

NORTHERN STORAGE PORTAL USER'S GUIDE



NORTHERN

Northern Storage Portal for Windows 2000/XP/2003 User Guide revision 2005.0.612.11

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INTRODUCTION

NORTHERN STORAGE PORTAL

You cannot overstate the importance of user involvement in storage resource management. In order to bridge the gap between the Administrator and the users, [inviting the users to get involved and keeping them continually informed] the Northern Storage Suite includes Northern Storage Portal. This is a program that can display informational and educational web pages to end-users. These web pages serve the following purposes:

- It provides a means for an end-user to view statistics about his or her home share.
- It educates end-users on the economy of data storage.
- It offers the user the option to move, delete files and unnecessary data.
- It allows the user to ask for more disk quota [response can be automated].

The user typically accesses the Storage Portal in response to e-mails from Northern Quota Server. The e-mail asks the user to click a link to get more information. The link opens a web page that shows the user's usage and quota information, etc.

INSTALLATION

For in depth installation and deployment information please refer to the Deployment Guide, found in the Northern Storage Suite installation directory.

SYSTEM REQUIREMENTS

For a list of the system requirements please refer to the Deployment Guide, found in the Northern Storage Suite installation directory.

LICENSING

For in depth licensing information please refer to the Deployment Guide, found in the Northern Storage Suite installation directory.

ARCHITECTURE

The Northern Storage Portal is organized into two conceptual components: The Administrator Console and the User Pages.

In the Administrator Console you can:

- Define Grace Limit Rules
- Check on pending requests for additional storage
- Inspect end-user pages
- View what Storage Portal has done previously [History page].

In the User Pages the users can:

- View statistics about his or her home share.

- Learn more about the economy of data storage.
- Get help to move, inspect or delete obsolete files or unnecessary data.
- Ask for more disk quota [response can be both partially and fully automated].

INVOLVING USERS IN SRM

The goal of Storage Portal is to help users economize with storage resources. When a storage management policy is first implemented it is advised that you start by informing the users about it, educating them about storage, its economy, the size of their quotas, etc. You can for instance send them informational e-mails, even before the quotas have been used up the users will have received some popup notifications and e-mails that has taught them to keep a mindful eye on how they use storage. Now, using the Northern Storage Portal you will be able to have users help out in storage management continually and proactively.

Using mail notifications about storage and quotas you can guide them to a web page that gives tips on how to save storage judiciously and how to reclaim wasted space. You can also totally automate the handling of emergency storage needs by allowing them to request additional storage from time to time, aided by the tools and instruction on their personal Storage Portal web page.

TYPICAL MESSAGE FROM QUOTA SERVER

The following is an example of a typical message sent to users, inviting them to visit their web page:

Dear Network User,

You are using [Data:'UsagePercent']% of your available disk space, [Data:'QuotaSize'] bytes.

If you need more disk space, or want help to reduce the size of your data, please click this link. The link will take you to a personal web page that will give you information about the storage you use, as well as help you to: move, remove or archive files, or request additional space.

Why did I get this e-mail?

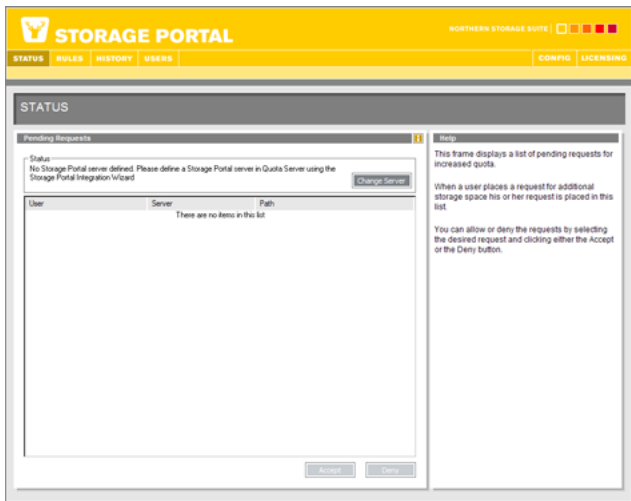
[organization] has decided to implement a storage policy. This means that, from now on the amount of storage available to you has been restricted. These restrictions have been put in place to save valuable resources. You have been given [Data:'QuotaSize'] bytes of storage. If you feel that you need more storage click this link.

ADMIN CONSOLE

ADMINISTRATOR PAGE

From the Admin View you can access three Views: Overview, Rules, History and Users.

Figure 1: Status page in the Admin Console



On the Overview page you are presented with a list of all pending requests. That is, a list of all requests for additional space that have been placed and which await your decision. If you haven't defined any rules that need admin interaction, the list will be empty.

On the Rules page you define Grace limit rules. That is, you decide which user groups that should have grace limits and which grace limits they should have.

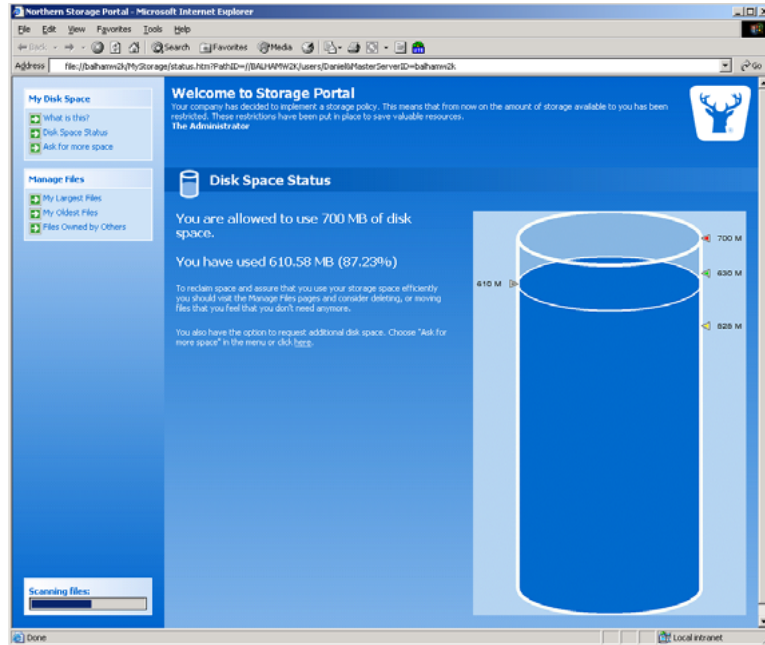
On the History page you retrieve historical data showing you which requests that have been processed within a customizable time frame.

On the Users page you can retrieve and view all individual web pages.

USER PAGES

The web page that each user can navigate to contain useful information about the user's quota and usage, but also some information about the content of his folders.

Figure 2: End-User Interface: Disk Space Status Page



Information the users can find on their pages are:

- Quota size
- Usage as a percent of quota
- Visual representations of quota and usage
- Top ten largest files
- Top ten largest files not owned by the user
- Top ten oldest files

Measures the user can take with the help of the page:

- Request an increase of quota
- Delete unnecessary files
- Move files that should be stored elsewhere

CONFIGURE

CONFIGURING STORAGE PORTAL

To successfully configure Storage Portal, you have to:

- Configure Quota Server to interact with Storage Portal. For more details, See “Configuring Quota Server” on page 11.
- Define grace limit rules. For more details, the Northern Storage Portal User Guide.

CONFIGURING QUOTA SERVER

To make Quota Server and Storage Portal interact, you have to configure Quota Server. This is done using the Storage Portal Configuration Wizard. The Wizard creates new Notification Templates for use with Storage Portal. Since the e-mail contains a link including arguments this must be supported! The mail should always be sent using SMTP.

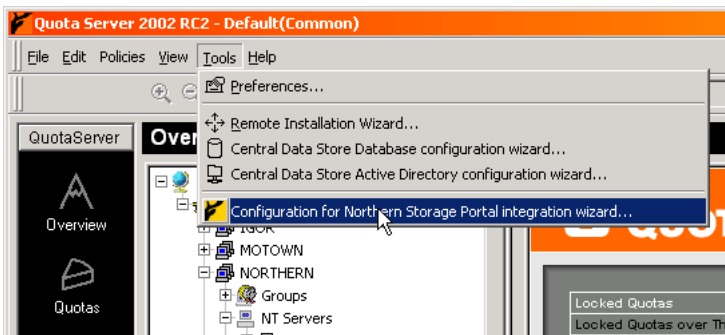
In the wizard you are asked to choose if the link to Storage Portal should use the File or HTTP protocols. On some mail systems file links with arguments are not supported, on these systems you are advised to use the HTTP link. The HTTP link does however rely on the use of a virtual directory and the IIS. For more details See “Configuring IIS” on page 13 and subsequent headings.

You should also notice that quotas that use Storage Portal must be set on a path that the user has access rights to.

To configure Quota Server to interact with Storage Portal:

- 1 In the Quota Server client, choose: Tools > Storage Portal Configuration Wizard. The Welcome dialog appears.

Figure 3: Quota Server and Storage Portal Integration



- 2 On the Welcome page, click Next. The Template Server dialog appears.



Notice! For Storage Portal to work you must provide the name of the server where you have installed Northern Storage Suite to Quota Server. Quota Server needs to know the name of this “Storage Portal server” for the two programs to interact.



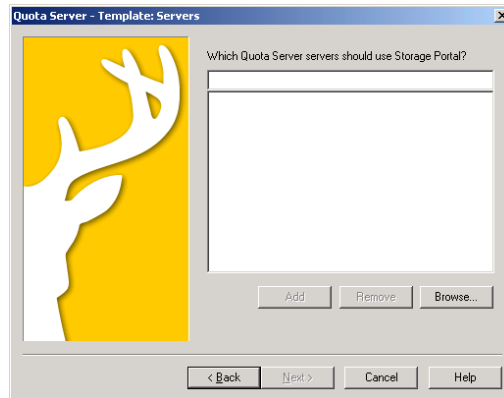
Notice! For Storage Portal messages to be sent via e-mail you must use SMTP.



Notice! For Storage Portal to work you must set the quotas on a path that the end-user has access rights to. This implies also that those quotas must be set on UNC path. Local path quotas cannot be used with Storage Portal.

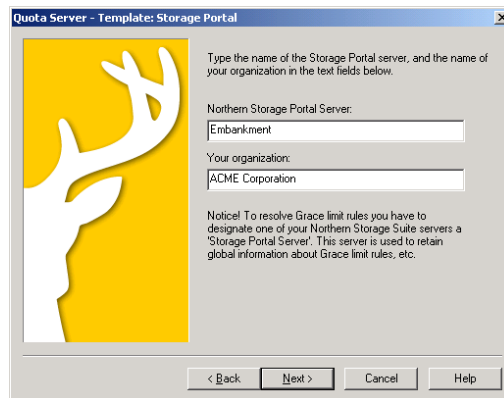
- 3 In the Template Server dialog click browse and add the Quota Server server that will use Northern Storage Portal. Click Next.

Figure 4: Choose Quota Server to use Northern Storage Portal



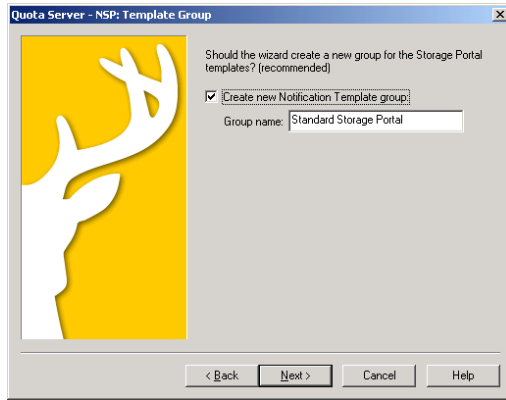
- 4 In the Template:Storage Portal dialog type the name of the server that will store all Grace Limit rules. Also type the name of your organization. This name will be used in the last portion of the Notification template you create. Click Next.

Figure 5: Template:Storage Portal



- 5 In the NSP:Template Group dialog either click next or change the name of the new Notification template group. [If you clear the check box, the templates will not be created!]

Figure 6: NSP:Template Group



- 6 In the NSP: e-mail links dialog choose whether you want to use file links or HTTP links. If you choose HTTP links, notice that you have to create a virtual directory for Storage Portal. For further details, See "Configuring IIS" on page 13.
- 7 In the Summary dialog, verify your settings and click Finish. A warning message appears that informs you of the fact that any existing template group with the same name will be replaced.
- 8 The settings are applied and you can close the wizard.

CONFIGURING IIS

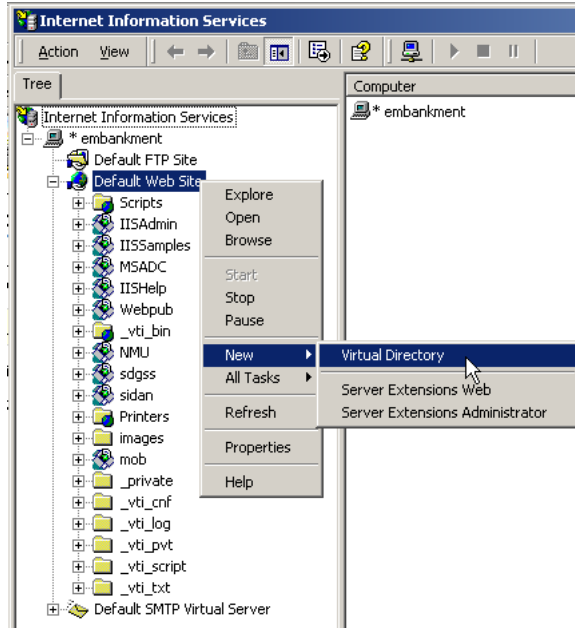
To use http links in your NSP e-mails you must create a virtual directory that points to the MyStorage share.

TO CREATE A VIRTUAL DIRECTORY

- 1 In the Internet Information Services [IIS] Manager, right-click your [default] Web site.

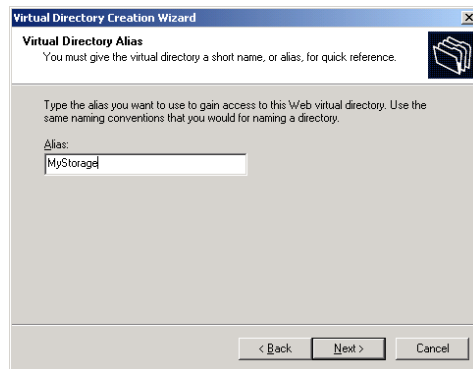
- 2 Select: New > Virtual Directory from the drop-down menu. The Virtual Directory Creation Wizard appears.

Figure 7: Internet Service Manager: Create: Virtual Directory



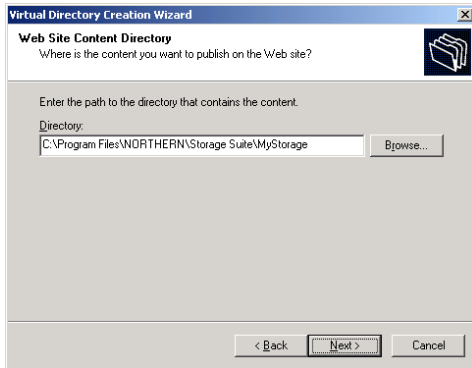
- 3 Follow the instructions in the Wizard, give the Virtual Directory the name MyStorage.

Figure 8: The Virtual Directory Creation Wizard.



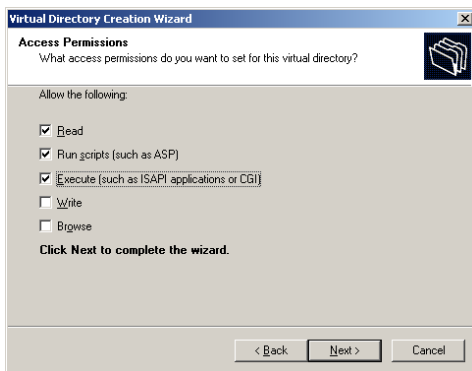
- 4 Browse to where you placed the Storage Portal pages [Typically found in the Northern install directory on your Master Server].

Figure 9: The Virtual Directory Creation Wizard



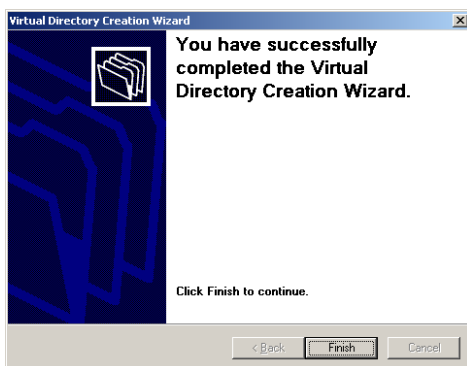
- 5 Please make sure to select the *Execute [such as ISAPI applications or CGI]* check box.

Figure 10: The Virtual Directory Creation Wizard



- 6 Complete the Create a Virtual Directory wizard.

Figure 11: The Virtual Directory Creation Wizard.



CUSTOMIZING STORAGE PORTAL

Northern Storage Portal can be customized in three respects. First, you can translate the text on all SP pages. Second, you can remove any of the Storage Portal pages displayed to the end-users. Finally, you can chose how many of the user's files should be shown.

EDITING TEXT ON END-USER PAGES

To edit any text found on the Northern Storage Portal end-user pages, browse to X:\Program Files\NORTHERN\Storage Suite\MyStorage\Include\en-us, and open the file i_Texts.txt.

The i_Texts.txt file is a file that contains all the text displayed in the end-user pages of Storage Portal. The file contains the name of each text insert on the page, an equal sign [=], followed by the text that the end-users will see when they go to Storage Portal.

To edit any text insert just change the text on the right-hand of the equal sign. Like this:

```
TXT_WELCOME_TITLE = Welcome to Storage Portal  
TXT_WELCOME_TITLE = Hi everybody!
```

Notice that you can use HTML tags as well. Like this:

```
TXT_WELCOME_TITLE= Hi Everybody <p>
```

Notice! You cannot enter line breaks into the text flow. This will not be picked up by the browser. Line brekas must be made with HTML tags, i.e
.

HIDING END-USER PAGES

To hide any of the Northern Storage Portal end-user pages, browse to X:\Program Files\NORTHERN\Storage Suite\MyStorage\Include\en-us, and open the file i_Settings.txt. The text file contains the names of the eight different end-user pages, followed by an equal sign and the statement TRUE. To remove a page replace the statement of that page with FALSE.

PAGE	SETTING	DESCRIPTION
PG_WHAT_DISPLAY	= True	The page that displays the introductory page
PG_QUOTA_DISPLAY	= True	The page that displays the quota information
PG_REQUEST_DISPLAY	= True	The page that allows you to request more space
PG_LARGEST_DISPLAY	= True	The page that displays the top ten largest files
PG_OLDEST_DISPLAY	= True	The page that displays the top ten oldest files
PG_NOTOWNED_DISPLAY	= True	The page that displays the top ten largest files not owned by this user

PAGE	SETTING	DESCRIPTION
PG_DUPLICATES_DISPLAY	= True	The page that displays duplicate files *files with identical content)
PG_MEDIA_DISPLAY	= True	The page that displays media files, regardless of owner.
FILE_COUNT	= 100	The number of files NSP shows.
IGNORE_OWNER	= True	Setting this value to "true" will display all files, regardless of owner..

NOTIFICATIONS

EDITING NOTIFICATIONS

NSP can be defined to send end-user notifications when a user request for additional storage has been denied or accepted. You can edit the notification templates for these messages. The templates are found in C:\Program Files\NORTHERN\Storage Suite\Database\EndUserPortal\Templates. To edit the text in the message, do any desired changes to the text found in the Text tag of the XML files.

The following files contain the body of the message:

- Admin accept body.xml
- Admin deny body.xml
- User accept body.xml
- User deny body.xml

USAGE

ADMIN CONSOLE

In the Admin Console you are able to define Grace limit rules. These Grace limit rules are defined per Group and they stipulate whether or not members of a given Group should be allowed increases of the quotas if they so require. Each Grace Limit Rule also indicates how large an increase a user can get, and whether or not the Grace limit should be granted automatically or only after the Administrator has cleared the request.

- Define Grace Limit Rules, See “Adding a Grace limit rule” on page 19
- Check on pending requests for additional storage, See “Monitoring Storage portal” on page 20
- Inspect end-user pages, See “Retrieving a User’s Page” on page 20
- View what Storage Portal has done previously [History page], See “Inspecting Storage Portal history” on page 20.

ADDING A GRACE LIMIT RULE

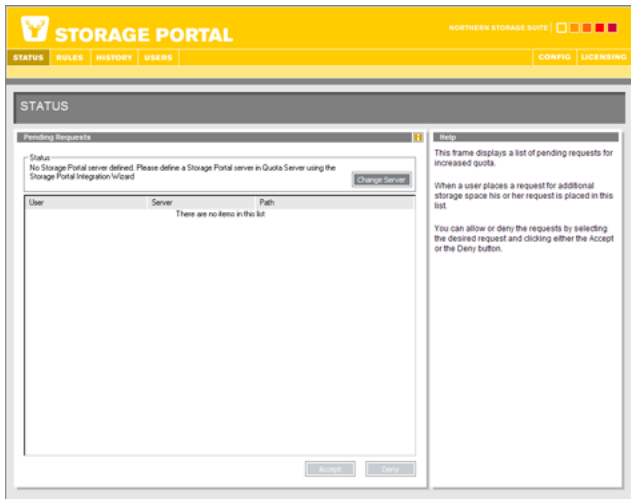
You apply grace limits per server and NT Group. The rules are applied to all members of that group on the specified server.

A grace limit is a rule that allows users to increase their quota. The size of this additional space is predefined in the Storage Portal Config.

To set a grace limit:

- 1 On the Rules page, in the Define rules control, click the Add button. The Define Rules Wizard appears.

Figure 12: Admin console: Rules page



- 2 Follow the on-screen instructions

You can proceed to define as many rules as you like by repeating the steps above.

MONITORING STORAGE PORTAL

To check on pending requests:

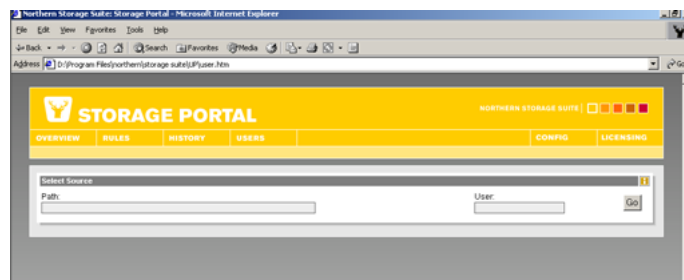
- 1 On the Overview page, in the Pending Requests control, highlight any listed request.
- 2 Click the Accept or the Deny button depending on whether you want to allow an increase of the size of the quota or not.

RETRIEVING A USER'S PAGE

To retrieve a user's page:

- 1 In the Path text field, enter the path to the machine where the User has his or her quota.
- 2 In the User text field, enter the Server name and Account [e.g. DOMAIN\USER] of the User.

Figure 13: Admin Console: User page



- 3 Click the Go button. The User's portal page is retrieved.

HISTORY

All requests for additional storage are saved for future reference. You can retrieve all requests and all decisions [regardless whether a request was accepted or denied] based on those requests on the History page in Northern Storage Portal.

INSPECTING STORAGE PORTAL HISTORY

To see old requests for storage and how they were handled:

- 1 On the History page, select the desired dates in the Calendar.
- 2 Click the Show History button. Relevant entries are shown in the list

C:\Program Files\NORTHERN\Storage Suite\Database\EndUserPortal\Templates

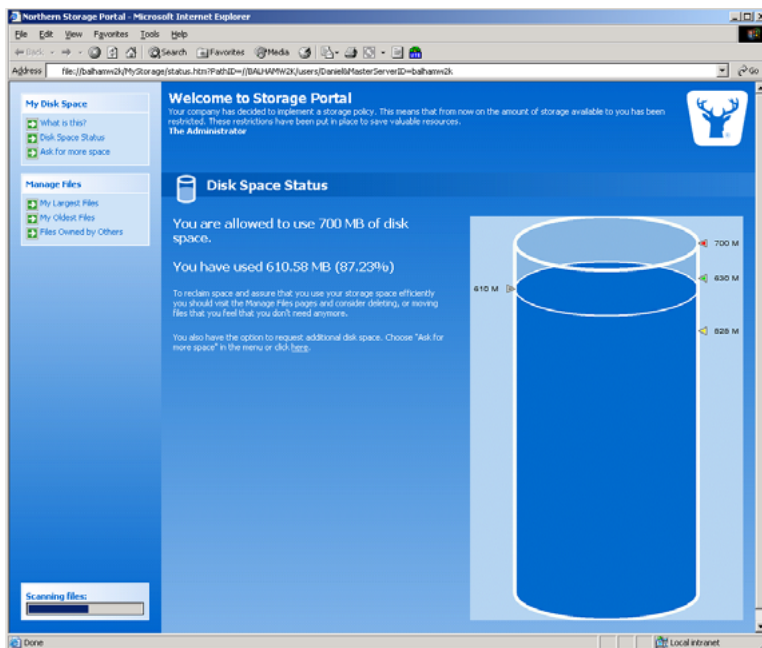
USER PAGES

The following documentation could be printed or mailed to users.

WELCOME PAGE

When you click the link in your Quota Server e-mail, you are taken to a personal web page. The first page you will see is the Welcome Page. From the Welcome Page you can go to any page of the portal.

Figure 14: Welcome page



MANAGE FILES

On the Manage files pages you will find your largest and oldest files and any files that belong to other users than yourself. Any file you find in the list can be selected and either:

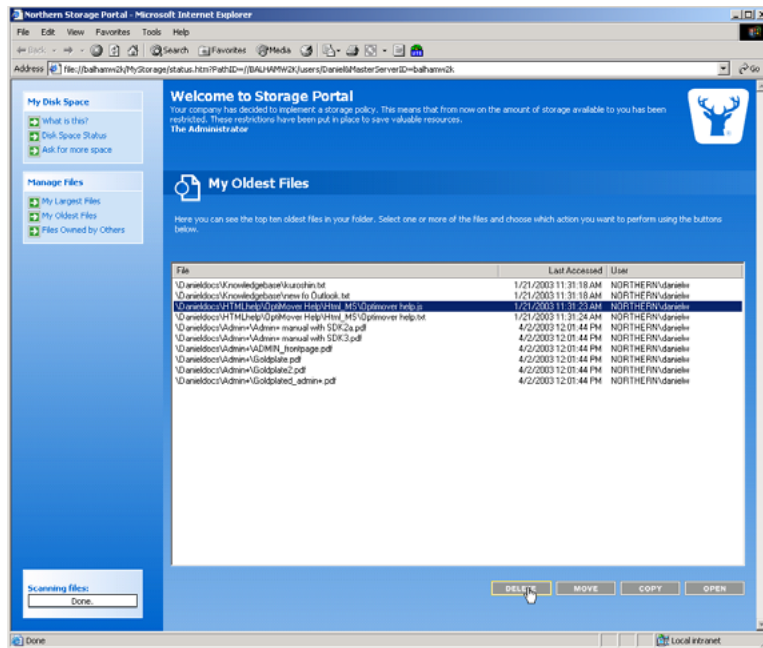
- Deleted
- Moved to another location
- Copied to another location
- Opened [if applicable]

DELETING A FILE

To delete a file:

- 1 On the Manage Files Page, in the list, select the file you want to delete.

Figure 15: End-User Interface: Manage Files page



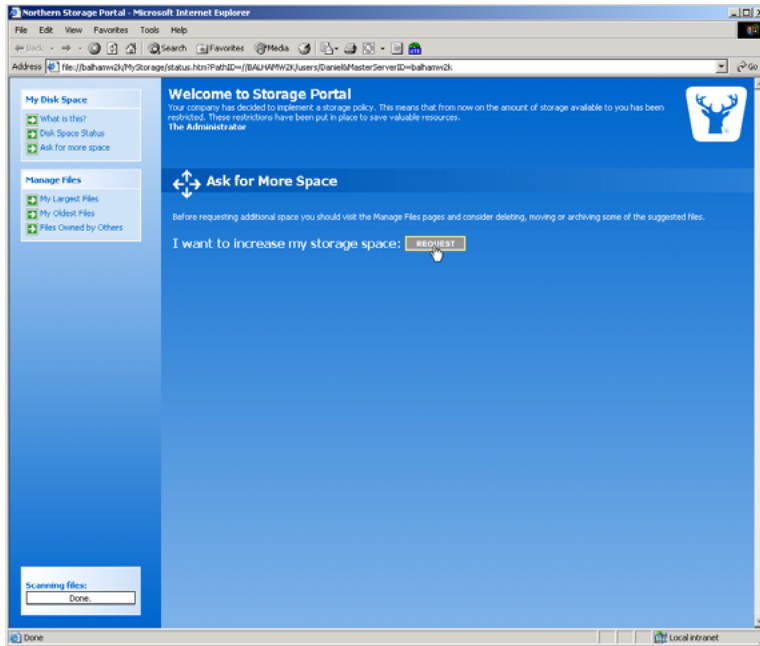
- 2 Click the Delete button at the bottom of the list. A warning message appears asking you to verify your decision.

POSTING REQUESTS FOR ADDITIONAL SPACE

To post a request for additional space:

- 1 On the Ask for More Space page click the Request button.

Figure 16: End-User Interface: Request Space Page.



- 2 A popup message appears informing you whether your request has been accepted, denied or put in the queue.

NORTHERN

NORTHERN: THE COMPANY

Northern Parklife, Inc. [NORTHERN] develops storage management software for Microsoft Windows server environments. Working with a global network of resellers and authorized distributors, the company's products are sold in 52 countries worldwide. NORTHERN® supplies a global market through its two offices, Tampa [Florida, US] and Stockholm [Sweden].

Northern is distinguished by the flexibility and reliability of its family of storage management solutions, as well as its unmatched customer support and responsiveness to market demand.

BUSINESS CONCEPT

NORTHERN develops and simplifies storage administration in Microsoft Windows server environments with advanced software technologies. Our products and employees help systems administrators to succeed in rationalizing and gaining better control over their IT resources.

Business Mission

NORTHERN's business mission is to provide system administrators with more **Time to Manage Storage**. The design core of all NORTHERN solutions is the capacity to re-balance the equation of increased responsibilities and static or diminishing resources. System administrators are saddled with an increasing range of responsibilities while their resources, particularly their time, remain limited. NORTHERN delivers a range of inherently tactical, while at the same time easy-to-use storage management tools that serve to augment the IT organization by reducing workload and increasing efficiencies. Our software makes storage administration simpler and less prone to error, and gives administrators greater latitude in developing and implementing creative business solutions that enhance their value to the organization.

NORTHERN software offers system administrators:

- More time for pro-active planning and creative problem-solving
- Better oversight and control
- Easy, hassle-free installations
- Simple, friction-free administration
- Reliability
- Fewer end-user issues (lightening the support burden)
- More spare time and free weekends

Time to Manage Storage is the removal of unnecessary repetition and complicated word-arounds, providing time for pro-active Storage Resource Management and time for job fulfillment.

THE MARKET

NORTHERN is the leader in the European systems administration software solutions market, which is comprised of systems administrators and network managers tasked with managing a broad range of network responsibilities. Because networking issues know no geographical

boundaries, the European and US markets served by NORTHERN allow for a consistent global marketing and product development strategy.

PRODUCT DEVELOPMENT

NORTHERN's product development is managed internally and driven by feedback from customers, Windows NT/2000 users and discussions with NORTHERN's board of advisors that consists of financial, technical and market experts.

CUSTOMER SUPPORT PROGRAM

Take advantage of expert technical guidance and inexpensive upgrades with NORTHERN's Customer Support Program

You have invested in a CD-ROM from NORTHERN, a software product. Every effort has been made to ensure that this software is your solution. But sometimes something extra is needed, to guarantee your investment.

The need for continuous organizational advances, network configurations, hardware peculiarities; these factors can lead to time consuming issues and the need for constant system evolution. This is when the NORTHERN Customer Support Program becomes invaluable: uncomplicated and inexpensive upgrading of your system to the most advanced solutions available, and smooth installation and integration with expert technical guidance.

The NORTHERN Customer Support Program brings you closer to the technological front line and provides you with the assistance you need to make the most out of being there.

NORTHERN does not just make software - we provide our customers with complete solutions.

FEATURES

NORTHERN's Customer Support Program offers two different kinds of support: Premium and Standard.

More information about NORTHERN's Customer Support Program is available at www.northern.net/support.

Please contact your local software supplier to find out how you can join NORTHERN's Customer Support Program. A list of authorized NORTHERN resellers is available at www.northern.net.

CONTACTING NORTHERN

Do you have questions? Would you like to comment on our products, support or business? Do you have suggestions for future releases or products? Would you like to pay us a visit?

STREET ADDRESS

Northern Parklife Inc
5201 West Kennedy Blvd Suite#930
Tampa FL 33609
USA

Northern Parklife AB
Gavlegatan 18b
SE-113 30 Stockholm
Sweden

PHONE

US time zones: 1.800.881.4950
1.813.639.0767

Other time zones: +46 8 457 50 00

FAX

US time zones: 1.813.639.0757

Other time zones: +46 8 457 50 50

E-MAIL

Sales inquiries: sales@northern.net
Support questions: support@northern.net
Other: info@northern.net

WEB

www.northern.net

