

User manual

WebShare G8

(Version 5.0.0)

User manual

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1 About the chapters of this manual

In the following, we give a brief summary of each chapter of this manual. This summary is meant to help you find the information you are looking for.

Chapter 2 "An introduction to HELIOS WebShare" gives background information about the idea of WebShare in general, and the components that make it up.

Software installation on the server

Chapter 3 "Installation" describes the different means of connecting the Web-Share Web Server and the WebShare File Server. In addition, the chapter covers the installation of the two-tier server system, including the prerequisites and the final verification of the installation.

WebShare - Administration and use

Chapter 4 "Administration" describes how to administer the WebShare File Server, including server preferences, WebShare Quickshares, users, sharepoints, and accounting (which lists all user actions). The Branding Editor, and WebShare statistics (information on the WebShare Web Server, Java, users, and the license) are discussed as well. The HELIOS Icon Collector, URL Share Access, and the related catalog presentation are also covered in this chapter.

Chapter 5 "HELIOS Admin" briefly shows how to manage WebShare related tasks such as configuring WebShare users and sharepoints with the HELIOS administration program.

Chapter 6 "Using WebShare" provides *step-by-step* user instructions for working with WebShare, including file management, WebShare Quickshares, previews and proofs of images and documents, personal user settings, file format and browser information.

Description of the WebShare server modules

Chapter 7 "WebShare Web Server" gives a listing of installed files. This is followed by a brief guide about WebShare Web Server localization and customization tasks. WebShare Web Server preference keys are described at the end of the chapter.

Chapter 8 "WebShare File Server" is a reference for the WebShare administrator. Utilities and (customizable) scripts and their function are explained as well as configuration files, preferences and accounting files. In addition, their function and effects on the WebShare File Server are described.

Chapter 9 "HELIOS Document Hub"

HELIOS Document Hub allows access to intranet file server volumes to present and use server documents online and offline while a built-in file synchronization ensures that server files are automatically updated on mobile devices.

Chapter 10 "WebShare security" gives background information about server port security issues in general, and also about JavaScript security in the Web-Share Web Server. This chapter also addresses how to control access to the WebShare File Server.

Additional information

Appendix A "Special characters in file names" provides information on the use of special characters in file and folder names and their behavior during upload/download processes.

Appendix B "WOStarter – Web service health check" The HELIOS Service Controller can use this plug-in to start/stop and monitor the WebShare Web Server ("websharewoa").

Appendix C "Technical notes" describes the structure of the WebShare log files (which can be inspected in the HELIOS Admin $_{\tt Lists}$ menu).

2 An introduction to HELIOS WebShare

HELIOS WebShare is a high-performance server, which enables fast and secure real time file access via any web browser. Authorized users, wherever they are, can easily use the file server without exposing it to the internet.

Remote collaboration

Remote collaboration becomes a reality with the fully automated two-way access to the server data. File browsing and management allow authorized users to manage files and folders remotely, similar to the local Windows Explorer or Mac Finder. It offers remote document previews of all major image formats. Remote OPI allows web clients to download OPI low-resolution images from the server and to upload completed documents for later printing with high-resolution images. Remote print job proofing is easy as well. Verification/proof of QuarkXPress, InDesign and PDF documents is also possible (see 2.3 "Integration with other HELIOS products").

Security

Security is provided by a two-tier server application, comprised of the Web-Share Web Server and the WebShare File Server. The WebShare Web Server handles the web user interface on a separate server to ensure that the main WebShare File Server is not available on the internet. The server file system security is enforced according to each user's credentials. Sharepoint based security allows further restrictions per user, e.g. browse, preview, download, upload and file management. Additional SSL encryption is supported.

Highest performance

Due to zipstream (unzipstream) *on-the-fly* compression (uncompression), HELIOS WebShare provides very fast performance, optimizing use of the internet bandwidth.

Note: HELIOS WebShare runs on top of the foundation provided by HELIOS Base. Please read the HELIOS Base manual for installation instructions and other important details.

2.1 New WebShare features

For new features in the WebShare software see the HELIOS website: www.helios.de Go to *HELIOS Product Versions – New Features*

For HELIOS Base, the foundation used by all HELIOS products, see the HELIOS Base product web page: www.helios.de Go to *Products* > *Base*

2.2 Client file transfer and syncing applications included with WebShare

2.2.1 WebShare Manager

The HELIOS WebShare Manager client tool allows synchronizing files and folders between a WebShare server and remote workstations over the Internet, using any standard web browser.

HELIOS WebShare Manager user manual: www.helios.de Go to Support > Media > HELIOS user manuals

2.2.2 Document Hub

HELIOS Document Hub allows access to intranet file server volumes to present and use server documents online and offline while a built-in file synchronization ensures that server files are automatically updated on mobile devices.

See also 9 "HELIOS Document Hub".

2.3 Integration with other HELIOS products

WebShare is part of an integrated product suite that enables the enhancement capabilities by adding additional HELIOS products.

Files on the WebShare File Server are stored in the HELIOS resource format as used by EtherShare and PCShare. This preserves special file properties, such as Mac resource forks or Windows file streams. If the WebShare sharepoint is the same as or overlaps an EtherShare or PCShare volume, then custom Mac icons are preserved as well.

If the WebShare File Server is installed on a Windows platform, and the defined sharepoint is in an NTFS partition, the files will be saved to disk in the SFM (*Services for Macintosh*) compatible format.

In case the WebShare File Server is running on OS X – without EtherShare or PCShare being installed – and the defined sharepoint is in an HFS partition, the files will be saved to disk in the native Mac OS format. In that case, file management (duplicate, copy/paste, rename) on OS X utilizes the native OS commands ("cp", "mv"), which may not preserve the resource fork of Mac files. Custom Mac icons are always preserved on OS X.

HELIOS Base (included with all HELIOS products) includes the "dt tools" for file management. These utilities properly handle Mac resource forks and

Windows file streams during file management, to preserve file type and creator information, file streams, etc. In addition, WebShare sharepoints that are the same as or overlap EtherShare and PCShare volumes will use the "dt tools" to update the desktop database for the HELIOS volume, providing support for Mac custom icons, and full compatibility for WebShare users and EtherShare/PCShare users.

EtherShare and PCShare are fully compatible with WebShare and add advanced file and print servers for Mac and Windows clients, respectively.

HELIOS ImageServer, for server-based OPI, image conversion, workflow automation, and color management, extends the WebShare preview capabilities to InDesign and QuarkXPress documents. WebShare together with ImageServer also enables remote workflow support via hot folders and custom actions.

HELIOS PDF HandShake and ImageServer enable remote PDF-native OPI on WebShare.

HELIOS PrintPreview adds support for remote proofing, annotations, and printing as well as remote separation proofing and color-matched composite previews, which can be remotely viewed or transferred via WebShare.

3 Installation

3.1 Different setups

3.1.1 General overview

WebShare is comprised of two main servers: the WebShare Web Server, and the WebShare File Server. The objective is to enable versatile and high performance remote file access over the internet, while at the same time isolating the file server from the internet. This feature is accomplished by means of the two-tier WebShare server application. The WebShare Web Server acts as an intermediary between the internet and the WebShare File Server:



When remote users log in to WebShare, their only access is to the WebShare Web Server, which is connected to the internet. The WebShare Web Server is very secure, and contains no data, passwords or configuration information. This WebShare Web Server accepts requests and forwards them to the WebShare File Server, via a private protocol. The file server authenticates these requests, and then starts a separate process with each user's access rights, so that remote users can access only the files and directories for which they have file system permissions. The WebShare File Server forwards the requested content to the WebShare Web Server which generates dynamic web pages for the remote users. This enables them to "see" the file server, without being directly connected. Ideally, the WebShare Web Server application should run on a dedicated server, allowing all other services and ports to be shut down. The WebShare File Server application then runs on the server that contains the actual data to be shared. The following sections detail the various server configurations possible, and the related firewall options. Additional security details are discussed in 10 "WebShare security".

3.1.2 Software firewall (Internet)

A software firewall can be configured directly on the WebShare Web Server (Fig. 3.1). For example, on an OS X server, software firewall settings can be defined via "System Preferences... > Sharing". It must only allow incoming HTTP connections, and only on port 2009. Other ports on this server must not be reached from the internet in order to provide a high level of security. Chapter 10.1.11 "Switching WebShare to port 80 on the WebShare Web Server" describes how to change the default HTTP IP address and port.

Furthermore, the WebShare Web Server needs two network interfaces, one for the internet, and one for the intranet. IP-routing must be switched off.

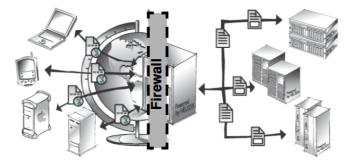


Fig. 3.1: Software firewall towards the Internet

3.1.3 Hardware firewall (Internet)

Another possibility is to install a hardware firewall between the internet and the WebShare Web Server (Fig. 3.2). As described in 3.1.2 "Software firewall (Internet)", the firewall must only allow incoming HTTP connections on port 2009. Here, one network interface for both the internet and the intranet will do, but two network interfaces offer additional security. IP-routing must be switched off.

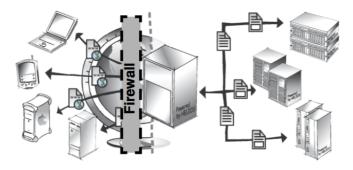


Fig. 3.2: Hardware firewall towards the Internet

3.1.4 Hardware firewall (Intranet)

A hardware firewall can also be positioned between the WebShare Web Server and the intranet. It should only allow incoming connections on ports 2010-2015. In addition, a software firewall should only allow incoming HTTP requests on port 2009 (Fig. 3.3). This setup requires two network interfaces, one for the internet and one for the intranet. IP-routing must be switched off.

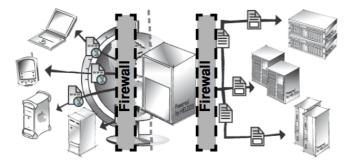


Fig. 3.3: Hardware firewall towards the intranet

3.1.5 Single-server solution

In a single-server solution (Fig. 3.4), the WebShare Web Server and the WebShare File Server are running on the same machine. The hardware firewall must deny incoming HTTP connections other than on port 2009.

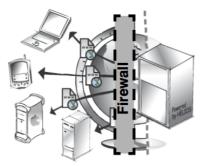


Fig. 3.4: Single-server solution

3.2 WebShare Web Server installation

3.2.1 System requirements

For the installation of the WebShare Web Server the following prerequisites apply:

- O Any supported HELIOS server platform. See a current listing of all supported platforms at: www.helios.de/web/EN/support/platforms.html
- O The programming language Perl (version 5.8.4 or newer)
- O 64-bit Java 6 or newer (see 4.1.2 "Server requirements" in the HELIOS Base manual)
- O 32 MB RAM; 2 MB per active client

Note: If a two-tier WebShare server configuration is used, then only HELIOS Base and the WebShare Web Server should be installed on the server that is connected to the Internet. On the WebShare File Server, HELIOS Base and the WebShare File Server get installed. It is only necessary to enter the HELIOS license information on the WebShare File Server.

3.2.2 Software installation

The installation of the HELIOS WebShare Web Server follows the standard HELIOS software installation scheme. It is described in detail in the chapter "Software Installation" in the HELIOS Base manual.

3.2.3 Verifying the installation

There are some steps you should take in order to verify that the installation of the WebShare Web Server was successful:

On a command line, issue srvutil status (see "srvutil" in the HELIOS Base manual):

\$ srvutil sta	tus			
Service	Status	PID	When	Restarts
srvsrv	Running	28287	Wed 10:08	
notifysrv	Running	28289	Wed 10:08	
authsrv	Running	28294	Wed 10:08	
desksrv	Running	28295	Wed 10:08	
heladmsrv	Running	28302	Wed 10:08	
afpsrv	Running	28303	Wed 10:08	
indexsrv	Running	28290	Wed 10:08	
papsrv	Running	28304	Wed 10:08	
pcshare	Running	28305	Wed 10:08	
lpd	Running	28312	Wed 10:08	
websharesrv	Running	28306	Wed 10:08	
dhcpsrv	Running	28309	Wed 10:08	
opisrv	Running	28313	Wed 10:08	
scriptsrv	Running	28307	Wed 10:08	
createpdf	Running	28293	Wed 10:08	
mdnsproxysrv	Running	28297	Wed 10:08	
websharewoa	Running	28298	Wed 10:08	
toolsrv	Running	28308	Wed 10:08	

The result of the status query shows that "websharewoa" is running. If "websharewoa" is not running, check the system messages for errors.

Note:	On OS X systems, the installation can be verified with the "HELIOS Services"
	application, which is installed in the OS X "Applications" folder.

The following steps may be used to verify that the WebShare Web Server is also available remotely:

In your browser enter the URL: http://hostname:2009 If the HELIOS WebShare homepage appears, the installation was successful.

- If it is not, try: http://<DNS name>:2009 Example: http://myserver.com:2009
- If this fails, try: http://<IP-address>:2009

Example: http://172.16.0.8:2009

If you are successful with using the IP address in the URL but not with "host name" or "DNS name", the installation of the WebShare Web Server was successful, but you may have a DNS configuration problem.

Verify with the HELIOS "socket" utility (verbose mode) that the web server can be reached:

```
$ socket -v myserver.com 2009
Trying to connect to myserver.com port 2009 ...
...
Successfully connected to server.
```

If this returns an unknown host, try the IP address:

```
$ socket -v 172.16.0.8 2009
Trying to connect to 172.16.0.8 port 2009 ...
...
Successfully connected to server.
```

➤ If this also fails, try (directly on the WebShare Web Server):

```
localhost$ socket -v localhost 2009
Trying to connect to localhost port 2009 ...
...
Successfully connected to server.
```

 \succ Exit "socket" with Ctrl-C.

Note:	The host names and I	P addresses in the	excerpts above	are just examples
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Note:	By default, the WebShare Web Server allows connecting to all WebShare
	File Server hosts. The preference WSAllowedHostNames (7.6 "Prefer-
	ences") restricts the access to named WebShare File Servers only.

3.3 WebShare File Server installation

3.3.1 System requirements

For the installation of the WebShare File Server the following prerequisites apply:

- O Any supported HELIOS server platform. See a current listing of all supported platforms at: www.helios.de/web/EN/support/platforms.html
- O The programming language Perl (version 5.8.4 or newer)
- O 32 MB RAM; 2 MB per active client
- O Each server that publishes files via WebShare requires a WebShare File Server license

3.3.2 Software installation and licensing

The installation of the HELIOS WebShare File Server uses the standard HELIOS Installer. It is described in detail in the chapter "Software Installation" in the Base manual.

The license is entered according to the instructions given in the chapter "Entering a new license" in the HELIOS Base manual.

3.3.3 Verifying the installation

There are some steps you should take in order to verify that the installation of the WebShare File Server was successful:

On a command line, issue srvutil status (see "srvutil" in the HELIOS Base manual):

\$ srvutil sta	tus			
Service	Status	PID	When	Restarts
srvsrv	Running	28287	Wed 10:08	
notifysrv	Running	28289	Wed 10:08	
authsrv	Running	28294	Wed 10:08	
desksrv	Running	28295	Wed 10:08	
heladmsrv	Running	28302	Wed 10:08	
afpsrv	Running	28303	Wed 10:08	
indexsrv	Running	28290	Wed 10:08	
papsrv	Running	28304	Wed 10:08	
pcshare	Running	28305	Wed 10:08	
lpd	Running	28312	Wed 10:08	
websharesrv	Running	28306	Wed 10:08	
dhcpsrv	Running	28309	Wed 10:08	
opisrv	Running	28313	Wed 10:08	
scriptsrv	Running	28307	Wed 10:08	
createpdf	Running	28293	Wed 10:08	
monitorsrv	Running	28296	Wed 10:08	
mdnsproxysrv	Running	28297	Wed 10:08	
websharewoa	Running	28298	Wed 10:08	
toolsrv	Running	28308	Wed 10:08	

The result of the status query shows that "websharesrv" is running.

Note: On OS X systems, the installation can be verified with the "HELIOS Services" application, which is installed in the OS X "Applications" folder.

The following steps may be used to verify that the WebShare File Server is also available remotely (use the appropriate server host name, or IP address, in place of "helioshost"):

```
$ socket -v helioshost 2010
Trying to connect to helioshost port 2010 ...
...
Successfully connected to server.
```

```
\succ Exit "socket" with Ctrl-C.
```

As the example above shows, the WebShare File Server port (2010) is available.

4 Administration

This chapter describes the configuration and administration of the WebShare File Server via the WebShare Administration web page. All WebShare administration can also be performed via HELIOS Admin, with the exception of the Branding Editor, and Java Server Statistics. Refer to 5 "HELIOS Admin" for details.

Launch a browser and enter the WebShare Web Server address, using port 2009, e.g.: http://hostname.company.com:2009

The WebShare Web Server port number can be changed by means of the **WOPort** preference (7.6 "Preferences").

Log on to the WebShare File Server according to the instructions in 6.1 "WebShare File Server login".

In order to have WebShare administrative privileges, a user must log in as "root" (UNIX based servers) or "Administrator" (Windows based servers) or be a member of either the "WSAdm" or the "SysAdm" group. Members of the "SysAdm" group have administrative privileges for HELIOS Admin and WebShare. Members of the "WSAdm" group have administrative privileges for WebShare only.

Important: After the first time installation of a HELIOS product the "root" and "demouser" passwords are empty and should be assigned as soon as possible!

HELIOS Admin is used to set the "root" and "demouser" passwords as described in "Setting passwords" in the HELIOS Base manual. You can then set additional WebShare host user passwords (see 4.1 "Server Preferences", below), and assign administrators to the "WSAdm" or "SysAdm" groups. Alternatively, the HELIOS utility program "authutil" can be used to set passwords.

There you will also find a detailed description on how to access and log in to HELIOS Admin.

From a Mac client, click on "MacOS", and select and download the "HELIOS Admin.app". From a Windows client, click on "Windows", and select and download the "HELIOS Admin.exe". For other platforms click on Java, select "HELIOS Admin.jar", and download.

After a successful login to WebShare, the "Home" page appears, allowing quick access to the defined sharepoints (Fig. 4.1).

Home				
Sharepoint Name	Window	Comment		
Demo	New	Demo-Dateien		
HELIOS Applications	New	Enthält HELIOS Tools und Programme		
Sample Images	New	Ausgewählte Beispielbilder verschiedener Formate		
WebShare Public	New	Proofvorlagen und ReadMe-Datei		
WebShare Test	New	WebShare Testvolume		

Fig. 4.1: WebShare "Home" page

Click on the Administration button. From within the "Administration" section, select the desired item (Fig. 4.2).

Note: HELIOS Admin can also be accessed via WebShare, as an administrative user, in the "HELIOS Applications" sharepoint:

0 5 6
Home Refresh Administration Logout
Administration
My User Preferences
Quickshare Administration
User Administration
Sharepoint Administration
Server Preferences
Accounting
Branding Editor
Java Server Statistics

Fig. 4.2: WebShare "Administration" page

4.1 Server Preferences

The "Server Preferences" page (Fig. 4.3) allows specifying default values for the WebShare File Server.

Cache

WebShare keeps image preview files, which have already been displayed, in a cache on the WebShare File Server, so they will open quite quickly the next time they are requested. The Cache Size in MB and the path to the Cache Directory are specified in the respective fields. If the Cache Directory is changed, the new directory must already exist, and have full *rwx* (read-write-execute) privileges for all.

The number of files in the cache is only limited by the assigned cache size. When the cache is full, WebShare starts to delete old files in the cache in order to store newer files. If the clear on Save checkbox is ticked, WebShare deletes all cache files upon clicking the Save Preferences button.

Horne Refresh Administration Logout				
Server Preferences				
Cache Size in MB:	300 (A minimum of 300 MB is recommended)			
Cache Directory:	var/tmp/wscache			
Remove All Cache Files:	Clear on Save			
E-Mail Notification on Admin Login:				
E-Mail Notification on User Login:	webshareuser@helios.de			
Enable E-Mail Message for Users:	₹			
Enable WebShare for Host Users:				
Enable WebShare for Virtual Users:	V			
Directory Listing Date Format:	dd MMM yyyy kk:mm			
Default Windows Encoding:	PC850			
Default Mac OS Encoding:	MacRoman			
Max. Gallery Resolution (pixel):	384			
Preview Resolutions (pixel or dpi):	36 dpi,72 dpi,96 dpi,576 dpi,256 pixel,512 pixel,768 pixel,1024 p			
Proof Simulation Profiles:	CromalinEuro 1.0 UCR370, MatchPrintS 1.0 UCR-370, ISOcoate			
	doc,ppt,xis			
Enable Register User Option: Enable Forgot Password Option:	-			
Enforce RSA Crypted Password Option:	-			
Allow URL Share Access:				
	✓ (reduced security)			
Quickshare Users are Global:	(reduced security)			
Skip Login With Empty Quickshare Passwords:	(reduced security)			
Allow ICC Profiles per User:	\checkmark			
Default Branding: HELIOS				
(Save Preferences)				
Detailed information on the date format is available at: Java Date Format				

Fig. 4.3: "Server Preferences" page

Clearing the cache should be done without any users connected, to avoid login time-outs during the removal. Alternatively, the WebShare File Server can be stopped with the <code>srvutil stop websharesrv</code> command and the content of the cache directory subsequently deleted with <code>rm -r <CACHEDIR>/*</code>. The WebShare File Server is restarted via <code>srvutil start websharesrv</code>.

Note: The default value for Cache Size in MB is 30, due to the usually limited disk space in "HELIOSDIR/var". If you change the Cache Directory preference to another path, it is recommended to set Cache Size in MB to a value of at least 300 (MB).

E-Mail

WebShare acts as an SMTP client and can send e-mail notifications via an SMTP server running on the same host, or via an external SMTP server.

The server settings SMTPHOST and SMTPSender must be set up correctly for e-mail notification to work (see SMTP in "HELIOS Admin > Server Settings" in the HELIOS Base manual).

By use of the Enable E-Mail Message for Users option, the administrator can determine whether the Mail functionality (see Edit > in 6.3 "Work in a sharepoint") is available to WebShare users.

WebShare users

Enable WebShare for Host Users and Enable WebShare for Virtual Users determine which type of users can connect to WebShare. *Host Users* are those users who are listed in the HELIOS password file "var/conf/passwd" or who are provided via AD/PDC or LDAP. *Virtual Users* are user names who have been set up as WebShare users only, but are mapped to a host user name (compare 4.3 "User Administration"). If Enable WebShare for Host Users is not checked, then individual *Host Users* can still be enabled by entering them as Virtual Users. If neither checkbox is marked, only "root" (or *Virtual Users* mapped to the user "root") can log in.

Important: Host users must have an entry in the HELIOS password file "var/conf/ passwd". Otherwise they will not be accepted as valid users and hence cannot log on to the WebShare File Server!

Date format

The Directory Listing Date Format can be customized, e.g. according to American or European date format preferences. For details go to: docs.oracle.com/javase/1.5.0/docs/api/java/text/SimpleDateFormat.html

Download encoding

The two pop-up menus Default Windows Encoding and Default Mac OS Encoding specify the default download encoding for the used client platform. The setting determined here is applied when OS Default in the Download Encoding pop-up menu (see 6.7 "My User Preferences") is selected.

Gallery Resolution

The Max. Gallery Resolution (pixel) field allows specifying the maximum resolution for image previews which can be selected by use of the slider in the WebShare gallery view. If set to 0 the gallery view is disabled. The corresponding button (File > Set View > Gallery) will be disabled or hidden depending on the Show Disabled Buttons setting of the used branding. The minimum value allowed (beside 0) is 32.

See 4.7 "Branding Editor" for further details on how the initial and possible gallery resolution values are determined.

Preview options

The Preview Resolutions (pixel or dpi) field is used to specify custom resolutions and percentage sizes for remote file previews and proofs. Preview and proof pages include four "zoom icons" for which the resolutions can be defined per branding, in the Branding Editor, by use of the "Preview Resolutions 1-4" preference (see **Toolbar Buttons**). In addition, there is a pop-up menu, which can be used to offer custom resolutions. This makes sense if preview or proof resolutions or sizes are frequently required which differ from the default. The custom pop-up menu dpi, pixel, and percentage values can be specified in the Preview Resolutions (pixel or dpi) field, as a comma-separated list. Note that images will not be scaled up from their original resolution (i.e., if the image is 512 pixels, and the user selects 768 pixels, the preview will not exceed 512 pixels). The default values in the pop-up list for previews and proofs are: 36, 72, 96, 144 dpi and 256, 512, 768, 1024 pixel.

Proof profiles

The Proof Simulation Profiles field allows specifying profiles, which should be available in the ICC Proof Simulation pop-up menu in the WebShare proof window. You can specify any profile that is stored in the "ICC-Profiles" volume.

Note: For this feature the "WebShare Public" sharepoint needs to be published.

If the Allow ICC Profiles per User option is enabled, WebShare users are allowed to upload and administer their own monitor and printer ICC profiles on the "My User Preferences" administration page. These profiles will be selectable in the Monitor ICC Profile and Printer ICC Profile pop-up menus of the WebShare proof window, in addition to any globally defined profiles. To benefit from this feature, HELIOS ImageServer is required.

Custom preview types

In the Custom Preview Types field you may enter suffixes for custom file types that are to be previewed in WebShare. For this to work, the files must be processed first (according to the rules given in the "wspreview.pl" script). For example, doc, xls, ppt (no blanks!) can be specified for Microsoft Office documents which, if required, are processed by Tool Server with the "OfficeReader" script. "OfficeReader" details can be found in the HELIOS Tool Server manual.

Login options

The setting of the checkboxes Enable Register User Option and Enable Forgot Password Option determines whether the Register as a New User and Forgot Password? links become available in the login window.

Note: These options enable the "wsregnewuser.pl" and "wsforgotpw.pl" WebShare utility programs (see 8.3 "WebShare utility programs"). These two sample scripts do not really register a new user, or generate/send a new password, until they have been customized to do so.

With the checkbox Enforce RSA Crypted Passwords checked, only encrypted user logins are permitted. For this purpose, JavaScript must be active in the web browser.

URL Share Access

If the checkbox Allow URL Share Access is checked, direct access to a specified WebShare sharepoint or to a document preview is possible. See 4.10 "WebShare URL Share Access" for a description on how WebShare link sharing works and what attributes can be set.

Quickshares

Check the checkbox Allow Quickshares to allow Quickshares on the WebShare server. While creating a Quickshare, a user can select the desired remote user from the User pop-up menu in the "Quickshare" section of the sharepoint file browser. If the Quickshare Users Are Global checkbox is checked, *all* Quickshare users are available in this pop-up menu. If not checked, only those Quickshare users who were created by the logged-in user are available. Skip Login With Empty Quickshare Passwords can be checked if the remote user should be allowed to open the Quickshare links by just clicking on them, without a prior login on the WebShare server (then the password must remain empty).

Branding

The pop-up menu Default Branding allows pre-selecting a global branding for all users on the WebShare File Server. This setting can be overridden for individual users by the setting of the Branding pop-up menu on the "User Administration" page (see 4.3 "User Administration").

Click on the save Preferences button to save modifications. Otherwise the changes will not be saved and will be lost.

4.2 Quickshare Administration

The "Quickshare Administration" page allows users to activate/deactivate existing Quickshares, delete them, or edit their corresponding comments, expiry dates, and permissions (Preview, Download, Upload). In addition, single Quickshares can be re-assigned to a different user. Non-administrators will see only the Quickshares that they have created, as discussed in 6.6.2 "Manage your own Quickshares". WebShare administrators will have an additional option, Show All Quickshares, which lists all existing Quickshares.

However, the fields Quickshare ID, URL, Sharepoint, Path, and Files are provided for informational purposes and cannot be edited.

Note: The E-Mail on Access function will be available in a future version of Web-Share:

When the user who was provided with the Quickshare link accesses the WebShare server, the creator of the Quickshare can optionally be notified.

Delete Quickshares

Select a Quickshare from the table and click on the Delete Quickshare button. Then confirm the deletion.

Important: Do not click on save Changes at this point because the data entry fields still contain the user information, and hence the Quickshare will be re-created!

The "Select" column allows selecting/deselecting all displayed Quickshares at a time.

Home Re	efresh Admi	nistration Log	pout					
				Quicks	hare Administ	ration		
My Quid	kshares I	Show All Qu	lickshares					
	Active	: 🗹						
Qui	ckshare ID	: 1						
	URL	.: https://anl	kh.dyn.helio	s.de:443/qs/localhost-	1-6cc3e0d038e93	95e Open		
Quick	share Use	r: Bart - bar	t@helios.de	(created b 🗘 +				
	Creator	r: root						
	Sharepoint	t: Sample Ir	nages					
	Path	template-	images%0					
	Files	: Cafeteria	.tif					
	Allow	r: Preview (🗹 - Downloa	ad 🗹 - Upload 🗆				
	Expires	s: 15 Jan 20	20 16:16	(e.g.: 18 Mar 201	4 15:24)			
	Comment	::						
E-Mail	on Access	: 🗆						
Save (Changes	Delete Quic	kshare) Se	end mail to Bart				
Select A	II Deselec	t All						
Select		QS User	Active	Expires	Sharepoint	Path	Files	Comment
0		Bart		15 Jan 2020 16:16				
	2	heinz		18 Aug 2020 13:35	Sample Images	template-images%	0 IL14_0056.pdf	Check color profile!

Fig. 4.4: WebShare "Quickshare Administration" page

4.3 User Administration

The "User Administration" page (Fig. 4.5) allows WebShare administrators to specify settings for users. Here WebShare virtual users can be created and deleted, and WebShare-only passwords specified for host users. Users can be assigned preset values for Download Encoding, Zip Streaming Format, and Branding. Some of these settings can be changed by the users themselves on their "My User Preferences" administration page (6.7 "My User Preferences").

In addition, there is the Privileged Transfer option which reserves a higher transfer bandwidth for the corresponding user. For all other users, file transfers will then (and only then!) be restricted to a limited speed (5 to 80 kB/s, depending on the currently used Internet connection).

	_					
Home Refresh Administration	gout					
			User Adm	ninistration	า	
User Name	Bart			_		
USER Name	. Dan					
Password		•		(Crypte	d RSA 1024 bit)	
Cannot change Password	: 🗆					
Run as Host Use	demo	user				
E-Mail Address	: bart@	helios.de				
Commen	:					
Expires	: 15 Ja	n 2020 16:16		(e.g.:	18 Mar 2014	14:53)
Download Encoding	: OS D	efault	\$			
Zip Streaming Format	: 🗹					
Privileged Transfe	: 🗆					
URL Document Preview only	: 🗆					
Quickshare Use	: 🗹					
Branding	: defau	ilt	•			
Clear Form Save Changes	Dele	ete User				
User Name Run as Hos	User	QS User	Branding	Expires	Comment	
Bart demouser		\checkmark	Server Default			
Bender root			Futurama			

Fig. 4.5: WebShare "User Administration" page

The URL Share Access feature allows sharing documents without letting the user navigate out of the document preview. If the URL Document Preview only checkbox is activated the user (except a user with administrative WebShare privileges!) can only access WebShare by a URL Share Access link that points directly to a document. The user will not be able to leave the document preview then. See 4.10 "WebShare URL Share Access" for further information.

If the Quickshare User checkbox is checked the user can only access the defined Quickshare(s). If no Quickshare is defined, the user cannot login at all. The Quickshare status of a user can be seen in the "QS User" column of the user table (see Fig. 4.5).

Normally, new Quickshare users are created by authorized users when they create a new Quickshare and select the Create new user option (see 6.6.1 "Create Quickshares"). This has the advantage that a WebShare administrator is not needed to create each Quickshare user or designate files to share. In addition, the file permissions (and WebShare branding) of the user creating the Quickshare are enforced for the new Quickshare user. The sharepoint settings Allowed Users/Groups and Allow Quickshares control who can create Quickshares, and for which sharepoints (see 4.5 "Sharepoint Administration").

Important: With the Quickshare User checkbox checked, Quickshare users can only log in on the WebShare server if at least one Quickshare has been assigned to them. In addition, they only see their Quickshares!

Notes for WebShare on Windows

Windows local users as well as AD/PDC user names, groups and passwords are automatically supported by WebShare. Host user password changes must be done with the respective tools within Windows. Changing the host user password is not supported within WebShare.

Virtual users are created and managed within WebShare. A virtual name, e.g. *Customer A* does not exist as a host user. However, each virtual user must be assigned to a valid host user account, e.g. "webtransfer", using the WebShare Run as Host User setting. In this case, the host user "webtransfer" must exist with a valid password on the host and the identical user and password must be created using the HELIOS "authutil" command.

Example:

The Windows host user name and password are:

User: webtransfer Password: secret

An identical host user and password must be created via the HELIOS "authutil" tool in the HELIOS password file:

authutil passwd -n webtransfer -p secret

WebShare virtual users can change their WebShare password within WebShare in Administration > My User Preferences.

Note:	Only the virtual user password is changed. The password for the corre-
	sponding host user remains unchanged.

Like the HELIOS Admin administrative groups "SysAdm", "PrnAdm", "QueueAdm", the administrative group "WSAdm" must be created via Windows to allow control of administrative rights within HELIOS Admin.

Create users

To create a WebShare user take the following steps:

- In the User Name field enter an arbitrary name which need not exist on the host, and can have up to 64 characters. Of course, you may also enter the name of an existing HELIOS user on that host. Then assign a password to the user in the Password field.
- Note: Although a WebShare *virtual user* can have an empty password assigned by the administrator, they cannot delete their password by themselves. A *host user* need not have a WebShare password, but it is highly recommended for security reasons. See **Change WebShare Password** in 6.7 "My User Preferences".

With the Cannot change Password checkbox ticked, users are prevented from modifying their password.

If the user specified in the User Name field is not a host user, then that new user will be a virtual user. That virtual user name must be mapped to a HELIOS host user name in the Run as Host User field (note that the specified host user *must* already exist on the host).

Note: It is important to note that "Run as Host User" means that the virtual user will have the file access permissions of that host user. In addition, the virtual user will see in the "User" pop-up list (when creating or modifying a Quickshare) any Quickshare users created by that host user, or by other virtual users mapped to that host user. Likewise, host users that have virtual users mapped to them, will be able to see any Quickshare users created by those virtual users.

If an E-Mail Address is specified, it appears in the individual user settings (see 6.7 "My User Preferences"). This e-mail address is used as the "From:" e-mail address if that user uses the mail feature. If this is left blank, then that user cannot send e-mail using WebShare. The next two fields are optional and need not be filled out: Comment serves as a means to provide additional information on the WebShare user, e.g. to which company or department they belong (see Fig. 4.5). An expiry date, after which the user cannot log in anymore, may be specified in the Expires field. The syntax must match that from the example next to the field.

Download Encoding specifies the default download encoding for the user client platform. The setting determined here is applied as the default in the Download Encoding pop-up menu (see 6.7 "My User Preferences"). With the Zip Streaming Format checkbox ticked, the file download uses Zip streaming, which allows file compression *on-the-fly*, without creating any temporary files.

After creating a WebShare user or configuring existing users, click on the save Changes button before proceeding to other tasks. Otherwise the entries will not be saved. To clear all data entry fields and set the Download Encoding and Zip Streaming Format back to the default values, click on the Clear Form button.

Delete users

Select a user from the table, click on Delete User and confirm the deletion.

Important: Do not click on save Changes at this point because the data entry fields still contain the user information, and hence the user will be re-created!

For a correct table display you may need to update the window by clicking on the Refresh button in the WebShare toolbar. The table listing the WebShare users can be sorted by clicking on the desired column header.

Note: Deleting users removes only virtual users, and host user WebShare passwords.

Disconnect users

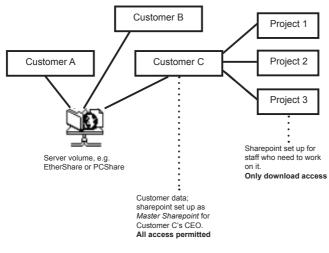
In the event that a system administrator needs to drop a user connection, there are three primary methods:

- Using WebShare, go to "Administration > Java Server Statistics", and under "WebShare User Statistics", click Session Details. Show. Terminate the desired session.
- Using HELIOS Admin (Lists > Active Users), show the connections and delete one of them.
- Or use the swho -c command (see HELIOS Base manual) to list active users and the corresponding process ID (*pid*). Then kill -TERM pid can be used to terminate that process.

4.4 Organize sharepoints

WebShare sharepoints can be organized to suit the required demands, for example, of a production site. The diagram below shows an example where a HELIOS EtherShare or PCShare volume is published via WebShare. At *Customer C's* site only the CEO is allowed to have full read and write access to the volume. However, the sharepoint is configured to the effect that the staff at *Customer C's* site is only allowed download access. Each user is only able to see their own projects. It is possible to share the same projects for different users with individual permissions.

A WebShare sharepoint can have different task and action rights for different users or groups:



4.5 Sharepoint Administration

Home Refre	Administration Logo	ut			
		Sharepoint Admi	nistration		
	Publish: 🗹				
Sharepoi	nt Name: Demo				
Sharepo	oint Path: /Volumes/D	aten/demovol/			
E-Mail on	Access:				
c	comment: Demo-Date	ien			
			D F	-	
	Allow Preview: M		w Reading:		
A	llow Download: 🗹	Allow Delete: 🗹 Always Allow F	Read/Write:]	
	Allow Upload: 🗹	Allow Rename: 🗹			
Download	I Layouts Only: 🔲 Al	low Annotations: 🗹			
Allow	v Quickshares: 🗹				
Allowed L	Jsers	Allowed Groups			
		1		1.	
▼ Docum	ent Hub Sync List				
VIDEO	o_caberg_2011.pdf				
catalog	o_caberg_2011.put				
				1.	
Add Fil	es & Folders				
Clear Fo	rm) (Save Changes)	Delete Sharepoint			
Show Allo	wed Users and Groups	3			
Publish	Sharepoint Name	Path	Comment	Sync List	
\checkmark	Demo	/Volumes/Daten/demovol/		Show Disk Usage	
\checkmark	HELIOS Applications	public/		Show Disk Usage	
\checkmark	Sample Images	/Volumes/Data/sample-images%0/			
1	WebShare Public	public/WebShare/			

Fig. 4.6: WebShare "Sharepoint Administration" page

With the "Sharepoint Administration" page (Fig. 4.6) WebShare sharepoints can be created, configured or deleted.

The sharepoint "WebShare Public" is created under the path "HELIOSDIR/ public/WebShare" during the installation. By default, it has no write access. In addition, the volume "HELIOS Applications" is created for the user "root". It has no write access either.

Create sharepoints

- In the sharepoint Name field enter the name you want to assign to the sharepoint, and then specify the sharepoint Path. (Note that the specified path *must* already exist with adequate access rights on the host.)
- In the (optional) E-Mail on Access field enter an e-mail address for notification mails after a user has downloaded, uploaded, deleted or just previewed a file, or added an annotation. If an annotation has been added to a preview or proof document, the notification e-mail contains a URL share access link which leads directly to the annotation table (the e-mail is sent as soon as the user has logged off or changed the sharepoint). Make sure that the complete recipient e-mail address is specified, e.g. webshare@mycompany.com

The optional *comment* field allows entering additional information about the sharepoint. The comments are displayed on the "Home" page (see Fig. 4.1).

With the Publish checkbox at the top of the window you can specify if the sharepoint is available at all.

The following options determine whether the buttons in the sharepoint toolbar are enabled (or visible, depending on the "Show Disabled Buttons" setting; see Fig. 4.16):

Allow Preview

Allows previews of documents and image files (see 6.4 "Image and document

previews" for complete details). Please note that this checkbox must also be activated to allow viewing documents in proof mode.

Allow Download

Allows the download of files and folders from the respective sharepoint.

Allow Upload

Allows the upload of files and folders to this sharepoint. If desired, Zip archives are automatically extracted.

Download Layouts Only

Specifies that only files inside layout folders in the sharepoint can be downloaded. Layout files are low-resolution proxy files created by ImageServer, for use in OPI aware page layout applications.

Note: The Download Layouts Only function requires that Allow Download is also active. Otherwise no download action will be possible at all.

Allow Copy

Allows copying, moving, duplicating and pasting files and folders. Also allows creating directories by use of the Create Dir option in the File > pop-up menu.

Allow Delete

Allows the deletion of files and folders.

Allow Rename

Allows renaming a file or folder.

Note: Changing permissions is only allowed if also Allow Rename is allowed.

Allow Annotations

Allows attaching annotations to a document in this sharepoint.

Allow Quickshares

Allows creating WebShare Quickshares on this sharepoint.

Always Allow Reading

Allows file and folder read access for all WebShare users, regardless of their host file and folder permissions. This option only affects the downloading or previewing of files.

Always Allow Read/Write

Allows file and folder read/write access for all WebShare users, regardless of their host file and folder permissions. This option only affects the uploading, downloading or previewing of files, *NOT* other file management options (e.g. copy/move/paste).

Note: The Always Allow Reading and Always Allow Read/Write options will only be available if enabled by a preference key setting. See AllowAllRead-Write in 8.5 "Preferences".

The Allowed Users and Allowed Groups fields serve as a means of access control for the sharepoint:

If there are no entries in either of the fields, *all* WebShare users can access the sharepoint. Entries in the Allowed Users field allow only those particular users to access the sharepoint. Likewise, entries in Allowed Groups allow *only* members of those groups to access the sharepoint. Users who are not allowed access to a sharepoint will not even see it, it will be hidden from them.

Note: Valid names in the Allowed Users field may be WebShare user names or host user names. The Allowed Groups field accepts valid host group names. Each entry must be in a separate line.

Sync list

The Document Hub Sync List link (see Fig. 4.6) allows you to define files or folders in a sharepoint that should be synchronized with the mobile device via the HELIOS Document Hub solution:

Click on the link and specify the desired files and folders in the text field, or select them by clicking on the Add Files & Folders link that opens a new window in which you can select the desired files and folders.

After clicking on Add Selection and Append to Sync List the selected objects are added to the text field and will be synchronized with the mobile device on request.

A click on the show Disk Usage link in the "Sync List" column opens a new window which gives information on the sync list disk usage (see Fig. 4.7).

Close Refresh		
Path	Objects	Size
VIDEO	2	5.88 MB
catalogo_caberg_2011.p	df 1	6.97 MB
_	al 3	12.85 MB
Toi		
catalogo_caberg_2011.p	df 1	6.97 MB

Fig. 4.7: Sync list disk usage

After creating a WebShare sharepoint or configuring existing sharepoints, click on the save Changes button before proceeding to other tasks. Otherwise the entries would not be saved and get lost. To clear the data entry fields click on the clear Form button.

To set up different access rights for the same directory on the WebShare File Server you can create multiple sharepoints, with the same path but each with a unique name and different access rights (Allowed Users, Allowed Groups).

Likewise, it is possible to set up different file management and previewing options for the same directory on the WebShare File Server by creating two sharepoints, with the same path but different allowances.

After creating a sharepoint you may wish to view the file permissions corresponding to the sharepoint content:

Click on the Home button, and then on the desired sharepoint. Use File > Set View > Extended to view the "Permissions". If you need to change the permissions, refer to File > in 6.3 "Work in a sharepoint" for details.

These permissions will be inherited by any files uploaded via WebShare, and hence determine which users will be able to view files, and change file permissions. Likewise, you may wish to change the file permissions for any existing files in the sharepoint, to enable the desired access for users.

Delete sharepoints

Select a sharepoint from the table and click on the Delete Sharepoint button. Then confirm the deletion.

Important: Do not click on save Changes at this point because the data entry fields still contain the sharepoint information, and hence the sharepoint will be re-created!

For a correct table display you may need to update the window by clicking on the Refresh button in the toolbar. The table listing the sharepoints can be sorted by clicking on the respective column header.

Define as HELIOS volume

In general, every WebShare sharepoint should also be the same as or a subset of a HELIOS volume, to ensure that files with Mac resource forks or Windows file streams get handled properly, and in order to enable Spotlight searches within that sharepoint. Use HELIOS Admin ("Volumes" in the Base manual) to define a volume (it need not be published) on each unique top level share. Lower level shares must NOT have their own (nested) volume definition. In the case that neither EtherShare nor PCShare is installed, HELIOS Admin can still be used to define volumes.

4.6 Accounting

The "Accounting" page (Fig. 4.8) lists all user actions on the WebShare File Server. The default view displays User, Action, Time, Sharepoint, Path and Entry per action.

The exact WebShare status codes are detailed in C.1 "WebShare log file structure".

	Refresh Adn	ninistration Set View >						
me	Heiresh Adn	ninistration Set view :	Logout					
				Acc	ounting			
			6 Linux/	Unix: 0.12% iF	hone: 3.	62% Windows: 0.49	% Mac Inte	el: 64.62% Mac: 19.13
Tod	av	•						Login Error
		Action	Time	Observation	Dette	Fata		Generic Erro
	User		Time	Sharepoint	Path	Entry		
	root(14)	login	08:58 09:47					
	root(14)	addUser	09:47	root				
	root(14)	logout	09:47					
	root(15)	login						
	root(15)	logout	10:48 11:42	Mat Test		O-fatada		
	root(16)	download (Details)		WebTest		Cafeteria	tif	
	root(16)	logout	12:07 13:12					
	root(17)	login						
	root(17)	logout	13:59					
	root(19)	login	14:01 14:02					
11	root(19)	logout	14:02					
	hendrik(1)	login	12:10					
	hendrik(1)	logout	12:13					
	hendrik(2)	login	12:13					
	hendrik(2)	logout	12:14					
_	root(3)	login	12:14					
17 10	michael(4)	login logout	12:18					
	root(3)	•	12:20					
	root(5) root(5)	login logout	12:20					
20	hendrik(6)	login	12:21					
21	hendrik(6)	login logout	12:21					
22	root(7)	logout login	12:21					
23		•	12:21					
	root(7)	logout	13:23					
25	root(8) root(8)	login logout	13:39					

Fig. 4.8: WebShare "Accounting" page

By means of the pop-up menu you can choose which accounting file is displayed on the "Accounting" page. The content is taken from the files "web-share.acct" (*today*) to "webshare.acct.6" (*seven days ago*), which are stored in "HELIOSDIR/var/adm".

By use of the toolbar item set View you can change the design of the list: Default (as seen in Fig. 4.8), Extended (includes "Path", "user agent" (browser), "OS" and "platform" information, and states the date in the "Time" column), and small. A click on column headers changes the sort order. An entry can appear with a yellow or red background. *Red* is used to highlight security warnings (e.g. login errors). *Yellow* is used for informational warnings (e.g. download errors).

Detailed accounting information (Fig. 4.9) for uploaded and downloaded archives is available when clicking on the (Details) link.

		Accountin	ng Details	
Accounting Info	rmation			
Time: 05 Jul :	2019 16:50 Sharepo	int Path: We	bTest:/	
User: root(9)		Action: uple	oad (1 File, 6.4 KB)	
Client: 172.16.	.0.2 Archiv	e Name: Rag	gTime 6.6.5.rtf.zip	
Success: Yes				
File Name	(Logfile root-1183646991-3-2 Modified	File Size	Compressed Size	Deflated
wsG8-e.pdf	01 Nov 2019 07:52	2.49 MB	1.7 MB	31.74%
baseG8-e.pdf	12 Oct 2019 11:06	3.06 MB	1.85 MB	39.60%
esG8-e.pdf	13 Oct 2019 12:14	1.42 MB	943.6 KB	35.00%
isG8-e.pdf	30 Sep 2019 17:19	2.26 MB	1.53 MB	32.25%
pdfhG8-e.pdf	12 Oct 2019 10:36	4.26 MB	3.48 MB	18.29%
	00.0 0010 17.00	597.3 KB	376.2 KB	37.01%
ppvG8-e.pdf	30 Sep 2019 17:23	007.0 110		

Fig. 4.9: WebShare "Accounting Details" page

Note:	Downloads from a WebShare sharepoint are always archives. Therefore
	every download action features the (Details) link.

4.7 Branding Editor

WebShare features a so-called "Branding Editor", which allows adjusting the GUI on a per client basis (Fig. 4.10). Clients can thus bring their corporate design into WebShare, which has the following advantages:

- O Easy GUI customizing without programming
- O Use of corporate designs
- O Enhanced customer retention
- O Hosting content for different clients on the same server
- O Icon families of different skin, color, and size included

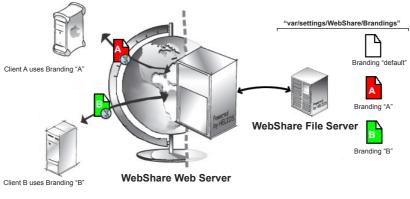


Fig. 4.10: WebShare brandings

4.7.1 Create and configure brandings

All branding components are stored on the WebShare File Server in the "Settings" volume in "WebShare/Brandings/<branding name>". You may copy images to this folder, they will then be available in the Branding Editor pop-up menus.

The WebShare "default" branding can be used as a template for custom brandings:

- ➤ Log on to the WebShare File Server.
- > Click on the Administration button and select the Branding Editor link.
- Note: Whenever the Branding Editor is invoked for the first time after the start of the WebShare Web Server, the brandings are synchronized between the WebShare File Server and the WebShare Web Server. Therefore it can take some seconds until the "Branding Editor" is displayed.
- In the "default" branding line click on the Duplicate link, enter a name for the new branding and click on the Save Branding button.

Note: Use only the characters A-Z, a-z, numbers 0-9, minus ("-"), and underscore ("_") for the branding names.

The duplicated branding (in the example named "HELIOS") is now listed in the "Branding Name" column. See Fig. 4.11.

A	5	Ô	0		
Home	e Hefresh	Administration	Logout		
				Brandir	ng E
в	randing	C	omment		
de	fault	Default	HELIOS WebShare style	e Duplicate	
H	ELIOS	HELIOS	corporate branding	Duplicate	C
		· ·	ebShare File Server.		
De	erauit pre-	-Login Brand (default 🛟 Set Bra	anding	

Fig. 4.11: "Branding Editor" page

Due to the duplication, the new branding initially comes with the same settings and configuration as the "default" branding. The branding can now be customized:

Click on the branding name link (in this case "HELIOS") to open the editor.

Branding

This section (Fig. 4.12) shows the login URL, which includes the branding name and the default for the window title (if this field is left empty, the value "HELIOS WebShare" is assumed). If a window title is specified in the Branding Editor, the Powered by HELIOS WebShare link is not displayed anymore for this branding on the WebShare start page, and when logging off from WebShare, the string "Thank you for using HELIOS WebShare." is replaced with your window title value ("Thank you for using <your_value>"). In addition, this section offers a pop-up menu to choose a login image, a comment field, and a field to enter a name under which the branding appears in the "Bonjour" network environment, e.g. in Apple's Safari browser (see arrow in Fig. 4.13).

> Click View to open a preview of the chosen login image in a new window.

Branding "HEL	IOS"	
Login URL:	http://ankh.helios.de:2009/?brand=HELIOS	
Login Image:	default View	
Comment:	HELIOS corporate branding	
Bonjour Name:	WebShare HELIOS	
Window Title:	My Company	

Fig. 4.12: "Branding" section

COLLECTIONS	Q Search
 History 	Bookmark
🕮 Bookmarks Bar	🚱 About Bonjour
📄 Bookmarks Menu	V i Webpages
Address Book	😵 DT-DIESEL TECHNIC AG
😵 Bonjour	容 Japanese: さむらい
All RSS Feeds	😵 Modern Cow
BOOKMARKS	Y MySpeedyWebShare
Imported Netscape/Mozil	🝄 Volvo Construction Equipment
imported Netscape/Mozi	WebShare HELIOS
	V Printers
	Whp LaserJet 4200 [ECCEA3]

Fig. 4.13: Bonjour listing in Safari

The login URL (Fig. 4.12) can be provided to users who should see and use this branding. Those users must also be assigned this same branding via the "User Administration" page (4.3 "User Administration"). Using the branding login URL ensures that the user is shown the branding login image (Fig. 4.12) and login page corresponding to that branding, even though the user has not yet logged in. Once the user logs in, the branding that has been assigned for that user via the "User Administration" page will be used.

If users navigate to the WebShare server without using their branding login URL, they will see the login image and login page which has been set via the Default pre-Login Branding pop-up menu (Fig. 4.11). If a user was not assigned a branding, once they log in, they will see the default branding defined on the "Server Preferences" page (4.1 "Server Preferences").

Body

Each page in WebShare is generated as an HTML page. This section allows defining colors, background images, font family, sizes, etc. (Fig. 4.14).

ody		
Text Color:	#000000	
Background Color:	#efefef	Body Text Sample
Separation Line Color:	#cdcdcd	Link (Rollover Test)
Background Image:	none	
Background Image Attachment:	scroll 4	
Background Image Repeat:	no-repeat 🛓	
Font Size:	10	pt
Font Family:	sans-serif 🗧 🗧	
Preferred Fonts:	Helvetica, Arial	
Link Color:	#0000b0	
Link Rollover Color:	#b00000	
Head Banner Image:	none	RGB Named colors Color slider X
Head Banner Alignment:	left +	
Foot Banner Image:	none	
Foot Banner Alignment:	left ‡	
Vertical Toolbar Padding:	0	P
mage Preview Background Color:	#f8f8f8	

Fig. 4.14: "Body" section

Next to each color definition field is a preview of the specified color. If you click on this square a color picker opens allowing you to pick a color. The color picker supports three modes (Fig. 4.14):

- O 216 web-safe RGB colors
- O 142 defined named colors
- O RGB color slider

(Click on preview field to apply the selected color)

All color definitions can be entered in the corresponding fields either with their name according to the HTML standard ("red", "black", "green", etc.), in their hexadecimal value (e.g. #000000 for "black") or as RGB values. You may enter "transparent" into a color definition field or leave the field empty, to assign transparency. The following table lists possible color definitions according to the CSS2 specification:

Value	Example	Description
HTML color name	maroon	-
#rrggbb	#CC0066	Hex 6 digits
#rgb	#C06	Hex 3 digits
rgb(rrr, ggg, bbb)	rgb(204, 0, 102)	Decimal RGB
rgb(rrr%, ggg%, bbb%)	rgb(80%, 0%, 40%)	Decimal RGB in percentage notation
Enter "transparent" or leave empty	transparent	Transparency

Note: RGB values, e.g. of corporate spot colors, can be determined by using color meters (e.g. Photoshop Eyedropper tool) and reading out the values from the color picker. These can then be entered in the color value text field, or "reproduced" with the color sliders of the color picker.

The "Vertical Toolbar Padding" setting only addresses Internet Explorer 6 users. It allows specifying the padding between the button strings and the toolbar background. Of course, this setting only applies if the toolbar alignment is set to vertical.

Tables

In this section the background colors for even and odd table rows can be defined (Fig. 4.15). It is advisable to specify background colors that contrast with each other, in order to enhance the readability of rows in larger table listings.

Background Color Even Rows: #e4e4e4	
	able Row
Background Color Odd Rows: #ededed Odd T	ble Row

Fig. 4.15: "Tables" section

Toolbar

This section allows specifying the appearance of the WebShare toolbar (Fig. 4.16). The toolbar can be aligned horizontally or vertically, and a background color and a background image can be assigned to it:

Toolbar Alignment: horizontal	•		
Toolbal Alighment. Inonzontal	·		
Background Color: transparent			
Realizeround Images (1, 11, 1, 1, 1	View	Toolbar Preview	
Background Image: toolbar_backgroun	View		
Background Image Repeat: repeat-xy	•		
Show Disabled Buttons:			

Fig. 4.16: "Toolbar" section

Select from the pop-up menu whether the toolbar background image should be repeated vertically (repeat-y), horizontally (repeat-x) or in both directions (repeat-xy). If no-repeat is selected, the background image is not repeated at all, i.e. it only appears once.

If the show Disabled Buttons checkbox is active disabled buttons and menu items appear grayed-out, else they are hidden.

Toolbar Buttons

This section allows specifying the appearance of the WebShare toolbar buttons (Fig. 4.17):

Toolbar Buttons		
Background Color:	transparent	
Rollover Background Color:	transparent	
Rollover Border Color:	transparent	Caption
Menu Font Size:	8 pt	Capion
Text Color:	#666666	5
Rollover Text Color:	#000000	Caption
Icon Style:	default	-
Icon Size:	32x32	Q
Show Button Icon:		Caption
Show Button Caption:		
Preview Resolutions 1-4:	256 512 768 1024 px	
Gallery Resolutions:	32,64,96,128,256,384 px	
Print Resolutions:	150,240,300,400 dpi	

Fig. 4.17: "Toolbar Buttons" section

Some configurable items in this section were already described above in other sections.

Icon styles and sizes can be selected from the corresponding pop-up menu.

If the show Button Icon checkbox is not active, icons are hidden and only the button caption is visible.

If the show Button Caption checkbox is not active, captions are hidden and only the button is visible.

The values specified in Preview Resolutions 1-4 are used in the 4 zoom buttons (numbered 1-4) for file previews and proofs. Default values are: "256,512,768,1024".

The Gallery Resolutions preference is a comma-separated list of pixel resolutions for the slider control in the gallery view. If only one value is defined the slider control will not be displayed in the gallery view. If the value 0 is defined the gallery view will be disabled for this branding.

This property is limited by the server preference Max. Gallery Resolution (4.1 "Server Preferences") which defines the maximum allowed resolution for gallery previews. Values larger than Max. Gallery Resolution can be defined, but the slider control will only allow resolutions up to the value defined in Max. Gallery Resolution. The initial resolution of the gallery view is the nearest defined value smaller than or equal to 128 pixels or to the value defined in Max. Gallery Resolution if it is less than 128 pixels. Default values are: "32,64,96,128,256,384".

The Print Resolutions preference allows you to specify print resolution values, which are available in the Resolution pop-up menu of the print and proof print settings menu. The first four values specified for this preference appear as Draft, Good, Excellent, and Super Fine. All other values, starting with the fifth specified value, are displayed as Custom 1, Custom 2, etc. (see also 6.4.7 "Preview/proof print settings").

Welcome Message

You may define a welcome message (Fig. 4.18) for the WebShare "Login" page (Fig. 4.19). HTML tags are allowed to format the text.

You may also include an image (in the example below the HELIOS logo) in the login window. See #loginImage in 4.7.8 "Customize brandings via CSS" for details.

 <br< th=""><th>Тад</th><th>Result</th></br<>	Тад	Result
Windows, UNIX, and web clients.	Bold	Bold
	<i>ltalic</i>	Italic
	<u>Underlined</u>	Underlined

Fig. 4.18: "Welcome Message" section

-	Login	
	HELIOS	
HELIOS Software GmbH is a leading develop of cross-platform networking, PDF and image s for Mac, Windows, UNIX, and web clients.		
WebShare File Server:	ankh	
User Name:		
Password:		(Crypted RSA 1024 bit)
	Login	
Forgot Password? Register as a New User.		

Fig. 4.19: "Welcome Message" at login

4.7.2 Import brandings

You may also import WebShare brandings, which have previously been created, e.g. with the Branding Editor on another WebShare server.

➤ Copy the branding to "var/settings/WebShare/Brandings".

- Click on the "Import Brandings from WebShare File Server." link on top of the Branding Editor.
- Note: While importing brandings, the WebShare Web Server synchronizes with the WebShare File Server. Therefore it can take some seconds until the imported branding(s) appear(s) in the list.

All brandings in "var/settings/WebShare/Brandings" will be imported into the Branding Editor and are listed in the "Branding" column (Fig. 4.20; compare with Fig. 4.11).

	Branding Edit
Comment	
Company B Branding	Duplicate Delete
Default HELIOS WebShare style	Duplicate -
HELIOS corporate branding	Duplicate Delete
Brille & Linse - Ihr Optiker in	Duplicate Delete
	Company B Branding Default HELIOS WebShare style HELIOS corporate branding

Fig. 4.20: Imported brandings

4.7.3 Brandings and the "style" file

Each branding folder contains the file "style" which stores all branding settings. However, to back up a branding you should save the whole branding folder.

4.7.4 Add custom file icons

For a description of how to add custom file icons to WebShare see **Custom** icons in 4.9 "HELIOS Icon Collector".

4.7.5 Add custom banner images

WebShare allows having custom head and foot banners per branding (see Fig. 4.14).

- Copy the image that you want to use as banner image into the brandings folder ("WebShare > Brandings > <branding name>").
- On the "Branding Editor" page click the "Import Brandings from WebShare File Server." link.
- In the "Body" section select from the pop-up menu Head Banner Image (or Foot Banner Image) the desired image file and confirm with the save button.

4.7.6 Banner image URL mapping

You may define URL mappings for the head banner image and the foot banner image. The following attributes are allowed with the <area> tag:

```
shape="rect|circle|poly|point"
coords="x1,y1,x2,y2"
href="URL"
alt="Alternative text"*
title="Tooltip text"
target="_blank|_parent|_self|_top"**
```

- * This attribute is compulsory
- ** Only "_blank" makes sense

For further information on URL image mapping see: www.w3.org/TR/html4/struct/objects.html#h-13.6

In the "<branding name>" folder, open "head.map" and "foot.map" respectively and replace the default content with the <area> tag and the desired attributes.

Example:

```
<area
shape="rect"
coords="0,0,68,68"
href="http://www.helios.de/"
alt="HELIOS Homepage"
title="HELIOS Homepage"
target="_blank">
```

- Note: You may define various URL mappings. For this, arrange the <area> tags one after the other.
- On the "Branding Editor" page click the "Import Brandings from WebShare File Server." link to make your changes active.

4.7.7 Add custom banner text

You may also add custom banner text which will be included above the Web-Share file browser view.

Save your custom banner text to a file named ".wsbanner" in the desired directory, and WebShare will add this text to the file browser view.

If the ".wsbanner" file is saved to the root directory of a sharepoint, it will apply to the entire directory tree. Simple HTML tags can be used to format the text.

4.7.8 Customize brandings via CSS

If existing, the file "additional.css" in the branding folder "var/settings/Web-Share/Brandings/
branding name>" will automatically be included in every WebShare server response for the corresponding branding.

As a starting point, you can use the example file "additional_samples.css". By default, it is copied to "var/settings/WebShare/Brandings/default" during the WebShare installation. It lists ID and class names for GUI components, e.g. buttons and tables used in WebShare, and some CSS examples for customizing a branding.

Do the following to customize a branding:

- Copy "additional_samples.css" to the desired branding subfolder and edit it, or create a new UTF-8 encoded text file. In any way, save it as "additional.css".
- ➤ Add custom style definitions to this file.
- On the WebShare "Branding Editor" page click on the "Import Brandings from WebShare File Server." link.

Changes become visible immediately after the import, for all sessions that use the modified branding.

Examples

Use mouse over effect (table row background color) in the file browser:

```
.fbTable tr:hover td {
    background-color: #CDF;
}
```

Hide the border of file items in gallery view and show it on *mouse over*:

```
.fbGalleryView .fileItem {
    border: lpx solid transparent;
}
.fbGalleryView .fileItem:hover {
    border: lpx solid #AAA;
}
```

Align images vertically centered in gallery view:

```
.fbGalleryView .imageCell {
    vertical-align: middle;
    display: table-cell !important;
}
```

Add a black border and a checkerboard background to the image in proof mode (the PNG image must be available in the respective branding folder):

```
#screenProofImage {
    border: lpx solid #000;
    background: url(checkerboard.png) repeat;
}
```

Hide the Administration toolbar button (*Important: This does NOT disable the administration, only the accessibility from the toolbar!*):

```
#tbBAdministration {
    display: none;
}
```

Apply red and bolded text style to the Logout toolbar button caption:

```
#tbBLogout span {
    font-weight: bold;
    color: red;
}
```

Include an image to the login page, as seen in Fig. 4.19:

```
#loginImage {
    background: transparent url(helios.png) no-repeat scroll 50%;
    height: 130px;
    width: 100%;
}
```

For more examples and detailed information about used CSS IDs and class names in WebShare, see the file "additonal_samples.css" in the respective branding folder. For further information about *Cascading Style Sheets* refer to: www.w3.org/Style/CSS/.

4.7.9 Customize brandings via JavaScript

If existing, the file "additional.js" in the branding folder "var/settings/Web-Share/Brandings/<branding name>" will automatically be included in every WebShare server response for the corresponding branding.

As a starting point, you can use the example file "additional_samples.js". By default, it is copied to "var/settings/WebShare/Brandings/default" during the WebShare installation. It contains information and examples about using JavaScript to customize the behavior and adding custom functionalities to a WebShare branding.

Do the following to customize a branding via JavaScript:

- Copy "additional_samples.js" to the desired branding subfolder and edit it, or create a new UTF-8 encoded text file and add custom JavaScript code to this file. In any way, save it as or rename it to "additional.js".
- On the WebShare "Branding Editor" page click on the "Import Brandings from WebShare File Server." link.

The script becomes active immediately after the import, for all sessions that use the modified branding.

4.7.10 Custom toolbar icons

It is possible to replace the toolbar icons that are shipped with WebShare with your custom icons:

Create your custom icon files in one or more of the sizes, specified in the Icon Size pop-up menu in the "Toolbar Buttons" section (compare Fig. 4.17), and save them in PNG, GIF or JPEG format. Make sure that the icon files have the extension .png, .gif, .jpeg or .jpg.

The custom icon files must have the same base name as the icons that you wish to replace, e.g. to replace the toolbar icon "copy.png" your custom icon must be named "copy.png", "copy.gif" or "copy.jpg". Please do not forget to also replace the corresponding rollover icons which always have "_active" appended to their name, e.g. "copy_active.png".

The icons shipped with WebShare are stored in "var/settings/WebShare/ Brandings/default/icons".

Note: Custom icons can be smaller than the original icons. Larger custom icon files will be clipped.

- Copy the icons into the "icons" subfolder of "var/settings/WebShare/Brandings/<branding name>".
- On the WebShare "Branding Editor" page click on the "Import Brandings from WebShare File Server." link.

The custom toolbar icons should now have replaced the corresponding icons that were selected in the "Toolbar Buttons" section.

4.7.11 Custom actions icons

It is also possible to add custom icons to those action scripts that are available in the toolbar Actions > menu (see **Actions >** in 6.3.1 "The WebShare toolbar"). These icons must be of the PNG format:

- Copy the icon into the "actions" subfolder (create if necessary) of "var/ settings/WebShare/Brandings/<branding name>". The custom icon must have the same name as the action script that you wish to assign the icon to, e.g. name the icon "wssendmsg.png" if you want to assign this icon to the script "wssendmsg.pl".
- On the WebShare "Branding Editor" page click on the "Import Brandings from WebShare File Server." link. The action in the Actions > menu should now have an associated icon.

4.8 Java Server Statistics

The "Java Server Statistics" page (Fig. 4.21) is organized in three sections: WebShare Server Information, WebShare Java Information, and WebShare User Statistics.

Vendor: Apple Inc. Java version: 1.6.0=65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB lava memory available: 18 MB (18444744 bytes) Free memory			
Hostname: ankh.helios.de Started at: 12:12:24 on Tue, Jan 27 2020 Europe/Berlin Uptime: 0 days, 1 hours, 9 minutes, 58 seconds Total HTTP transactions: 46 werage HTTP transactions time: 0.629 Total Download: 0 kB Total Download: 0 kB Total Preview: 0 kB WebShare Java Information Vendor: Apple Inc. Java version: 1.60.655 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB lava memory available: 18 MB (18444744 bytes) Free memory WebShare User Statistics Active users: 2 Peak active users: 2		Java Server Statistics	
Started at: 12:12:24 on Tue, Jan 27 2020 Europe/Berlin Uptime: 0 days, 1 hours, 9 minutes, 58 seconds Total HTTP transactions: 46 verage HTTP transactions time: 0.629 Total Download: 0 kB Total Preview: 0 kB VebShare Java Information Vendor: Apple Inc. Java version: 1.6.065 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB ava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	WebShare Server Information		
Uptime: 0 days, 1 hours, 9 minutes, 58 seconds Total HTTP transactions: 46 werage HTTP transactions time: 0.629 Total Upload: 0 kB Total Download: 0 kB Total Preview: 0 kB WebShare Java Information Vendor: Apple Inc. Java version: 1.6.0_65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB lava memory available: 18 MB (18444744 bytes) Free memory WebShare User Statistics Active users: 2 Peak active users: 2	Hostnam	e: ankh.helios.de	
Total HTTP transactions: 46 iverage HTTP transactions time: 0.629 Total Download: 0 kB Total Download: 0 kB Total Preview: 0 kB VebShare Java Information Vendor: Apple Inc. Java version: 1.60.65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB lava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Started a	at: 12:12:24 on Tue, Jan 27 2020 Europe/Berlin	
Verage HTTP transactions time: 0.629 Total Upload: 0 kB Total Download: 0 kB Total Preview: 0 kB VebShare Java Information Vendor: Apple Inc. Java version: 1.6.0_65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB Iava a memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Uptim	e: 0 days, 1 hours, 9 minutes, 58 seconds	
Total Upload: 0 kB Total Download: 0 kB Total Preview: 0 kB VebShare Java Information Vendor: Apple Inc. Java versior: 1.6.0_65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB Iava a memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Total HTTP transaction	s: 46	
Total Download: 0 kB Total Preview: 0 kB VebShare Java Information Vendor: Apple Inc. Java version: 1.6.0_65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB ava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	verage HTTP transactions tim	e: 0.629	
Total Preview: 0 kB VebShare Java Information Vendor: Apple Inc. Java version: 1.6.0_65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB ava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Total Uploa	d: 0 kB	
WebShare Java Information Vendor: Apple Inc. Java version: 1.6.0_65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB Iava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Total Downloa	d: 0 kB	
Vendor: Apple Inc. Java version: 1.6.0=65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB ava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Total Previe	w: 0 kB	
Java version: 1.6.0_65 Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB lava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	WebShare Java Information		
Operating system: Mac OS X 10.9.5 x86_64 Java Threads running: 37 ava memory assigned: 33 MB ava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Vendor: Apple	Inc.	
Java Threads running: 37 ava memory assigned: 33 MB ava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Java version: 1.6.0_	65	
ava memory assigned: 33 MB lava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Operating system: Mac O	S X 10.9.5 x86_64	
ava memory available: 18 MB (18444744 bytes) Free memory VebShare User Statistics Active users: 2 Peak active users: 2	Java Threads running: 37		
VebShare User Statistics Active users: 2 Peak active users: 2	lava memory assigned: 33 MB		
Active users: 2 Peak active users: 2	Java memory available: 18 MB	(18444744 bytes) Free memory	
Peak active users: 2	WebShare User Statistics		
	Active users: 2		
eak active users at: 12:21:51 on Tue, Jan 27 2020 Europe/Berlin	Peak active users: 2		
	Peak active users at: 12:21:51	on Tue, Jan 27 2020 Europe/Berlin	

Fig. 4.21: WebShare "Java Server Statistics" page

4.8.1 WebShare Server Information

This section contains general information about the WebShare Web Server, such as the host name, the server start time, the uptime, the number of HTTP transactions and the average time per HTTP transaction, i.e. the elapsed time between HTTP request and response. In addition, the total amounts of uploaded, downloaded and previewed data are displayed.

4.8.2 WebShare Java Information

Provides information on the hardware vendor, the OS, the Java version, the number of active Java threads, and the assigned and available memory. Clicking on the Free memory link frees allocated memory that is currently unused.

4.8.3 WebShare User Statistics

Provides information about currently active and peak active users. You can view session details by clicking on the Session details: Show link. In addition, all sessions, except for the user's own session, can be terminated by clicking on the Terminate link (Fig. 4.22). A click on the Session details: Hide link closes the session details view.

WebShare Us	er Statistics					
Active	users: 2					
Peak active	users: 3					
Peak active us	sers at: 08:33:26 Mo	Jan 27 2020	Europe/Be	erlin		
Session	details: Hide					
WebShare Se	ssion Details					
User Name ▲	Remote Address	Requests	Login	Last Request		
hendrik	/172.16.0.2	6	Fri 12:00	Fri 12:01	Terminate	
root	/172.16.0.2	23	Fri 10:50	Fri 11:59		

Fig. 4.22: WebShare session details

4.9 HELIOS Icon Collector

HELIOS Icon Collector collects all file icons from a Windows or Mac client, to make them available to the WebShare File Server for use in the file browser.

4.9.1 Icon Collector (Windows)

On Windows, document types and programs are detected by the Registry.

The HELIOS Icon Collector is available on the "HELIOS Applications" volume:

Mount the "HELIOS Applications" volume and open the "Windows > WebShare Tools" folder. Double-click the "HELIOS Icon Collector.exe" program icon.

4.9.2 Icon Collector (OS X)

On Mac, file and program icons are usually located in an Application bundle in the "Applications" folder.

The HELIOS Icon Collector is available in the "HELIOS Applications" volume:

- Mount the "HELIOS Applications" volume and open the "MacOS > Web-Share Tools" folder. Double-click the "HELIOS Icon Collector" program icon.
- > If desired, change the icon search path using the Search icons in: field.

4.9.3 Usage

In the save Icons in: field specify the path to the destination folder, where the icons are stored in the HELIOS native ".wsr" format or select it using the Browse button (Fig. 4.23). Important: The destination folder must already exist!

🎁 HELIOS Icon	Collector	
Please select a c	lestination folder to save the icons. Then press the start button.	
Save icons in:	C:\Documents and Settings\Administrator\Desktop\ICON5	Browse
Status:		
	Cancel	Start

Fig. 4.23: HELIOS Icon Collector - select destination folder

> Click the start button.

The progress is shown in the window (Fig. 4.24).

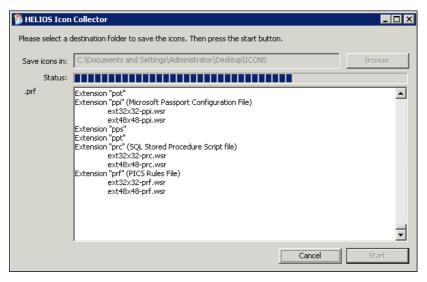


Fig. 4.24: HELIOS Icon Collector - viewing process status

The process is complete when the progress bar has reached the end. Now all available file icons are stored in the ".wsr" format in the destination folder (Fig. 4.25).

js∖Adn	ninistrator\Desktop\ICONS			_ 🗆 ×
<u>T</u> ools	Help			
earch	🏷 Folders 🛛 🔝 🗸			
Setting	s\Administrator\Desktop\ICONS			💌 🔁 Go
	Name 🔺	Size	Туре	Date Mor
*	ext32x32-aca.wsr	2 KB	WSR File	2/9/2020
	🖻 ext32x32-acf.wsr	2 KB	WSR File	2/9/2020
	📾 ext32x32-acl.wsr	3 KB	WSR File	2/9/2020
	🖬 ext32x32-acs.wsr	2 KB	WSR File	2/9/2020
	dext32x32-act.wsr	3 KB	WSR File	2/9/2020
	📼 ext32x32-actproj.wsr	3 KB	WSR File	2/9/2020
	dext32x32-aif.wsr	4 KB	WSR File	2/9/2020
\$	dext32x32-aifc.wsr	4 KB	WSR File	2/9/2020
	ext32x32-aiff.wsr	4 KB	WSR File	2/9/2020
	dext32x32-apf.wsr	3 KB	WSR File	2/9/2020
	dext32x32-api.wsr	3 KB	WSR File	2/9/2020
	dext32x32-apln.wsr	4 KB	WSR File	2/9/2020
	dext32x32-asa.wsr	3 KB	WSR File	2/9/2020
	dext32x32-asax.wsr	3 KB	WSR File	2/9/2020
	dext32x32-ascx.wsr	3 KB	WSR File	2/9/2020
\$	ext32x32-asf.wsr	4 KB	WSR File	2/9/2020
	ext32x32-asm.wsr	2 KB	WSR File	2/9/2020
	ext32x32-asmx.wsr	3 KB	WSR File	2/9/2020
	ext32x32-asp.wsr	3 KB	WSR File	2/9/2020
ary	ext32x32-aspx.wsr	3 KB	WSR File	2/9/2020
	ext32x32-asx.wsr	4 KB	WSR File	2/9/2020
	ext32x32-au.wsr	4 KB	WSR File	2/9/2020
	ext32x32-avi.wsr	4 KB	WSR File	2/9/2020
	ext32x32-bat.wsr	2 KB	WSR File	2/9/2020
	ext32x32-bfc.wsr	3 KB	WSR File	2/9/2020
				2/9/2020
				2/9/2020
		3 10		21 572020
	<u>T</u> ools earch Settings	Folders :::- Settings\Administrator\Desktop\ICONS Settings\Administrator\Desktop\ICONS Name Rext32x32-aci.wsr	Iools Help serch > Folders	Iools telp Settings\Administrator\Desktop\ICONS Settings\Administrator\Desktop\ICONS Image Size Type Image Image Size Type Image Size Type Image Size Size WSR File Image ext32x32-afr.wsr 4 KB WSR File Image ext32x32-asr.wsr 3 KB <th< td=""></th<>

Fig. 4.25: HELIOS Icon Collector - destination folder content

The collecting of file icons can be repeated whenever new icons are added to the source workstation.

To display a ".wsr" file you can drag it in the HELIOS Icon Collector program window.

Now copy all files to "WebShare/Icons" in the "Settings" volume on the WebShare File Server.

Custom icons

Custom icons can also be copied to the destination folder. They must have the size 32x32, 48x48 or 64x64 and be in the PNG format.

Icon names must follow a certain syntax:

O Icon by file extension

ext<size>-<extension>

O Icon by file type & creator

type&creator<size>-<type(hex)>-<creator(hex)>

O Icon by type

type<size>-<type(hex)>

Examples:

Sound file icon of the size 64x64 with extension ".wav":

ext64x64-wav.png

Flash Player icon of the size 32x32 with type "APPL" and extension "SWF2":

type&creator32x32-4150504c-53574632.png

JPEG file icon of the size 48x48 with type "JPEG":

type48x48-4a504547.png

4.10 WebShare URL Share Access

WebShare URL Share Access can be used for customer convenience, to offer direct access to relevant content. Or, it can be used as part of a variable data or personalized URL system. WebShare URL Share Access offers a very powerful technology to integrate WebShare features or content into third-party or custom applications.

It allows sharing document previews or directory listings from within any text document, e-mail or web application. Single images can be referenced from HTML in the src attribute of an tag or the data attribute of an <object> tag.

The URL Share Access feature also allows sharing documents without permitting the user to navigate out of the document preview. If the URL Document Preview only checkbox is activated in the user configuration, the user can only access WebShare by a URL Share Access link that points to a particular document. This allows presenting PDFs and images quickly and easily without any session setup. Further customization can be done by use of additional banners. A much simpler toolbar menu will be presented in this view. Whenever possible, a close button is additionally displayed (see Fig. 4.26 below).

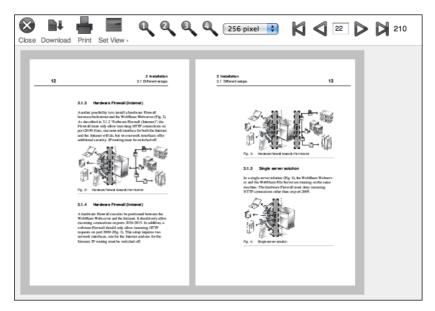


Fig. 4.26: Document opened via URL Share Access link - document preview only

4.10.1 Required parameter

server

The file server you wish to connect to, e.g.: server=localhost

4.10.2 Login parameters

user

The user name you wish to log in with, e.g.:

user=webshareuser

password

The password for the user to log in with. If the password is omitted the user will be prompted to enter the password.

password=websharepassword

Note: To specify the password parameter, the user parameter must also be specified.

The po (preview only for URL Share Access) flag can be specified in the user configuration file (see 8.1 "User configuration file") to limit a user to URL access only. This avoids that this particular user can be abused for interactive logins.

4.10.3 Path parameters

share

The sharepoint name, e.g.: share=SampleImages

path

The path to a file or folder, e.g.: path=template-images%25%30/TIFF

4.10.4 Image parameters

If the path parameter is set and points to an image file, the following parameters can be appended:

flip

Specify h or horizontal for flipping the image horizontally, v or vertical for flipping the image vertically. hv or vh or both flips the image horizontally and vertically. Omit this parameter or specify none for not flipping the image at all.

rotate

Specify 90, 180 or 270 to rotate the image by the specified degrees. Omit this parameter or specify none or 0 for not rotating the image.

zoom

Specify any dpi or pixel value, e.g.: zoom=512pixel or zoom=72dpi

You may also specify comma-separated values, which are taken as x/y pixels, e.g: zoom=512, 512

If the path parameter is set and points to a multiple-page document the following parameters can additionally be specified:

page

Specify the desired page number of the document, e.g.: page=3

4.10.5 Response parameter

If the path parameter is set and points to an image file, you may want to fetch the image only. The following parameter can be used to embed images in an HTML page, e.g.: "/>

Image-only

Specify true or 1 to generate a response that does just contain the requested image. Omit this parameter to get a complete WebShare session.

Important: If the image-only option is used PrintPreview needs to be installed on the host. Otherwise an error message is issued ("501 – Not implemented")!

4.10.6 Image only parameters

Optional parameters if image-only is set to true or 1:

Image-type

Specify either jpg or png or tiff or pdf or jp2 to convert the requested image to an other file type, e.g.: image-type=pdf

profile

Specify the name of the ICC profile that should be applied to the image. Omit this parameter to receive the original image or specify the string none to have the sRGB profile applied, e.g.: profile=MatchPrints%201.0%20UCR-370

Any profile listed in the Default Simulation Profile pop-up menu (see Fig. 6.26), or available in the HELIOS "ICC-Profiles" volume can be used as a profile name.

monitor-profile

Specify the name of a monitor profile that should be applied to the image. As a profile name any profile listed in the Default Monitor Profile pop-up (see Fig. 6.26) can be used, e.g.: monitor-profile=iMac%20Calibrated.icc

If the profile parameter is set to a valid ICC profile name, you may define proof color options:

filter-inks

Specify a comma-separated list of indices of each ink color that should be visible. For details refer to FilterInks option of the "layout" command (see HELIOS ImageServer manual), e.g.: filter-inks=2,3,4

4.10.7 Preview page parameters

Optional parameters if *image-only* is set to *false* or 0 and the path parameter points to a multiple-page document:

cols

Specify the number of columns that should be used for the document preview, e.g.: cols=2

rows

Specify the number of rows that should be used for the document preview, e.g.: ${\tt rows=4}$

facing-pages

Specify true or 1 to enable facing pages mode. Omit this parameter or set it to false if you do not wish facing pages.

no-page-breaks

Specify true, if page breaks should be hidden. Omit this parameter or set it to false if page breaks should be displayed.

4.10.8 Examples

All parameters must be properly escaped (e.g. "%20" for escaping the space character).

Example 1:

Logged in as user "heliosuser" (password: "demo") and previewing page 3 of the file "Layout.xpv" in the subdirectory "xpv_images" of the sharepoint "Sample Images". The size is 256 pixel, rotated 90° clockwise and arranged in 2 rows and 2 columns while the pages are facing, with page breaks hidden:

```
http://ankh.helios.de:2009/app/webshare.woa/wa/linkShare?
server=localhost
&user=heliosuser
&password=demo
&share=Sample%20Images
&path=xpv_images/Layout.xpv
&rotate=90
&cols=2
&facing-pages=true
&zoom=256pixel
&page=3
&no-page-breaks=true
```

Example 2:

Logged in as user "heliosuser" (password: "demo") and accessing the "default" directory in the sharepoint "Brandings":

```
http://ankh.helios.de:2009/app/webshare.woa/wa/linkShare?
server=localhost
&user=heliosuser
&password=demo
&share=Brandings
&path=default
```

Example 3:

Logged in as user "heliosuser" (password: "demo") the response to the request will only be the image "Cafeteria-RGB.tif". This allows embedding an image in a web page:

```
http://ankh.helios.de:2009/app/webshare.woa/wa/linkShare?
server=localhost
&user=heliosuser
&password=demo
&share=Demo
&path=SampleImages/TIFF/Cafeteria-RGB.tif
&image-only=1
```

In addition, an ICC profile may be applied to the image, and the image format can be converted to PDF:

```
http://ankh.helios.de:2009/app/webshare.woa/wa/linkShare?
server=localhost
&user=heliosuser
&password=demo
&share=Demo
&path=SampleImages/TIFF/Cafeteria-RGB.tif
&image-only=1
&profile=MatchPrintS%201.0%20UCR-370
&image-type=pdf
```

4.10.9 URL Share Access Helper

"URL Share Access Helper" is a convenient tool to generate URL Share Access links without the need to specify each desired parameter in the web browser's URL address bar.

- Mount the "HELIOS Applications" volume and open the HTML file "UrlShareAccessHelper.html" from the "Documentation" folder in a web browser.
- Fill in the form fields according to your needs and finally click on Generate Link.

The generated link can be clicked in order to log in to WebShare with the specified parameters.

4.10.10 Security considerations

You should give some thoughts about the security when using WebShare URL Share Access:

- O Access data (user name and password) are stated in cleartext in the browser address bar
- O The option image-only=1 can be deleted from the browser address bar in order to receive a complete session

You can do the following to reduce the security risk:

- O Establish a special user who is used for URL Share Access only
- O Use a user who has document preview-only access (URL Document Preview only option)
- O Only allow that user to access specific sharepoints. Set all other sharepoints to deny that user access (Allowed Users, Allowed Groups in the "Sharepoint Administration" dialog).
- O Establish read-only permissions for the sharepoint

4.11 WebShare catalog presentation

The WebShare catalog presentation allows presenting a multiple-page PDF document, to be displayed in a web browser with a simplified user interface. WebShare options such as Login, Sharepoints, Administration are invisible and therefore unavailable for the user. Depending on the permissions, the user can view a PDF document in multiple zooming steps, switch between pages, print the current document view, and download the document. This makes it very easy to provide versions of a PDF catalog. Remote users simply click on a given URL, which then opens the catalog presentation.

The WebShare catalog presentation uses the *URL Share Access* feature (see 4.10 "WebShare URL Share Access"). "UrlShareAccessHelper.html", an HTML page, which is available in the "HELIOS Applications" volume, helps generate a static URL that can be used for remote users to access the catalog presentation. The remote user is in a kind of sandbox and does not see other WebShare options, only the PDF file will be presented.



Fig. 4.27: WebShare catalog presentation sample

The catalog presentation interface can also be customized by using a custom branding. Additional HTML banner and trailer files allow placing some

additional text information on the top and bottom of the PDF document, e.g. advertisements and other important information.

Steps to set up the WebShare catalog presentation:

Step 1 – WebShare User Administration

Create a new user or use an existing one that should be the user which runs for all catalog clients. Check the URL Document Preview only option for this user. This means that the user cannot login interactively, this user is forced to run the simplified presentation mode only.

Step 2 - Create the URL for the catalog presentation

Open the "UrlShareAccessHelper.html" file in a browser. Specify the server, username, file path, etc. settings (check 4.10 "WebShare URL Share Access" for details).

Optional steps

- Customize a branding and assign this branding to the user you created in "Step1" (see 4.3 "User Administration").
- Add an HTML banner and trailer file. These HTML files must be in the same directory where the PDF file is stored. The HTML banner uses the document name with the suffix ".banner", e.g. "Document1.pdf.banner", the trailer HTML uses the suffix ".trailer", e.g. "Document1.pdf.trailer".

Distribute the generated URL to remote users who should be allowed access to this document. Depending on the access rights, they may also download the document. It is very easy for remote catalog users because they do not need any user credentials, nor do they see any other WebShare data.

This feature allows making this print catalog quickly available to remote users, reducing printing and making intermediate versions available via WebShare catalog presentations only.

4.12 Troubleshooting

Wrong Java version on WebShare Web Server

The WebShare Web Server needs Java 6 or newer (64-bit). Older versions produce some "Class not found" errors, which do not identify the problem.

Solution:

Install a newer Java version for your WebShare Web Server.

Please make sure that Java is found when "start-helios" is issued. A symbolic link from your Java runtime to "/usr/bin/java" could be a solution. The Java version can be verified with the command:

```
# java -version
java version "1.6.0_38"
Java(TM) SE Runtime Environment (build 1.6.0_38-b05)
Java HotSpot(TM) Client VM (build 20.13-b02, mixed mode, sharing)
```

Custom file icons do not appear after an upload

Many browsers only support the data fork for the upload. This means that additional information like a custom icon, the correct Type & Creator, etc. gets lost during the upload.

Solution:

Create a Zip archive using the OS X Finder Zip utilities, which will include all metadata and WebShare will correctly unpack it on the server. A second benefit is that Zip archives are smaller.

Note: Custom icon support requires EtherShare or PCShare.

Uploading file names with special characters contain wrong file names after the upload

All major browsers support UTF-8 web pages, unfortunately some fail to accept/preserve file names in upload forms with umlauts, etc.

Solution:

Create a Zip archive and upload the archive. OS X Finder Zip and Windows Zip include correct file names which will be unpacked correctly on the server by WebShare.

No icons after file upload in WebShare sharepoint window

Files are displayed with a generic icon instead of the application or document icon in the sharepoint window.

Solution:

First, verify that the sharepoint corresponds to or is contained within a HELIOS volume. See 4.5 "Sharepoint Administration".

Then use the HELIOS Icon Collector (4.9 "HELIOS Icon Collector") to collect the icons on a client and copy them to the WebShare server.

Missing response for long directory listings

If a long directory listing is requested (e.g. more than 4000 files) and no response is received by the client this can be caused by a memory bottleneck. Check the "websharewoa.log" file in "HELIOSDIR/var/adm" for a message like the following WebObjects error message:

[2007-11-07 09:00:14 CET] <WorkerThread3> <WOWorkerThread id=3 socket=null> Throwable occurred: java.lang.OutOfMemoryError

Solution:

Allocate more memory to the "websharewoa" process by using the preference:

```
# prefvalue -k Programs/websharewoa/JavaOptions -t strlist
    -- "-Xms[MIN_SIZE_IN_MB]m,-Xmx[MAX_SIZE_IN_MB]m"
```

MIN_SIZE_IN_MB specifies the initial size of the Java memory allocation pool, while MAX_SIZE_IN_MB specifies the maximum size of the Java memory allocation pool.

MIN_SIZE_IN_MB must be greater than 1 MB, MAX_SIZE_IN_MB must be greater than 2 MB, e.g.:

```
# prefvalue -k Programs/websharewoa/JavaOptions -t strlist
    -- "-Xms32m,-Xmx512m"
```

Default for min_size_in_mB: "32m"; for max_size_in_mB: "128m".

WebShare login with "WebShare File Server" set to "localhost" can fail

If an error message like: Cannot connect to server: java.io.IOException: Socket connect to localhost failed, error: Connection refused is returned, the server is set up to use IPv6.

Solution:

Instead of using "localhost" you can use either the IPv4 number of "localhost" (127.0.0.1), the real host name of the server (e.g. "mywebshareserver") or with its DNS name (e.g. "mywebshareserver.mycompany.com").

Another option would be to specify "WSHostName" for the WebShareWOA server, so that the "WebShare File Server" field contains that name by default, instead of "localhost".

You can set this preference by means of the "prefvalue" command:

```
# cd /usr/local/helios
# bin/prefvalue -k 'Programs/websharewoa/WSHostName' -t str
    "mywebshareserver"
```

Thereafter, a stop/start of "websharewoa" is required to activate that change:

```
# bin/srvutil stop websharewoa
# bin/srvutil start websharewoa
```

Another option could be to specify a Java preference so that the Java engine does prefer the IPv4 stack:

```
# bin/prefvalue -k
    'Programs/websharewoa/java.net.preferIPv4Stack' -t bool TRUE
```

Again, a stop/start of "websharewoa" is required to activate that change.

4.12.1 Limitations

Due to internal limits, WebShare cannot select more than 4096 items, for deleting, downloading, etc.

Solution A:

Select a parent folder.

Solution B:

Select smaller chunks.

5 HELIOS Admin

In addition to the web-based administration (see previous chapter 4 "Administration"), WebShare users and sharepoints can be configured and administered from within HELIOS Admin. This administration service is comprised of two components, the HELIOS Admin server and the HELIOS Admin client.

The HELIOS Admin client is a convenient tool that allows configuring users, groups, volumes and sharepoints, printer queues, etc., and which is supported for various client platforms, due to its Java heritage. For details see the chapter "HELIOS Admin" in the HELIOS Base manual.

In this manual we focus on the WebShare related usage of HELIOS Admin, such as configuring WebShare users and sharepoints.

5.1 General remarks

This chapter describes the use of the application HELIOS Admin to perform WebShare related configuration from any workstation in a convenient and secure way.

In order to use HELIOS Admin, the HELIOS Admin server must already be running on the host you want to configure. The HELIOS Service Controller is configured to start this service automatically when the system is booted.

Other chapters in this manual describe how administrative work, which is required to configure and maintain the WebShare system, can be done directly on the host, e.g. by using "prefvalue" (see "HELIOS utility programs" in the HELIOS Base manual). However, most of these tasks can be carried out much easier using HELIOS Admin from one of the workstations.

HELIOS Admin offers a high degree of convenience to the system administrator. The application allows the host configuration to be represented graphically with lists and windows.

HELIOS Admin accesses and modifies the "Preferences" configuration file. HELIOS Admin and the HELIOS Admin server have built-in safety checks to avoid conflicting or invalid configuration settings.

HELIOS Admin has the additional advantage that almost all changes are immediately effective, without having to restart the affected service.

5.2 WebShare Server Settings

General

The General tab (Fig. 5.1) provides the same general options and preferences that are available in the web-based administration (Fig. 4.3 in 4.1 "Server Preferences"), where they are described.

ankh:WebShare Server Settings
File Edit Settings Lists Windows Help
General Preview Quickshares
Cache Directory: var/tmp/wscache Browse
Cache Size: 300 MB Clear Cache
(A minimum of 300 MB is recommended)
E-Mail Notification on Admin Login:
E-Mail Notification on User Login: webshareuser@helios.de
☑ Enable E-Mail Message for Users
Directory Listing Date Format: dd MMM yyyy HH:mm 25 Aug 2016 15:28
Default Windows Encoding: PC850
Default Mac OS Encoding: MacRoman 🗸
Enable WebShare for Host Users reduced security:
Tenable WebShare for Virtual Users Allow URL Share Access
Enable Register User Option In Allow Quickshares
Enable Forgot Password Option Quickshare Users are Global
Enforce RSA Crypted Passwords
Default Branding:
OK Apply Revert Cancel

Fig. 5.1: WebShare Server Settings - General tab

Preview

Likewise, preview-related options and preferences in the Preview tab (Fig. 5.2) are also available in the web-based administration (Fig. 4.3). See 4.1 "Server Preferences" for a description.

ankh:WebShare Serve	r Settings	
File Edit Settings Lists	Windows Help	
General Preview Quicks	hares	
Max. Gallery Resolution:	384	pixel
Preview Resolutions:	256, 512, 768, 1024	pixel
	36, 72, 96, 576	dpi
Proof Simulation Profiles:	CromalinEuro 1.0 UCR370,MatchPrintS 1.0 UCR-370,!	Browse
Custom Preview Types:	doc,ppt,xls	
	Allow ICC Profiles per User	
	OK Apply Revert	Cancel

Fig. 5.2: WebShare Server Settings - Preview tab

Quickshares

The Quickshares tab (Fig. 5.3) lists all Quickshares that are defined on this server. This information is the same that is available in the lower part of the web-based administration window (Fig. 4.4).

	:WebShare Serv it Settings List	-	Help		- • •
General	Preview Quid	shares			
ID 🛦	Expires	User Name	Sharepoint	Path	Files
2 1	6/15/19 4:16 PM	1 Bart	Sample Images	template-images%0	[Cafeteria.tif] 🔺
2	8/18/18 1:35 PM	1 heinz	Sample Images	template-images%0	[IL14_0056.p
•					

Fig. 5.3: WebShare Server Settings - Quickshares tab

A double-click on an entry opens the "Quickshare:<#>" window (Fig. 5.4). In this window, certain Quickshare information can be modified:

- The checkboxes Active, Preview, Download, Upload, E-mail on access
- The selection Web Server
- The entry fields Expires, Comment

All other fields cannot be changed but their content can be selected and copied to paste into another application, e.g. to send the URL to the e-mail address of the Quickshare user. The options are described in 4.2 "Quickshare Administration".

ankh:Quicksha		- • •
File Edit Setting	s Lists Windows Help	
Active		
Quickshare ID:	1	
Web Server:	ankh.dyn.helios.de 👻	
URL:	https://ankh.dyn.helios.de:443/qs/local	Open
Quickshare User:	Bart	Send E-Mail
Creator:	root	
Sharepoint:	Sample Images	
Path:	template-images%0	
Files:	Cafeteria.tif	*
		-
Allow:	Preview Download Dupload	1
Expires:	6/15/	19 4: 16 PM 🚔 💌
Comment:		•
		-
E-Mail on Access:	System Administrator <root></root>	
	OK Apply Revert	Cancel

Fig. 5.4: Quickshare administration

5.3 Sharepoints

The sharepoints tab shows all HELIOS WebShare sharepoints on the host (Fig. 5.5). The HELIOS Admin server automatically creates this list by inspecting sharepoint-related entries in the "Preferences" file (see 8.5.2 "Sharepoint preference keys").

Choose the sharepoints tab. If it is not available, activate it in the Lists menu.

nkh 🔜										x
File Edit Settings	Lists Windows H	Help								
+ 🍳 🔴		0						\times		
Users Groups Volu	mes Sharepoints	WebShi	are Users	Printers	Scripts	Syncs	Online			
Sharepoint 🔺	Path		Comment			Users		Groups	Sync List	
🕸 Demo	/Volumes/Data/der	movol								-
HELIOS Applic	public/					[root]				
Sample Images	/Volumes/Data/sar	nple-i								
WebShare Public	public/WebShare/								[public/WebShare]	1_
										E

Fig. 5.5: HELIOS Admin - Sharepoints tab

To open an entry, highlight a sharepoint name in the list and go to File > Open, or just double-click on the entry or press the RETURN key.

Note: For space reasons, the "Sync List" column is only displayed if at least one sync list is specified.

General

The WebShare sharepoint administration window (Fig. 5.6) in HELIOS Admin provides the same features and options that are already known from the webbased administration described in 4.5 "Sharepoint Administration" (compare Fig. 4.6).

ankh:Sharepoi	nt:Demo			(- • •
File Edit Setting	s Lists Windo	ws Help			
General Sync List	Quickshares				
Publish					
Sharepoint Name:	Demo]
Sharepoint Path:	/Volumes/Dater	/demovol			Browse
E-Mail on Access:					
Comment:	Demo-Dateien				
Allow Preview		Allow Co	ру	🔲 Always A	llow Reading
Allow Downloa	ad	Allow De	elete	Always A	llow Read/Write
Allow Upload		Allow Re	ename		
Download Lay	outs Only	Allow A	notations		
Allow Quicksh	ares				
User			Group		
		•			^ +
			L		
		ОК	Apply	Revert	Cancel

Fig. 5.6: WebShare sharepoint General tab

Sync List

Switching to the sync List tab (Fig. 5.7), you may define files or folders in the present sharepoint that should be synchronized with a mobile device via the HELIOS Document Hub solution. See a description of the sync list feature in **Sync list** (compare Fig. 4.7).

ankh:Sharepoint	:Demo				×
File Edit Settings	Lists Windows	Help			
General Sync List	Quickshares				
Path	Direc	tories	Files	Size	
VIDEO		1	1	5.88 MB	
catalogo_caberg_201	11.pdf	0	1	6.97 MB	
	-				
		1	2	12,85 MB	
					_
Ad	id	Delete		📝 Show Disk Usage	•
		OK	Apply	Revert Cancel	
					_

Fig. 5.7: WebShare sharepoint Sync List tab

By default, the show Disk Usage checkbox is not activated. If checked, three additional columns become available: "Directories", "Files", and "Size" of the synchronized files.

Note: Activating the show Disk Usage checkbox may slow down server performance due to the enumeration of directory trees.

Quickshares

The Quickshares tab Fig. 5.8 lists all Quickshares within the selected sharepoint. It contains important parts of the information that is also available in the WebShare "Quickshare Administration" window (compare Fig. 4.4 in 4.2 "Quickshare Administration").

		ch:Sharepoint:		euro I I ele				x
	Genera	dit Settings al SyncList	Duickshares	ows Heip				_
ľ	_	Expires	User Name	Path	Files	Comment	Creator	
	-	6/15/19 4:1	Bart	template-imag	[Cafeteria.tif]		root	
	2	8/18/18 1:3	heinz	template-imag	[IL14_0056	Check color pr	root	
								-
				OK	Apply	Revert	Cancel	
Γ								

Fig. 5.8: WebShare sharepoint Quickshares tab

To open an entry, highlight a Quickshare in the list and go to File > Open, or just double-click on the entry or press RETURN.

5.4 WebShare Users

The WebShare Users tab shows all HELIOS WebShare users on the host (Fig. 5.9). The HELIOS Admin server automatically creates this list by inspecting the "webshare.passwd" file (see 8.1 "User configuration file").

ankh										×
File Edit Settings I	Lists Windows	Help								
+ • •		()					×		Ŀ	
Users Groups Volur	mes Sharepoints	WebS	hare Users	Printers	s Scripts	Syncs	Active Users			
User Name 🔺	Run as Host User		Virtual User		QS User		Branding	Expires	Comment	
Bart	demouser		V		V		default	6/15/19 4:16 PM		-
Bender	root		V				Futurama			
demouser							default			
hendrik							default			
root							Screenshot			

Fig. 5.9: HELIOS Admin - WebShare Users tab

- Choose the WebShare Users tab. If it is not available, activate it in the Lists menu.
- To open an entry, highlight a user name in the list and go to File > Open, or just double-click on the entry or press RETURN.

General

The WebShare user administration window (Fig. 5.10) in HELIOS Admin provides the same features and options that are already known from the web-based administration described in 4.3 "User Administration" (compare Fig. 4.5).

ankh:WebShare	User:Bart
File Edit Settings	Lists Windows Help
General Quickshares	s
User Name:	Bart
Password:	•••••
	Cannot change Password
Run as Host User:	demouser
E-Mail Address:	bart@helios.de
Comment:	
Expires:	7/29/16 4:16 PM
Download Encoding:	OS Default
	☑ Zip Streaming Format
	Privileged Transfer
	URL Document Preview only
	☑ Quickshare User
Branding:	[default 🔹
	OK Apply Revert Cancel

Fig. 5.10: WebShare user General tab

Quickshares

If one or more Quickshares have been assigned to a WebShare user, the additional Quickshares tab becomes available (Fig. 5.11). See a description of the Quickshares feature in 4.2 "Quickshare Administration" (compare Fig. 4.4).

	dit Settings L		Help			
Sener	al Quickshares					
D	Expires	Sharepoint	Path	Files	Comment	
9 2	1 6/15/19 4:16 Pi	M Sample Images	template-images	[Cafeteria.tif]		root 🔺
						-
			OK Ap	ply Re	vert	Cancel
						Carreer
_						

Fig. 5.11: WebShare user Quickshares tab

5.5 WebShare log file

The WebShare log file contains all details for several WebShare actions, such as login, preview, add files, delete files, etc.

The exact WebShare status codes are detailed in C "Technical notes".

Select WebShare Log Files from the Lists menu and specify the desired day.

ile Edit Settings	Lists (Options Wir	idows Help							
Date/Time	User	IP	Action	Sharepoint	Path	Entry	Target	Platform	Result	Details
/23/19 9:47:30 AM	root(2)	172.16.2.78	login					Mac Intel	0	
/23/19 9:48:24 AM	root(2)	172.16.2.78	preview	DEMO	/sample-images/PNG/	Cafeteria-RGB.png	-oxpix=256 -oOutputProfile= (232.66 KB)		0	
			addQuickshare(101-blade_qs2)	DEMO	sample-images/PNG	Cafeteria-RGB.png			0	
/23/19 9:51:00 AM	root(2)	172.16.2.78	logout						0	

Fig. 5.12: Example of a WebShare log file

- Choose save as... from the File menu to save the WebShare log file as a text file.
- Note: If the filter option is active (see "Filtering log entries" in the HELIOS Base manual section below), only the filtered part of the WebShare log file is saved.

You can then read this information into a word processor for further use. HELIOS Admin gets its information from the files "HELIOSDIR/var/adm/ webshare.acct" (data of "Today") to "HELIOSDIR/var/adm/webshare.acct.6" ("7 Days Ago"). See C "Technical notes" for more information.

6 Using WebShare

This chapter explains step by step how to log on to the WebShare File Server, how to select a sharepoint and how to use the buttons in the sharepoint toolbar.

6.1 WebShare File Server login

- Launch a browser and enter the WebShare Web Server address using port 2009, e.g.: http://hostname.company.com:2009
- In the WebShare File Server field enter the name of the server you want to connect to (or just accept the provided server name), select the desired language from the Language pop-up menu, and click on the Continue button (Fig. 6.1).

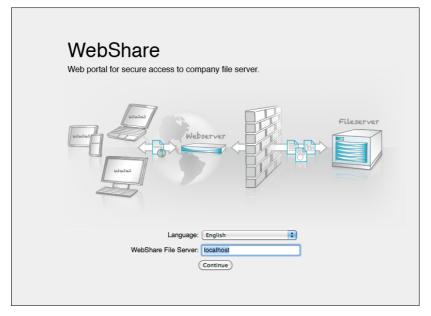


Fig. 6.1: WebShare login window

Note: The login form must be completed within 2 minutes. Otherwise a time-out error will occur. In addition, the user has only 3 trials to log in.

You may also preselect the WebShare File Server via the URL parameters "wshost" and "autoforward":

wshost

http://<domain>:<port>/?wshost=<a fileserver name>

The file server name is set to the value specified by the "wshost" parameter in the WebShare File Server login field.

autoforward

http://<domain>:<port>/?wshost=<a_fileserver_name>&autoforward

This URL pastes the WebShare File Server name, which is handed over by "wshost", into the WebShare File Server login field and proceeds with Continue.

For this to work, JavaScript must be activated in your browser. If JavaScript is not active, only the WebShare File Server is pasted.

In the upcoming window fill in the User Name and Password fields and click on the Login button (Fig. 6.2).

Login		
WebShare File Server:	localhost	
User Name:	Bart	
Password:		(Crypted RSA 1024 bit)
	Login	
Forgot Password? Register as a New User.		

Fig. 6.2: WebShare login window

Note: The password field should have the annotation Crypted RSA... in order to ensure a secure password transfer. If it shows Cleartext, enable JavaScript in your browser to avoid insecure clear text password transfer. See also JavaScript in 10.1.1 "WebShare Web Server".

If you do not already have a user name and password, use the Register as a New User link (if available) to enter user data in order to receive a WebShare account. If you already have a WebShare user name, but forgot your password, use the Forgot Password? link (if available) to request a new login password.

After a successful login, the "Home" page appears, which allows the selection of a WebShare sharepoint from the Sharepoint Name list (Fig. 6.3).

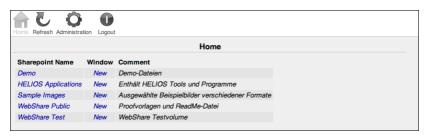


Fig. 6.3: WebShare "Home" page

To open the desired WebShare sharepoint (Fig. 6.4), click on the corresponding link.

You can also open a new window for browsing by clicking on the $_{N \in W}$ link in the "Window" column. Note that you can only have one window open for each sharepoint per login.

If you logout from one window, all other windows belonging to the same session will also be disconnected. When you then click on a link in one of these windows, you will be redirected to a "Session time out" error page with the message: Your session has been terminated. Use the link click here to log in again.

6.2 WebShare access keys

WebShare supports access key navigation that facilitates many user operations, which would have been done via mouse clicks otherwise.

Access keys are enabled in a different way with different browsers. So please check your browser documentation. Access keys that are marked with an * are used without *modifier key*.

Browser	Мас	Windows
Chrome	Ctrl-Alt	Alt
Firefox	Ctrl-Alt	Alt-Shift
Internet Explorer	n/a	Alt
Safari	Ctrl-Alt	Alt

Table 6.1: Modifier keys of some browsers

A	Select/deselect all files
В	Back/Up one level
С	Copy selected files
v	Paste selected files
U	Upload
н	Home
R	Refresh current web page with latest server content
Q	Log out
Ρ	Previous item in search/preview
N	Next item in search/preview
F	Find (in file browser) / Full-screen (in preview/proof mode)
← *	Show previous page (in preview/proof mode)
> *	Show next page (in preview/proof mode)

1	Zoom level 1 (in preview and proof mode only)
2	Zoom level 2 (in preview and proof mode only)
3	Zoom level 3 (in preview and proof mode only)
4	Zoom level 4 (in preview and proof mode only)
5	Zoom level 5 (in proof mode only; <i>fixed</i>)
6	Zoom level 6 (in proof mode only; <i>fixed</i>)
7	Zoom level 7 (in proof mode only; <i>fixed</i>)
8	Zoom level 8 (in proof mode only; <i>fixed</i>)
9	Zoom level 9 (in proof mode only; <i>fixed</i>)

6.3 Work in a sharepoint

This chapter describes how to work in a WebShare sharepoint.

Keyboard navigation for file browsing

The user has the option to search for files, e.g. in very large directories, and to "scroll" them into the visible area. For example, pressing the keys "d", "a", and "t", highlights all files in the directory that start with *dat*. In doing so, if the first found entry is not in the visible area, the display is automatically scrolled into the viewer's focus.

The interval is 0.5 seconds, i.e. the maximum time span between pressing the keys "d" and "a" is half a second, otherwise "a" is considered to be the new search letter.

Contextual file menu

A contextual menu allows faster access to commands on single items in the file browser. It provides the most used commands (*Download*, *Preview*, *Proof*, *Slideshow*, *Copy*, *Duplicate*, *Delete*, *Rename*, *Permissions*, *Quickshare*, *Open*) without the need to select the file and choose the command from the menu. Open allows opening PDF, movies, Flash and other file types directly in the web browser.

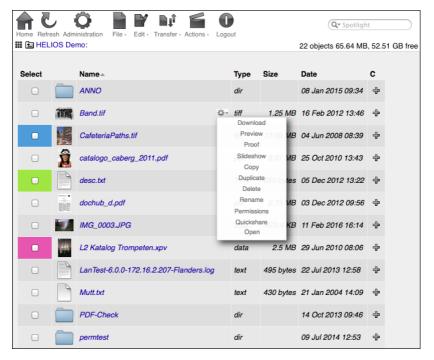


Fig. 6.4: WebShare file browser (default view)

- To open the menu, click on the section, which appears when hoovering over the file name. Note that a current selection will be reset when using the contextual menu.
- Note: JavaScript needs to be activated in the web browser to use features such as the contextual menu or the automatical local time zone adjustment in the "Date" column.

6.3.1 The WebShare toolbar

In the following, the icons in the toolbar (Fig. 6.5) are described. Underneath the toolbar the directory level in the sharepoint is shown. You may click on a subdirectory to jump to that level. A click on the folder symbol allows you to jump one level up or back from the preview mode.



Fig. 6.5: WebShare sharepoint toolbar

Note: If items in the toolbar appear grayed out then you do not have sufficient permissions (see 4.5 "Sharepoint Administration"). Ask the Administrator.

Home

Shows a list of all sharepoints that are available to the logged-in user.

Refresh

A click on this button reloads the current page from the WebShare File Server.

Administration

Opens the WebShare "Administration" page. See Fig. 4.2 in 4 "Administration".

File >

This toolbar item contains a submenu with the following items:

Create Dir

Create a new directory in the sharepoint.

Permissions

View and change file or folder permissions. This feature is of great value, to allow or deny other users access to files and folders. See also 6.3.3 "Note on file access permissions".

Note: Changing permissions is only allowed if Allow Rename is activated (see Allow Rename in 4.5 "Sharepoint Administration").

Rename

Rename a selected file or directory in the sharepoint.

Duplicate

Duplicate one or more selected files or directories into the same directory. Duplicated files will have "copy", "copy 1", "copy 2", etc. appended to their name, before the suffix.

Delete

Delete the selected files from the sharepoint. As a means of security and to avoid inadvertent deletion, you will be asked to confirm the deletion by clicking on the Remove Selected Items button or Cancel to remove all checkmarks.

Preview

Show a preview of the selected item(s); if no item has been checked all suitable

documents are opened in preview mode. See also 6.4 "Image and document previews".

Proof

Show a proof of the selected item(s); if no item has been checked all suitable documents are opened in proof mode.

Slideshow

Create a slideshow from the selected items (see Fig. 6.6); if no item has been checked all suitable documents are opened in a slideshow.

Sideshow	
Image File(s): 5 Autoplay: ☑	
Duration: 3 s Repeat Slideshow: €	
Transition: None =	
Start	

Fig. 6.6: WebShare Slideshow

Autoplay

After clicking the start button the slideshow starts automatically. If this option is not selected, the slideshow will not run automatically; manual navigation is then required.

Duration

Determines the time interval in seconds between the slides change.

Repeat Slideshow

With this option enabled, the slideshow will start over again when it has reached its end.

Transition

Allows adding a transition style between the single slides. You can choose between Fade-in and Slide-in.

Navigation:

Key	Action
esc	Stop slideshow
_	Pause/resume slideshow
← …	Previous page
·· >	Next page
2	Next document
7	Previous document

Search

Search for files and folders within the sharepoint. In the example below (Fig. 6.7) a full-text search for files with the terms "job", "titles", and "print" is done. You may filter the search by the modification date with the pop-up menu Modified, and also limit the number of hits with the Max. Results pop-up menu. If the Limit Search To Current Folder option is checked, the search is limited to the folder from which the search was started. Searches are case-insensitive.

Search	
↓ Search Dialog	
Spotlight search 🗘 🔍 vib titles print	8
Max. Results: 100 + Modified: Any Date +	
Limit Search To Current Folder Cancel Search	

Fig. 6.7: WebShare search function

After clicking on the Search Files button all hits are listed in the Search Result section (Fig. 6.8). You may directly go to each hit by either using the arrow buttons, by clicking on the link underneath each hit or by using the access key P and N (see 6.2 "WebShare access keys"). All described ways have in common that the file is selected automatically. However, clicking on the file name itself will open the file in preview mode.

The File Search as well as the Search Result section can be hidden by clicking on the arrows in the left upper corner of the respective section or by clicking the caption "Search Dialog" and "Search Result" respectively. Another click will show them again.

Search "job titles print" — Items Found: 2					
↓ Search Dialog					
Spotlight search : Q- job titles print					
Max. Results: 100 🗘 Modified: Any Date 🗘					
Limit Search	Limit Search To Current Folder Cancel Search				
↓ Search Result					
888 888					
No.	Name Path	Modification Date			
1.	desc.txt	30 Nov 2019 12:04			
1.	Found in Demovol: /				
2.		30 Nov 2019 12:04			
Z. de la de					

Fig. 6.8: WebShare search results

A click on the cancel button will close the WebShare file search section.

More details on the HELIOS Spotlight search, and search options, are covered in the HELIOS Index Server manual, in the chapters "Simple Spotlight syntax" and "Advanced Spotlight syntax".

When moving the cursor over the Spotlight search field in the WebShare toolbar or the "Search Dialog" search field (Spotlight search must be selected from the pop-up menu), a link to a Spotlight search help pop-up window becomes visible (Fig. 6.9).

The link show all indexed attributes, at the bottom of the "Spotlight Help" window, displays all attributes indexed by the indexer modules for that sharepoint (see HELIOS Index Server manual). A click on an attribute inserts it in the search field.

Spotlight Help	
Search Term	14 Objects 22 MB, 72.9991 GB Finds
Full-Text Search	
Man Woman	All files that contain "Man" and "Woman" in their name or content.
Man OR Woman	All files that contain "Man" or "Woman" in their name or content.
Man -Woman	All files that contain "Man" but do not contain "Woman" in their name or content.
print serv*	All files that contain "print" and a word starting with "serv", e.g. "server" or "service" in their name or content.
Attribute Search	
name:*nut*	All files with "nut" in their name, e.g. "hazelnut", "nutshell".
date:"this week"	
date:today	All files being created or modified either "this week" or "today" or "2010-12-31".
date:2010-12-31	
colorspace:RGB -kind:JPEG	All RGB files of any format but JPEG.
dpi:<300	All files with a resolution less than 300 dpi.
The search term is not case-s	sensitive, i.e. a search for "Printer" and

Fig. 6.9: Spotlight Help pop-up

Label >

Mac operating systems up to Mac OS 9.x, and then again from OS X 10.3 on, allow assigning color labels to files and folders. Files and folders can be "marked" for their importance or priority. HELIOS WebShare offers a similar functionality in this submenu.

Note: HELIOS Admin allows defining color labels in its Settings > Color Labels menu (see HELIOS Base manual).

Set View >

Change the view of the file browser, e.g. add or extend column types, and display the listing in a set of 4 predefined modes (Default, Smart, Extended, and Small). The *smart* view option displays a server-generated preview thumbnail of image files instead of the file type thumbnail. Note that only the *extended* view option includes the UNIX file permissions, which is a convenient means to see who is allowed access to specific files and folders. These permissions can be changed by using the Permissions option in the pop-up menu (see above). The options Hide Comments and Show Comments allow hiding and unhiding file comments.

You may also browse the files in a *gallery* view mode rather than in a list. The gallery view mode can be enabled in two ways:

From the sharepoint toolbar select File > Set View > Gallery.

Or just click on the gallery icon (IIII) in the toolbar, adjacent to the sharepoint path information.

Edit >

This toolbar item contains a submenu with the following items:

Select All

Mark all checkbox items in a sharepoint at the same time. Clicking on this button again will unmark all items.

Сору

Copy one or more selected files or directories into the WebShare internal clipboard for later pasting.

Paste

Paste one or more previously copied files or directories into the currently opened sharepoint directory path. Existing files are not overwritten, but will have "dup", "dup 1", "dup 2", etc. appended to their name, before the suffix.

Note:	The difference between copying/pasting a selection and duplicating is that copied items can be pasted into different sharepoints or different directo- ries. However, duplication is only possible within the same sharepoint, i.e. directory.
Note:	Copy, Move and Paste are allowed according to your server file and folder per- missions within the sharepoint. The setting of the Always Allow Reading and Always Allow Read/Write checkboxes (see 4.5 "Sharepoint Adminis- tration") has no influence on that.

Move

Move one or more previously copied files or directories into the currently opened sharepoint directory path. The behavior is the same as if using Paste, with the exception that the source files or directories are deleted.

Mail

WebShare provides a front-end for the HELIOS mail tool, which allows sending e-mails directly from within WebShare. Selected files and folders will be listed in the mail body (Fig. 6.10).

To:	admin@yourdomain.com	
Cc:		
Bcc:		
oject:	Sample Images:/production-images%0/	

Fig. 6.10: WebShare mail functionality

Transfer >

This toolbar item contains a submenu with the following items:

Download

Download one or more files or folders that have been marked to the local disk. These will be transferred in a Zip file named "download.<date>.zip". For example, the file "Cafeteria.tif" will be contained in a Zip file named "download.14-06-15.zip" after being downloaded from a WebShare sharepoint on June 15, 2014.

Important: Empty directories are not included in the downloaded Zip file. Color labels, comments, and other attributes are preserved for downloaded *files*, but not for *folders*.

After extraction, each download folder includes the file "DownloadLog.txt", which contains a list of successfully downloaded items, and for any omitted items a short description why they were omitted.

Upload

In the "Upload" dialog (Fig. 6.11) you can select the file(s) to be uploaded.

Upload				
Sharepoint: HELIOS Demo:/ 23 objects 65.69 MB, 52.53 GB free				
Drop files here or select files for upload: Choose Files a calendar2018.pdf				
To cancel all uploads, please close this window.				
54.28 KB / 54.28 KB uploaded. > 54.28 KB/s 🖋 Close				
File Name F	ile Size	Status		
calendar2018.pdf 5	4.28 KB			

Fig. 6.11: WebShare sharepoint file upload

After being uploaded, the file(s) are listed in the current sharepoint (Fig. 6.12, compare with Fig. 6.4).

Home Betre	sh Adm	inistration File Edit Transfer Actions	Logout		Q* Spotligh	it
III 🔁 HELI			Luguar		23 objects 65.69 MB	, 52.5
Select		Name	Туре	Size	Date	с
		ANNO	dir		08 Jan 2015 09:34	÷
	THE	Band.tif Uploaded file	e tiff	1.25 MB	16 Feb 2012 13:46	÷
		CafeteriaPaths.tif	tiff	17.69 MB	04 Jun 2008 08:39	÷
		calendar2018.pdf	pdf	54.3 KB	04 Jan 2018 12:39	÷
	Â	catalogo_caberg_2011.pdf	pdf	6.97 MB	25 Oct 2010 13:43	÷
		desc.txt	????	650 bytes	05 Dec 2012 13:22	÷
	jie -	dochub_d.pdf	pdf	2.73 MB	03 Dec 2012 09:56	÷
	7	IMG_0003.JPG	data	472.4 KB	11 Feb 2016 16:14	÷
	111	L2 Katalog Trompeten.xpv	data	2.5 MB	29 Jun 2010 08:06	÷
		LanTest-6.0.0-172.16.2.207-Flanders.	log text	495 bytes	22 Jul 2013 12:58	÷
		Mutt.txt	text	430 bytes	21 Jan 2004 14:09	÷
		PDF-Check	dir		14 Oct 2013 09:46	÷

Fig. 6.12: WebShare uploaded file in sharepoint

When the upload is complete, details in terms of file size, upload performance, etc. are displayed.

Note: If ImageServer and WebShare are installed on the same host, and the Create Layouts option in HELIOS Admin is enabled for that volume, the OPI server will by default create layouts of uploaded files. You can switch this behavior off according to the instructions given in the HELIOS ImageServer manual.

If the name of a file to be uploaded already exists in the destination folder, the uploaded file will have "dup", "dup 1", etc. appended to its name, before the suffix. This refers only to a duplicate name, not to the actual file content, which may or may not be the same.

To upload folders, you need to create a Zip archive from the folder prior to the upload. This is easily done using the OS X Finder Compress "<file>" functionality. Windows clients (XP or later) can use the Zip archiving and extracting capability built into the Windows Explorer via the Send To > Compressed (zipped) Folder context menu. See also 6.8.1 "Supported upload formats").

Note: When uploading a Zip file to the sharepoint, a dialog pops up asking if the Zip file should be extracted automatically after the upload. If you wish to prevent automatic extraction of Zip files for the whole WebShare server, please read the instructions below.

If a folder does already exist with the same name as an uploaded folder, the two folders are merged. Duplicate file names within this folder then follow the rule explained above ("dup" extension to file name).

If you wish to upload Zip archives without automatic extraction by default, you must edit the "wsupload.pl" script:

Copy "HELIOSDIR/etc/webshare/wsupload.pl" to "HELIOSDIR/var/ webshare/wsupload.pl" and change the line:

@unzipOpts = ("-u", "-m", \$mimetype, "-o", "\$fname", "-n", "\$wsmv", "-C", "\$dir");

to

```
@unzipOpts = ("-u", "-m", "application/octet-stream",
"-o", "$fname", "-n", "$wsmv", "-C", "$dir");
```

Note: The upload mechanism supports files greater than 4 GB. In doing so, uploads will be split into smaller 2 GB chunks (default) and re-assembled on the server, to overcome browser and network web proxy limits. The chunk size can be defined by use of the **WSUploadChunkSize** preference.

Alternatively, you can upload files by dragging them into the current sharepoint file browser:

On your workstation select the files that you wish to upload to the Webshare server and drag them into the file browser window.

You can also select several files at once, they will be uploaded sequentially.

Note: Older browsers may not support the drag & drop upload functionality. In this case the standard upload form and window are provided.
 Using Internet Explorer, you must open the upload window first and then drag the file(s) into this window.
 The drag & drop upload only works for file(s) – folders are not supported in HTML5. It is recommended that you create Zip archives before the upload because attributes such as color label and creation date are preserved that way.

The drag & drop functionality can be switched off completely by setting the **WSDisableHTML5Upload** preference to TRUE. Then, the standard upload form and window will be used (see Fig. 6.11).

Open

Open PDF documents, movies, Flash and other file types directly in the web browser. For this to work, the file must be checked in the "Select" column. Note that JavaScript must be activated in the used browser to use this feature.

Actions >

This toolbar item makes action scripts available that are stored in "var/settings/ WebShare/Actions". Corresponding icons must be named "<action>.png" and copied to "var/settings/WebShare/Brandings/<branding>/actions". Fig. 6.13 shows an example for two action scripts, "wsll.pl" and "wssendmsg.pl", including their corresponding icon.

The Actions > item in the WebShare toolbar is only available if scripts are stored in "var/settings/WebShare/Actions"!

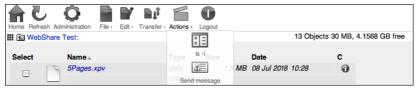


Fig. 6.13: WebShare action scripts with icon

6.3.2 Add file comments

You may add file comments, which are also available when accessing that file from EtherShare or PCShare, to any file in a WebShare sharepoint. These comments are restricted to 199 bytes.

- In the sharepoint file browser click on the + button pertinent to the item to add a comment.
- > To read or modify an already existing comment click on the 0 button.

6.3.3 Note on file access permissions

When setting permissions on sharepoints and files, it is important to keep in mind the following file system rules that affect who can rename and delete files and folders.

File permissions

The write ("w") permission for a file controls only the changing of the file content. This permission has no control over the renaming or deleting of that file.

Folder permissions

The write ("w") permission for folders controls the changing of folder content, i.e. files and subfolders within that folder. The permissions set on a folder control the changing of file names and the adding or deleting of files within that folder.

Hence, if you wish to create a folder where users can read and modify files, the folder would need read/write permissions. However, if you wish to save a reference file to that folder, and do not want anyone to be able to rename or delete it, then the only way to do so is to save it into a different folder (or a subfolder), which has read-only permissions. Generally, when a WebShare user attempts to perform an action that is not allowed, either no action occurs or an explanatory error message is displayed.

Permissions: Owner, Group, Others

In addition to users who have permissions for a file or folder as described above, "root" and members of the groups "SysAdm" and "WSAdm" are also allowed to make modifications on file and folder permissions in WebShare (even if the file access permissions would not otherwise allow them to do so). Fig. 6.14 shows permissions for 2 folders and 2 files. The folder "PUBLIC" as well as the file "public.txt" are accessible by everyone. The permissions are:

drwxrwsrwx for the folder and -rw-rw-rw- for the file.

The folder "PRIVATE" as well as the file "private.txt" are only accessible by the owner ("user"), its group ("group") and the system administrator. The permissions are:

drwxrws-x for the folder and -rw-rw-- for the file.

Home Re	fresh Adm	inistration		nansfer ,	Actions , Logout					
🏭 🔁 De	I Demo Volume: 4 Objects 2 KB, 10.1026 GB free									
Select		Name	Type/Ext-	Size	Modification Date	с	Permission	Owner	Group	
		PUBLIC	dir	68	14 Jun 2019 11:07	÷	drwxrwsrwx	hendrik	docs	
		PRIVATE	dir	68	14 Jun 2019 11:07	÷	drwxrwsx	user	group	
		private.txt	.txt	1822	14 Jun 2019 11:19	÷	- <i>rw-rw</i>	user	group	
	And a second sec	public.txt	.txt	834	14 Jun 2019 11:19	÷	- <i>rw-rw-rw</i> -	hendrik	docs	

Fig. 6.14: WebShare permissions

Note: Check with your server administrator for questions about permissions.

6.3.4 Logout

Clicking the Logout button will close all connections for that user, abort any downloads in progress and exit to the WebShare "Logged Out" page (Fig. 6.15).

	Logged Out	
Thank you for using HELIOS WebShare.		
Click here to log in again		

Fig. 6.15: WebShare "Logged out" page

If user closes the browser without logging out or the user has been idle for a time, i.e. no web activity has occurred, the session will automatically be closed, after the idle time period specified by the **WOSessionTimeOut** preference (see 7.6 "Preferences").

The Click here to enter again link leads directly to the login window (Fig. 6.1).

6.4 Image and document previews

If the Allow Preview option is enabled, WebShare can generate bitmap previews when a user clicks on an image or document.

WebShare automatically detects all supported image and document types. The previews are generated by the "wspreview.pl" script which makes use of the image conversion program "wsconvert". All previews will be generated as either JPEG or PNG files in an RGB or grayscale color space.

This script can be modified to change the default behavior. Or it can be used as a template for custom "action scripts", e.g. to create previews with specific ICC profiles.

Images and documents

The following image and document input formats are supported:

TIFF, EPSF, DCS-1, DCS-2, Scitex-CT, JPEG, JPEG 2000, JBIG2, PICT, Photoshop, BMP, PDF, PNG, XPV, DOC, PPT, XLS, and all common RAW camera images.

WebShare can display previews of multiple-page PDF documents (also in facing pages view, with or without page break).

Note: Password-protected PDF files cannot be previewed.

QuarkXPress and InDesign (ImageServer option)

If ImageServer is installed, previews of QuarkXPress and Adobe InDesign documents (Mac and Windows) are supported. For such previews it is necessary to install the HELIOS Preview extension for QuarkXPress or InDesign. These extensions automatically save an ".xpv" file containing the document preview together upon each QuarkXPress or InDesign document save. A WebShare user can click on this ".xpv" file to view the document previews of each page.

Office documents

Previews of Office documents in WebShare are possible. Please read the **Custom preview types** section.

Generated previews

WebShare generates PNG previews for the following formats:

- O PDF
- O QuarkXPress & InDesign documents (".xpv")
- O All images containing a clipping path
- O 1 bit images (black/white)

WebShare generates JPEG previews for the following formats:

O All grayscale and color images without a clipping path

All previews and proofs, once generated, will be cached to allow the reuse of existing rendered previews by other users.

It is possible to customize the preview generation by using different Image-Server parameters in the "wspreview.pl" script, e.g. to specify a different ICC profile for the RGB color space that is used for the previews. The following resolutions are supported by default:

- O Zoom 1: 256 pixel (default image width after clicking on image)
- O Zoom 2: 512 pixel
- O Zoom 3: 768 pixel
- O Zoom 4: 1024 pixel

Additional preview resolutions can be specified as pixel or dpi values on the "Server Preferences" administration page. The customizable resolutions are selectable in the pop-up menu. The preview resolutions should be limited to avoid very large preview images which may take very long to download and display within the browser. Zoom 1 to Zoom 4 are defined in the "Branding Editor > *Branding Name* > Preview Resolutions 1-4" preference.

Note:	If JavaScript is not enabled, clicking the Go button will start generating the
	preview specified in the pop-up menu.

6.4.1 Previewing images and single document pages

WebShare allows previewing images and supported document formats (see 6.4 "Image and document previews"). If this feature is enabled for a sharepoint, then file names will appear as links.

To view an image or document, click on the file name or select one or more files and click the File > Preview toolbar button.

If multiple items have been marked for preview in the file browser, the first preview is displayed, other(s) can be selected from a pop-up menu or via the "next" and "previous" arrow icons (Fig. 6.16). A checkbox adjacent to the pop-up menu allows unselecting images in the file browser (go back with **S**).



Fig. 6.16: Select preview from pop-up menu

Previews can be scaled in resolution and dimensions via the "zoom icons" or the pop-up menu adjacent to them (Fig. 6.16). The dimensions, resolutions (and percentage values), which are also available in the Set View > button in the toolbar, can be specified in the Preview Resolutions (pixel or dpi) field of the WebShare "Server Preferences" page. The "zoom icons" have fixed resolutions which can be defined per branding, in the Branding Editor, by use of the "Zoom 1-4" preference (see 4.7.1 "Create and configure brandings"). The default values are 256, 512, 768, and 1024 pixels. The zoom icon on the far right has WebShare display the preview in full-screen mode. If you have specified monitor width values in the Monitor Size Information section in "My User Preferences", the entry 100% is available in the set View > Zoom menu or in the resolution pop-up menu, to display the preview images in their original size.

The Rotate > and Flip > toolbar icons allow transforming the preview according to the action selected in the corresponding submenu. The selected view settings (zoom, rotate, flip, info) are maintained for subsequent previews.

Set View > Show/Hide Image Info allows controlling whether basic image information is displayed along with each image.

6.4.2 Image Editor

Important: To make use of Image Editor it is required that ImageServer be installed. Also, Image Editor requires download permissions on the sharepoint, otherwise the Image Editor icon in the menu bar will appear grayed-out.

The "Image Editor" function allows the user to apply simple changes on an image document. Images can be rotated, flipped vertically and horizontally, and cropped. In addition, the edited images can be downloaded from the WebShare server in five presets, which can be selected from the output drop-down list (see Fig. 6.17).



Fig. 6.17: Cropping an image using the "Image Editor" function

O Web

This setting is useful for publishing the edited image on the web.

- Format: JPEG/PNGf
- Color: RGB
- Compression: JPEG/PNG
- Resolution: 144 dpi
- Profile: sRGB_IEC61966-2-1_noBPC.icc

O Office

This setting is useful for using the edited image in an MS Office application, e.g. Word.

- Format: JPEG/PNGf
- Color: RGB
- Compression: JPEG/PNG
- Resolution: 144 dpi
- Profile: sRGB_IEC61966-2-1_noBPC.icc (if input file = CMYK => no profiling)

O Prepress

This setting is useful for using the edited image in a prepress environment. It will maintain its high resolution and is converted to the CMYK color space, for proper printing.

- Format: TIFF
- Color: CMYK
- Compression: compress
- Resolution: 305 dpi
- Profile: ISO-coated_v2_eci.icc (if input file \neq CMYK)

O PDF

This setting embeds the image in a PDF document, for easy sharing and viewing. Lossless JPEG2000 compression reduces the file size considerably.

- Format: PDF
- Color: RGB
- Compression: JPEG2000

- Resolution: 144 dpi
- Profile: sRGB_IEC61966-2-1_noBPC.icc

O PDF Hi-Res

This setting is similar to the standard PDF preset with the difference that the high resolution of the original image is maintained. Lossless JPEG2000 compression reduces the file size considerably.

- Format: PDF
- Color: RGB
- Compression: JPEG2000
- Resolution: 305 dpi
- Profile: sRGB_IEC61966-2-1_noBPC.icc
- Note: If an image is downloaded with its original dimensions (width, height), Web-Share sets its resolution to the value defined in the used preset, e.g. *144 dpi* ("Web" and "Office"). Width and height of the output image are adjusted accordingly, and differ from the original dimensions.

However, if width and height of the image are modified, then these values are used in the output image, but the resolution is changed accordingly. For output sizes specified in *cm* or *in* the resolution defined in the used preset is delivered, and the dimensions are adjusted accordingly.

Edit an image

Here is a short example on how to crop an image and then save it using the "Office" preset:

- From within the preview mode, click on the Image Editor button in the toolbar to open the image editor window.
- Click on the crop tool to activate the crop mode (see Fig. 6.17).
- Drag the cropping tool rectangle over the area that should remain after cropping.
- > Click on the crop button to apply your changes to the image.

- > Specify the output size and select "Office" from the Output drop-down list.
- Click on the Download button.

Customize Image Editor output settings (output drop-down list)

The Image Editor output pop-up list offers five standard output settings. To modify these settings, or set up your own presets, you need to create – if not already available – the file "additional.js" in the branding folder "var/settings/ WebShare/Brandings/
sranding name>". It will automatically be included in every WebShare server response for the corresponding branding.

As a starting point you can use is the example file "additional_samples.js". It is copied to "var/settings/WebShare/Brandings/default" during the WebShare installation. It contains information and examples about using JavaScript to customize the behavior and adding custom functionalities to a WebShare branding:

- Copy "additional_samples.js" to the desired branding subfolder and edit it, or create a new UTF-8 encoded text file and add custom JavaScript code to this file. In any way, save it as or rename it to "additional.js".
- On the WebShare "Branding Editor" page click on the "Import Brandings from WebShare File Server." link.

Example:

Delete all entries from the Image Editor output drop-down list and add two entries named "Documentation" and "HiRes":

```
option1.text = "Documentation"; // default language (English)
option1.value = "id=docu; res=72; colorspace=RGB; format=PNGf;
icc='sRGB_IEC61966-2-1_noBPC.icc'";
ieOutput.options.add(option1); // add new entry
// create a second one
var option2 = document.createElement("option");
if (document._locale == "de")
    option2.text = "Hohe Auflösung"; // German localization
    (consider localization for supported locales DE, ES, JA)
else
    option2.text = "HiRes"; // default language (English)
option2.value = "id=hires; res=305; compress=compress;
colorspace=CMYK; format=TIFF; icc='ISOcoated_v2_eci.icc'";
ieOutput.options.add(option2); // add new entry
```

Editing images in multi-page documents

The Rows and Cols buttons in the toolbar allow displaying several pages at the same time (see 6.4.5 "Previews of multiple-page documents"). The user can select one of the pages to edit it in the "Image Editor".

6.4.3 "Color Info"

Important:	For the "Color Info" feature, HELIOS PrintPreview must be installed.
	Color info for PDF documents is only available in proof mode and only if a simulation profile has been selected.

set View > Color Info is similar to the Photoshop color info and shows the individual primary color and spot color values used in the selected area (Fig. 6.18).

}



Fig. 6.18: The Color Info dialog

To obtain color information, open the color info window by selecting set View > Color Info and click on the preview or proof image.

Note: Color information for PDF documents is only available in proof mode and with a selected simulation profile.

The color values can be displayed in bit or percent values. The 22 icon in the title bar can be used to toggle between these display modes. When retrieving color information of CMYK images, the TAC (*Total Area Coverage*) is also displayed in addition to the process color values.

> To clear the list of color value entries, click the \square icon in the title bar.

Every click on the preview or proof image will leave a numbered marker which belongs to a list entry of the same number. If you hover over a list entry the corresponding marker will be animated, a click on a list entry scrolls the corresponding marker into view. A click on an image marker highlights the corresponding list entry and scrolls it into view. The "Color Info" dialog can be dragged by clicking on the title bar and resized to the required size.

Note: If color information for high-resolution image are retrieved while the preview resolution is relatively low, it can happen that the displayed results do not match the actual values. In this case the interpolation of the position where you have clicked to is to blame.

6.4.4 "Annotations"

Important:	For the "Annotations" feature, HELIOS PrintPreview must be installed!
	JavaScript must be activated in your web browser to enable the annotations feature!
	The annotations feature is <i>not</i> supported by Internet Explorer 6. Internet Explorer 7 and newer however do support this feature.
	In order to make the annotations feature available for the current sharepoint, the $\tt Allow Annotations$ checkbox must be activated (see 4.5 "Sharepoint Administration").

set View > Annotations opens a dialog window, which allows attaching annotations to all file formats that can be previewed with WebShare (see 6.4 "Image and document previews"). It tracks document versions and allows signing off ready-to-go documents (Fig. 6.20).

A discussion is opened by clicking on the + icon in the left upper corner of the annotations dialog, and marking a point or a rectangle area in the document, which starts a new reviewing thread. A rectangle area marker allows selecting

the marker color from a color picker and its opacity. From the pop-up menu s_{tatus} , each user can specify within the annotation thread, if they agree or reject the issue, or leave everything as is. The next user can reply to an annotation by clicking the Reply button underneath the entry to which they wish to answer and set a new thread discussion status. If a discussion thread already exists, the overall status is displayed adjacent to the file information in the WebShare preview window (see Fig. 6.20 below).

After *all* threads of an document are answered in an accepted state, the document turns into final. Multiple document versions and multiple threads are supported.

An already existing discussion can also be opened by clicking the overall status icon or by clicking on the desired "<file name>.annotation" entry in the WebShare file browser.

Annotations and their replies can be edited or deleted later. However, this is only possible with your own annotations and answers, provided they are still unanswered. Annotation topics can be sorted by date, in multi-page documents additionally by page (each topic corresponds to a point or rectangular marker).

The metadata dialog (\square) shows the file name, and allows specifying a project name and a due date (see Fig. 6.20). The project name is displayed in the annotation title.

The \pm / \Box buttons allow expanding/collapsing the whole annotations thread. If the thread is collapsed, date and time of the last contribution are displayed (compare Fig. 6.19 with Fig. 6.20).

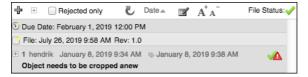


Fig. 6.19: Date and time of last contribution

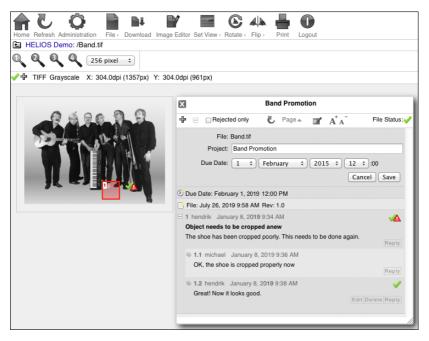


Fig. 6.20: Annotations to an image file

The whole discussion is stored in a look-aside XML file, which stays next to the document. The (AnnotationPrefix) preference allows hiding the XML file or storing it in a directory. The XML format allows parsing the annotation records or automatically generating annotation files.

This also addresses all requirements to collaborate within a remote proofing workflow. Especially the multiple-version document support allows keeping the entire history and differentiate between versions. The annotation capability works for the WebShare document preview and proofing window.

lcon	Description
÷	Add an annotation
+ / -	Expand all/Collapse all annotations
đ	Edit the annotation metadata, e.g. project name and due date
×	File status: Accepted, the document is final
A	File status: Rejected, there are conflicts
<u></u>	Revision status: File has changed since last annotation
0	Annotations for a document exist but no status was set
N	Document was viewed in proof mode with ICC profile selected when annotation was saved
A ⁺ A ⁻	Increase or decrease the font size
č	Refresh annotations view and send pending e-mail notifications
Rejected only	Filter to display rejected entries only

Table 6.2: Icons used in annotation dialog

WebShare annotations can be printed out using the WebShare print function (), see 6.4.7 "Preview/proof print settings". The first page will contain the image with its marks, the following pages will show the comments.

6.4.5 Previews of multiple-page documents

If you open a multiple-page document, the toolbar is extended to offer more functions (Fig. 6.21):



Fig. 6.21: WebShare multiple-page preview toolbar

You may navigate through the document by entering the desired page number and pressing the ENTER key or the "Refresh" button of the toolbar, or you can flip the pages forward and backward.

In addition, you can add or remove rows and columns for previewing multiplepage documents. This can also be done in the Set View > Rows/Cols > toolbar menu. Presets are available in the View Presets > submenu: 2x2, 2x4, and 4x4rows/columns.

Note: The maximum number of concurrently displayed preview images is 300.

set View > Options > makes two more preview options for multiple pages available:

Facing Pages

The pages of a document face each other, with the even numbered pages being always on the left and odd numbered pages on the right (Fig. 6.22).

Note: Multiple-page documents are considered as books if Facing Pages is selected. Therefore the first page of a document is always displayed single.

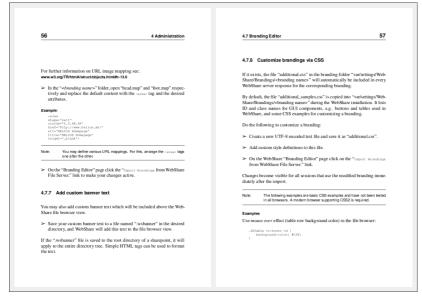


Fig. 6.22: Multiple facing pages

Page Breaks

The gap between facing pages is removed if the Page Breaks option is *unselected* (compare Fig. 6.22 and Fig. 6.23).

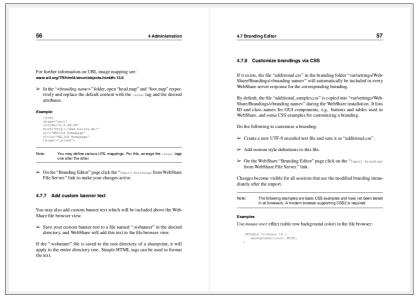


Fig. 6.23: Multiple facing pages without page break

6.4.6 Banner and trailer files per document

To display file-related information in the file preview, WebShare searches the current directory for files with the same file name and a ".banner" or ".trailer" suffix, and displays the content of these files in the file preview. For example, the files "Cafeteria.tif.banner" and "Cafeteria.tif.trailer" will be displayed above/below the file preview of the file "Cafeteria.tif". HTML content is allowed for these files.

6.4.7 Preview/proof print settings

A click on the Print toolbar icon allows specifying print settings prior to using the standard OS print dialog, when printing a preview or proof image (see Fig. 6.24).

The Paper Size pop-up menu allows choosing a pre-defined paper format from the list, or Custom... which opens the Extended Options dialog. Here you can specify custom values for the page dimension, and in addition define a scaling factor. The values that are specified are used for scaling and positioning only and it is important that they match those selected in the browser dialogs "Print" and "Page Setup", respectively. The "Paper-Formats.txt" document, which is located in the "WebShare Public" sharepoint ("Proof-Templates" directory), contains all those paper formats that become available in the Paper Size pop-up menu.

Note: If you check the Scale Images To Fit Page option, the chosen scaling factor may be overriden.

The Resolution pop-up menu allows selecting the resolution for printing the document:

```
Draft (150 dpi)
Good (240 dpi)
Excellent (300 dpi)
Super Fine (400 dpi)
```

Note: By default, or if PrintPreview is not installed and licensed on the server, the resolution of the preview image is 150 dpi.

If the Print Annotations (PrintPreview required!) and Print Images options are checked, the first page will contain the image, the following pages will contain the annotations.

In proof mode, an additional checkbox, Print Image Info, becomes available. If this option is checked, the image information is included in the printout.

Preview/proof print settings for multiple-page documents

When printing multiple-page documents, the "Print Settings" dialog offers an additional section (Fig. 6.25) which allows specifying the printing range. Current view prints the page(s) displyed in the browser, or a range of pages when using the From and To fields. If you wish to print only those pages that contain images with annotations, use the Images With Annotations Only option.

Home Refresh Administration Home Refresh Administration HELIOS Demo: /CafeteriaPaths.tif	Print Settings Paper Size: A4
Q Q Q 36 dpi ÷ ✓ ⊕ TIFF (Compress) CMYK X: 406.4dpi (2048px) Y:	▼ Extended Options Paper Width: 210 mm ÷
	Paper Height: 297 Margin Width: 0 Staple Margin: 15 Scaling: 100 %
	Resolution: Draft (150dpi) ÷ Page Content: g/ Print Images
	Print Annotations

Fig. 6.24: WebShare preview/proof print dialog

	Print Settings	
Paper Size:	A4	\$
	Scale Images To Fit Page	
	Extended Options	
Resolution:	Draft (150dpi)	\$
Page Content:	Servint Images	
	Print Annotations	
Pages:	 Current View 	
	O From: 1 To: 248	
	 Images With Annotations Only 	
		Cancel Continue

Fig. 6.25: WebShare preview/proof print dialog for multiple-page documents

For the print output of the preview, workstation-based color management (sRGB v4 ICC) is applied.

6.5 Remote Proofing

Together with HELIOS PrintPreview, WebShare allows remote soft proofs on the monitor and color-matched proof prints from the web browser.

The remote proofing feature is described in detail in the HELIOS PrintPreview manual.

6.6 WebShare Quickshares

A "Quickshare" is a short URL that allows sharing a group of files on the WebShare server to remote users, without the need to set them up as users or configure a new sharepoint. Quickshare links allow users to download, upload and preview files via a simplified WebShare user interface. In addition, Quickshare URLs can be specified with a duration date, after which they expire.

To be able to use Quickshares, make sure that the server option Allow Quickshares (see 4.1 "Server Preferences"), and the sharepoint option Allow Quickshares (see 4.5 "Sharepoint Administration") are enabled. See also 4.2 "Quickshare Administration" which describes how to manage existing Quickshares, and Quickshare User (see 4.3 "User Administration"), which discusses the "Quickshare User" settings.

6.6.1 Create Quickshares

- Select a file in the sharepoint file browser and choose Edit > Quickshare from the toolbar, or alternatively, choose Quickshare from the contextual file menu (see Contextual file menu in 6.3 "Work in a sharepoint") of the file for that you wish to create a Quickshare.
- Choose Create new user from the User pop-up menu and enter a new user name in the New User field. Then specify a password (optional) and a valid e-mail address in the corresponding fields.

If you have already created another Quickshare for a certain user, and you wish to assign this new Quickshare to the same user, select them from the pop-up menu instead.

Specify what actions the recipient of the Quickshare should be allowed to take via the Preview, Download, and Upload checkboxes.

- From the Expiry pop-up menu choose an expiry date, or specify a custom date. In addition, you may enter a comment which is provided to the recipient of the Quickshare.
- If you wish to be notified as soon as the recipient opens the Quickshare check the E-Mail on Access checkbox.
- Click on save when you have completed all entries.

The user who is assigned a Quickshare can be provided a direct link to the Quickshare (Send E-Mail to <Quickshare user>).

Delete a Quickshare user

- In the sharepoint file browser select an arbitrary file and choose Edit > Quickshare from the toolbar, or alternatively, choose Quickshare from the contextual file menu (see Contextual file menu in 6.3 "Work in a sharepoint") of any file.
- In the User pop-up menu choose the user that you wish to delete. Then click on the Delete button and confirm the deletion.

6.6.2 Manage your own Quickshares

Administration > Quickshare Administration allows a user to edit existing Quickshares, or delete them. A description of this window can be found in 4.2 "Quickshare Administration". Users who are not WebShare administrators can manage only the Quickshares that they have created, whereas WebShare administrators can see all Quickshares, including information about the creator of each Quickshare.

6.6.3 Upload files to a Quickshare

Files uploaded to a Quickshare are incorporated in a folder named "Quickshare Upload-<Quickshare user name>-<number of Quickshare>". This folder is always stored in the Quickshare root directory.

6.7 My User Preferences

In Administration > My User Preferences personal user settings (Fig. 6.26) can be specified. The dialog allows the user to specify individual settings for downloading files, which may well override the settings specified by the administrator on the "User Administration" page.

Settings for User <user name>

With the Preferred View pop-up menu, the user can define their preferred initial file browser view. It offers: Default, Smart Extended, and Small. The additional option Gallery is only available if the gallery view is activated.

The Download Encoding pop-up menu offers MacRoman, PC850, IS08859-1, UTF8, MacIcelandic, EUC-KR, and SJIS encoding methods. In addition, OS Default uses the client OS default encoding, which was set by the administrator.

With the Zip Streaming Format checkbox activated, the file download uses Zip *streaming* (instead of a standard Zip file download), which allows file compression *on-the-fly*, without creating any temporary files.

After changing your user preferences click on the Save User Preferences button. Otherwise your changes will get lost.

Refresh Administration Logout		
My U	ser Preferences	
ettings for User "demouser"		
Preferred View: Default	•	
Download Encoding: OS Default	•	
ip Streaming Format:		
E-Mail Address: henk@helios.de		
Save User Preferences		
Change WebShare Password		
Old Password:		
New Password:		
New Password:		
Change Password (Crypted RSA 1024 bit)		
Proof Setup		
Default Monitor Profile: Apple Performa Display	•	
	d against selected profile, profile is omitted	
Default Printer Profile: Default	\$	
Workstation color management: ma	atched with server default profile, profile is included	
Default Simulation Profile: SC_paper_eci.icc	\$	
Monitor Size Information		
Width (pixel): 1920 (Detect)		
Screen Width: 20.28 inch 🛟		
Save Proof Setup		
Monitor Profile Administration		
elect Name	Modification Date	
Add Profile Remove Selection	01 Dec 2018 10:38	
Add Profile (Remove Selection)		
Printer Profile Administration		
Simulation Profile Administration		
Select Name SC_paper_eci.icc	24 May 2015 15:14	
SC paper ecilico		

Fig. 6.26: WebShare "My User Preferences" page

Save Default User Settings

Note: This section is only available to users with administrative rights.

With the save Default Settings button the admin user can save their personal settings as default settings for all other users. The settings are stored in "HELIOSDIR/var/run/WebShare_User_Settings/WSdefaults.settings". The default settings are overridden by personal user settings.

Any custom JavaScript properties (see 8.2.1 "WSProperties") and data entered in the "Monitor Size Information" section (properties starting with Default.screen.< ... >) will not be saved in the default user settings.

Change WebShare Password

In addition, the "Change WebShare Password" section allows WebShare users to change their WebShare password on their own, without having administrative rights on the WebShare File Server. This is another means of security for *Host Users* who may not want to use their host user password over the internet. For example, a remote login to WebShare from an internet cafe bears the risk of a spyed host user password (e.g. keystroke logging spyware can capture a password as it is typed in, before the password is encrypted for transmission). If someone uses their host user name but a password that is only used with WebShare, the worst-case scenario would be a spyed WebShare login, with the host login not being affected. For more information on content security see also 10.1.10 "No content security". Of course, *Virtual Users* can also change their password on their own in this configuration window.

Note: Users which were assigned the "Cannot change Password" flag by the administrator cannot change their WebShare password on their own (see **Create users** in 4.3 "User Administration").

Enter the old (existing) and the new password in the respective fields. To use the existing host user password again, *Host Users* leave the New Password field blank. For *Virtual Users*, any attempt to leave the New Password field blank will yield an error message. In this case the "original" WebShare password has to be entered again.

Proof Setup

If Allow ICC Profiles per User is activated on the Server Preferences page (4.1 "Server Preferences") the user can choose their default profiles by use of the Default Monitor Profile, Default Printer Profile, and Default Simulation Profile pop-up menus. The chosen profiles will automatically be selected in the Monitor ICC Profile and Printer ICC Profile pop-up menus in the WebShare proof window. Selecting a profile will switch the proofing mode from "Workstation color management" (profile is included in image, default behavior) to "Server color management" (profile is omitted). If no profiles are available on the server, the buttons Add Monitor Profile, Add Printer Profile, and Add Simulation Profile open an upload dialog.

Note: If a simulation profile has been added via the Add Simulation Profile button, all default simulation profiles defined in the "Server Preferences" page will disappear from the Default Simulation Profile pop-up menu.

With the Monitor Size Information link the visibility of the preferences Width (pixel) and Screen Width can be switched. With these properties the user may enter their monitor width in pixels in the Width (pixel) field and the width of the visible screen size in a selectable unit (mm, cm or inch) in the Screen Width field. If both preferences are set, the entry 100% becomes available in the set View > Zoom menu of the file preview and proofing page to display images in its original size. If JavaScript is activated, the Detect button next to the Width (pixel) field can be used to automatically detect the pixel width.

WebShare will remember if a zoom level of 100% has been selected for the proof component, and will add this setting to the user settings file. When the component is opened again, the proof will be displayed at 100%, even with a new login. If another zoom level is selected, the setting is deleted from the user settings file.

If any global or user ICC profiles are available on the server, the user can have these profiles displayed in the Monitor Profile Administration, Printer Profile Administration, and Simulation Profile Administration Sections. Profiles added by the user can be deleted by selecting the profiles and clicking the Remove Selection button. The Add Profile button opens a dialog to upload an ICC profile. Global profiles are displayed *grayed-out* and cannot be administered by the user. The profiles are stored in the ".Proof-Profiles/<username>/Monitor", ".Proof-Profiles/<username>/Printer", and ".Proof-Profiles/<userna

Note: Allow Preview has to be enabled for the "WebShare Public" sharepoint. The server preference Allow ICC Profiles per User has to be enabled and the "WebShare Public" sharepoint must be published for this feature.

6.8 WebShare file format support

6.8.1 Supported upload formats

- Uncompressed single file
- Windows XP (or newer) Explorer Zip files
- WinZip archives (8.1 or newer)
- MacBinary encoded file
- OS X 10.3 (or newer) Finder Zip archives
- Mac OS 8/9 DropZip 7.0.3 archives (MacBinary)
- OS X DropZip 8.0.2 files (MacBinary)

We recommend to use the Zip format for uploading because they

- ... have a high compression ratio
- ... can contain multiple files/folders

- ... support Mac OS Resource/Finder information (MacBinary)
- ... preserve the file creation date
- ... preserve special characters in file names

6.8.2 Supported download formats

- · Zip-compressed archives for UNIX and Windows clients
- Zip Streaming format supported by Windows XP (or newer), and by Mac, using Mac Finder Zip (OS X 10.3 or newer)

6.9 Supported browsers

WebShare uses standard HTML web pages. Special browser plug-ins and Java are not needed. JavaScript is used to ease access to some features and to improve the overall appearence. However, WebShare generally works well without JavaScript being activated in the browser. WebShare has successfully been tested with many different browsers on Windows, Mac OS 9, OS X and UNIX platforms. For power users, this chapter provides information about which browsers have intensively been tested by HELIOS, and some hints about possible problems.

- Safari 3.0 and newer
- Firefox 3.0 and newer
- Internet Explorer 6 and newer
- Google Chrome 5.0 and newer
- For mobile devices, see 9 "HELIOS Document Hub"

These above listed browsers have received more intensive testing and are considered to work perfectly with WebShare. Again, many other browsers will just work fine with WebShare but have only received limited testing.

Please note that iOS does not support downloads.

Automatic MacBinary upload support

All current browsers skip MacBinary data so that the document resource (e.g. preview picture, icon, document type) gets lost during the upload.

Solution:

Instead of uploading just files, generate OS X Finder Zip archives. Uploading the compressed Zip files will work with any browser.

Continuing browsing while uploading files

Some browsers do not accept additional requests while they are uploading files (refer to your browser documentation). A new browser window or using a different browser application allows logging in a second time and continuing with other tasks or monitoring the loading files. The disadvantage of the second login is that it will require one additional user session on the WebShare File Server.

Safari allows continuing while the upload is ongoing.

Saving a password in your browser/keychain

As WebShare crypts all passwords with a random number for every login, re-using the same old password does not work for a second time. Browsers may cache the user name and passwords and try to re-use it a second time, which fails with the WebShare login. HELIOS considers this a security feature of WebShare.

In case JavaScript is turned off the password is sent unchanged (in clear text) to the server, and the keychain/browser feature remembering this clear text passwords works again. We recommend to keep JavaScript active to allow encrypted passwords for the WebShare Server login.

Downloading progress bar does not match downloaded file size

When downloading files, the WebShare Zip streaming technology compresses files always *on-the-fly* during the download. The browser progress bar shows the uncompressed original size. However, the download size will differ due to the zipstream compression and additional changes on the server before the download is completed. The very last file in every download is called "DownloadLog.txt" which includes a list of all downloaded files and possible errors (file was not accessible anymore, no permission, etc.). If this file is included after unpacking the "download.zip" archive you can assume a complete download.

Do not use the back/forward buttons of your browser

WebShare keeps some state about the current directory, selected files, etc. Using the back button, the client will request a page and may use the selection of the previous page instead of the current one. This can lead to unpleasant results, e.g. if the selection was "delete files". Only the "Home" window allows to open a separate window for each sharepoint. Do not use the back/forward buttons or the "Open Link in new Window" option of your browser. The central "Home" menu or selectable URLs in the file browser allow you to go back to different locations.

WebShare Web Server

7

The WebShare Web Server ("webshare.woa") is a Java program running on a server with an internet connection. It can be installed on the same machine where the WebShare File Server is installed, in which case it is called a "single server solution". To increase the level of file system security, the WebShare Web Server should be installed on a separate server, in a "two-tier server solution".

Ideally no other applications or services would be running on the WebShare Web Server. This allows the blocking of all ports and services (by software and/or hardware firewalls), except for those required by WebShare.

Due to the fact that no data files are stored or cached on the WebShare Web Server, a high level of WebShare File Server security is ensured. The WebShare Web Server uses one dedicated TCP/IP port for all web clients, by default 2009.

During the installation of HELIOS WebShare the packed file "websharewoa.tar" is installed in the directory "HELIOSDIR/etc/webshare". The "start-helios" command then extracts the file in the directory "HELIOSDIR/var/run" to the "webshare.woa" package.

7.1 WebShare license information

The WebShare product includes two server components. The WebShare File Server which is licensed on a given HELIOS machine ID (mach ID) and a WebShare Web Server which may run on a separate server machine. The WebShare Web Server belongs to the WebShare server product and will not require a separate WebShare activation key.

The complete HELIOS software license terms must be accepted during the installation and can be found on the product CD.

7.2 WebShare Web Server files

The "HELIOSDIR/var/run/webshare.woa/Contents/Resources/" folder contains the following files:

Accounting.wo/

Accounting HTML page component

AccountingDetails.wo/

HTML page component for detailed accounting information

AdmPrefs.wo/

Preferences administration HTML page component

AdmShares.wo/

Sharepoint administration HTML page component

AdmUsers.wo/

User administration HTML page component

Admin.wo/

Main administration HTML page component

FileBrowser.wo/

HTML component for browsing files and directories

FilePreview.wo/

HTML component for document and image previews

ForgotPassword.wo/

Template HTML component for forgotten passwords

Goodbye.wo/

Logout HTML page component

Login.wo/

Login HTML page component

Main.wo/

Welcome and select server page component

PagePreview.wo/

HTML component for image proofs

RegisterNewUser.wo/

Template HTML component for registering new users

Sharepoints.wo/

Sharepoint listing HTML page component

Upload.wo/

HTML component for uploading files

UserPrefs.wo/

User preferences HTML page component

WSBrandingEditor.wo/

HTML Branding Editor component

WSCSSComponent.wo/

System internal component

WSExceptionPage.wo/

System internal component

WSFileAnnotationsContent.wo/

System internal component

WSFileAnnotationsEntryContent.wo/

System internal component

WSFileAnnotationsTemplate.wo/

Template for annotations dialog

WSFileListingMenu.wo/

System internal component

WSOpenFile.wo/

Template for open file page

WSToolbar.wo/

HTML toolbar component

WSToolbarButton.wo/

System internal component

WSToolbarLink.wo/

System internal component

WSUploadForm.wo/

System internal component

WSUploadReport.wo/

System internal component

WSUploadStatus.wo/

System internal component

WebShareStats.wo/

Server statistics HTML page component

ZipDownload.wo/

System internal component

Each "*.wo" directory contains the "*.html", "*.wod" and "*.woo" files for the corresponding web page.

The script "sbin/start-websharewoa" starts the WebShare Web Server daemon. Usually, it is started by the "srvutil start websharewoa" command during "starthelios". In case of startup problems, it can be started manually to monitor the error messages in a terminal window via:

```
# cd /usr/local/helios
# sbin/start-websharewoa
```

Additional logging is reported to the WebObjects log files. They are located in "HELIOSDIR/var/adm/" and are called "websharewoa.log", with the appendices ".0" (*yesterday*), to ".6" (*seven days ago*). All internal WebObjects messages are reported to "websharewoa.log". All HELIOS generated WebShare Web Server messages are reported to the system messages file.

7.3 Customization/Localization

WebShare includes user selectable localized language support for its user interface. This chapter describes how to customize an existing language version.

Note: This section is about customizing the "webshare.woa" package. If no customizing is done, then this section can be ignored.

To customize the WebShare Web Server, first copy the "webshare.woa" package from "HELIOSDIR/var/run" to "HELIOSDIR/var/webshare". All customization must be done in "var/webshare". This is because whenever WebShare is started it looks for "webshare.woa" in "var/webshare". Only if it cannot be retrieved from there, is it taken from "var/run". The idea is that "webshare.woa" is always replaced in "var/run" in case of software updates. Being in "var/webshare", localizations and other adjustments are preserved.

Note: However, for new WebShare product versions or updates that incorporate new features, you must copy the "webshare.woa" package anew from "var/run" to "var/webshare", overwriting the older package, and apply the customization/localization again. Otherwise it might be incompatible with the used WebShare File Server or new features might not be available.

7.3.1 Customizing "*.html" files

Customize all "*.html" files, using UTF-8 characters. Before changes in "*.html" files become valid, the "websharewoa" service must be stopped and restarted.

7.3.2 Customizing "*.wod" files

Customize all "*.wod" files, using UTF-8 strings. You may customize the strings with any UTF-8 compatible text editor. Before changes in "*.wod" files become valid, the "websharewoa" service must be stopped and restarted.

7.3.3 Customizing action scripts

Custom action scripts are customized by putting #Title=UTFname into the script within the first 5 lines.

Likewise, the #NameField= comment in any script can be edited. The next time you log in and select a script from the WebShare "Actions" toolbar item, a field becomes available, allowing you to submit values to the script.

Refer to 8.4 "WebShare scripts" for details on creating or customizing Web-Share custom scripts and action scripts.

7.3.4 Adding additional language localizations

WebShare includes support for English, German, Japanese, Spanish, and French. Additional language localizations can only be done directly by HELIOS. Please contact your HELIOS partner for such requests.

Note: If customizations should also be valid in localized resources, then the "<language>.lproj" folders must also be customized.

7.4 HTTP/SSL support

7.4.1 Introduction

This section outlines how to configure your SSL setup. We will describe how to use the HELIOS "wskeytool" utility to accomplish this task.

What does SSL mean?

SSL (Secure Sockets Layer) is a protocol designed by Netscape Communications Corporation to provide encrypted communications on the internet. SSL is layered beneath application protocols such as HTTP, SMTP, FTP, Telnet, Gopher, and NNTP and above the connection protocol TCP/IP. It is used by the HTTPS access method. SSL works by using a secret key to encrypt data that is transferred. Modern browsers support SSL, and many websites use the protocol to obtain confidential user information, such as credit card numbers. By convention, URLs that require an SSL connection start with *https:* instead of *http:*.

7.4.2 Background

An SSL-enabled server usually uses a secured file or database called keystore to store the keys and certificates for the server. These security credentials are used to prove to clients that the server is legitimately operating on behalf of a particular domain. If your server will only need to act as one domain, you only need one key entry and certificate in the keystore. Keys are stored in the keystore under aliases. Each alias corresponds to a domain name, e.g. *webshare.yourserver.com*.

Certificates attempt to guarantee that a particular party is who they claim to be. Certificates are trusted based on who signed the certificate. If you only require light security, e.g. for internal use on trusted networks, etc. you can use "self-signed" certificates. Self-signed certificates encrypt the communication channel between client and server. However the client must verify the legitimacy of the self-signed certificate through some other channel as all current browsers reject self-signed certificates by default. Unfortunately, blindly accepting self-signed certificates opens up the system to "man-in-themiddle" attacks.

The advantage of self-signed certificates is that you can create them for free or for testing and evaluation. But as "LetsEncrypt" certificates are also free of charge, it is not worth using self-signed certificates¹. In addition, you can safely use a self-signed certificate if you can verify that the certificate you are using is legitimate. So if a system administrator creates a self-signed certificate, then

¹LetsEncrypt requires root access to the machine on which the WebShare Web Server is installed!

personally installs it on a client's truststore (so that the certificate is trusted) you can be assured that the SSL connection will only work between the client and the correct server.

For higher security deployments, you should get your certificate signed by a CA (*Certificate Authority*). Clients truststores will usually contain certificates of the major CAs and can verify that a CA has signed a certificate. This chain of trust allows clients to trust certificates from servers they have never interacted with before. Certificate signing is similar to a public notary (with equivalent amounts of verification of identity, record keeping, and costs).

7.4.3 Import an exiting certificate

The "wskeytool" utility (see 7.5 "wskeytool") allows importing certificates into the WebShare Web Server:

wskeytool -import -keyfile <private key> -file <public key> -trustcacerts

Example:

```
wskeytool -import -keyfile
    /etc/letsencrypt/live/example.com/privkey.pem
    -file /etc/letsencrypt/live/example.com/fullchain.pem
    -trustcacerts
```

If the private key file is encrypted, the -keyfilepass option must be specified. If private key and public key are stored in one file, the -file option must be omitted.

A documentation of all options is available using the following command: wskeytool -import -h -v

Check the import: wskeytool -list

The certificate should now be listed as "PrivateKeyEntry".

7.4.4 Request and import a new certificate from a CA

In order to configure SSL on your server you need to complete the following tasks:

- 1. Decide on your HELIOS WebShare Web Server domain
- 2. Create a key pair for your server domain certificate
- 3. Have a CA certify the SSL server certificatea) Generate a CSR (*Certificate Signing Request*)b) Submit your CSR to a CA for signing
- 4. Import the server certificate obtained from the CA into the keystore

Detailed instructions for each of the above steps:

1. Decide on your HELIOS WebShare Web Server domain

The WebShare Web Server domain should match the server hostname, e.g. "webshare.yourdomain.com", the WebShare Web Server must be accessible under this domain name.

2. Create a key pair for your server domain certificate

In order to create a server certificate key pair, use the HELIOS "wskeytool" utility on the WebShare Web Server:

```
# cd /usr/local/helios/bin
```

Generate a key:

wskeytool -genkey -alias <WebShare Web Server domain>

Note: If you plan to change the CA for an existing certificate, just start with the following section. WebShare uses the existing certificate unless -importcert is called.

3. Have a CA certify the SSL server certificate

To get a CA signed certificate, you must first export the certificate to a file in the standard CSR format.

a) Generate a CSR:

wskeytool -certreq -file <CSR_filename>

b) Submit your CSR to a CA for signing.

4. Import the server certificate obtained from the CA into the keystore If you had a CA sign your server certificate you must import it into your existing keystore:

wskeytool -importcert -file <signed_certificate_file> -trustcacerts

Important: The keystore must contain the complete certificate chain, from your domain certificate to the CA root certificate. Otherwise, the "websharewoa" service will not start up properly with HTTPS.

7.4.5 Create a certificate using an online CA (RFC 8555)

Prerequisite: port 80 needs to be accessible from the certification server (default: "https://acme-v02.api.letsencrypt.org") under the WebShare Web Server domain and must not be used by another application.

wskeytool -acme -domain <WebShare Web Server domain> -contact <email>

7.4.6 Create a self-signed certificate

wskeytool -genkey -alias <WebShare Web Server domain>

Note: Will not be accepted by Internet browsers unless an an exception rule is defined.

7.5 wskeytool

"wskeytool" is a key and certificate management utility. Its purpose is to support the user in administration of the "HELIOS WebShare Web Server" keystore, required for HTTP/SSL support.

All command and option names are preceded by a minus sign (-). The options for each command can be provided in any order.

Commands:

-certreq

Generates a CSR using the PKCS#10 format. A CSR is intended to be sent to a CA. The CA authenticates the certificate requestor (usually off-line) and will return a certificate or certificate chain, used to replace the existing certificate chain (which initially consists of a self-signed certificate) in the keystore. The private key associated with -alias is used to create the PKCS#10 certificate request. If -dname is provided, then it is used as the subject in the CSR. Otherwise, the X.500 distinguished name associated with -alias is used. If -ext is provided, the extentions from the alias were replaced. The CSR is stored in the file "<file>". If no file is specified, the CSR is output to "stdout".

Note:	Use the $\ensuremath{-importcert}$ command to import the response from the CA.	
Options:		
-alias <alia< td=""><td>IS></td></alia<>	IS>	
	Alias name of the entry to process	
-sigalg <al< td=""><td>g></td></al<>	g>	
	Signature algorithm name	
-file <file></file>		
	Output file name	
-keypass <arg></arg>		
	Key password	
-dname <n< td=""><td colspan="2">-dname <name></name></td></n<>	-dname <name></name>	
	Distinguished name	
-ext <name< td=""><td>e:critical=value> X.509 extension</td></name<>	e:critical=value> X.509 extension	
-keystore	<keystore></keystore>	
	Keystore name	
-storepass	s <arg></arg>	
	Keystore password	
-storetype <type></type>		
	Keystore type	
-v		
	Verbose output	
-q		
	Suppress console output	
-h		
	Help output	

-changealias

Move an existing keystore entry from the specified -alias to a new alias, -destalias. If no destination alias is provided, the command prompts for one. If no key password is provided, the storepass is attempted first. If this attempt fails, the user is prompted for a password.

Options:

-alias <alias>

Alias name of the entry to process

```
-destalias <alias>
```

Destination alias

```
-keypass <arg>
```

Key password

-cacerts

Access the CAcert keystore

```
-keystore <keystore>
```

Keystore name

```
-storepass <arg>
```

Keystore password

-storetype <type>

Keystore type

-v

Verbose output

-q

Suppress console output

-h

Help output

-delete

Deletes from the keystore the entry identified by -alias. The user is prompted for the alias, when no alias is provided at the command line.

Options:

-alias <alias>

Alias name of the entry to process

-cacerts

Access the CAcert keystore

-keystore <keystore>

Keystore name

-storepass <arg>

Keystore password

-storetype <type>

Keystore type

-v

Verbose output

-q

Suppress console output

-h

Help output

-exportcert

Reads from the keystore the certificate associated with -alias and stores it in the file "<file>". By default (if the -rfc option is not specified), the certificate is output in binary encoding. If -aliasrefers to a key entry with an associated certificate chain, the first certificate in the chain is returned. This certificate authenticates the public key of the entity addressed by -alias. If -alias refers to a trusted certificate, then that certificate is output.

Options:		
-rfc		
	Output in RFC style	
-alias <alias></alias>		
	Alias name of the entry to process	
-file <file></file>		
	Output file name	
-cacerts		
	Access the CAcert keystore	
-keystore <keystore></keystore>		
	Keystore name	
-storepass <arg></arg>		
	Keystore password	
-storetype <type></type>		
	Keystore type	
-v		
	Verbose output	
-q		
	Suppress console output	
-h		

Help output

-genkeypair

Wraps the public key into an X.509 v3 self-signed certificate, which is stored as a single-element certificate chain. This certificate chain and the private key are stored in a new keystore entry identified by -alias.

The -dname value is used as the issuer and subject fields in the self-signed certificate.

Options: -alias <alias> Alias name of the entry to process -keyalg <alg> Key algorithm name -keysize <size> Key bit size -sigalg <alg> Signature algorithm name -dname <name> Distinguished name -ext <name:critical=value> X.509 extension -startdate <date> Certificate validity start date/time -validity <days> Validity number of days -keypass <arg> Key password -keystore <keystore> Keystore name -storepass <arg> Keystore password -storetype <type> Keystore type -v Verbose output -q Suppress console output

-h

Help output

-import

Reads the private key from a PKCS#1, PKCS#5, PKCS#8, or PKCS#12 formatted file and the certificate or certificate chain (where the latter is supplied in a PKCS#7 formatted reply or a sequence of X.509 certificates) from a second file, and stores it in the keystore entry identified by -alias. If neither -keyfile nor -file are specified, the certificate and private key are read from "stdin". The data to be imported must be provided either in binary encoding format (DER) or in printable encoding format (PEM, also known as Base64 encoding) as defined by the Internet RFC#1421 standard.

The alias defaults to the first hostname found in the HELIOS preference **WOHost**. If this preference cannot be found, the default alias is built from the first "DNS" SubjectAlternativeName or from the X.500 distinguished name "CN" extracted from the certificate.

Options:

-noprompt

Do not prompt

-trustcacerts

Trust certificates from CAcert

-alias <alias>

Alias name of the entry to process

-keyfile <file>

Private key file name

-keyfilepass <arg>

Source key password

-keyalg <alg>

Key algorithm name

-file <file></file>		
	Input file name	
-keystore <keystore></keystore>		
	Keystore name	
-storepass <arg></arg>		
	Keystore password	
-storetype <type></type>		
	Keystore type	
-v		
	Verbose output	
-q		
	Suppress console output	
-h		

Help output

-importcert

Reads the certificate or certificate chain (where the latter is supplied in a PKCS#7 formatted reply or a sequence of X.509 certificates) from -file, and stores it in the keystore entry identified by -alias. If no file is specified, the certificate or certificate chain is read from "stdin".

"wskeytool" can import X.509 v1, v2, and v3 certificates, and PKCS#7 formatted certificate chains consisting of certificates of that type. The data to be imported must be provided either in binary encoding format or in printable encoding format (also known as Base64 encoding) as defined by the Internet RFC 1421 standard. In the latter case, the encoding must be bounded at the beginning by a string that starts with ---BEGIN, and bounded at the end by a string that starts with ---END.

You import a certificate for two reasons: To add it to the list of trusted certificates, or to import a certificate reply received from a

CA as the result of submitting a CSR to that CA (see the -certreq command). Which type of import is intended is indicated by the value of the -alias option.

If the alias does not point to a key entry, "wskeytool" assumes you are adding a trusted certificate entry. In this case, the alias should not already exist in the keystore. If the alias does already exist, "wskeytool" outputs an error because there is already a trusted certificate for that alias, and does not import the certificate.

If the alias points to a private key entry (or no alias is provided and there is exactly one private key entry in the keystore), "wskeytool" assumes you are importing a certificate reply. The public key from the certificate has to match that private key.

Options:

-noprompt

Do not prompt

-trustcacerts

Trust certificates from CAcert

-alias <alias>

Alias name of the entry to process

-file <file>

Input file name

-keypass <arg>

Key password

-cacerts

Access the CAcert keystore

-keystore <keystore>

Keystore name

-storepass <arg>

Keystore password

-storetype <type>

Keystore type

-v	Verbose output
-q	Suppress console output
-h	Help output

-importkeystore

Imports one or all entries from another keystore (for import from PKCS#12, please note the differences to the -import command, which can also import an entry from PKCS#12, but the handling of the defaults is different).

If the -srcalias option is not provided, all entries in the source keystore are imported into the destination keystore. If a source keystore entry type is not supported in the destination keystore, or if an error occurs while storing an entry into the destination keystore, the user is prompted whether to skip the entry and continue or to quit.

If the destination alias already exists in the destination keystore, the user is prompted to either overwrite the entry or to create a new entry under a different alias name.

If the *-noprompt* option is provided, the user is not prompted for a new destination alias. Existing entries are overwritten with the destination alias name. Entries that cannot be imported are skipped and a warning is displayed.

The -destalias and -srckeypass options cannot be provided if the -srcalias option is not provided.

Options:

-srckeystore <keystore>

Source keystore name

-destkeystore <keystore>

Destination keystore name

-srcstoretype <type> Source keystore type -deststoretype <type> Destination keystore type -srcstorepass <arg> Source keystore password -deststorepass <arg> Destination keystore password -srcalias <alias> Source alias -destalias <alias> Destination alias -srckeypass <arg> Source key password -destkeypass <arg> Destination key password -noprompt Do not prompt -v Verbose output

-q

Suppress console output

-h

Help output

-keyclone

Copy an existing keystore entry from the specified -alias to the new -destalias. If no destination alias is provided, the command prompts for one. If the original entry is protected with an entry

password, the password can be supplied with the -keypass option. If no key password is provided, -storepass is attempted first. If the attempt fails, the user is prompted for a password.

If the WebShare Web Server is connected via multiple hostnames, the command -keyclone can be used to copy an key entry into the alias for another hostname. The certificate must support this name (as wild card certificate or with an X.509 certificate extension "SubjectAlternativeName").

Options:

```
-alias <alias>
           Alias name of the entry to process
-destalias <alias>
           Destination alias
-keypass <arg>
           Key password
-keystore <keystore>
           Keystore name
-storepass <arg>
           Keystore password
-storetype <type>
           Keystore type
-v
           Verbose output
-q
           Suppress console output
-h
           Help output
```

-list

Prints to "stdout" the contents of the keystore entry identified by -alias. If no alias is specified, the contents of the entire keystore

are printed.

By default, this command prints the common name (CN) and the SHA1 fingerprint of a certificate. If the -v option is specified, the certificate is printed in human-readable format, with additional information such as the owner, issuer, serial number, and any extensions. You cannot specify both -v and -rfc.

When retrieving information from the keystore, the password is optional. If no password is specified, the integrity of the retrieved information cannot be verified and a warning is displayed.

Options:

-rfc

Output in RFC style

-alias <alias>

Alias name of the entry to process

-cacerts

Access the CAcert keystore

-keystore <keystore>

Keystore name

-storepass <arg>

Keystore password

-storetype <type>

Keystore type

-v

Verbose output

-h

Help output

-printcert

Reads the certificate from -file, the SSL server (-sslserver), or the signed JAR file ($-JAR_file$) and prints its contents in a humanreadable format. Note that the -jarfile, -sslserver, and -fileoptions cannot be provided at the same time. If neither option is specified, the certificate is read from "stdin".

If the certificate is read from a file or "stdin", it might be either binary encoded or in printable encoding format, as defined by the RFC 1421 Certificate Encoding standard.

Note:	This command can be used independently of a keystore.	
Options:		
-rfc		
	Output in RFC style	
-file <file></file>		
	Input file name	
-sslserver <	server[:port]>	
	SSL server host and port	
-jarfile <ja< td=""><td>R_file></td></ja<>	R_file>	
	Signed JAR file	
-help		
	Help output	

-printcertreq

Prints the content of a PKCS#10 format certificate request, which can be generated by the -certreq command. The command reads the request from -file. If there is no file, the request is read from "stdin".

Note: This command can be used independently of a keystore.

Options:

-file <file>

Input file name

-v

Verbose output

-help

Help output

-printcrl

Reads the Certificate Revocation List (CRL) from -file. A CRL is a list of digital certificates that were revoked by the CA that issued them. The CA generates the file.

Options:

-file <file>

Input file name

-v

Verbose output

-help

Help output

-storepasswd

Changes the password used to protect the integrity of the keystore contents.

If a password file for the keystore exists, the user must have write access to it. The protection for key entries, protected with the keystore password (default, like WebShare Web Server certificates), changes to the new password.

Options:

-new <arg>

New password

-cacerts
Access the CAcert keystore
Access the CAcert keystore

-keystore name
Storepass <arg>
Keystore password

-storetype <type>
Keystore type

-v
Verbose output

Help output

When the -v option appears, it signifies verbose mode, which means that more information is provided in the output. This is also working in combination with the -help option.

7.5.1 Completion

➤ Restart the WebShare Web Server.

```
# srvutil stop websharewoa
# srvutil start websharewoa
```

SSL setup is now complete and WebShare can be reached via both HTTP and HTTPS.

Note: To allow *only* HTTPS access and *not* HTTP, you must set the **WOPort** preference to 0 (see 7.6 "Preferences").

7.5.2 Q&A

How will a "Certificate Request" look like?

```
----BEGIN NEW CERTIFICATE REQUEST-----
MIIBxzCCATACAQAwgYYxCzAJBgNVBAYTAKRFMRAwDgYDVQQIEwdHZXJt
YW55MRAwDgYDVQQHEwdHYXJic2VuMR0wGwYDVQQKExRIRUxJT1MgU29m
dHdhcmUgR21iSDEXMBUGA1UECxMOSEVMSU9TIFN1...
-----END NEW CERTIFICATE REQUEST----
```

Usually this needs to be submitted including the ---BEGIN... and ---END... lines into your CA (e.g. verisign.com)

Why is my browser telling me that the certificate does not match?

There can be several reasons for this:

- O Your server domain name URL does not match the certificate
- O Your certificate has not been signed by a CA
- O You certificate has expired
- O Your browser does not know about your CA, e.g. VeriSign is installed in all major browsers

Our experience shows that Mozilla based browsers provide more detailed information on certificates than others. In a case of a problem these browsers can be used to show how the CA certificate response will look like.

7.5.3 Known issues

Problem:

If "websharewoa" issues an error message during startup:

websharewoa: [2009-11-28 15:54:30 MEST] <main> Unable to establish an SSL connection to port 443 on this host

and then exits, make sure that the SSL port is not used by another application, e.g.:

```
# netstat -an | grep 443
```

should not list a line like below:

*.443 *.* 0 0 24576 0 LISTEN

Also check for the following message:

```
websharewoa: [2009-11-28 15:54:30 MEST] <main> com.webob-
jects.foundation.NSForwardException for com.webob-
jects.foundation.NSForwardException for
java.security.NoSuchAlgorithmException: Algorithm
SunX509 not available "Algorithm SunX509 not available"
```

indicates that the used JVM implementation does not offer SSL support. Check for an update to that JVM or install the Oracle JVM.

Problem:

The Microsoft Internet Explorer 6 cannot use a port other than 443 (default) for a "websharewoa" secure HTTPS connection.

7.6 Preferences

This section lists all the preference keys that are pertinent to the WebShare Web Server. Find a description of how to set, view, change or delete preferences, with the HELIOS "prefdump", "prefvalue", and "prefrestore" utility programs in "HELIOS utility programs" in the HELIOS Base manual.

Important: Make sure that preference keys *DO NOT* start or end with a slash ("/") character, and note that they are case-sensitive! Also, if any preference key or preference value includes spaces, that key or value must be enclosed in quotes.

The following keys require a restart (see "srvutil" in the HELIOS Base manual) of the service to take effect:

Key: Programs/websharewoa/<preference>

int

WOPort

2009

Specifies the WebShare Web Server port number for HTTP access. If set to "0" (without quotes) any HTTP connection to the WebShare Web Server is denied, only HTTPS/SSL connections are accepted. In that case, make sure the preference SSLPort is set, otherwise no connection to the WebShare Web Server can be established.

Note: If you wish to use HTTP port 80, and Apache or another web server is also running on the WebShare Web Server, see 10.1.11 "Switching WebShare to port 80 on the WebShare Web Server" for configuration details.

MDNSPort	int	2006
----------	-----	------

Specifies the port number of the mDNS proxy server that is used for mDNS ("Bonjour") branding registrations. If more than one WebShare Web Server is used, all used ports must have the same number.

Important: The value of this preference needs to be identical with the mDNS proxy server <code>TelnetPort</code> preference (see HELIOS Base manual). If there should be the need to change a value, then make sure that both preference keys are assigned the same value!

SSLPort

443

int

Specifies the WebShare Web Server port number for HTTPS/SSL connections to the browser.

WOHost

(see description)

Specifies the hostname or IP address of the WebShare Web Server. This is useful on machines with multiple IP addresses/hostnames. If this preference is not set, the WebShare Web Server can be reached via any IP address/host name on the machine. The preference can also be set to a comma-separated list of IP addresses/hostnames. In addition, this preference allows specifying a port or SSL port, meaning that, if a port or SSL port is specified, the default settings (given by **WOPort** and **SSLPort**) are overridden.

Example 1:

(WOHost="myDomain:2035:2036"; WOPort="2009"; SSLPort="443";)

For "myDomain", the default settings 2009 and 443 are overridden.

Access to the application:

str

http://myDomain:2035
and via SSL:
https://myDomain:2036

Example 2:

(WOHost="myDomain::2036"; WOPort="2009"; SSLPort="443";)

For "myDomain", no individual port is specified so the standard settings apply.

Access to the application:

http://myDomain:2009 and via SSL: https://myDomain:2036

Example 3:

(WOHost="myDomain:0:2036"; WOPort="2009"; SSLPort="443";) Specifying the port "0" for "myDomain" means that there are no standard (i.e. unencrypted and therefore insecure) connections available.

Access via SSL only:

https://myDomain:2036

WSRedirectToSSL bool FALSE

If set to TRUE, this preference induces the server to redirect the request to a secure Internet connection, for example:

http://webshare.helios.de:2009 => https://webshare.helios.de:2012

Note: It is required that an SSL port be specified via the **SSLPort** or **WOHost** preference.

WSDenyAccessForUA strlist "+http"

str

This preference contains a string list to specify user agents which should not be serviced. This is helpful to disable web crawlers that do not honor the "robots.txt"² file, e.g.:

prefvalue -k 'Programs/websharewoa/WSDenyAccessForUA' -t strlist "+http://baidu.com,+http://webcrawlerXYZ.com"

Requests with a user agent string containing a string of this preference receive a status 404 ("not found") response.

Important: A faulty entry, e.g. a string that is included in many user agents, can block access completely!

WSPublicHost

This preference determines which hostname is used by default when multiple network interfaces are active on the Webshare Web Server. Setting a public hostname may also become necessary if the internal WebShare Web Server hostname is different from that when used from external, e.g. via port mapping in a router/firewall, or via a proxy server. This setting is mainly used for Quickshare generated URLs. Two different settings are supported:

²"robots.txt" in the domain root allows defining the behavior of search robots on a website.

```
Qualified hostname: (e.g.: "webshare.yourdomain.com")
```

This specifies the hostname for public access when multiple network interfaces are valid. The port and SSL configuration will be used from the matching **WOHost** configuration with the WSPublicHost hostname specified.

URLs: (e.g.: "https://webshare.yourdomain.com:80")

Specifies the protocol, e.g. *http* or *https*, the hostname and, optionally, a port for generated public URLs. In this case, it must be ensured that public host connections are forwarded to the WebShare Web Server, e.g.:

<external hostname>:80 => <internal hostname>:2009.

WSDisabledSSLProtocols strlist "SSLv3, SSLv2Hello"

By default, this preference is not set which means that SSLv3 and SSLv2Hello are disabled. This configuration is advised by Oracle for all server applications supporting HTTPS.

The list of supported HTTPS protocols depends on the Java version.

Protocols supported by Java 7: SSLv2Hello, SSLv3, TLSv1, TLSv1.1, TLSv1.2

If this preference is set, all protocols that should be disabled must be specified. Example configuration to allow TLSv1.2 and newer only:

Note: Use this preference with care. Disabling additional protocols may cause incompatibilities with older web browsers using HTTPS.

WSHostName

str

localhost,*

Specifies the WebShare File Server default hostname prompt for the login dialog. It corresponds to the WebShare File Server entry in the WebShare login page. This preference can also be set to a comma-separated list of IP addresses or hostnames. In this case a pop-up menu to choose a WebShare File Server will be available at the login dialog.

Also aliases for IP addresses/hostnames can be defined:

```
prefvalue -k 'Programs/websharewoa/WSHostName' -t str
"localhost,Server 1=fileserver,Server 2=172.16.2.222"
```

In this case, a pop-up menu will be available to choose a Web-Share File Server showing the strings "localhost", "Server 1", and "Server 2".

It is also possible to specify a port number with the hostname, e.g.

prefvalue -k 'Programs/websharewoa/WSHostName' -t str "localhost:2010,Server 1=fileserver,Server 2=172.16.2.222"

However, specifying a port number requires that this port has also been set, together with the hostname, in the WSAllowedHostNames preference, provided that WSAllowedHostNames was specified at all. If not, the connection is refused and an error message is issued.

If an "*" is found as a hostname in the WSHOSTName preference the user is allowed to enter a file server name manually, in addition to choosing a file server from the pop-up menu:

```
prefvalue -k Programs/websharewoa/WSHostName -t str
"localhost:2010,Server 1=fileserver,Server 2=172.16.2.222,*"
```

However, if more than one hostname or/and host alias are defined together with an "*", JavaScript needs to be activated in the client application to get a pop-up menu displayed – otherwise a plain text field, showing the first defined hostname, is displayed.

If only one hostname or alias is defined, the user can neither choose nor enter a file server name.

The following examples give an overview of the possible cases:

Preference value: "*" Display on login page: an empty text field. Preference value: "localhost:2010" Display on login page: the string "localhost:2010". Preference value: "Server 1=localhost" Display on login page: the string "Server 1".

Preference value: "localhost, *" (default) Display on login page: a text field with the value "localhost".

Preference value: "Server 1=localhost, *" Display on login page: a text field with the value "Server 1".

Preference value: "Server 1=localhost, otherhost"

Display on login page: a pop-up menu with the values "Server 1" and "otherhost".

Preference value: "Server 1=localhost, otherhost, *"

Display on login page: a pop-up menu with the values "Server 1" and "otherhost", and in addition the ability to enter a file server name manually.

Note: If a list of file servers without an "*" is defined in the "WSHost-Name" preference, only file server names or file server aliases defined in this preference are accepted. However, if only one file server name or alias is defined – or an "*" is found as a host name – the file server name defined by the "wshost" parameter (see **wshost**) is used.

WSAllowedHostNames str (see description)

List of WebShare File Server hostnames or IP addresses which are allowed to be used on the WebShare Web Server. The string must be comma-separated if more than one "allowed" hostname or IP address is specified. If not set, all hostnames are allowed.

WSHostPort

int

2010

Specifies the WebShare File Server port number. If more than one WebShare File Server is used, they all have to use the same port.

Note: The value of this preference needs to be identical with the WebShare File Server preference **TcpPort** (8.5 "Preferences"). If there should be the need to change a value, then make sure that both preference keys are assigned the same value!

WSUploadChunkSize int 64 1024

This preference specifies the chunk size for drag & drop uploads in MB for uploads that exceed the 4 GB limit. Split uploads become necessary because of web browser and proxy server limits.

WSDisableHTML5Upload bool FALSE

If this preference is set to TRUE, the drag & drop upload functionality is switched off completely. Instead the standard upload form and window will be used.

.....

WSEventDisplayPassword str

This preference allows specifying a password for a protected HTML page, which allows monitoring the WebShare Web Server and the events it is processing. By default, the page is unavailable until a password is set. For security reasons, this preference should not be used unless you are an WebObjects deployment specialist and you know how the WebShare Web Server and WebObjects work internally.

WSUpDownloadTimeOut int 86400

The default time-out value for uploads and downloads of the Web-Share Web Server is 24 h (=86400 s). If more time is needed, e.g. due to a slow internet connection, this preference may be set to a higher value.

WOSessionTimeOut int 3600

Specifies that, after a user has been idle for a time, i.e. no web activity has occurred, the session will automatically be closed after one hour (=3600 s).

WSGZIPResponse bool TRUE

Modern browsers, e.g. Safari, Firefox, Internet Explorer support "gzip" compressed HTML pages. If supported by the browser, the WebShare Web Server generates "gzip" compressed HTML pages. For slow connections, e.g. via modem or ISDN lines this will increase the browsing performance by a factor of 2-5, depending on the content. In case of problems with compressed pages this feature can be turned off by setting this preference to FALSE.

WSPrintJavaExceptions bool FALSE

strlist

If this preference is set to TRUE, and an error occurs, a stack trace (debugging information) is printed on the error page.

JavaOptions

The values of this preference are passed through to the Java command when starting the "websharewoa" service. If specified, behavior, performance or debugging options can be set.

Note: Use this preference with caution! Providing invalid arguments will preclude "websharewoa" from starting! Providing wrong argument values can cause considerable performance issues.

7.6.1 WOStarter preference keys

WatchdogInterval int 600

strlist

Specifies the interval in seconds in which the watchdog process checks the WebShare Web Server ("websharewoa") for plausibility of its output to the web browser.

ResponsePositive

Specifies a list of strings that are mandatory in the WebShare Web Server response to the web browser if the behavior is normal. If just one of these strings is missing, the "websharewoa" service is restarted. An example for a mandatory string is: "<!DOCTYPE html PUBLIC".

ResponseNegative strlist ""

Specifies a list of strings that *must not* be contained in the WebShare Web Server response to the web browser. If just one of these strings is included, the "websharewoa" service is restarted.

8 WebShare File Server

"websharesrv" is the WebShare File Server, a native program running on the machine which can also host the HELIOS EtherShare/PCShare file servers, and is controlled by the HELIOS Service Controller (see HELIOS Base manual). It spawns a separate process for each user login.

The WebShare File Server offers various and versatile user and document management features, including e-mail notification on user login, additional customization in WebShare action scripts, etc.

8.1 User configuration file

"HELIOSDIR/var/conf/webshare.passwd" is the user configuration file of the WebShare File Server. Some specifications made on the "My User Preferences" administration page (see 6.7 "My User Preferences") are stored in this file:

```
heliosuser::::zs=1, nocp=1, qs=1:::
martin::::zs=1, nocp=0, qs=0:::
ws1:md5_dd1c91f5d657b421c339592f:demo::zs=1, nocp=1, qs=0:::
ws2:clr_cleartextpassword:demo::zs=1, nocp=1, qs=1:::
```

Each line in "webshare.passwd" starts with the user name followed by several fields which are separated by colons. The first (user name) and third (user ID) field must be set, the other fields may remain blank.

User name

Virtual User or Host User

Password

(Password in clear text or MD5 hash code of UTF-8 clear text password)

A string starting with *md5*_ is a crypted password for virtual users. A string starting with *clr*_ is a hash value of the password for virtual users. For host users this field may be empty if there is no additional WebShare password set and the HELIOS host password is used. We recommend to set a different password, though.

Run as user

An empty field identifies a host user. For virtual users this field contains the name of the host user the virtual user is mapped to.

Expiry date

The 4th field contains the user expiry date/time in the format:

dd-MMM-yyyy-kk-mm

For example: 28-Feb-2004-14-21

The Expiry date is entered in the Expires field on the "User Administration" page according to the syntax specified by the preference **DateFormat** (8.5 "Preferences").

Flags

(comma-separated)

"zs" (zipstream) "nocp" (cannot change password) "pt" (privileged transfer) "br" (branding)=<branding name> "po" (preview only for URL Share Access) "gs" (Quickshare user)

Example:

If *zipstream* is enabled, this field shows "zs=1", otherwise "zs=0". If there is no entry, *zipstream* is enabled.

Client encoding

(for uploads/downloads)

Name of the client encoding for uploads/ downloads, e.g. "MacRoman". Empty when the "OS Default" has been specified.

E-mail address

This has to be a fully specified e-mail address, for example: username@mycompany.com

Comment

Make sure that the comment does not contain special characters like a colon (":"). These will be replaced with "_" in order to keep "webshare.passwd" compatible.

8.2 WebShare user settings file

User settings are stored in the "HELIOSDIR/var/run/WebShare_User_Settings/ <user name>.settings" file (*= *PrintPreview required*):

```
* Application.session.annotationParameters
Default.preferredView
* Default.iccProfiles.printer
* Default.iccProfiles.monitor
* Default.iccProfiles.simulation
* Default.screen.width
* Default.screen.width.unit
* Default.screen.pixel
FileBrowser.session.showFileComments
FileBrowser.session.gallervIconSize
FileBrowser.session.searchResultView
FileBrowser.session.searchResultGalleryIconSize
FileBrowser.session.showGalleryDetails
* PrintPreview.zoom.originalSize
WSPrintDialog.settings.paperHeightSetting
WSPrintDialog.settings.marginWidthSetting
WSPrintDialog.settings.paperWidthSetting
WSPrintDialog.settings.resolutionValueString
WSPrintDialog.settings.bindingMargin
```

```
WSPrintDialog.settings.scaleImages
WSPrintDialog.settings.paperFormatString
WSPrintDialog.settings.unitName
* WSPrintDialog_ProofMode.settings.paperFormatString
* WSPrintDialog_ProofMode.settings.resolutionValueString
* WSPrintDialog_ProofMode.settings.controlGraphicPosition
* WSPrintDialog_ProofMode.settings.unitName
* WSPrintDialog_ProofMode.settings.paperHeightSetting
* WSPrintDialog_ProofMode.settings.paperHeightSetting
* WSPrintDialog_ProofMode.settings.scaleImages
* WSPrintDialog_ProofMode.settings.paperWidthSetting
* WSPrintDialog_ProofMode.settings.paperWidthSetting
* WSPrintDialog_ProofMode.settings.paperWidthSetting
* WSPrintDialog_ProofMode.settings.paperWidthSetting
* WSPrintDialog_ProofMode.settings.controlGraphicString
* WSPrintDialog_ProofMode.settings.printProofImageTitle
```

8.2.1 WSProperties

The "WSProperties" object allows getting and setting user settings (see 8.2 "Web-Share user settings file") or custom properties via JavaScript from the "additional.js" JavaScript file (see 4.7.9 "Customize brandings via JavaScript"). Custom properties will also be saved in the user settings file and provide a persistant way to save properties. If default user settings are saved (see **Save Default User Settings** in 6.7 "My User Preferences") any custom properties will not be saved. "WSProperties" is implemented as a singleton and cannot be initiated. Note that the *getProperty* and *setProperty* methods may cause a read/write operation on the WebShare file server. If these methods should be executed asynchronously, set a callback function object with *setCallback*.

getProperty: function (<String> key)

Retrieve a property value for the given key. If the property is null, false, true or undefined it will be converted to a corresponding JavaScript object, otherwise a string is returned. If the property does not yet exist this method returns null.

key: The name of the property to retrieve.

setProperty: function (<String> key, <String> value)

Set a string property value for the given key. This method returns the new value of the property as it was retrieved via the *getProperty* method.

key: The name of the property to set.
value: The value the property specified with key should be set to.

setCallback: function (<Function> func)

Set a function object that will be called whenever the *readyState* attribute of the *XmlHttpRequest* object changes. If a callback function is set by this method the request will be performed asynchronously. The server response will be sent as an object notated in JavaScript Object Notation (JSON) format and contains the *propertyValue* object which will contain the value of the retrieved or set property. Use the JavaScript *eval* or *JSON.parse* function for parsing the JSON response inside the callback method.

func: A reference to a function object or an anonymous function which takes a *XmlHttpRequest* object as its argument.

8.3 WebShare utility programs

The "zipstream" and "unzipstream" programs are used for download and upload compression (and extraction). They are located in the "HELIOSDIR/bin" directory.

All other utilities described in this section are Perl scripts which are stored in "HELIOSDIR/etc/webshare". For those scripts, the "dt" command will be used to ensure that all changes are applied to data and resource parts of files and folders. This ensures that HELIOS volume specific requirements are met. Note: These Perl scripts can be customized. However, this should never be done in the original script file because it could be replaced during updates. Instead, copy the script from "HELIOSDIR/etc/webshare" into the "HELIOSDIR/var/ webshare" directory. WebShare automatically looks first in "var/webshare" for all scripts and uses "etc/webshare" only as a fallback if the script is not available in "var/webshare".

8.3.1 zipstream

This utility creates a Zip archive to which files and folders can be added in a compressed form. The advantages over the Zip program are that there are no temporary files created during compression, and file downloads can commence immediately without waiting for the archive to be created. Special file attributes like creation date, Mac type and creator and resource fork are encoded into MacBinary, which is preserved in the compressed Zip archive. UTF-8 is always the encoding used for file/folder name representation in the *file system*. The encoding used for file/folder name representation in the *Zip archive* can be specified to match the client computer system, e.g. MacRoman, PC850, ISO8859-1, UTF-8.

Due to the Zip64 support, files greater than 4 GB can be downloaded.

Usage:

```
zipstream [options] file
zipstream -h (for help info)
```

The following options are supported:

-f	Write the Zip archive to the file instead of writing to "stdout".
-C	Input files are read from this directory.
-1	Zip compression level. Valid levels are from 1 (best speed) to 9 (best compression). The default level is 6.

-C	Encoding used for file names in Zip archive. The default encoding is UTF8. Use uniconv -1 to list all available encodings (see HELIOS Base manual). "zipstream" is called with this option by the WebShare File Server when an encoding is selected via the Download Encoding pop-up menu on the "User Administration" or "My User Preferences" page.		
	Note: The server volume encoding for "zipstream" is always assum to be UTF-8. Non UTF-8 volumes are not supported.	ıed	
-S	Print estimated Zip archive size to "stdout" (8 byte integer, netwo byte order).	ork	
-S	Print estimated Zip archive size to "stdout" (4 byte integer, network byte order).		
-b	Write output in blocks of n kBytes. The default is 32 kB.		
 No Zip streaming format. "zipstream" is called with this option by the WebShar when the checkbox Zip Streaming Format is not check 			
		ver	
-m	Encode the data and resource fork of a Mac file to MacBinary.		
-р	Calculate precise Zip archive size (generates a temporary zip archive		
-t	Include file comments in MacBinary (works only together with the $-m$ option).		
-r	Preserve ".rsrc" directories. By default, ".rsrc" directories a skipped when creating the Zip archive. This option has no effec -m is set.		
-е	Add report file "DownloadLog.txt" to Zip archive containing f access errors and, if $-v$ is also set, verbose information.	ile	

-v	Display verbose information on "stderr" or, if $_{-e}$ is also set, write verbose information to "DownloadLog.txt" in the Zip archive.	
-z	Resolve symbolic links, add files into Zip archive.	
-x	Generate OS X 10.3 (or newer) Finder compatible Zip archives, so that no additional archiving software is needed.	
-i	Specifiy path to download accounting log file.	
-0	Specify offset bytes to skip in data file. This option supports single file archives only for restarting downloads.	
-N	Use the given file name for the Zip directory entry.	
-d	Specifies the UTC (<i>Universal Time Coordinated</i>) time difference in seconds which is taken into account when generating dates within the Zip archive.	
-u	Enforce Zip64 archive creation for entire Zip archive (otherwise it will automatically switch to Zip64 on archive sizes > 2 GB).	
-w	Ignore HideSpecialFiles WebShare preference.	

Example:

Create an Zip archive named "archive.zip" and add "file1", "file2", "dir1", and "dir2" to the archive:

\$ zipstream -f archive.zip file1 file2 dir1 dir2

8.3.2 unzipstream

The "unzipstream" utility expands Zip files and decodes MacBinary files.

By default, it reads a Zip or MacBinary file from "stdin". The -f option can be used to specify a Zip or MacBinary input file. Output files are stored under

the names defined in the Zip or MacBinary file. If the input file is not a Zip or MacBinary file, it will be written to "stdout" or to the file specified by the $_{-\circ}$ option.

Usage:

```
unzipstream [options] file
unzipstream -h (for help info)
```

The following options are supported:

-f	Read the	Read the Zip archive instead of reading from "stdin".	
-0	-	Output file name. This is only used if the input file is not a Zip of MacBinary file.	
-C	Output files are written to this directory.		
-c Encoding used for file names in Zip arch is UTF8.		ng used for file names in Zip archive. The default encoding	
	Use uni	conv -1 to list all available encodings.	
	Note:	The server volume encoding where Zip files are unpacked is always assumed to be UTF-8. Non UTF-8 volumes are not supported.	
-r		Preserve ".rsrc" directories. By default, files in ".rsrc" directories are not extracted from the Zip archive.	
	Note:	To prevent inconsistencies between information stored in the desktop database of a HELIOS volume and the files/folders on this volume, do not upload or extract a Zip archive with ".rsrc" directories directly into an active HELIOS volume. Make sure to use the HELIOS "dt" tools (see HELIOS Base manual).	

-n <scriptname>

Name of a notification script that will be called after a file is extracted. The script is called with the following parameters:

- backupOriginal
- replaceOriginal
- directory
- · temporary file name
- · original file name
- file type ("Image" or "NoImage")
- -m Specify the MIME type of the input file. If -m is given, "unzipstream" does not check the header of the input file to determine the file type. Currently, two mime-types are supported: *application/xmacbinary* and *application/octet-stream*. If *application/octet-stream* is specified, "unzipstream" returns the input file unchanged.
- -I List files instead of extracting them.
- -u Unhide "dot files" by replacing the leading dot with an underscore.

Example:

.DS_Store is represented as _DS_Store.

-i Specify the path of the upload accounting log file.

-x <offset>

Specify <offset> bytes to skip in the target file before extracting. This option should only be used in combination with the -t option and single file archives to resume an interrupted upload.

-y <fileContentLength>

Specify the content length for uploads. The estimated upload length is verified to detect aborted uploads.

-t Specify the temporary upload file name. This is only used in combination with the -x option.

- -b If the file to extract already exists, backup the existing file. This option is only used with the "wsuploadmv" notification script. By default, "wsuploadmv" creates a different file (e.g. "file dup.txt") if the file already exists.
- -R If the file to extract already exists, replace it. This option is only used with the "wsuploadmv" notification script. By default, "wsuploadmv" creates a different file (e.g. "file dup.txt") if the file already exists.

-g <modtime>

Specify a modification time for the extracted file. This option should be used with single file archives only.

- -d Specify the delta in seconds relative to UTC (*Coordinated Universal Time*).
- -v Display verbose information on "stderr".

Please note that if a Zip file on its part contains Zip files in the archive, these will not be further expanded.

Examples:

List the Zip archive, assuming Windows (PC850) encoding:

```
$ unzipstream -1 -c PC850 -f archive.zip
```

Extract the Zip archive which was created by DropZip, assuming Mac (MacRoman) encoding:

```
$ unzipstream -c MacRoman -f archive.zip
```

Extract all files in "abc.zip" to the directory "/data/zips":

```
$ unzipstream -f abc.zip -C /data/zips
```

8.3.3 wscommon.pm

"HELIOSDIR/etc/webshare/wscommon.pm" is a Perl library module which is included by all WebShare Perl scripts. It contains, for example, information on other installed HELIOS products.

8.3.4 Action script environment variables

The following environment variables are available for WebShare action scripts or utility programs:

Environment variable	Description
WSUserEncoding	Download encoding; e.g. "OS Default"
WSAccept-Language	Currently used GUI language for WebShare; e.g. "en"
WSWindowsEncoding	Default Windows encoding; e.g. "PC850"
WSStreamingZip	Use Zip Streaming format; e.g. "Yes"
WSMacintoshEncoding	Default Mac OS encoding; e.g. "MacRoman"
WSUserId	Effective user ID of current session; e.g. "105"
WSGroupId	Effective group ID of current session; e.g. "30"
WSUser	Name of logged-in user
WSUserEMail	E-mail address of logged-in user
WSSessionSeq	websharesrv process ID (843) and number of logins (64); e.g. "843-64"
WSClientAddress	IP address of logged-in client
WSPREVIEWDIR	WebShare cache directory path
WSUserAgent	Browser information; e.g. "Mozilla/5.0 (Mac; U; PPC Mac OS X Mach-O; en-US; rv:1.6) Gecko/20040113"
HELIOSDIR	HELIOS directory path; e.g. "/usr/local/helios"

Note: The following environment variables are only available if the script is called from within a sharepoint via the Actions > menu:

Environment variable	Description
WSSharepoint	e.g. "Sample Images"
WSSharepath	e.g. "/template-images%0/"

8.3.5 wscopy.pl

Usage:

wscopy.pl destdir srcdir files...

This program is called by the WebShare File Server every time copy or Paste function (in the Edit > toolbar menu) is selected. "destdir" specifies the destination directory, which the specified files and folders from the "srcdir" are copied to.

8.3.6 wsmove.pl

Usage:

wsmove.pl destdir srcdir files...

This program is called by the WebShare File Server every time the Move function (in the Edit > toolbar menu) is selected. "destdir" specifies the destination directory to which the specified files and folders from the "srcdir" are moved to.

8.3.7 wsdownload.pl

Usage:

wsdownload.pl zipstream-options offset srcdir files...

This program is called by the WebShare File Server every time the Download function is selected. "wsdownload.pl" uses the WebShare "zipstream" utility to stream an *on-the-fly* generated Zip archive without temporary files to "stdout". With the "zipstream-options" argument additional options are passed on to a "zipstream" program call. The "offset" argument defines the number of bytes to be skipped for resuming single file archive downloads. The "srcdir" specifies the current directory of the user's web session. The "files" argument consists of the files and folders that have been selected for download by the user. Settings like Zip format, file name encoding, MacBinary support, and client platform (Mac or Windows) are automatically determined by the "wsdownload.pl" script.

8.3.8 wsdup.pl

Usage:

wsdup.pl dir files...

This program is called by the WebShare File Server every time the Duplicate function (in the File > toolbar menu) is selected.

8.3.9 wsmkdir.pl

Usage:

```
wsmkdir.pl dir newdir
```

This program is called by the WebShare File Server every time the Create Dir function (in the File > toolbar menu) is selected.

8.3.10 wsmv.pl

Usage:

```
wsmv.pl dir source dest
```

This program is called by the WebShare File Server every time the Rename function (in the File > toolbar menu) is selected.

8.3.11 wspreview.pl

Usage:

```
wspreview.pl srcfile srcfiletype dstfiletype previewfile resOptions page antialiasPDF \,
```

This program is called by the WebShare File Server every time an image or document preview that is not yet available in the cache area, is requested from the client.

Parameters:

srcfile

The complete path name to the image or document the user selected for preview.

srcfiletype

The file type of the document from which a preview is to be generated.

dstfiletype

The file type of the preview image; usually JPEG or PNG, see 6.4 "Generated previews" for details.

previewfile

The path name of the preview filename. The filename specifies the preview name to be saved in the preview cache area.

resOptions

This parameter specifies the preview options for the ImageServer "layout" command. Different parameters are split by a "|" character. For example, -oxpix=256|-orotate=90|-oflipvertical

page

The page number starting with 1 used for multiple-page documents.

antialiasPDF

"True" or "False" to specify antialiasing for PDF input files.

8.3.12 wsforgotpw.pl

Note: This script does not require any user authentication.

Usage:

wsforgotpw.pl opts...

This program is called by the WebShare File Server every time the Forgot Password? link on the login page is clicked. The following table lists the Perl script field variables in the left column, and on the right the corresponding HTML field entries in the file "ForgotPassword.wod" (see 7.3.2 "Customizing "*.wod" files"). Please note that the Perl script variable names are given and cannot be renamed! If fields are not needed, leave them empty:

wsforgotpw.pl	ForgotPassword.wod
\$username	editUser.username
\$email	editUser.email
\$organization	editUser.organization
\$comment	editUser.comment
\$field5 \$field10	editUser.field5 10

8.3.13 wsregnewuser.pl

Note: This script does not require any user authentication.

Usage:

wsregnewuser.pl opts...

This program is called by the WebShare File Server every time the Register as a New User link on the login page is clicked. The following table lists the Perl script field variables in the left column, and on the right the corresponding HTML field entries in the file "RegisterNewUser.wod" (see 7.3.2 "Customizing "*.wod" files"). Please note that the Perl script variable names are given and cannot be renamed! If fields are not needed, leave them empty:

wsregnewuser.pl	RegisterNewUser.wod
\$username	editUser.username
\$password	editUser.password
\$verifyPassword	editUser.verifyPassword
\$email	editUser.email
\$comment	editUser.comment
\$organization	editUser.organization
\$field7 \$field20	editUser.field7 20

8.3.14 wsrm.pl

Usage:

wsrm.pl dir files...

This program is called by the WebShare File Server every time the Delete function (in the File > toolbar menu) is selected.

8.3.15 wsperm.pl

Usage:

wsperm.pl dir user group userMode groupMode otherMode recursive files

This program is called by the WebShare File Server every time the Permissions function (in the File > toolbar menu) is selected.

8.3.16 wsupload.pl

Usage:

```
wsupload.pl dstdir filesize backupOriginal replaceOriginal fileOffset tmpFilename filename mimetype
```

This program is called by the WebShare File Server every time the Upload function (in the Transfer > toolbar menu) is selected. "wsupload" receives the upload stream from "stdin" and unpacks the uploading stream in the directory specified by the "dstdir" parameter. The "unzipstream" utility is used as a back-end to unpack the data stream *on-the-fly*. As soon as a file within a Zip stream is detected, the file is saved with a temporary name with the process ID as suffix. For each file in the Zip stream the "wsuploadmv" script is called to rename the file with the process ID suffix to its final name. All this is done *on-the-fly* while "unzipstream" continues to receive data with additional files within the Zip stream. "wsupload" automatically detects if the upload is done from a Windows or Mac client, and will set up a proper character encoding according to the user and system settings.

8.3.17 wsuploadmv.pl

Usage:

wsuploadmv.pl backupOriginal replaceOriginal dir source dest backupOriginal and replaceOriginal can be set to '1' or '0' This program renames uploaded files from their temporary name to their final name. "wsuploadmv" is a good place to add more processing tasks, e.g. a virus scanning software to verify uploaded files.

8.3.18 WebShare File Server service port

This service displays WebShare File Server user and status information.

After calling socket localhost with the appropriate port on the command line, you may enter the additional commands users, status or help to display possible options:

```
$ socket localhost 2016
Welcome to the HELIOS WebShare File Server service port
help
help - print a list of available commands
quit - close connection
status - show status information
users - show user information
rmcache - remove all cache files
users

        # PID
        User UID Address
        CRC
        Login

        1 inactive tom
        101 192.168.1.2
        24c9ce
        Mon 10:38

        1 active
        joe
        108 192.168.1.8
        3bffc9d6
        Thu 11:23

Summary: 1 active users (1 inactive users)
status
WebShare File Server, Version 4.0.0u1107
Up since: Wed Dec 3 10:25:30 2014
Max users: 0
Max users allowed: 65535
```

Note: For security reasons the WebShare File Server service port only accepts incoming connections from localhost. Remote access is not allowed.

8.4 WebShare scripts

8.4.1 Custom scripts

It is possible to include scripts in the WebShare workflow which automate tasks, etc. WebShare comes with some custom scripts ("wslogin.pl", "wsadd-share.pl", "wslogout.pl", "wsemail.pl", and "wspreviewaccess.pl") that have to be customized by the user in order to take effect, and various sample action scripts (see 8.4.3 "Sample action scripts"). The custom scripts are stored in "HELIOSDIR/etc/webshare/samples". In addition, the WebShare utility scripts in "HELIOSDIR/etc/webshare", described in 8.3 "WebShare utility programs", may also be customized.

Note: The standard output size of custom scripts is limited to 64 kB. However, the error output is limited to 2 kB.

Custom scripts become active after copied into the "var/webshare" directory.

wslogin.pl

This script is called after a successful WebShare login with the parameters:

- User name
- Apparent user IP address (If the user is e.g. "behind" a proxy server, the proxy IP address is presumed as user IP address)
- Complete browser identification string (User Agent)
- A string containing the user ID
- An options string containing the user type (*Virtual User* or *Host User*) as first entry; and separated by a comma the entry "IsAdmin", if the user has Administrator rights

The script can be customized to perform any desired action upon a user login. A script return value of 0 would allow the user to log in to WebShare, whereas

a value different from 0 would deny the login, while issuing an error message via "stderr".

Enhanced Document Hub security

This script can also be used for an enhanced Document Hub security by defining a list of mobile device IDs that are allowed to log on to the WebShare Web Server. A sample WebShare "wslogin.pl" script using Document Hub IDs can be downloaded from the HELIOS WebShare server:

Server:	webshare.helios.de
User name:	tools
Password:	tools
Sharepoint:	HELIOS Tools
Selection:	HELIOS WebShare > Sample wslogin.pl for DocumentHub IDs

wsaddshare.pl

Every time a WebShare Administrator adds or modifies a sharepoint, the "wsaddshare.pl" script is called. Its parameters are:

- Sharepoint name
- Sharepoint path
- Sharepoint e-mail address
- An options string with the boolean preferences of the sharepoint (**Publish**, **AllowDownload**, etc.) containing the sharepoint preference keys in a commaseparated list
- A list of all users who are allowed to see the sharepoint
- A list of all groups whose user members are allowed to see the sharepoint

By customizing this script, a System Administrator can prevent WebShare Administrators from creating a sharepoint whose path points beyond the administrative (allowed) area. A return value of 0 would allow creating a sharepoint or applying changes in a sharepoint, whereas a value different from 0 would deny these actions, while issuing a message to the System Administrator via "stderr".

wslogout.pl

As soon as the user has logged out, this script is called with the following parameters:

- User name
- HTTP client TCP/IP address
- Complete browser identification string (User Agent)

This script may be customized, e.g. to clean up directories or to accomplish similar tasks. In contrast to **wslogin.pl** and **wsaddshare.pl**, the return value of this script is not interpreted.

wsemail.pl

This action script is called every time a user sends an e-mail via WebShare. The script is called with the parameters:

- User name
- Recipient (field TO:)
- Carbon copy recipient (field cc:)
- Blind carbon copy recipient (field Bcc:)
- Subject
- Mail text

The Script must exit with status 0 to allow the user sending e-mail or status 1 to deny sending an email.

wspreviewaccess.pl

If a script named "wspreviewaccess.pl" is copied to "HELIOSDIR/var/ webshare" it is called every time an image preview is requested.

The script has two arguments:

- 1. <Pathname> to the image
- 2. <Pathname> to the cache preview file

This allows precise auditing for third-party scripts which may use this information to get informed about the preview activities.

8.4.2 Debugging WebShare scripts

All WebShare scripts are developed in Perl including the sample scripts. They can be developed in any language, e.g.: shell, PHP, Perl, Java, C/C++. HELIOS prefers Perl because it is very powerful and compatible across different server platforms. This chapter provides guidelines on how to debug Perl scripts to be used as utility and action scripts within WebShare. Make sure to implement and debug your script so that it works in general before you begin debugging it in the WebShare environment.

Environment requirements:

All scripts are called with the current working directory HELIOSDIR, which is "/usr/local/helios" by default. To be compatible on all platforms without depending on the Perl installation path all WebShare Perl scripts include a #!var/run/runperl in the first line. "runperl" is a symbolic link to the local Perl interpreter. The "runperl" link is automatically created during the WebShare installation. All WebShare default scripts are included in "etc/webshare". Customized scripts should be stored in "var/webshare" to avoid overwriting your scripts during a new installation. Another benefit is that the entire "var" folder contains all customization and settings, which allows easy migration to a different server platform without applying all changes again.

Printing debugging information:

As many scripts produce their output to "stdout" or "stderr", printing script variables will produce mixed output which leads to malfunctions. All HELIOS scripts support debug output into a file by specifying the "DEBUGTTY" environment variable.

A simple debugging session:

```
# cd /usr/local/helios
# export DEBUGTTY=/dev/tty
# var/webshare/actions/<yourscriptname>
```

The above commands allow to test drive the script and to check the results.

A debugging session within a running WebShare File Server:

```
# cd /usr/local/helios
# bin/srvutil stop websharesrv # to stop the webshare file server
# export DEBUGTTY=/dev/tty
# sbin/websharesrv
```

The manual start of the WebShare File Server as shown above prints all output into the current terminal.

8.4.3 Sample action scripts

As mentioned in 8.4.1 "Custom scripts", WebShare comes with various sample action scripts:

- wsannotations.pl (List annotations)
- wscmdargs.pl (Cmd ARGS)
- wsdialog.pl (Dialog sample)
- wsdu.pl (Disk usage)
- wsimageinfo.pl (Image info)
- wslinks.pl (WebShare link example)
- wsll.pl (*ls* -*l*)
- wspdfinfo.pl (PDF info)
- wssendmsg.pl (Send message)
- wsspotlightmeta.pl (Spotlight metadata)
- wsxpvcollect.pl (Collect files from XPV)
- wsxpvinfo.pl (XPV info)

The string entered in the script header, in the line #Title=, is used as the script title in the menu.

Located in "var/settings/WebShare/Actions/Samples", the scripts must be copied to "var/settings/WebShare/Actions" in order to become available in the Actions > pop-up menu in the toolbar of the sharepoint window (see section **Actions** > in 6.3 "Work in a sharepoint"). In addition, the file access permissions of each action script determines if it is even visible to individual users. See 10.1.7 "Action scripts".

wsannotations.pl

This action script returns a table of all annotations for the current sharepoint, and offers a search functionality for annotations.

wscmdargs.pl

This action script prints out the script arguments and the environment variables.

wsdialog.pl

This two-step action script first generates a form with customized HTML fields (text fields, buttons, etc.), which are then processed.

wsdu.pl

Action script to show disk usage of files by use of the du command.

wsimageinfo.pl

(ImageServer required) Action script to extract information about an image.

wslinks.pl

This action script allows opening the WebShare components *file browser*, *preview*, *proof, download*, *Spotlight search*, *upload* to dynamically create HTML hyperlinks, to enable the user to navigate to different WebShare components. For example, navigate into a proof window which displays page 12 of a specified file, with a zoom of 100%.

wsll.pl

This action script lists, by use of the ls -l command (on Windows dir), the content of the current directory.

wspdfinfo.pl

(*PDF HandShake required*) Action script to extract information about a PDF document.

wssendmsg.pl

Action script to send messages from WebShare to all users that are connected via "afpsrv", "pcshare" or "heladmsrv".

wsspotlightmeta.pl

Action script which returns a table of Spotlight metadata for all selected files.

wsxpvcollect.pl

(*ImageServer required*) Action script to collect the referred data (QuarkXPress or InDesign document and images) from the XPV document. It creates also a report about the used fonts.

wsxpvinfo.pl

(*ImageServer required*) Action script to extract information about an XPV document.

Note: If the name of the script file starts with "hide-" (e.g. "hide-scriptname.pl") the script will not be listed in the Action > menu of the toolbar. This is useful for actions that will be called by JavaScript (see 8.4.4 "Calling action scripts via JavaScript") but should not be visible for the user.

8.4.4 Calling action scripts via JavaScript

It is possible to call any custom action script via JavaScript from the "additional.js" JavaScript file (see 4.7.9 "Customize brandings via JavaScript"). This allows customization of workflows or adding new features and options. To call a custom action script via JavaScript make use of the *WSJavaScriptCommand* object. Custom actions can be called from the WebShare "Home" page, the file browser page, the preview page, the proof window, the "Administration" page, and the "My User Preferences" component.

To call custom action scripts from JavaScript use the *WSJavaScriptCommand* object. It contains the following public methods:

addFiles: function (<Array> or <Object> files)

Add files to the action script as if they were selected in the file browser.

files: An array of HTML element objects or a single HTML element object like *HTMLTableRowElement*, a *HTMLTableCell-Element*, or similar.

addParameters: function (<Object> parameters)

The key/value pairs of the given object will be passed to the action script as "POST" variables. If any name field content has been set via the *setNamefieldContent* method this method will throw a *WSJavaScriptCommandException*.

parameters: An object holding key/value pairs.

send: function ()

Sends the request. If no command name has been set via the *setCommand* method this method will throw a *WSJavaScriptCommandException*.

Returns: true if the request has been sent, false if no request can be sent from the current component.

setCallback: function (<Function> func)

The function object func will be called whenever the *readyState* attribute of the *XmlHttpRequest* object changes. The *XmlHttpRequest* object will be passed as a parameter to the function.

func: A reference to a function object or an anonymous function which takes a *XmlHttpRequest* object as its argument.

setCommand: function (<String> name)

Set the name of the script to invoke.

name: The name of the action script to invoke, e.g. "wsannotations.pl".

setNamefieldContent: function (<String> content)

Set the content of the name field of an action. If any "POST" parameters have been set via the *addParameters* method this method will throw a *WSJavaScriptCommandException*.

content: The content of the name field of an action script.

setSharepoint: function (<String> name)

Sets the name of the current WebShare sharepoint. In the "File-Browser", "Preview", and "Proof" components, the sharepoint name cannot be overridden and this method will throw a *WS-JavaScriptCommandException* if invoked. It should be used to set a sharepoint in components that do not have a sharepoint context like the "Administration" component. You may want to call this method within a try/catch block.

name: The name of a WebShare sharepoint.

8.5 Preferences

This section lists all the preference keys that are pertinent to the WebShare File Server. Find a description of how to set, view, change or delete preferences, with the HELIOS "prefdump", "prefvalue", and "prefrestore" utility programs in "HELIOS utility programs" in the HELIOS Base manual.

Important: Make sure that preference keys *DO NOT* start or end with a slash ("/") character, and note that they are case-sensitive! Also, if any preference key or preference value includes spaces, that key or value must be enclosed in quotes.

Key: Programs/websharesrv/<preference>

8.5.1 WebShare File Server preference keys

WrongAuthDelay int 2

Specifies the time delay in seconds between failed login requests. This helps increase the security against unauthorized logins, e.g. by password robots, which try to match the password by issuing a large number of passwords per second.

AllowForgotPassword bool FALSE

Determines whether the Forgot Password? link becomes visible in the login window. The setting of this preference reflects the state of the Enable Forgot Password Option checkbox on the "Server Preferences" page (Fig. 4.3).

AllowRegisterUser bool FALSE

Determines whether the Register as a New User link becomes visible in the login window. The setting of this preference reflects the state of the Enable Register User Option checkbox on the "Server Preferences" page (Fig. 4.3).

AllowEMailMessages bool TRUE

Determines whether the Mail function (in the Edit > toolbar menu) is available. The settings of this preference reflects the setting of the Enable E-Mail message for Users checkbox on the "Server Preferences" page (Fig. 4.3).

EnforceCryptedLogin bool FALSE

With this preference set to TRUE, only encrypted user logins are permitted (JavaScript must be active in the web browser). The setting of this preference reflects the state of the Enforce RSA Crypted Passwords checkbox in the "Server Preferences" page (Fig. 4.3).

AllowLinkShares bool FALSE

With this preference set to TRUE, WebShare allows direct URL access from remote clients.

AllowQuickshares bool FALSE

Set this preference to TRUE to allow Quickshares. The setting reflects that of the Allow Quickshares checkbox in the "Server Preferences" page (Fig. 4.3).

GlobalQuickshareUsers bool FALSE

With this preference set to TRUE, *all* Quickshare users are available in the Quickshare User pop-up menu. The setting reflects that of the Quickshare Users Are Global checkbox in the "Server Preferences" page (Fig. 4.3).

QuickshareEmptyPassword bool FALSE

With this preference set to TRUE, a remote user is allowed to open Quickshare links by just clicking on them, without the need to previously log in on the WebShare server (requires an empty password). The setting of this preference reflects the state of the skip Login With Empty Quickshare Passwords checkbox in the "Server Preferences" page (Fig. 4.3).

The following keys require a new login to take effect:

AnnotationPrefix str

If an annotation is added to a file in the preview or proof window, it is named "<file name>.annotation" and saved adjacent to the original file. This preference allows specifying prefixes for the annotation file, e.g. a dot ("."), which would hide the file in the WebShare file browser. Also directories can be specified; if "anno/" is specified, the annotation file is saved to the directory "anno" which is created adjacent to the original file.

.....

DisableUTCDelta bool FALSE

int

bool

Allows deactivating the time adjustments. The default is FALSE which means time zones are automatically adjusted.

128

MaxWoaBlockSize int

This value is specified in kilobytes. The WebShare protocol block size between the WebShare Web Server and the WebShare File Server specifies the maximum size of a command (except for downloads, uploads, and previews, which are streamed). For example, if annotations become larger than 128 kB, this parameter allows increasing the maximum block size to a higher value.

URLSuffixSize

For QuickShare tiny URLs this parameter describes how many random bytes are used in the URL to avoid that anonymous users can try out QuickShare URLs by entering all combinations. The default is 8, with a minimum of 2 and a maximum of 254.

8

logdenied

If set to TRUE, this parameter lets "websharesrv" append a record to the system messages if, due to the IP access list, access to one or more users has been denied.

FALSE

MaxGalleryRes int 384

This preference specifies the maximum resolution for image previews in the gallery view. If the value of the preference is set to 0, the gallery view mode is not available (the corresponding button in the File > Set View > Gallery menu is grayed out or hidden, depending on the show Disabled Buttons setting of the used branding, see **Toolbar** in 4.7.1 "Create and configure brandings").

If the specified value is less than 32 the WebShare Web Server assumes 32 as the maximum size.

TcpRecvSize int 65536 (64 x 1024)

Specifies the maximum number of TCP data bytes that are passed from the clients to "websharesrv" over the network during a transaction. The number of bytes may need to be limited if the buffer size in the UNIX server is too small. TcpRecvSize can be varied to optimize the data transfer rate.

TcpSendSize int 65536 (64 x 1024)

Specifies the maximum number of TCP data bytes that are passed from "websharesrv" to the clients over the network during a transaction. The number of bytes may need to be limited if the buffer size in the UNIX server is too small. TcpSendSize can be varied to optimize the data transfer rate.

Note: Changed values in TcpRecvSize and TcpSendSize will automatically be assigned to the WebShare Web Server as well, for the next login.

CacheSize

int 30 (in MB)

Specifies the cache size value of the WebShare File Server for preview files. It corresponds to the Cache Size in MB value in the WebShare "Server Preferences" menu.

	Note:	The default value for CacheSize is 30 (MB), due to the usually limited disk space in "HELIOSDIR/var". If you change the CacheDir preference to another path, it is recommended to set CacheSize to a value of at least 300 (MB).		
AllowHostl	Jsers	bool	TRUE	
	Server wi	th their host login	allowed to log on to the WebShare File n name. The setting reflects that of the sers checkbox in the Webshare "Server	
AllowVirtua	alUsers	bool	TRUE	
	File Serve reflects the	er with their (virtu	e allowed to log on to the WebShare aal) WebShare login name. The setting ebShare for Virtual Users checkbox in erences" menu.	
AdminNoti	iy	str	нн	
	as a client It correspo	with Admin right	to which a notification is sent as soon ts logs on to the WebShare File Server. Notification on Admin Login entry in erences" menu.	
	Note:	Make sure that the webshare@myco	e complete receiver account is specified, e.g. ompany.com	
UserNotify		str		

Specifies an e-mail address to which a notification is sent as soon as a user logs on to the WebShare File Server. It corresponds to the E-Mail Notification on User Login entry in the Webshare "Server Preferences" menu.

Note: Make sure that the complete receiver account is specified, e.g. webshare@mycompany.com

AllowAllReadWrite bool FALSE

str

If set to TRUE, this preference enables the sharepoint preferences AllRead and AllReadWrite. In that case, the additional options Always Allow Reading and Always Allow Read/Write (see 8.5.2 "Sharepoint preference keys") will be shown in the "Sharepoint Administration" page.

Important: It may considerably reduce host security to set the AllowAll-ReadWrite flag to TRUE because if required, host access rights are bypassed, with all user processes changing to "root" processes!

DateFormat

"dd MMM yyyy kk:mm"

Specifies the format with which the date is displayed in the file browser of the "Sharepoint" menu. It corresponds to the Directory Listing Date Format entry in the Webshare "Server Preferences" menu. Also, this preference specifies the required syntax for the Expires field in the "User Administration" page. See **Date format** in 4.1 "Server Preferences".

ProofProfiles str "CromalinEuro 1.0 UCR370,..." Specifies those profiles from the "ICC-Profiles" volume that should

be available in the ICC Proof Simulation pop-up menu in the Web-Share proof window.

```
AllowUserICCProfiles bool FALSE
```

If this preference is set to TRUE, WebShare users are allowed to upload and administer their own monitor and printer ICC profiles on the "My User Preferences" administration page. It corresponds to the Allow ICC Profiles per User entry in the WebShare "Server Preferences" menu.

mail

TRUE

Specifies whether e-mail notification is used at all.

SendMailOnActionScript bool FALSE

bool

If set to TRUE, this preference sends an e-mail, as soon as a WebShare action script is executed, to the address that is specified in the E-Mail on Access field on the "Sharepoint Administration" page. See EmailAccess.

DefaultWindowsEncoding str "PC850"

> Specifies the default encoding method when downloading files on Windows clients. The setting reflects that of the Default Windows Encoding pop-up menu on the "WebShare Server Preferences" menu.

DefaultMacintoshEncoding str

Specifies the default encoding method when downloading files on Mac clients. The setting reflects that of the Default Mac OS Encoding pop-up menu in the WebShare "Server Preferences" menu.

ShowHiddenFiles bool FALSE

> If set to TRUE, hidden files ("dot files" and files which have been marked as hidden in an EtherShare volume) are displayed in a sharepoint file browser.

HideSpecialFiles strlist

> Specifies file names which should always be hidden in a directory listing.

.. ..

PreviewResolutions str (see description

Specifies the (comma-separated) pixel/resolution values which are available in the "Sharepoint" preview pop-up menu. The "zoom

"MacRoman"

icon" resolution values are defined in the "Branding Editor > *Branding* > Preview Resolutions 1-4" preference, and are not affected by this preference.

By default, the following resolutions are available:

36 dpi,72 dpi,96 dpi,144 dpi,128 pixel,256 pixel,512 pixel, 768 pixel,1024 pixel

CustomPreviewTypes str ""

Allows specifying suffixes for custom file types that are to be previewed in WebShare and which must be processed first (according to the rules given in the "wspreview.pl" script). For example, doc, xls, ppt (no blanks!) can be specified for Microsoft Office documents which, if required, are processed by Tool Server with the "OfficeReader" script.

URLWebOnlyUsers strlist

If this preference is set, the specified users have only URL based WebShare web access. See also the AllowLinkShares preference.

URLImageOnlyUsers strlist

If this preference is set, the specified users have only URL based WebShare image fetching access. This allows setting up a special user (real or virtual) for remote URL image-only access. If somebody tries to steal the URL specified user name and password for a manual WebShare login, this will be denied. See also the **AllowLinkShares** preference.

Important: Specifying the same user name(s) with both preferences URL-WebOnlyUsers and URLImageOnlyUsers will cause that the access for the specified user(s) is denied at all – be it via URL Share Access or manual login. So make sure to use different user names with both preferences!

	ing keys req to take effe		"srvutil" in the HELIOS Base manual) of
MaxUsersL	.imit	int	see description
	Allows limiting the WebShare user count. The "Universal File Server" license allows access from EtherShare, PCShare, and Web- Share. Each service counts against the "Universal User" count. So it is possible that many WebShare users use up all available user licenses, so that no EtherShare or PCShare login is possible anymore.		
	Note:	unlimited users. In	niversal Users", WebShare can be used with n this case, WebShare users do not affect Share logins, so it makes no sense to set
TcpPort		int	2010
	ports (up t		e Server port number. Additional TCP ill automatically be allocated as needed er.
	Important:	the WebShare Web erences"). If there	pPort preference needs to be identical with Server preference WSHostPort (7.6 "Pref- should be the need to change a value, then th preference keys are assigned the same
TelnetPort		int	2016
	Specifies Server.	the "telnet" servi	ce port number of the WebShare File
sessions		int	(see description)
			nber of workstations (clients) that are VebShare File Server simultaneously.

	workstatic should be your softw	ons that are conne less than or equal vare license. The o	y be the same as the total number of cted to the WebShare File Server, and to the number of sessions allowed by lefault value for sessions is the number software license.
minuid		int	(see description)
	which hav virtual us that speci	ve a lower user ID ers running as a	er allowed for user IDs. All host users than that specified by minuid, and all host user with a user ID lower than e not permitted to log in. The default allowed.
maxuid		int	(see description)
	which hav virtual use specified b	e a higher user II ers running as a h	er allowed for user IDs. All host users O than that specified by maxuid, and all ost user with a user ID higher than that permited to log in. The default behavior
ipaccess		str	"ipaccess"
	-		g the access list with the IP addresses n to "websharesrv". See HELIOS Base
CacheDir		str	"var/tmp/wscache"
	WebShare	File Server. It co	ich contains the preview files on the rresponds to the Cache Directory entry references" menu.
	Note:	This directory mu execute) permission	st already exist and have <i>rwx</i> (read-write-

AliasPDF

bool

TRUE

If set to FALSE, antialiasing for PDF previews is deactivated.

8.5.2 Sharepoint preference keys

The following keys take effect immediately:

Key: Programs/websharesrv/Shares/<sharename>/<preference>

Path

Specifies the sharepoint path. It corresponds to the Sharepoint Path entry in "Sharepoint Administration".

Publish	bool	TRUE
Publish	bool	TRUE

str

Specifies whether a sharepoint is published in the "Home" menu. The setting reflects that of the Publish checkbox in the "Sharepoint Administration" page.

EmailAccess str

Specifies an e-mail address for notification mails on user access and action to the selected sharepoint. It corresponds to the E-Mail on Access entry on the "Sharepoint Administration" page. Make sure that the complete receiver account is specified, e.g. webshare@mycompany.com.

CollectMails bool TRUE

Specifies whether user action notification mails, as stated in the EmailAccess preference, are issued after the user has logged out, which is the default behavior, or – if set to FALSE – immediately after each file download, upload or deletion done by a user.

Note: If set to FALSE, no notifications for *previews* are issued at all because this would result in a flood of notification mails.

Comments

Specifies a comment on the selected sharepoint. It corresponds to the *comments* entry on the "Sharepoint Administration" page.

AllowQuickshares bool FALSE

str

With this preference set to TRUE, Quickshares can be assigned to files organized in this sharepoint. The setting reflects that of the Allow Quickshares checkbox on the "Sharepoint Administration" page.

AllowAnnotations bool FALSE

With this preference set to TRUE, annotations can be added to a document. The setting reflects that of the Allow Annotations checkbox on the "Sharepoint Administration" page.

AllowPreview	bool	TRUE

Specifies whether previews of images in the sharepoint are allowed. The setting reflects that of the Allow Preview checkbox on the "Sharepoint Administration" page.

AllowDownload	bool	FALSE

Specifies whether downloading files from the sharepoint is allowed. The setting reflects that of the Allow Download checkbox on the "Sharepoint Administration" page.

AllowUpload bool FALSE

Specifies whether uploading files to the sharepoint is allowed. The setting reflects that of the Allow Upload checkbox on the "Sharepoint Administration" page.

AllowRename bool FALSE

Specifies whether renaming files and directories in the sharepoint is allowed. The setting reflects that of the Allow Rename checkbox on the "Sharepoint Administration" page. Setting this preference allows changing permissions, too.

AllowCopy	bool FALSE
	Specifies whether copying files to the sharepoint and creating di- rectories is allowed. The setting reflects that of the Allow Copy checkbox on the "Sharepoint Administration" page.
AllowDelet	e bool FALSE
	Specifies whether deleting files in the sharepoint is allowed. The setting reflects that of the Allow Delete checkbox on the "Sharepoint Administration" page.
AllRead	bool FALSE
	Specifies whether file read access in the sharepoint is enabled for all users, irrespective of the server file access settings. Read access includes file download and preview. The setting reflects that of the Always Allow Reading checkbox on the "Sharepoint Administra- tion" page. This preference must first be enabled by the WebShare administration preference key AllowAllReadWrite .
AllReadWr	ite bool FALSE
	Specifies whether file read/write access in the sharepoint is en- abled for all users, irrespective of the server file access settings. Read/write access includes file download, upload and preview. The setting reflects that of the <code>Always Allow Read/Write checkbox</code>

AllowAllReadWrite.

bool

OnlyLayouts

FALSE

in the "Sharepoint Administration" page. This preference must first be enabled by the WebShare administration preference key

If set to TRUE, only layouts of the images in the sharepoint can be downloaded. The setting reflects that of the Download Layouts only checkbox in the "Sharepoint Administration" page. For this preference to be enabled, the WebShare File Server preference **AllowDownload** must be set to TRUE.

Users

strlist

Specifies one or more user names for which the sharepoint is available. If no names are specified, the sharepoint is available for all users. It corresponds to entries in Allowed Users on the "Sharepoint Administration" page.

Groups strlist

Specifies one or more group names for whose members the sharepoint is available. If no names are specified, the sharepoint is available for all groups. It corresponds to entries in Allowed Groups on the "Sharepoint Administration" page.

......

For WebShare, the sharepoint (volume) key is the name of the sharepoint, for example "WebShare Public", whereas for EtherShare and PCShare the volume key is the directory path, for example "/demovol".

To set up a sharepoint "Mycompany Public", similar to the "WebShare Public" by using "prefvalue", the following prefvalue sequences must be called:

```
# prefvalue -k "Programs/websharesrv/Shares/Mycompany Public/
Path" -t str "/mycompany/public/WebShare"
# prefvalue -k "Programs/websharesrv/Shares/Mycompany Public/
AllowDownload" -t bool TRUE
# prefvalue -k "Programs/websharesrv/Shares/Mycompany Public/
AllowPreview" -t bool TRUE
```

By default, the Publish flag is set, therefore it need not be specified.

8.5.3 Quickshare preference keys

The following keys require a new login to take effect: Key: Programs/websharesrv/Quickshares/<QS #>/<preference> Active bool FALSE Specifies if a Quickshare is active. Setting a Quickshare status to FALSE, does not mean that the Quickshare is deleted but it is not available for remote users. The setting reflects that of the Active checkbox on the "Quickshare Administration" page. Username str Specifies the name of the WebShare user to whom the Quickshare was assigned. The setting reflects the first part of the content of the Quickshare User pop-up menu on the "Quickshare Administration" page. Sharepoint str This preference states the WebShare sharepoint that a Quickshare points to. The setting reflects the content of the Sharepoint text field on the "Quickshare Administration" page. Path str This preference states the path that a Quickshare points to. The setting reflects the content of the Path text field in the "Quickshare Administration" page. Expires uint32 0 This preference allows you to enter an expiry date after which the Quickshare becomes void. The setting reflects the content of the Expires text field on the "Quickshare Administration" page.

Comment		str	11 11
	Quickshare use	er. The setting re	o enter a comment for the remote effects the content of the <i>comment</i> text inistration" page.
Creator		str	пп
	-	ntent of the cre	eator of a Quickshare. The setting eator text field on the "Quickshare
CreatorEM	ail	str	н н
	Specifies the e- Quickshare.	-mail address of	f the logged-in user who created the
Files		strlist	нн
	share link. The		(s) that are provided via the Quick- ts the content of the Files text field ration" page.
EMailOnAd	cess	bool	FALSE
	notified by e-m	ail if a user ope e E-Mail on Ac	RUE, the creator of a Quickshare is ns a Quickshare. The setting reflects cess checkbox on the "Quickshare
AllowDow	nload	bool	TRUE
	files via Quicks	share link. The	llows a Quickshare user to download setting reflects the state of the Allow nickshare Administration" page.
AllowUplo	ad	bool	FALSE
	files via Quicks	share link. The	allows a Quickshare user to upload setting reflects the state of the Allow kshare Administration" page.

AllowPrevi	ew	bool	TRUE
	files via Quicks	share link. The	llows a Quickshare user to preview setting reflects the state of the Allow ckshare Administration" page.
Random		str	н н
Random	C		

Specifies a random suffix string for the Quickshare URL (compare Fig. 4.4). This prevents clients from accessing Quickshares with empty passwords (see **QuickshareEmptyPassword** above) by simply entering Quickshare IDs.

8.5.4 Web Server preference keys HELIOS Admin needs to know

The following keys require a new login on HELIOS Admin Server to take effect:

Key: Programs/websharesrv/websharewoa/<webserver>/<preference>

When HELIOS Admin displays the "Quickshare" edit dialog, it includes information about the Web Server and URL.

If the WebShare File Server and Web Server are installed on different machines, HELIOS Admin needs to know the WebShare Web Server configuration for the following preference keys:

- SSLPort
- WOHost
- WOPort
- WSAllowedHostNames
- WSHostName
- WSHostPort
- WSPublicHost

For <webserver> in the preference key use the complete WebShare Web Server name or IP address, e.g.:

Example 1 (using the complete WebShare Web Server *name*):

mywebserver.domain.com

Example 2 (using the complete WebShare Web Server *IP address*):

172.16.3.29

If for example the WebShare Web Server has the changed SSLPort 4430, this would be the prefvalue call to set:

```
prefvalue -k "Programs/websharesrv/websharewoa/mywebserver.domain.com
    /SSLPort" -t int 4430
```

9 HELIOS Document Hub

HELIOS Document Hub allows access from iOS or Android devices to intranet file server volumes to present and use server documents online and offline. Built-in file synchronization ensures that server files are automatically updated on mobile devices. Enterprise file server security is enforced for online and offline use.

A user guide on how to use Document Hub is available in the app's help files.

10 WebShare security

10.1 Security considerations

10.1.1 WebShare Web Server

HELIOS WebShare's security is provided by a two-tier server application. The WebShare Web Server handles the web user interface on a separate server to ensure that the main file server is not accessible from the internet. In addition, SSL encryption is supported.

Port

Incoming HTTP port is 2009.

JavaScript

During the login process, the password is sent in encrypted form (RSA), as long as JavaScript is activated in the browser. If JavaScript is active, the browser will display crypted RSA 1024 bit adjacent to the Password field (Fig. 6.2). If it is not, the word will be cleartext and the password is sent without any encryption to the WebShare server.

Note:	With the Enforce RSA Crypted Passwords option in the "Server Prefer-
	ences" window (see Fig. 4.3 in 4.1 "Server Preferences") encrypted user
	logins are enforced.

10.1.2 WebShare File Server

The server file system security will be enforced according to the user credentials. Sharepoint based security allows further restrictions per user, e.g. browse, preview, download, upload and file management.

Ports

Port 2010-2015

10.1.3 Server setup

We highly recommend to use a two-tier server setup which is comprised of a dedicated WebShare Web Server with two network adapters as illustrated in 3.1 "Different setups". The benefit of this setup is:

- O Only one HTTP port (default: 2009) is available from the internet
- O HTTP traffic is handled on a dedicated server (HTTP attacks will not slow down the file server)
- O The dedicated WebShare Web Server does not store any data (in case an unauthorized person is able to log in, they will not find any data)
- O It is easier to secure the dedicated server with only one incoming TCP/IP port
- O It is easier to use the latest OS updates on this dedicated server

10.1.4 Firewalls

We highly recommend to secure all TCP/IP ports of the WebShare Web Server and allow only incoming HTTP connections on port 2009 (WebShare HTTP default). This can be done via a hardware firewall on an internet router or via a software firewall on the WebShare Web Server.

10.1.5 Access from the WebShare Web Server to the WebShare File Server

The WebShare Web Server preference **WSAllowedHostNames** (7.6 "Preferences") allows limiting the WebShare Web Server access to a given list of WebShare File Servers. We recommend to specify the hosts which are allowed by the WebShare Web Server to avoid that an unauthorized person routes this HTTP traffic via your WebShare Web Server to their WebShare File Server. Though this is not a security problem, there should be no reason to allow others to use your WebShare Web Server.

10.1.6 Symbolic links within sharepoints

By default, WebShare hides all symbolic link files for security reasons. Irrespective of this, it can happen that a directory includes a symbolic link to some files outside of a sharepoint. When a user duplicates this directory, all references to symbolic links are resolved and copied into the duplicated directory. Therefore, the files will not be symbolic links anymore and can be accessed.

10.1.7 Action scripts

WebShare allows running custom scripts, which are stored in the "var/settings/ WebShare/Actions" directory. All sample actions were developed as "Perl" scripts. "shell" or other programs are allowed but we recommend "Perl" to ensure server cross-platform compatibility, and avoid quoting problems of special characters in file names/arguments. Please note that action scripts running with the host user ID (or equivalent permissions) can access data outside a sharepoint. For security reasons, you may want to control the action script availability to individual users by limiting the action script access permissions. This can be done using the file system permissions (UNIX "chmod" or Windows ACLs to set e.g. *access for user only, access for group only*). Action scripts calling host programs (via system, pipe open, shell, etc.) can be dangerous if the file names contain special characters (e.g. < or > or '). Consult an operating system or "Perl" scripting specialist to verify custom scripts.

10.1.8 Allow all Read or Read/Write access in sharepoints

The optional preference to bypass host permissions **AllRead** and **AllReadWrite** should not be used unless you are aware that the access to files is not protected by the host OS anymore. By default, these two preferences are turned off and can only be turned on via a special WebShare file preference.

10.1.9 "wsaddshare" and "wslogin" scripts

The optional "wsaddshare" script allows limiting the sharepoint administration to a few specific path names (e.g. only "/data" and "/webshare" are allowed). Set up a list of allowed path names via "wsaddshare" to ensure that the Web-Share Administrator cannot publish the entire server.

The "wslogin" script allows additional auditing of user logins, e.g. verifying the remote address or limiting the login to specific hours/days.

10.1.10 No content security

By default, WebShare uses crypted passwords, nobody can spy these passwords because WebShare uses a random number which is different for each HTTP login. The complete content, e.g. file browsers, image previews and uploads/downloads, is sent over the internet without encryption in a default installation. internet providers, local users, etc. can use network monitoring tools to spy your activities. To avoid this, complete encryption via HTTPS can be enabled according to the instructions given in 7.4 "HTTP/SSL support".

10.1.11 Switching WebShare to port 80 on the WebShare Web Server

This chapter provides more information about how to setup WebShare to use the default HTTP port and how to run WebShare in parallel with the existing web server on the same machine, using port 80 for the HTTP communication.

Some customers will not allow any other port than the default HTTP port 80. Changing the WebShare port to 80 offers more compatibility to other users behind their own proxy servers and firewalls.

By default WebShare accepts incoming HTTP connections from all IP addresses/network interfaces on port 2009. When the **WOPort** preference is changed to port 80 this may conflict with the existing web server (e.g. Apache) on the same host. The workaround is to setup a second IP address (alias) on the same interface and configure WebShare to use the second IP address on port 80. The DNS/Hosts configuration must be updated with the second IP address, e.g. "webshare.<yourdomain>.com" mapping to the second IP address. This can be done via:

ifconfig eth0:0 192.168.1.6 up

This is the command for a Linux platform using the network interface "eth0" assigning the additional IP address. The command or syntax may vary on different server platforms, so check your options in the "ifconfig" or "ip" documentation. The IP address has to be valid within your internet network range/class.

The first step is to tell WebShare to listen only on the new interface instead of all interfaces.

Specify the WebShare Web Server preference WOHost. The new name must resolve to the new alias IP address:

```
# prefvalue -k Programs/websharewoa/WOHost -t str
"webshare.yourdomain.com"
```

Then set the WOPort preference and then stop and restart the WebShare Web Server:

```
# prefvalue -k Programs/websharewoa/WOPort -t int 80
```

srvutil stop websharewoa

srvutil start websharewoa

A Special characters in file names

There are several characters in file/folder names which are handled specially when uploading or downloading. These are 9 characters, which have a special meaning for UNIX file names.

Even on Mac or Windows clients, not all of them can be used in file names.

Hexadecimal	Usual representation
22	"
2a	*
2f	/
3a	:
3c	<
Зе	>
3f	?
5c	\
5e	٨
7c	

When uploading a file with a name containing a character from this list, the file name stored in the server file system will not be represented with the original character. Instead, it is represented with a "^" followed by the hexadecimal encoding of the character. This encoding is also used by EtherShare.

For example, the file name "4*4 yields 16" will be stored as "4^2a4 yields 16" in the server file system. Similarly, when uploading a Zip archive containing a file or folder with a name containing a character from this list, the file name in the file system will contain the " xy " representation.

When downloading a file with a name containing a quoted character from this list, it will NOT be translated to its unquoted form. Instead the representation will be the same. For example, a UNIX file name "4^2a4 yields 16" will be downloaded unchanged.

Similarly, when downloading multiple files, the Zip archive containing a file or folder with a name containing a quoted character from this list, the file name in the Zip archive will contain the "^xy" representation.

Note: The above mentioned escape rules for special characters are for internal handling only. In the GUI and in the file browser the WebShare Web Server will display the unescaped character.

B WOStarter – Web service health check

All HELIOS services are monitored by the HELIOS Service Controller. If a program aborts due to a major problem, the Service Controller will log errors and restart the service. The "wostarter.so" (WOStarter) is a plug-in for the Service Controller to constantly monitor its whole web service. If a web service gets stuck and is not responding correctly to HTTP requests from the WOStarter, the Service Controller will restart the service. This adds an additional level of availability auditing to the Service Controller.

The file "wostarter.so" is located in "HELIOSDIR/lib". The HELIOS Service Controller can use this plug-in to start/stop and monitor the WebShare Web Server ("webSharewoa"). It can be activated for the WebShare Web Server via the following preference:

```
# prefvalue -k 'Services/websharewoa/ServiceStarter' -t str
  "de.helios.servicestarter.wostarter"
```

WOStarter periodically checks whether the "websharewoa" service is still alive. WOStarter can detect the following web service failures:

- O HTTP response does not contain an expected keyword
- O HTTP response contains a keyword that is not expected
- O HTTP error occurs
- O HTTP response is incomplete
- O No HTTP response at all

When WOStarter detects a problem with its monitored web service, it will log detailed errors and restart the web service. Custom WOStarter settings can be configured via preferences.

Examples:

```
The WatchdogInterval preference specifies the timeout in seconds (default=600):
```

prefvalue -k 'Programs/websharewoa/WatchdogInterval' -t int [value]

The WOHost preference specifies the hostname or the IP address of the web service (*default*=localhost):

```
# prefvalue -k 'Programs/websharewoa/WOHost' -t str [value]
```

The woPort preference specifies the port of the web service (*default=2009*): # prefvalue -k 'Programs/websharewoa/WOPort' -t int [value]

The ResponsePositive preference specifies optional strings that must be contained in the HTTP response (*no default*).

```
# prefvalue -k 'Programs/websharewoa/ResponsePositive' -t strlist [value]
```

The ResponseNegative preference specifies optional strings that must be contained in the HTTP response and which indicate an error (*no default*).

prefvalue -k 'Programs/websharewoa/ResponseNegative' -t strlist [value]

C Technical notes

C.1 WebShare log file structure

"HELIOSDIR/var/adm/webshare.acct" (with the appendices ".0", *yesterday*, to ".6", *seven days ago*) provides details for several WebShare actions.

The messages have the following format (from left to right):

date user ip action sharepoint path entry target user-agent result details

Description

date: Date and time in seconds since 1-1-1970 (UNIX "time_t" values)

user: Name of the logged-in user. The number of user logins per day is stated in parentheses. If a user has logged-in from HELIOS Admin, this is stated in the form <*user*>(*heladmin*)

ip: IP address of the logged-in client

action: Action that is taken, e.g. login, preview, addShare

sharepoint: Sharepoint where the action is taken

path: Path to file within the sharepoint

entry: File name in download, upload, getFile and preview action

target: File size in *download*, *upload*, *findFile*, *getFile* action, and used options in case of *preview* action

user-agent: In case of a *login* action, browser information (OS, browser, platform) is listed

result: Result 0 for success, 666 for failed login

details: File information in *download* and *upload* action

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