.
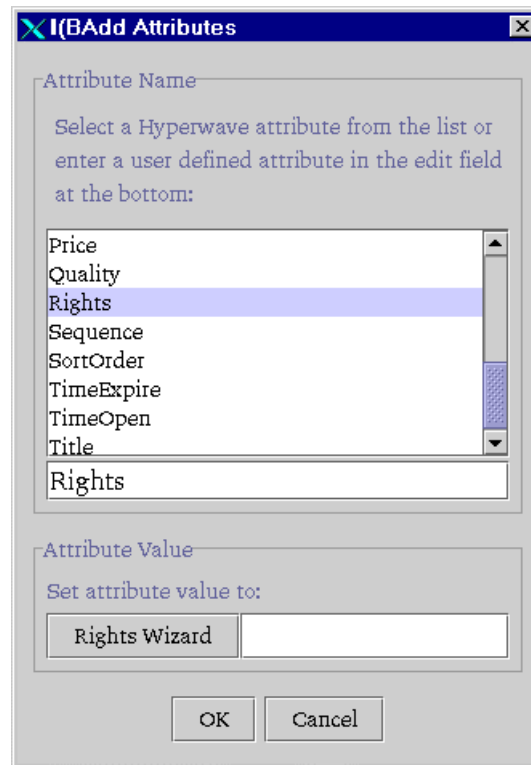
Figure 21: Add Attribute dialog box

Removing an Attribute

a) Click on the **Remove** button in the **Modify Objects** dialog box. The **Remove Attribute** dialog box appears (Figure 22).

b) Select an attribute type from the listbox or enter an attribute type manually in the textbox under the attribute listing.

    You can remove a particular instance of an attribute by entering the value associated with that attribute. For example, if an object has two **Titles**, one in English and one in German, but you only want to remove the German title: enter the value associated with the German title in the second text box. The English title will not be affected.

c) Click the **OK** button. The attribute you want to delete will appear in the large text box in the **Modify Objects** dialog box.
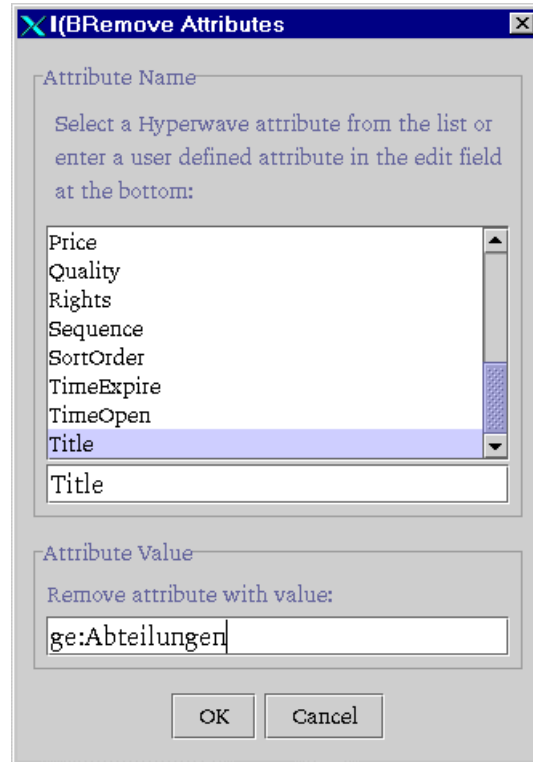
Figure 22: Remove Attribute dialog box

Changing an Attribute

a) Click on the **Change** button in the **Modify Objects** dialog box. The **Change Attribute** dialog box appears (Figure 23).

b) Select an attribute type from the list box or enter an attribute type manually in the **Name** textbox.

c) Enter the current value of the attribute in the textbox labeled **Change attribute value from**. You may use a wildcard (*) in this value. If you are entering a Rights attribute, you can use the Rights Wizard to enter the value by clicking on the **Rights Wizard** button.

d) Enter the value you want to give to the attribute in the textbox labeled **Change attribute value to**. If you are entering a Rights attribute, you can use the Rights Wizard to enter the value by clicking on the **Rights Wizard** button. The Rights Wizard is explained on <u>page</u> 27.

e) Click the **OK** button. The attribute you want to change will appear in the large text box in the **Modify Objects** dialog box.
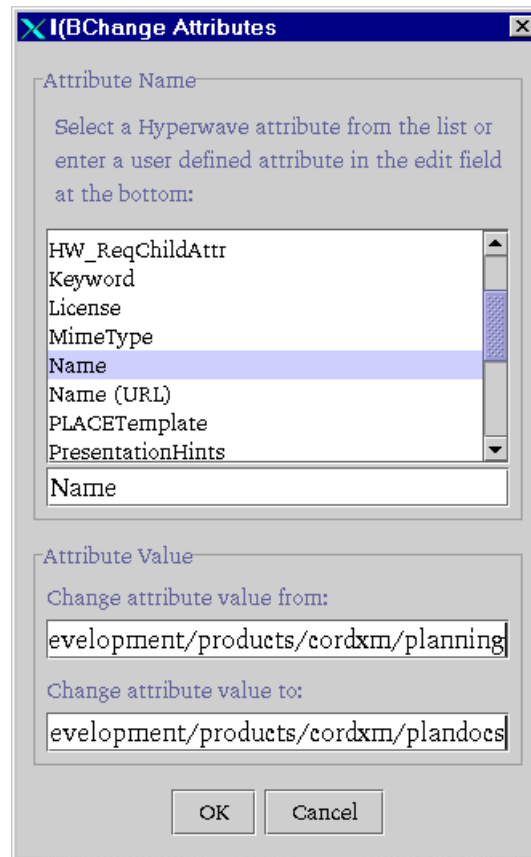
Figure 23: Change Attribute dialog box

4. Apply the changes by clicking on the **OK** button.

After clicking the **OK** button, a dialog box will appear displaying the progress of the modification of the attributes. This dialog box logs any errors that occur.

3.7.3   Rights Wizard

The Rights Wizard allows you to set permissions for individual objects without having to remember the syntax of the Rights attribute or the valid user and group names (see Figure 24).

Using the Rights Wizard, you can set read, write or unlink rights for different user and groups.

RIGHTS WIZARD   The Rights Wizard is used as follows:

1. Search for the desired users or groups as follows:

    Activate the **Users** and/or **Groups** checkboxes, depending on which type you want to search for.

    Click on the letter tab corresponding to the first letter of the user or group name(s) you are searching for, and click on the **Search** button. All user names corresponding to the letter you picked will appear in the column on the left of the dialog box. To list all available users and groups, click on the **All** button.

2. Select the user (or group) for which you want to set rights, and click on the right arrow button. The user or group name will be moved to the viewing window on the right.

3. Select the name(s) in the right column for which you want to set rights. Use your Ctrl key to select multiple user/group names that do not appear one after another. Use your Shift key to select a sequential group of user/group names. Selected names will show outlined with a blue shadow. Activate the appropriate checkboxes (W= write, U= unlink, R= read) according to the type of rights you want to grant to the selected users and groups.

   The corresponding letters will appear next to the names in the column listing.

4. To delete an entry from the right column, select the entry and click on the left arrow button.

5. When you have set all the rights to your satisfaction, click on the **OK** button. The syntax of the Rights you have assigned appear in the attribute value text box in the Add Attribute dialog box.
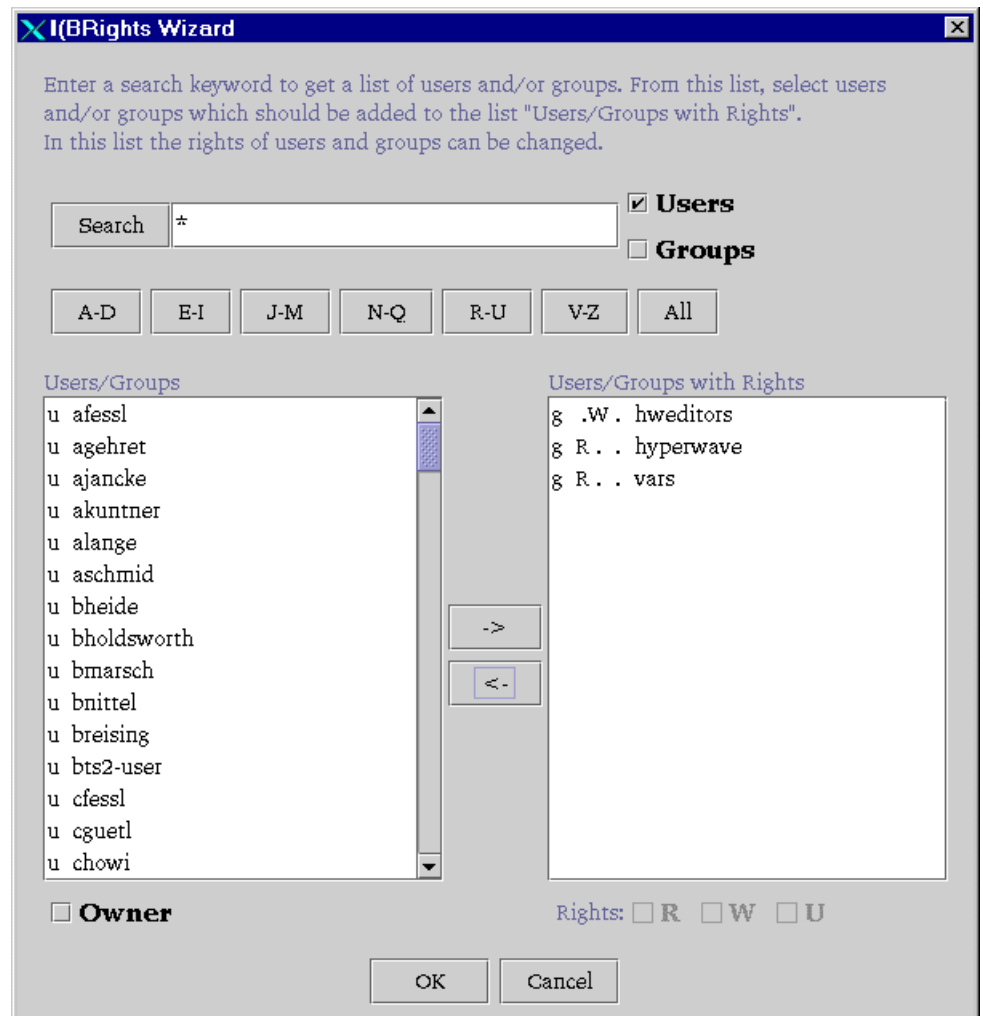

Figure 24: Rights Wizard

3.8   Version Control

3.8.1   How Version Control Works

CHECK IN AND CHECK OUT

Hyperwave Information Server's Version Control feature lets you save and retrieve all the versions ever created of a document on the server.

Documents on Hyperwave Information Server are not automatically version controlled. If you want a document to be version controlled, you must use the **Check in** function on it. This assigns a version number to the document (starting with 1.0), and makes it so that no one can edit the document unless he or she has used the **Check out** function on it. When a user checks out the document, it is automatically locked for this user, meaning that only this user can edit it until it is checked in again. At check in, you can select the checkbox labeled **Check in only if content changed**, in which case, a new version will only be created and the version number increased, if there have been any changes made to the document.

Starting with version 5.1 of the HWIS, it is possible to check out a version other than the most recent version. You will be prompted with a dialog box that allows you to choose which version to check out. If you would prefer that this dialog box did not appear, and that you could check out documents in the usual manner, you should deselect the checkbox in **Preferences** (**Version Control Options** tab) labeled **Show version selection dialog on check out**. See for more information on setting preferences.

EXPERIMENTAL AND LAST COMMITTED VERSION

When a document has been checked out by a user, it is called an **experimental** version. After the document has been checked in, the new version is called the **last committed version**.

SET COMMITTED VERSION

With the **Set Committed Version** function, you can commit a version other than the most recent version. This version will then be displayed in the collection listing for all other users with read rights to access, and users with write rights can continue working on further versions of the document.

REVERT TO VERSION

With the **Revert to Version** function you can go back to any version in the history of a document and use it as the most recent version (last committed version).

TAKE OUT VERSION

With the **Take out Version** function, you can select a particular version of a document from the version history and remove it from version control. All other versions of the document will be deleted.

Note: This version will now reside on the server as a normal document, not under version control. All other versions of this document will be deleted from the server. It is not possible to execute this command with experimental versions.

DELETE

With the **Delete** function, you can select a certain version of a document from the version history and delete that single version. You can also choose to delete all versions older than the selected one from the server.

VERSION HISTORY

You can view the complete version history of a document in the Version Control dialog box (Figure 25), including the version number, the user who created the version and the time it was created. For each entry in the list the title of the

version with a link to that version is shown, so you can easily view any version in the history.

Under the Edit menu in Java Virtual Folders, you can create a link to a particular version of a document, see page 18.

3.8.2 Version Control in Java Virtual Folders

When you select the command **Version Control** from the context-sensitive menu, a dialog box will appear that allows you to view the version history of the selected object and gives you access to the version control functions: **Check In**, **Check Version, Revert, Delete** and **Take Out** (see Figure 25).

To apply these commands to a version of a document:

1. Right click on the object you wish to apply the Version Control command to.

2. From the context-sensitive menu that appears, choose the option **Version Control**.

3. In the **Version Control** dialog box, click on the version on which you want to perform the version control function and click on the appropriate button (**Check In, Check Out, Revert, Delete, Take Out, Set Committed Version**).

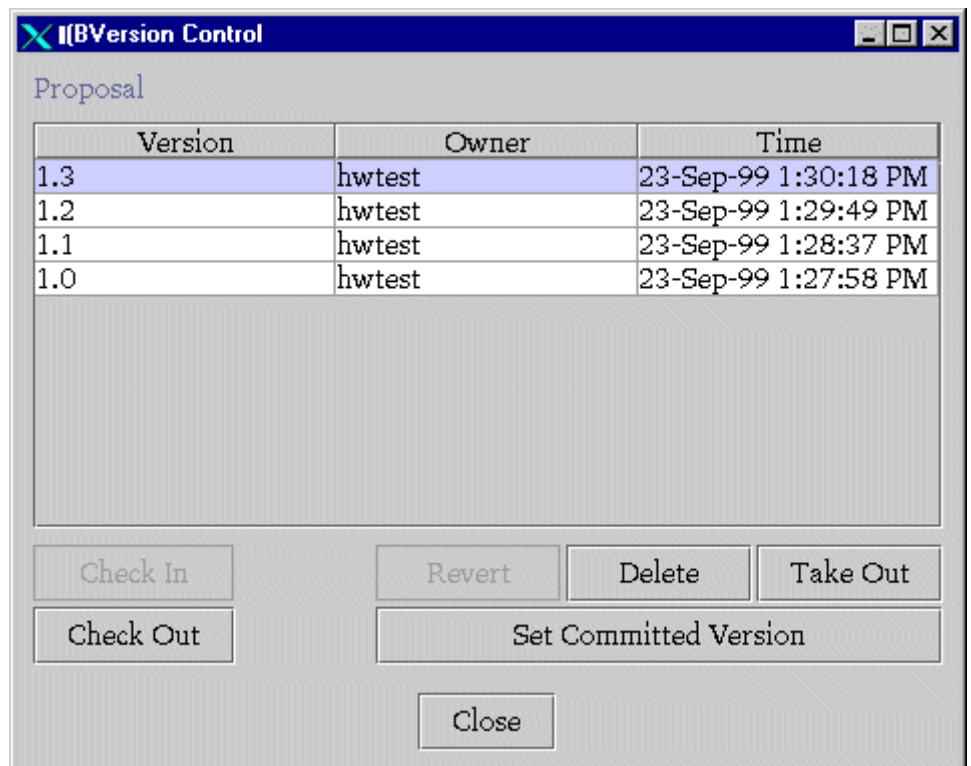4. Click on the **Close** button to exit the dialog box.

Figure 25: The Version Control dialog box

VIEWING COMMENTS   If you double click on any version in the Version Control dialog box, a secondary dialog box will appear, displaying the comment that was entered with that version. See Figure 26.
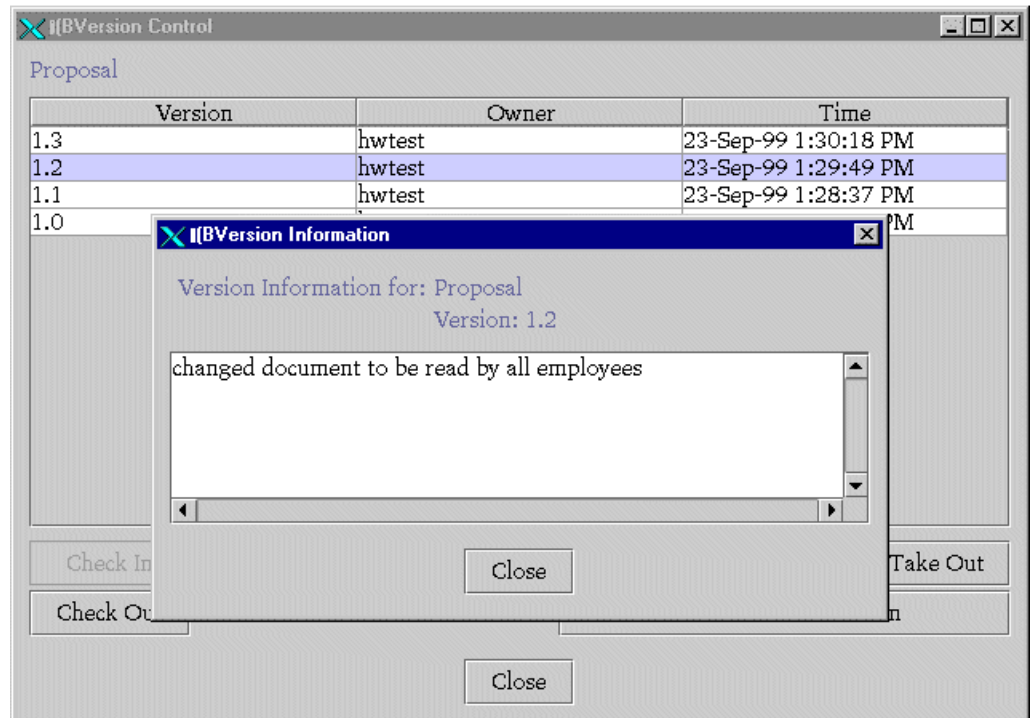

Figure 26: Version Control dialog with version comment

CHECK OUT / CHECK IN FROM CONTEXT-SENSITIVE MENU   It is also possible to apply the **Check In** and **Check Out** commands directly from the context-sensitive menu, without opening the Version Control dialog box.

Check Out will only appear on the context-sensitive menu when you click on an object for which you have write rights and which is version controlled.

Check In will only appear on the context-sensitive menu when you click on an object for which you have write rights and which are not yet version controlled, or which are version controlled and checked out.

CHECK OUT A DOCUMENT   To check out a document:

1. Click with your right mouse button on the document you wish to check out

2. Choose **Check Out** from the context-sensitive menu. A dialog box appears showing all versions existing for the document (Figure 27).

3. Choose the version you wish to check out.

4. Click on the **OK** button to check out the version.

   If you select the checkbox labeled **Do not show this dialog next time**, you will only be able to check out the most recent version of the document with this method. You will still be able to check out previous versions by accessing the Version Control dialog box (see <u>page</u> 30).

   A notification dialog will display the progress of the check out action, and list any errors that might occur.

The document now appears in the Java Virtual Folders view as an experimental version.
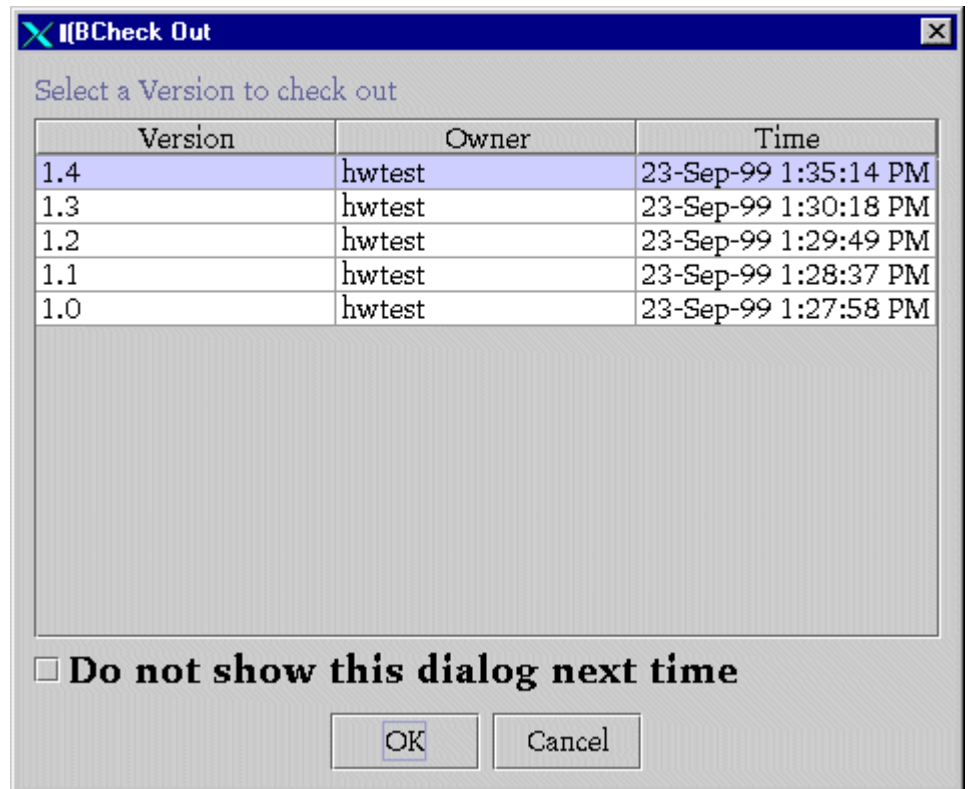

Figure 27: Check Out dialog box

CHECK OUT MULTIPLE DOCUMENTS

It is also possible to check out more than one document at a time. To check out multiple documents:

1. Select the documents you wish to check out by clicking on them once. Select sequential documents by holding down your shift button and clicking, select documents that are not next to each other by holding down your control button (Ctrl) and clicking.

2. Click with your right mouse button on one of the selected documents.

3. Choose **Check Out** from the context-sensitive menu. You will not be given the option to check out previous versions of the documents. The most recent version of all documents will be checked out.

CHECK IN A DOCUMENT

To check in a document:

1. Click with your right mouse button on the document you wish to check in.

2. Choose **Check In** from the context-sensitive menu.

3. A dialog box appears where you can enter a comment and set the version number for the new committed version (see Figure 28).

   If you select the checkbox **Check in only if content changed**, the document will only be checked in if its content has been modified. If the content has not been changed, the previous version number will be reverted to and the experimental version deleted.

A dialog box appears showing the progress of the action, and listing any errors that might occur.

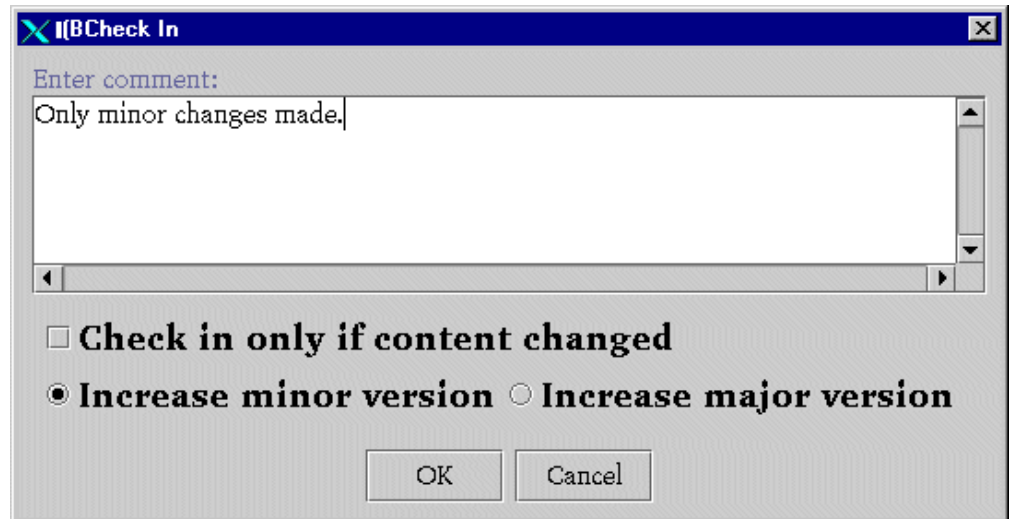The document now appears in the Java Virtual Folders view with its new version number.

Figure 28: Check In dialog box

3.9   Configurations

3.9.1   How Configurations Work

The Configurations function allows you to manage collections and hierarchies in a very effective way. With Configurations , you can save any collection in its current hierarchical form. In other words, all objects will be saved, as well as the meta-information on objects, and structural information regarding how the collection is configured. The Configurations feature is similar to Version Control in that it stores previous versions (in this case collection hierarchies, rather than single objects), allows you to replace the current configuration with an older configuration, allows you to load previous configurations to the server without overwriting new content, and allows you to browse previous configurations.

SAVING A CONFIGURATION

The **Save** function allows you to save a collection as a configuration. The selected collection and its contents are saved to a configuration file. This collection is now given a special attribute **HW_ArchiveType** with the value "Configuration". The configuration file is assigned a major and minor version number. You can also enter a comment on the configuration to be saved.

Only the most recent version of a configuration is stored in the Hyperwave Information Server database (this version is labeled "current" in the Configuration Control dialog box). All previous versions are saved in separate configuration files.

Only the most recent version of a configuration can be modified. All previous configurations are stored in static files outside the database.

IDENTIFYING CONFIGURATIONS

Collections that are configurations appear on the Hyperwave Information Server interface with a special icon. This icon looks like the standard Collection icon, with a small red C in the bottom right hand corner 📁.

RESTORING A CONFIGURATION

The Restore function allows you to restore a previous configuration to the Hyperwave Information Server database. This function assigns the restored configuration as the most recent version, and the configuration that had until now been the most recent version is deleted. You can identify which configuration in the history you wish to restore by its major and minor version numbers.

Only when a previous configuration is restored to the database can it be modified, as it is no longer stored in a static file.

MERGING A CONFIGURATION

The Merge function allows you to restore a previous configuration to the Hyperwave Information Server *without overwriting the most recent version*. In this way, it differentiates itself from the Restore function. The previous configuration is loaded to the Hyperwave Information Server database, incorporating any changes that have been made since it was last saved and assigning it as the most recent version. Again, the configuration to be loaded is identified by its major and minor version number.

VIEW ALL CONFIGURATIONS

In the **Configuration Control** dialog box (Figure 29), you can view all previous configurations for a configuration object. Configuration objects are listed with their major and minor version numbers, the user who saved them, the date they were saved and the GOid attributes. All previous configurations can be transparently browsed using your web browser. There is no need for any extra tools.

All objects belonging to archived configurations can be identified by the attribute **HW_Configuration**. The value of this attribute is the GOid of the root collection of this configuration.

DELETING A CONFIGURATION

The Delete function allows you to delete archived configurations from the configuration history. It is not possible to delete the current configuration, as it exists on the server and is not stored as an archived file.

3.9.2 Configurations in Java Virtual Folders

The **Configuration** command in the context-sensitive menu allows you to access all the functions of Hyperwave Information Server's Configurations feature.

When you choose this option from the context-sensitive menu, the **Configuration Control** dialog box will open (see Figure 29).

In this dialog box, you can **save** new configurations from objects in Java Virtual Folders, **merge** and **restore** previous configurations to the server, **delete** configurations and **select** configurations for display. The dialog box displays all previous configuration objects as well as the current configuration, which is active on the server. Previous configurations are displayed with their version number, the user who created the configuration, the date and time they were created and the GOid of both the configuration object and the root collection. You can also view comments that were entered with configurations.
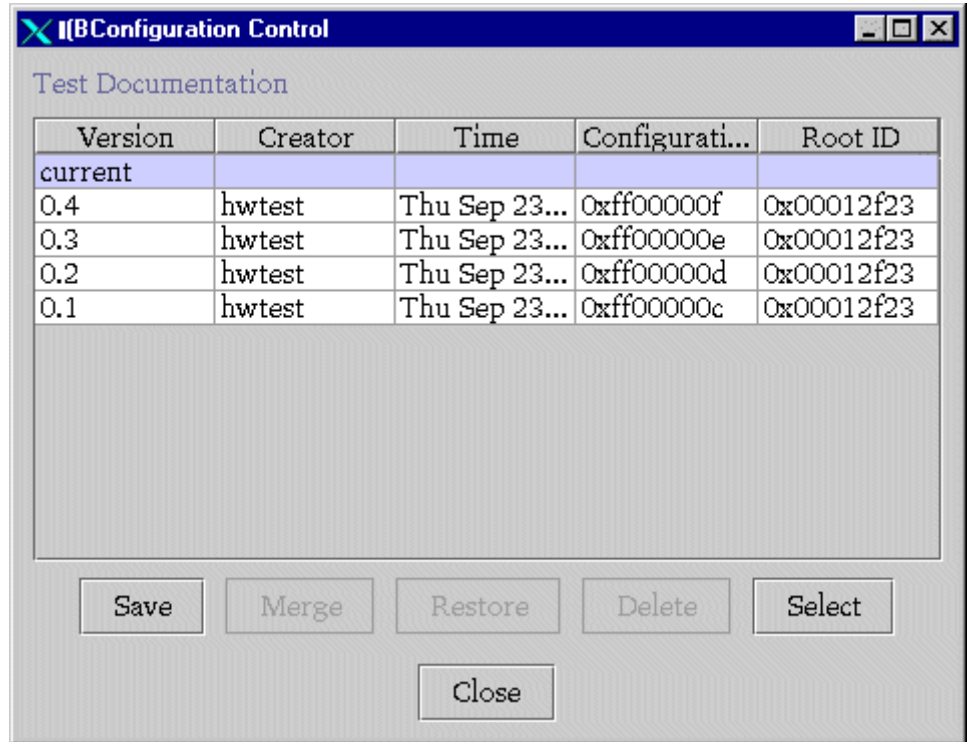
Figure 29: Configuration Control dialog box

SAVE CONFIGURATION

To save a new configuration:

1. Right click on the collection in Java Virtual Folders window that you wish to save as a configuration.

2. From the context-sensitive menu, choose the option **Configuration**

3. In the dialog box that appears, click on the **Save** button.

4. The collection you created will be stored as a configuration and will appear in the configurations listing in the **Configuration Control** dialog box.

5. Click on the **Close** button to exit the dialog box.

Collections and directories that are configuration objects will be displayed in the Java Virtual Folders view with the configuration icon:

MERGE, RESTORE, DELETE CONFIGURATION

To merge, restore or delete a configuration:

1. Right click on the configuration object in the Java Virtual Folders window.

2. From the context-sensitive menu options, choose **Configuration**.

3. In the **Configuration Control** dialog box, click on the configuration you wish to merge (or restore or delete). The selected configuration will show with a blue shadow.

4. Click on the **Merge** (**Restore** / **Delete**) button.

5. Click on the **Close** button to exit the dialog box.

VIEWING COMMENTS If you double click on any version in the Configuration Control dialog box, a secondary dialog box will appear, displaying the comment that was entered when that configuration was saved. See Figure 30.
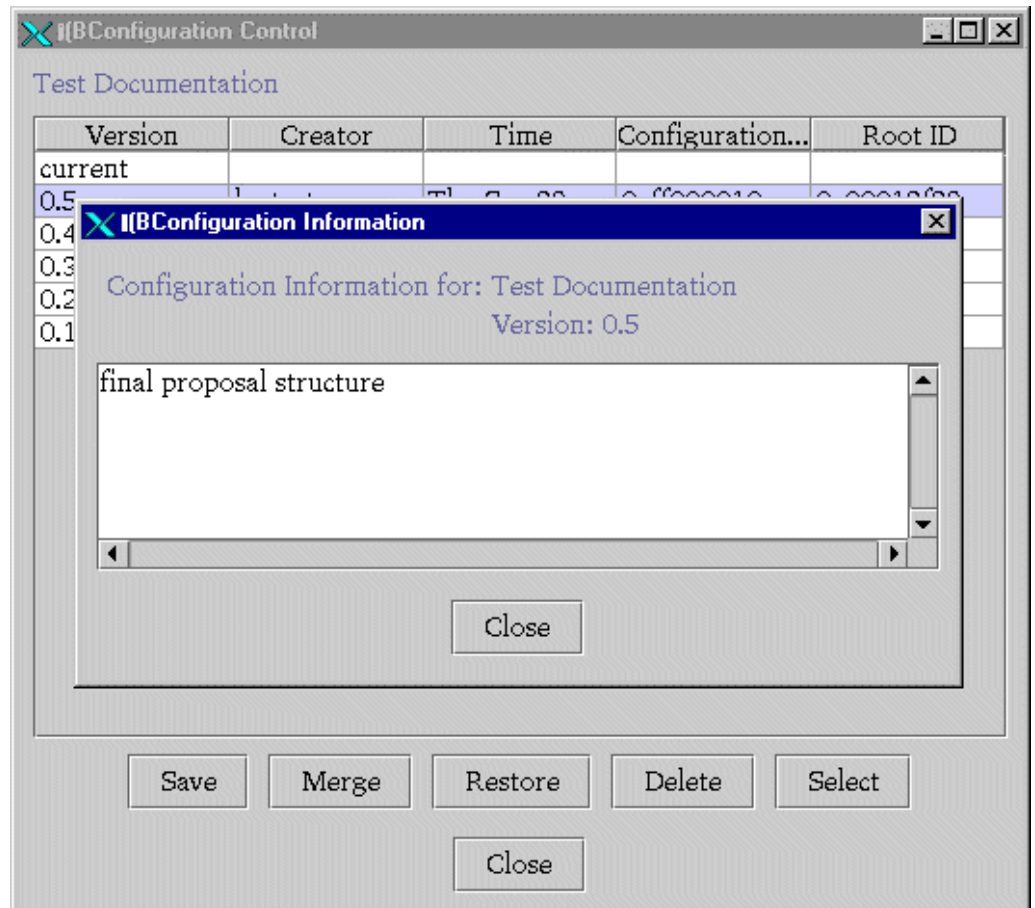

Figure 30: Configuration control dialog with configuration comment

DISPLAY PREVIOUS CONFIGURATIONS The **Select** button in the Configuration Control dialog box allows you to select a saved configuration for display in Java Virtual Folders (and consequently on the Hyperwave Server).

In normal circumstances, the current configuration is displayed (all previous configurations are stored outside the server). If you select a previous configuration from the listing and click on the button **Select**, this configuration will be displayed instead.

The configuration is displayed normally in the Java Virtual Folders view, with a note after the Title indicating its configuration version number, e.g. (C1.2).

3.10 Setting Preferences for Added HWIS Collections

When you click with your right mouse button on the mount point of a HWIS collection that you added in Java Virtual Folders, an option appears on the context-sensitive menu that does not appear for other objects. This option is named **Preferences**, and allows you to customize how Java Virtual Folders uploads your documents, and many other aspects.

UPLOAD REPLACE OPTIONS

The dialog box that opens when you select Preferences from the context-sensitive menu has seven tabs. The first of these is labeled **Upload Replace Options**. In this dialog box, you can instruct Java Virtual Folders how to behave when you want to upload a document that already exists on the server (see Figure 31).
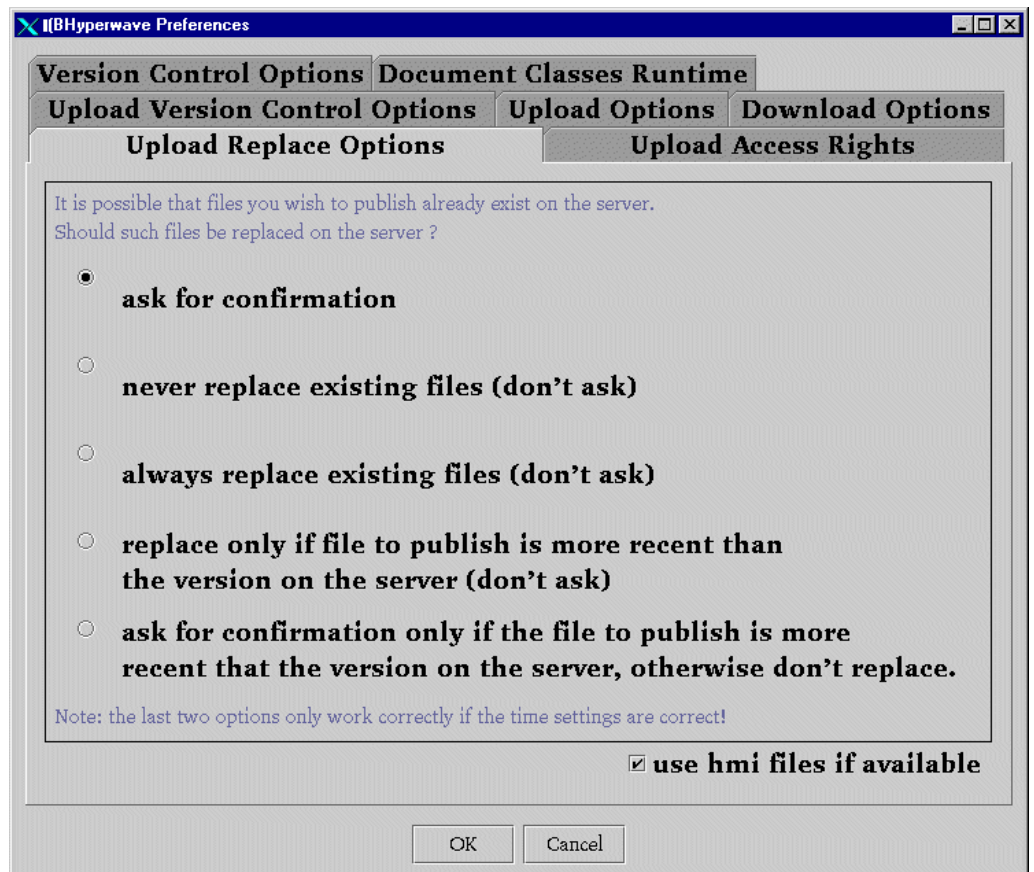
Figure 31: Preferences: Upload Replace Options
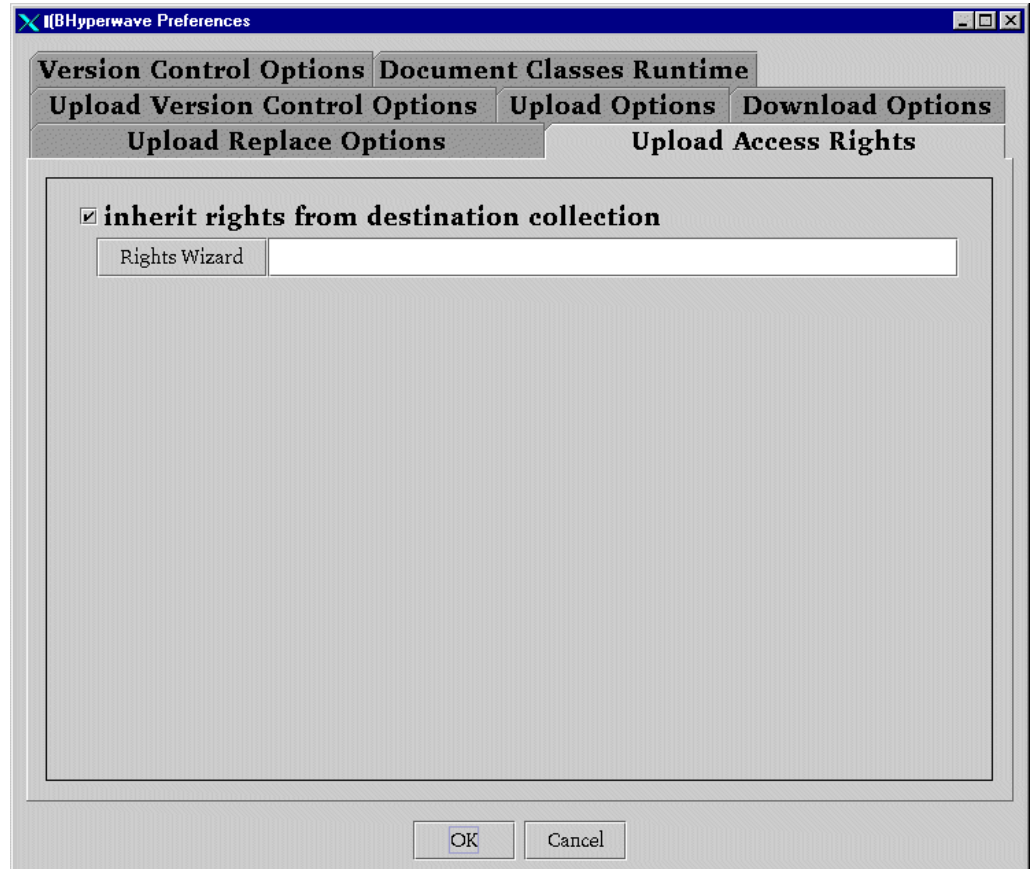
Figure 32: Preferences: Upload Access Rights

UPLOAD ACCESS RIGHTS

The second tab in the Preferences dialog box is labeled **Upload Access Rights**. Here, you can decide that documents to be uploaded should have the same rights as the collection you are putting them into (this is the default option), or you can set individual rights for documents (see Figure 32). You can use the Rights Wizard to help you set access rights. The Rights Wizard is explained on .
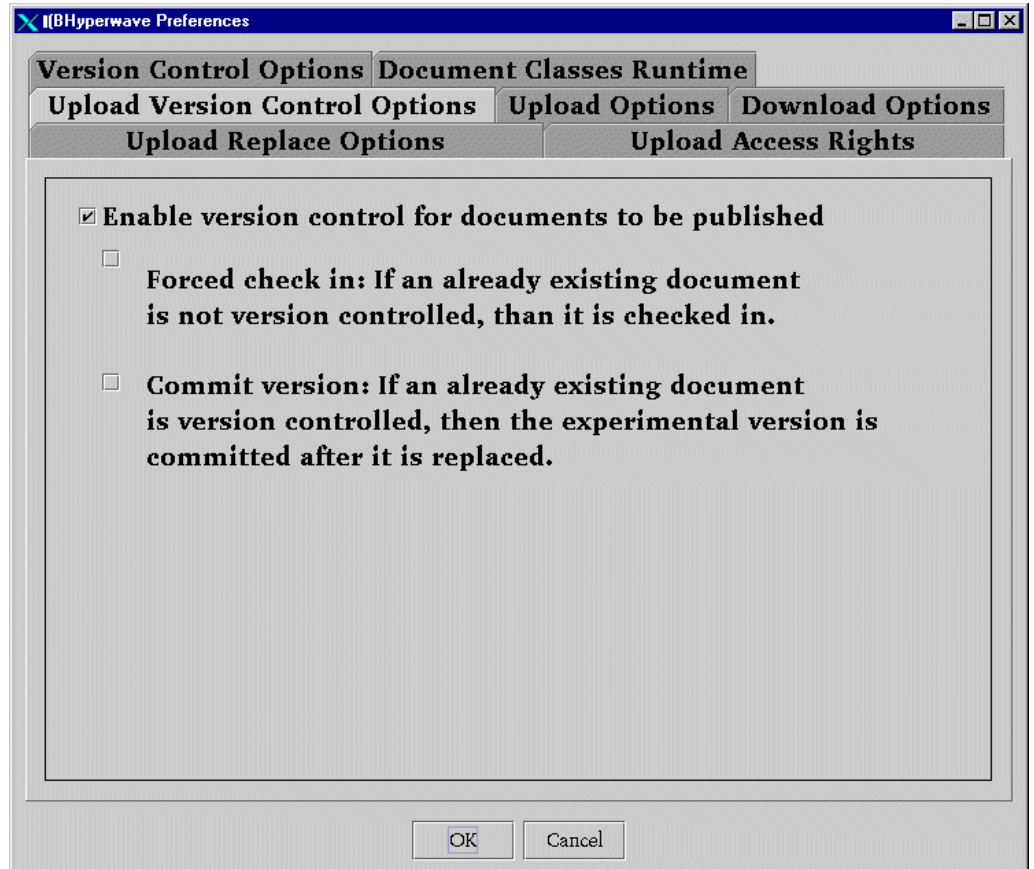
Figure 33: Preferences: Upload Version Control Options

UPLOAD VERSION CONTROL OPTIONS

The third tab in the Preferences dialog box is labeled **Upload Version Control Options**. Here you can determine how Java Virtual Folders should apply Version Control options to uploaded documents. You can choose to force a check in on a document (it is automatically put under Version Control when it is uploaded to the server) or, if the document already exists and is already version controlled, you can choose to commit the version you are uploading as the latest version. See Figure 33.
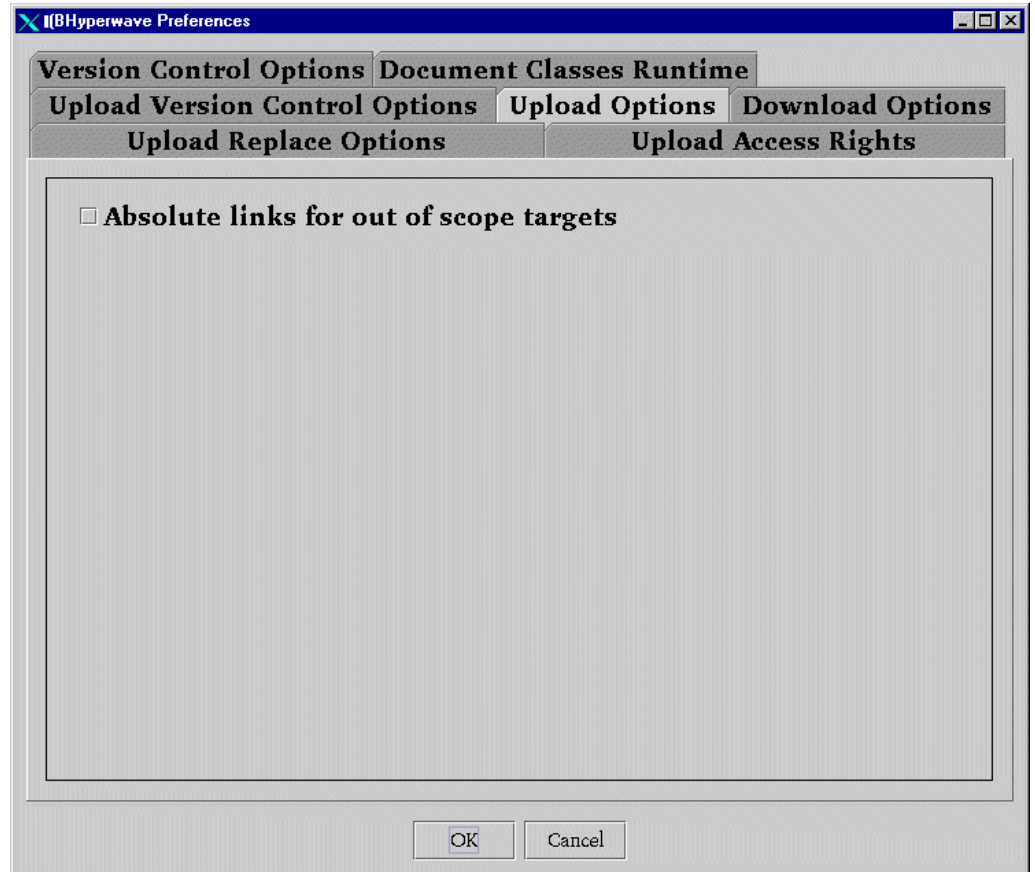
Figure 34: Preferences: Upload Options

UPLOAD OPTIONS   The fourth tab in the Preferences dialog box is labeled **Upload Options**. Here you can select the checkbox **Absolute links for out of scope targets**. This option helps you to ensure that link consistency is maintained when documents are being moved between a Hyperwave Information Server and a local file system. See Figure 34.
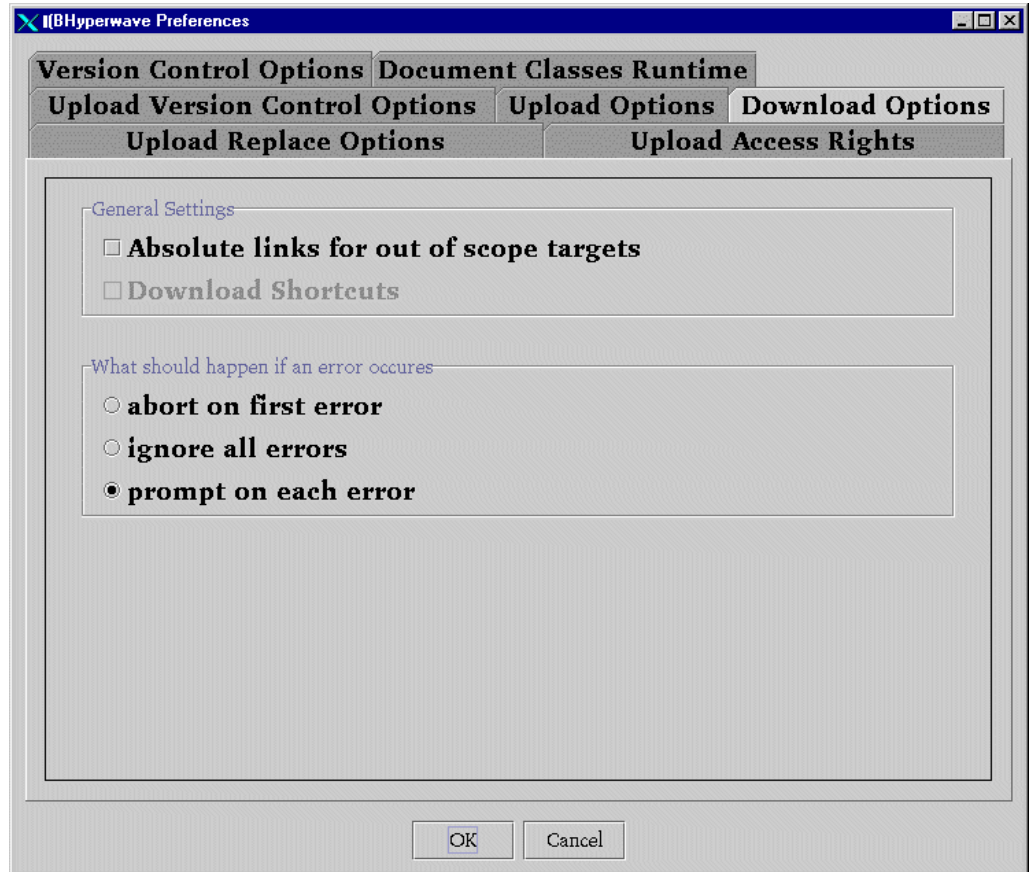
Figure 35: Preferences: Download Options

DOWNLOAD OPTIONS   The fifth tab in the Preferences dialog box is labeled **Download Options**. Here you can specify how Java Virtual Folders should behave when the objects you are downloading to a local file system contain or consist of links to other objects. You can also specify how Java Virtual Folders should behave when errors occur. See Figure 35.
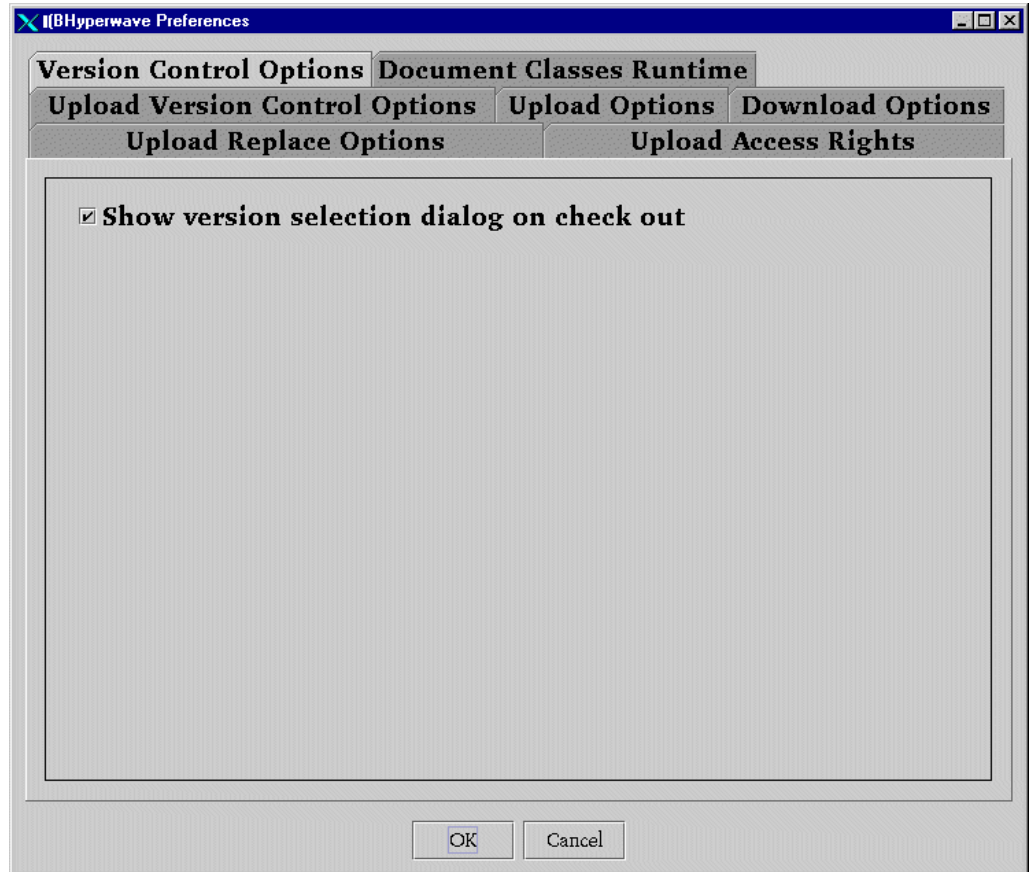
Figure 36: Preferences: Version Control Options

VERSION CONTROL OPTIONS

The sixth tab in the Preferences dialog box is labeled **Version Control Options**. Here you can select whether or not you are given the option of checking out versions other than the most recent version when you choose **Check out** from the context-sensitive menu. See Figure 36.

Even if you do not have this preference set, you can always choose to check out a previous version of a document by accessing the **Check out** function in the **Version Control** dialog box.
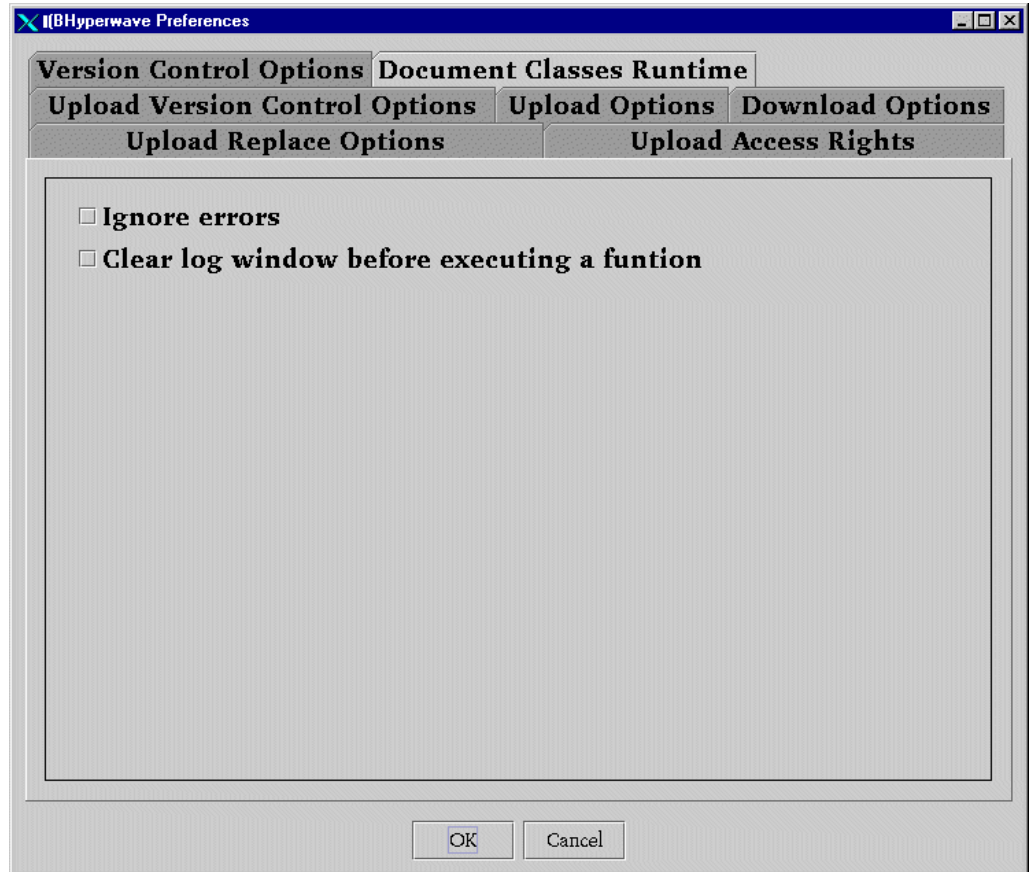
Figure 37: Preferences: Document Classes Runtime

DOCUMENT CLASSES RUNTIME
The final tab in the Preferences dialog box is labeled **Document Classes Runtime**. In this dialog box, you can set preferences specific to the Document Classes feature. See Figure 37.

3.11 The Link Map

You can click on any object in Java Virtual Folders and display its related documents in the form of a Link Map. The Link Map shows all links *to* the document and all links *from* the document. With the Link Map you can also browse the relations of other displayed documents.

3.11.1 Viewing a Document's Link Map

To display the link map for a particular object:

1. Click on the object with your right mouse button.

2. From the context-sensitive menu, choose **Link Map**.

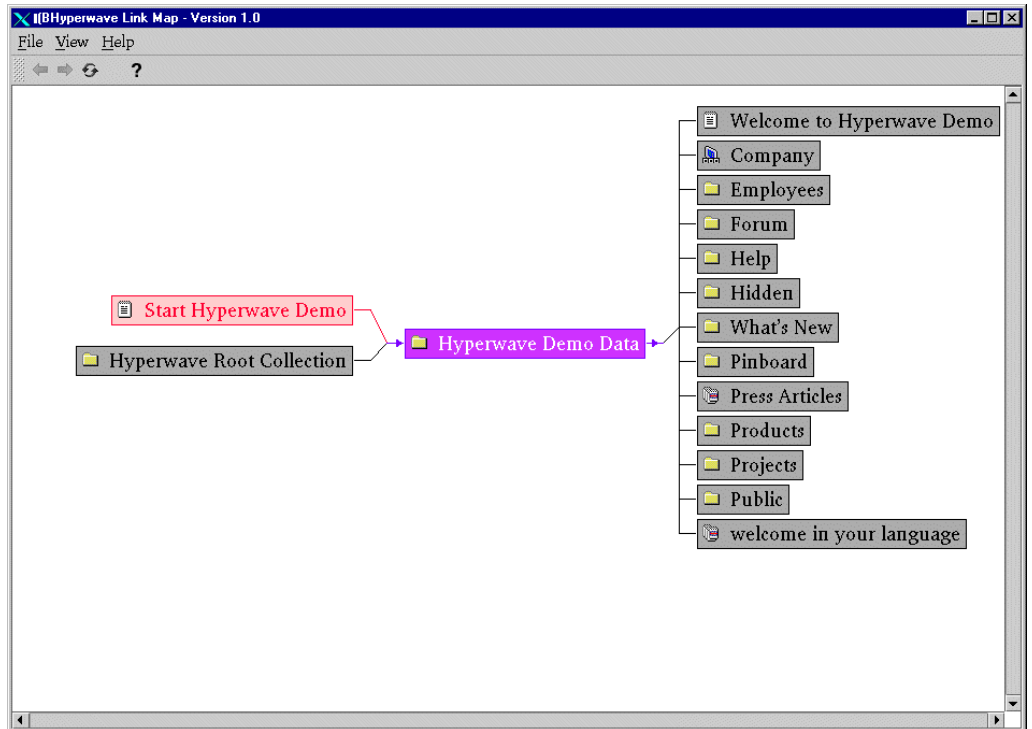The Link Map appears, showing all links to and from the document. See Figure 38.

Figure 38: The Link Map

The menus in the Link Map toolbar are File, View and Help.

<div style="display:flex">
<div style="width:25%; text-align:right">THE FILE MENU</div>
<div>The **File** menu allows you simply to quit the Link Map window.</div>
</div>

THE VIEW MENU   The **View** menu offers several options for viewing the Link Map.

The **Back** and **Forward** options allow you to move between views you have already loaded in the Link Map (much the way back and forward arrows work on a web browser). The **Refresh** option refreshes the Link Map view after you have made changes.

The **Center** option centers the view in the Link Map window.

*Note: The **Back**, **Forward** and **Refresh** options are also all available as buttons on the Link Map toolbar, and the **Center** and **Refresh** options are also available by clicking with your right mouse button in an empty part of the Link Map view.*

Under **Options** you can specify several aspects of how items are displayed in the Link Map window. These options are explained on <u>page</u> 45.

THE HELP MENU   The **Help** menu gives you access to online help and information about the tool.

3.11.2   Browsing in the Link Map

When you click with your right mouse button on any of the documents on display in the Link Map window, a context-sensitive menu appears with the options **Focus Object**, **Open in new Link Map**, and **Properties** (see Figure 39).

If you select **Focus Object**, the Link Map view will change to display the links to and from the document you have just clicked on. You can return to your previous view using the back arrow (⬅).

If you select **Open in new Link Map**, a new Link Map window will open displaying the links to and from the document you have just clicked on. The result is the same as selecting **Focus Object** from the context-sensitive menu, except that you have a second Link Map window open, with your original view preserved in the first window.
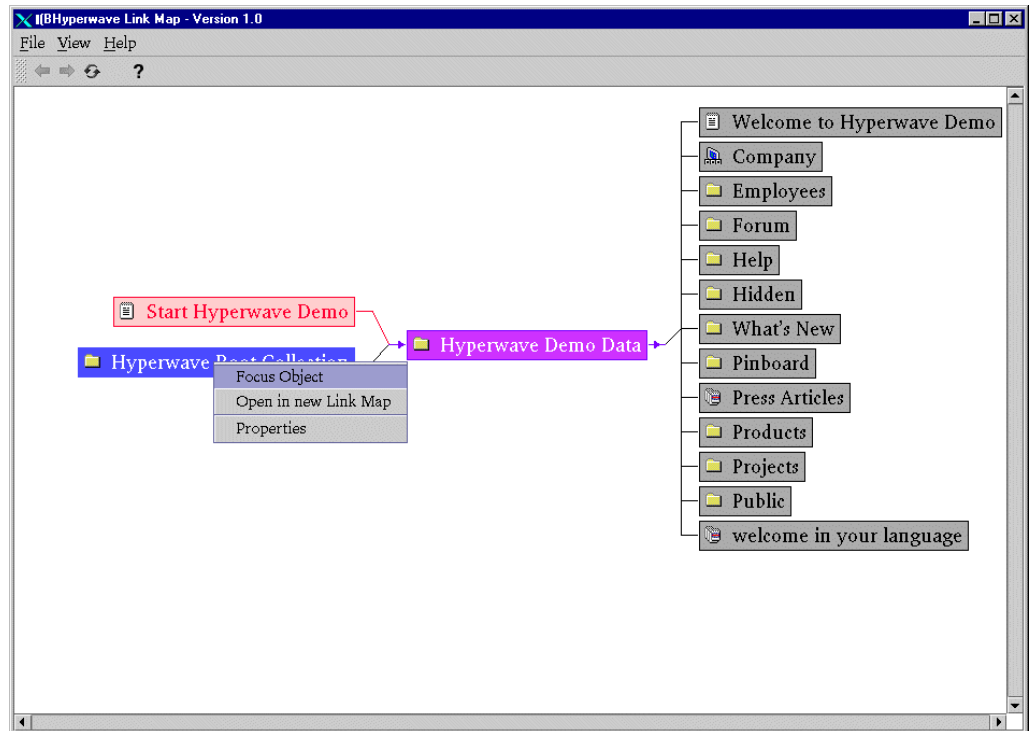
Figure 39: The Link Map with object-specific context-sensitive menu

If you choose **Properties** from the context-sensitive menu, a dialog box will appear listing the properties for that document, as described on <u>page</u> 17.

3.11.3   Link Map Viewing Options

You can specify several aspects about how you would like the Link Map to display information, including the colors used, the number of levels of hierarchy shown, labeling and spacing.

To set viewing options for the Link Map select **View → Options**. There are four tabs in the Options dialog box: **View**, **Color**, **Label** and **Layout**.
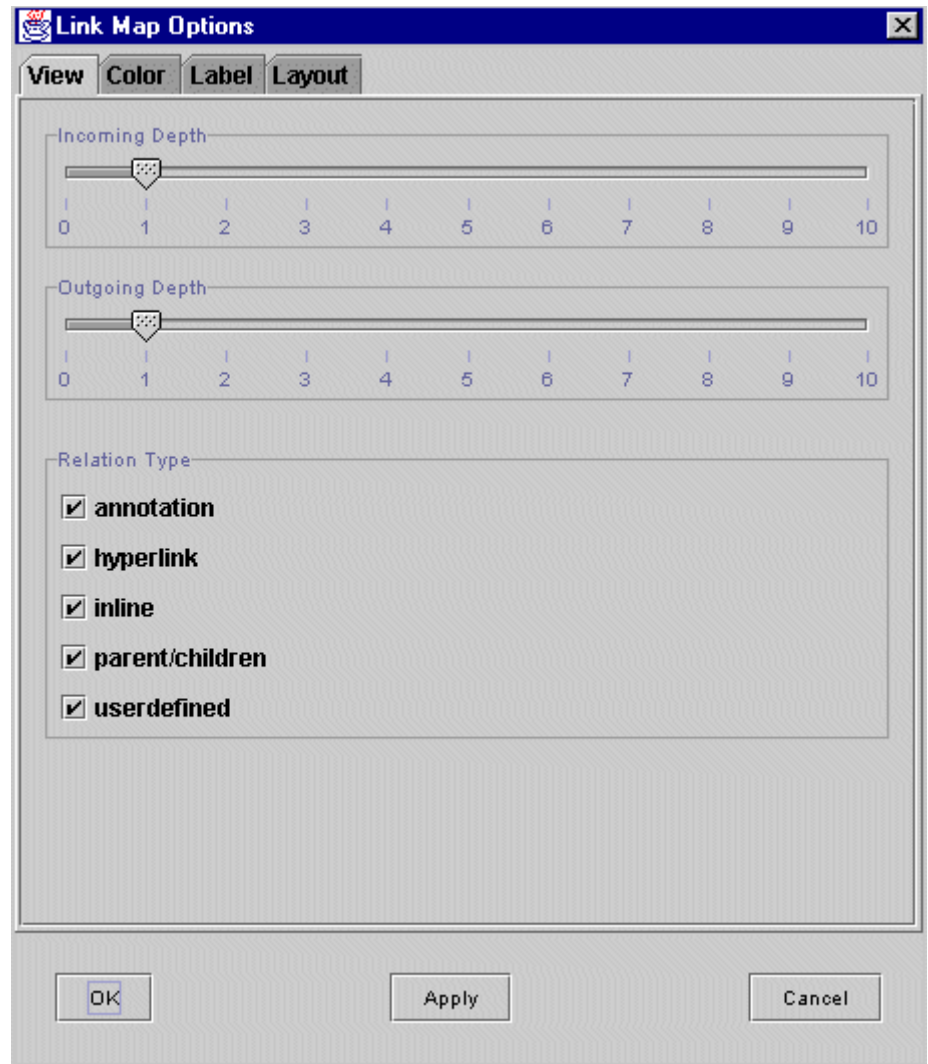
Figure 40: Link Map View Options: View

Under the **View** tab you can specify how many levels of links you want to display for both incoming and outgoing links. You can also specify which link types you would like displayed. See Figure 40.
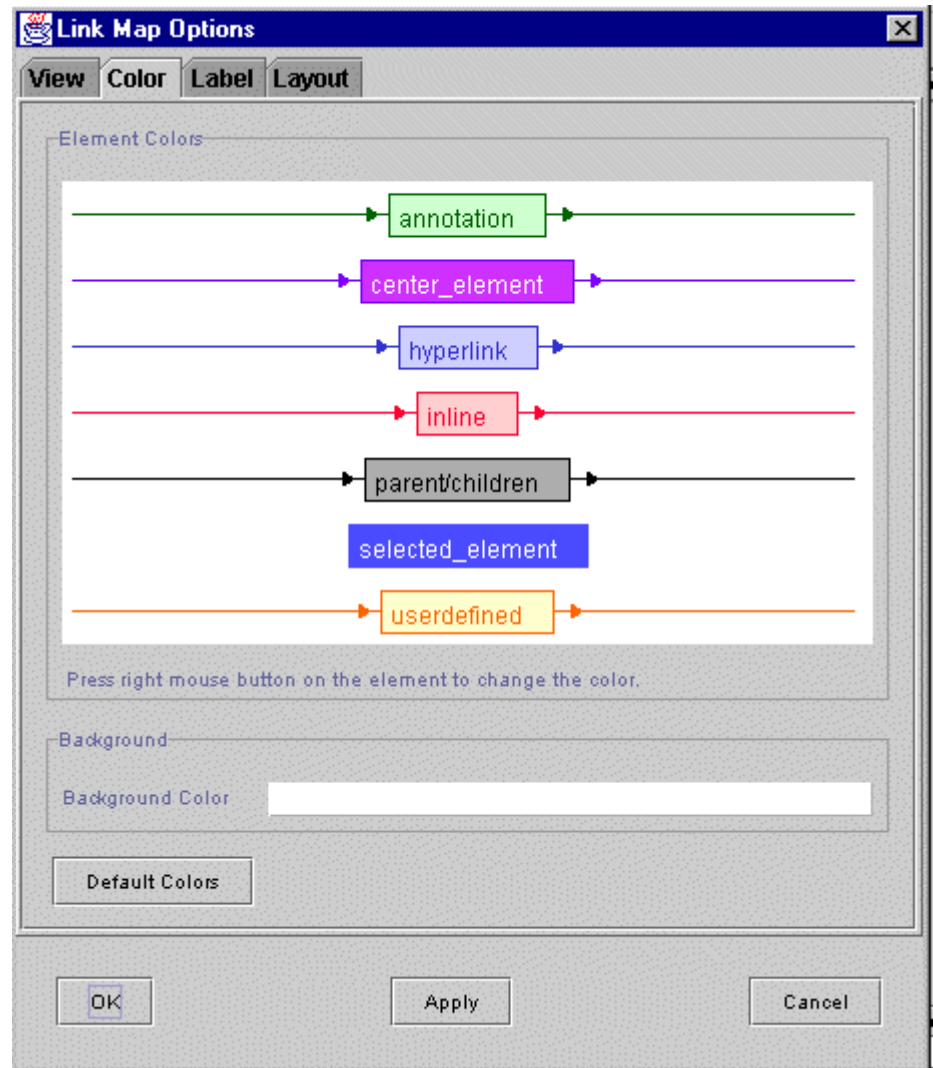
Figure 41: Link Map View Options: Color

Under the **Color** tab you can select color schemes for displaying different types of links. These color schemes are completely modifiable. You can click with your right mouse button on any of the displayed color schemes (e.g. "annotation") and modify the colors used for **Text**, **Background** or **Bounds** (outlines). You can also change the overall background color for the Link Map, and return to the default color scheme. See Figure 41.
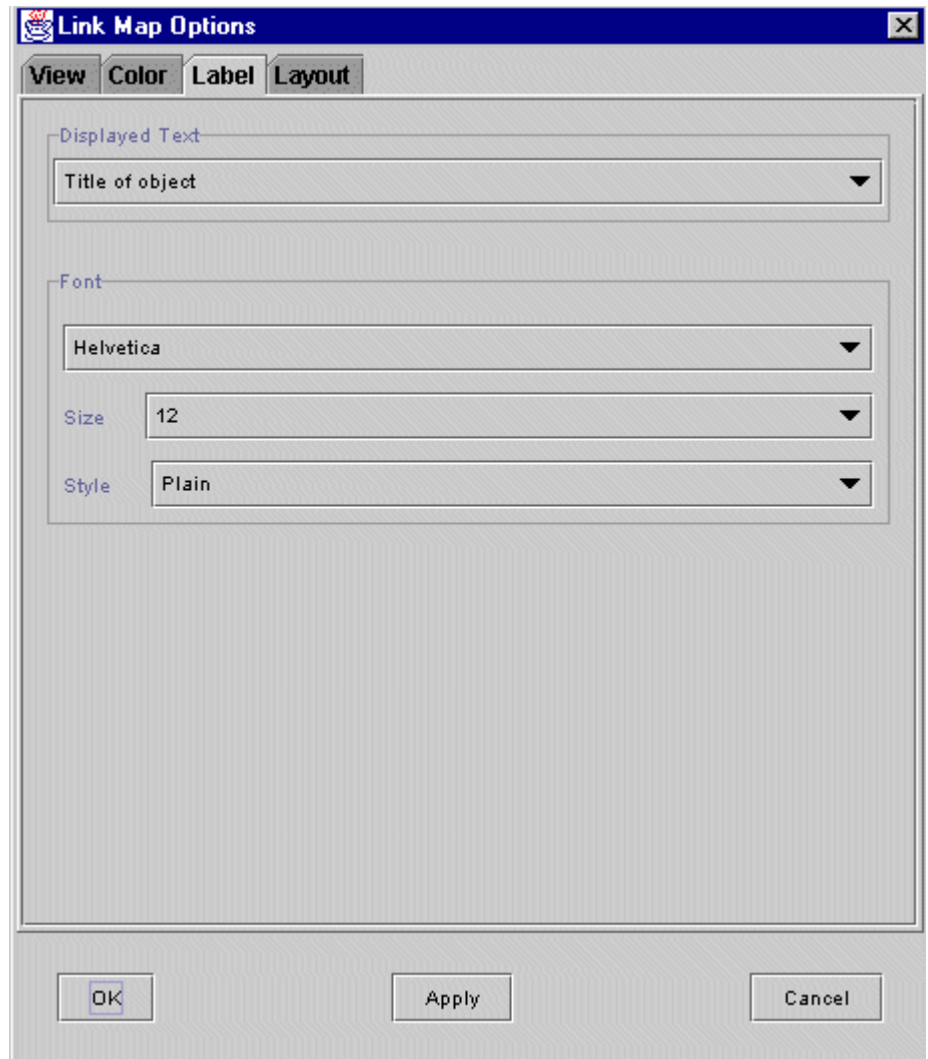
Figure 42: Link Map View Options: Label

Under the **Label** tab you can choose whether the Title or Name attributes of documents should be displayed. You can also choose a font type, size and weight. See Figure 42.
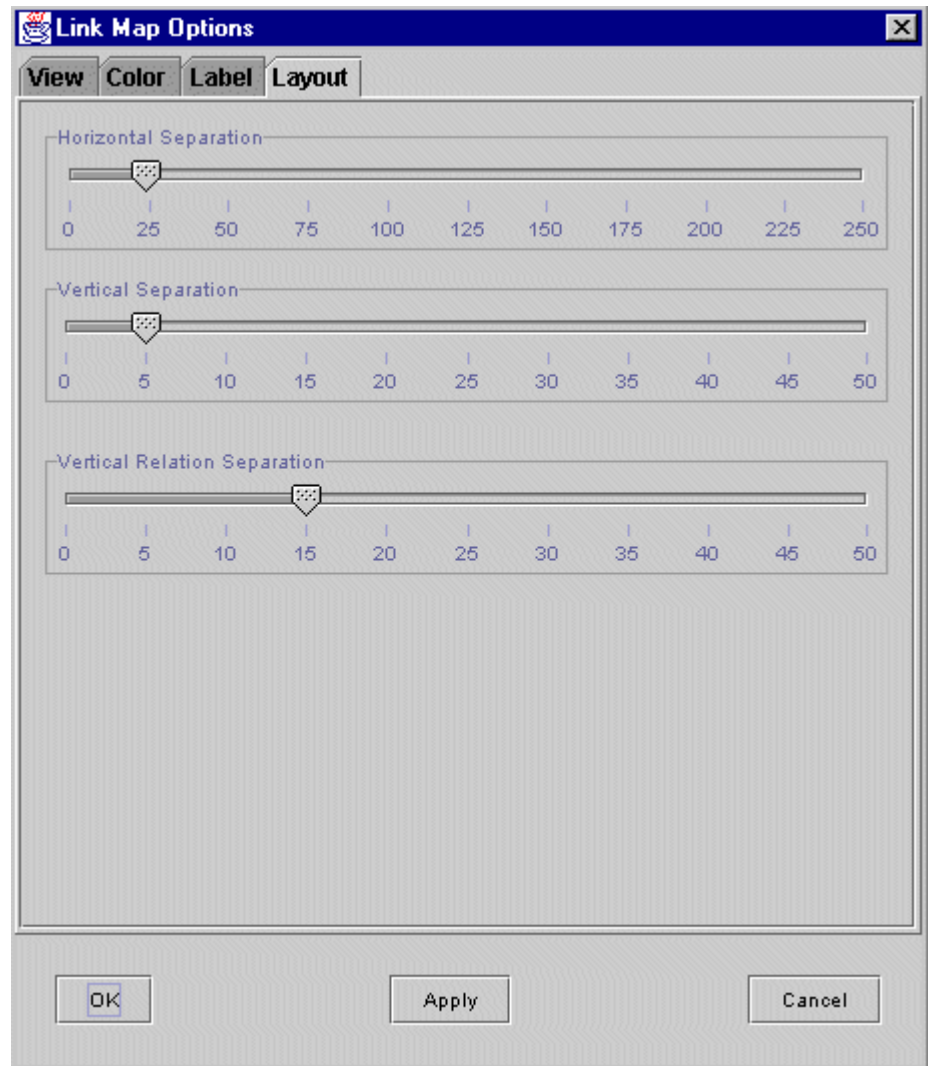
Figure 43: Link Map View Options: Layout

Under the **Layout** tab you can modify the horizontal and vertical spacing of the elements in the Link Map view. See Figure 43.

3.12   Drag and Drop

You can move objects in Java Virtual Folders by dragging and dropping them from one location to another.

If the object you move is a collection, all descendants of the collection will also be moved.

MOVE   To **move** an object, simply drag it from its current position to the collection or hierarchy where you want it. If you try to move an object from a Hyperwave Information Server to a mounted file system (or vice versa), Java Virtual Folders will perform a **copy** action instead.

COPY To **copy** an object, drag it and drop it in its new location while holding down the Ctrl button. Your mouse pointer will show with a small plus sign (+).

LINK To **link** to an object, drag it and drop to the location where you want the link, while holding down your Alt button. Your mouse pointer will show with an arrow sign.

- Select individual objects by clicking on them.

- Select multiple objects that are not next to each other by holding down your Ctrl button and clicking on them.

- Select groups of objects by holding down your Shift button and clicking on the first and last elements of the group.

Note: You cannot move objects to a collection if you do not have write rights for that collection.

3.12.1 Keyboard Shortcuts in Java Virtual Folders

Keyboard Shortcut	Function
Ctrl+N	New Virtual Folders
Ctrl+W	Close
Ctrl+Q	Exit
F5	Refresh
F1	Help
Ctrl+X	Cut
Ctrl+C	Copy
Ctrl+V	Paste
Ctrl+L	Link
Ctrl+Shift+L	Link Version
Delete	Delete
Ctrl+A	Select All
Ctrl+I	Invert Selection
Alt+Enter	Properties
Shift+F10	Open context-sensitive menu
C	Center (Link Map)

3.12.2 Sorting Information in Java Virtual Folders

In Java Virtual Folders, the right-hand window displays the contents of whatever collection or directory you clicked on in the left-hand panel. This display

information has the headings: Title, Name, Author, Version, and Modification Date.

To sort the object display by any of these headings, click once on the heading name in the right-hand Java Virtual Folders window (e.g. **Title**). Click on this to invert the listing under that heading. There is a blue arrow next to the selected heading, which indicates the sort direction. (See Figure 44).
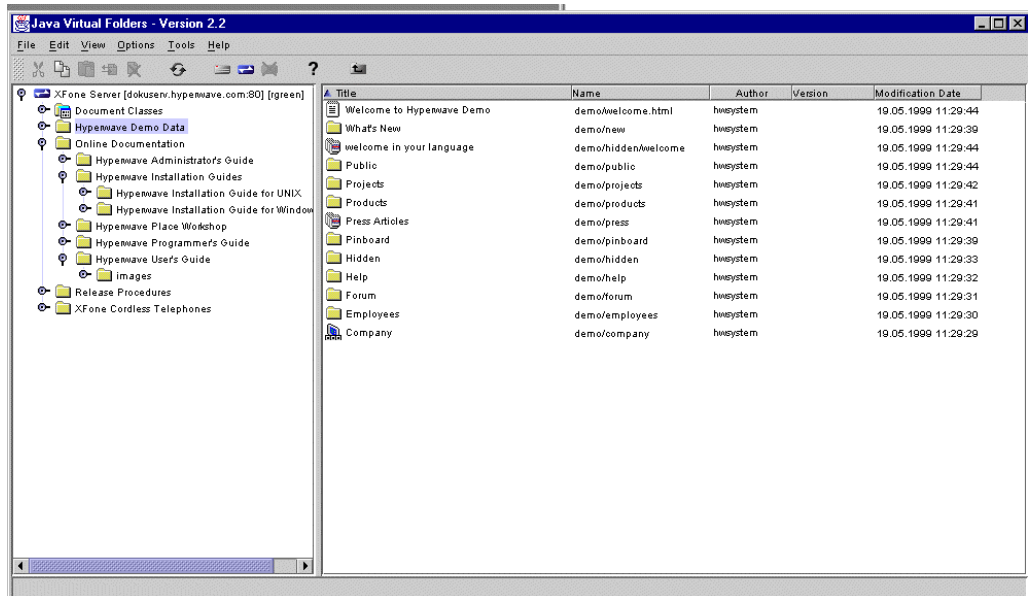

Figure 44: Sorting listings in Java Virtual Folders

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