Network Storage Manual

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Introduction

To improve storing, sharing and backup of large files (in the order of gigabytes) the university network storage can be used. Each university employee (and student) has a certain amount of disk space available on the network.

Most people on the university make use of Windows XP that was installed by the university (so called UWP installation). When using the UWP installation of Windows XP the network storage can be accessed by going to either the X:\ drive or the Y:\ drive listed under 'my computer'.

A benefit of a UWP installation is that your desktop items and regional settings, as well as documents, are stored on the network. This means that when you log in on a computer with a UWP installation you will have your own desktop items, regional settings and documents. All this information is stored on the X:\ drive. The Y:\ drive is meant for sharing files among groups of people (such as a research group).

Most groups have their own folder on the Y:\ drive where they can store (averaged sized) files for backup purposes or for sharing with colleagues. The disadvantage of these folders is the limited storage space that is available. Because of this it is not uncommon for research groups to use external hard drives or other solutions for their file storage needs.

Network storage for research groups

For the 'Singe Molecule Biophysics', 'Molecular Systems Biology' and 'Membrane Enzymology' groups new folders have been created on the network drive for storing large files. The folder names along with their storage capacity are listed below:

| Group | Folder | Capacity | Administrator |
|---------------------------|-----------------------|------------------|--------------------|
| Singe Molecule Biophysics | Y:\Staff\fwn\vanoijen | 2 TB (≈ 2000 GB) | Antoine van Oijen |
| Molecular Systems Biology | Y:\Staff\fwn\MSB | 1 TB (≈ 1000 GB) | Matthias Heinemann |
| Membrane Enzymology | Y:\Staff\fwn\poolman | 3 TB (≈ 3000 GB) | Bert Poolman |

Backup

Each day a backup of the folders is made. The backups are stored for the duration of 90 days. Even when a file is (accidentally) modified it is still possible to retrieve the original. For each file the last 6 versions are stored. Restoring a backup is done via CIT (<u>http://www.rug.nl/cit/index</u>).

Access control

The folder for each group is only accessible by its members. When a new person joins the research group the group-list for their folder needs to be adjusted accordingly. This means that people are not automatically granted access to the folder of their research group. As soon as a person joins or leaves

the group the administrator of that group needs to adjust the group-list accordingly by sending an email to either <u>c.m.punter@rug.nl</u> or <u>servicedesk.zernike@rug.nl</u>.

It is not possible to set the right-settings for sub-folders. This means that access to sub-folders cannot be restricted to certain persons only! The persons listed on the group-list have access to all sub-folders.

Sharing

Since every person of the research group has access to the network drive there is no need to exchange files using external hard drives or USB disks. Files can be accessed by simply going to 'my computer' and navigate to the folder of the research group (on UWP installations). It is also possible to access the files on the network drive from home via a web interface (<u>https://netstorage.id.rug.nl/NetStorage/</u>).

Network storage on Windows XP (UWP)

To access the network storage on Windows XP (university work space UWP) you can go to 'My computer' and double click on the Y drive.

Network storage for Employees

Employees (usernames that are prefixed by a 'p') can directly navigate to 'Y:\Staff\fwn'. The folder of the research group should be located in the 'fwn' folder.

Network storage for Students

Students cannot see the 'Y:\Staff' folder. In order to get access to the network drive of your group you can use a little tool called 'NetworkDrive'. The tool can be downloaded from http://www.singlemolecule.nl/tools/NetworkDrive.zip .

The NetworkDrive tool adds a network drive to 'My computer' that directly refers to the folder of the group. To logon to the network drive you need to specify your university username and password. After clicking on 'Next' it can take up to a minute before the network drive has been configured.

| Map Network Drive - Research group | built 19-8-2011 Heinemann | × |
|---------------------------------------|------------------------------|---|
| Username (s1234567) Password | s1234567 | |
| Show network drive | Next address | |

Network storage on Windows XP (non-UWP)

When the Y-drive is not listed under 'My computer' it usually means the no UWP installation (university Windows XP installation) is present on the computer. There are two options to access files on the network drive on a (non-UWP) Windows XP installation:

- Access via a web interface <u>https://netstorage.id.rug.nl/NetStorage/</u>. On this website you will be asked for your username and password. As username you can use your staff/student number and university password.
- Access via configuring a WebDav drive. WebDav offers a more convenient way to move files back and forth from or to the network drive.

Configuring WebDav on Windows XP:

• Open 'My Network Places' from the desktop and choose 'Add a network place'



- A wizard is started, choose 'Next'
- Select 'Choose another network location' in the menu beneath 'Service Providers' and fill in the network drive address that belongs to your group:
 - Heinemann group: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/DriveY@GRP01/Staff/fwn/msb</u>
 - Van Oijen group: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/DriveY@GRP01/Staff/fwn/vanoijen</u>
 - Poolman group: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/DriveY@GRP01/Staff/fwn/poolman</u>

| Network Place Wizard | |
|---|--------|
| What is the address of this network place? | A. |
| Type the address of the Web site, FTP site, or network location that this shortcut will ope | n. |
| nternet or network address: | |
| l/oneNet/NetStorage/DriveY@GRP01/Staff/fwn/vanoijen 💌 | |
| /iew some examples. | |
| | |
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| | |
| | |
| c Bank | Canad |
| < <u>B</u> ack <u>IN</u> ext> | Lancel |

- After a warning about a security alert, you can log in to your account (p123456 and university password).
- As a last step in the wizard you are asked to fill in a name for the settings you just made.
- You can access the network drive via 'My Network Places'.

Network storage on Windows Vista and Windows 7

Before you can access the network drive on Windows Vista or Windows 7 you need to download a file that changes the Windows registry so that a secure connection can be setup: <u>http://www.singlemolecule.nl/tools/webdav.zip</u>. The zip-archive contains a file called 'Webdav Windows.reg'. By double clicking on this file, the Windows registry will be adjusted so that a secure (https) connection to the WebDAV server can be set up.

- Right-click on 'My Computer' and choose 'Map network drive'.
- Choose a drive and set the folder to the network drive address that belongs to your group:
 - Heinemann group: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/DriveY@GRP01/Staff/fwn/msb</u>
 - Van Oijen group: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/DriveY@GRP01/Staff/fwn/vanoijen</u>
 - Poolman group: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/DriveY@GRP01/Staff/fwn/poolman</u>
 Also check the 'Reconnect at logon' and the 'Connect using different credentials' checkboxes.

| 🐁 Hap Network | k Drive | × |
|---------------|---|--------|
| 🔘 🍕 Map I | Network Drive | |
| What net | twork folder would you like to map? | |
| Specify th | e drive letter for the connection and the folder that you want to connect to: | |
| Drive: | Y: | |
| Folder: | http://www.uwdomeinnaam.nl/webdav Browse | |
| | Example: \\server\share | |
| | Reconnect at logon | |
| | Connect using different credentials | |
| | Connect to a Web site that you can use to store your documents and pictures. | |
| | | |
| | | |
| | | |
| | | |
| | Finish | Cancel |

• Click finish. A dialog will pop up asking for username and password. As username you can use your staff/student number (e.g. p123456 or s1234567) and password.

| Connect to we Connecting to w | ww.softmedia.nl www.softmedia.nl | |
|----------------------------------|-------------------------------------|--|
| | User name | |
| | Password | |
| | Remember my credentials | |
| | | |

- Go to 'My computer' and select the specified drive.
- Navigate to the folder of your group:
 - Staff\fwn\poolman
 - \circ Staff\fwn\vanoijen
 - Staff\fwn\msb

Network storage on Mac OS X

For Mac OS X a program called 'Goliath' can be used to connect to the network storage. It can be downloaded at: <u>http://www.webdav.org/goliath/</u>. After downloading and installing the application the following settings need to be set to access your data:

- URL: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/</u>
- User name (P123456) and password

Network storage on Linux

If you are using one of the more modern window managers (such as a recent version of Gnome or KDE) there is a very high probability that you can access the data from your window manager. This is also an excellent option if you don't have "root" on the machine that you are logged into.

Open a folder view from your window manager (usually an icon on the desktop that might be labeled something like 'Home') and type the following into the location bar at the top: <u>https://netstorage.id.rug.nl/oneNet/NetStorage/</u>. On some systems, such as KDE, you will probably need to type in: webdavs://netstorage.id.rug.nl/oneNet/NetStorage/.

Network storage via web-interface

It is also possible to access your data via a browser. <u>https://netstorage.id.rug.nl/NetStorage/</u> is a web interface to the network drive.



Remarks

It is important that the network stays intuitively structured. This means that care should be taken when storing files on the network drive. The following guidelines can be used to keep the network drive ordered:

- Each person has a separate folder (preferably named according to the name of the person e.g. a folder called j.devries\ containing all the files that belong to a Jan de Vries).
- To prevent that files get lost is also a good habit to group files according to their creation-date or project (e.g. j.devries\2010\december\palmReconstructions.zip).
- Give files meaningful names and order them accordingly. Prevent situations where you have a file such as 'old stuff/backup/from desktop/stuff.zip'.

Troubleshooting

Unable to connect to the network drive

Make sure you that you are able to access the network drive via the web interface <u>https://netstorage.id.rug.nl/NetStorage/</u>. If this is not possible, this means that you are not authorized to access the network drive. Authorization for the network drive can be arranged by the secretary of your research group.

Folders are visible but files seem to be hidden

This is a problem that happens under Windows Vista and Windows 7. To fix this problem a hotfix for Windows needs to be installed which can be found on <u>http://support.microsoft.com/kb/2555258</u>.

For question you can send an email to <u>c.m.punter@rug.nl</u>