# UBFS



# JumpStart Computing and Information Technology

#### Introduction

The *UB File System* (UBFS) is a centrally located disk resource that can be accessed wherever you connect to the UB network. Whether you connect from the residence halls or off campus, through the dial-in lines, or from one of the many public computing areas or Cybraries, UBFS is available for your use.

UB students have 15 megabytes of personal storage space reserved for them in the UBFS disk area. This storage space is a convenient resource for storing your electronic files. Your UBFS area is accessed as if it was just another hard disk on a Windows 95/98/NT machine, or another directory on a UNIX system.

#### Using UBFS

You can use UBFS to store files that you need to access from both home and school. For example, you can upload or save a Microsoft Word document to your UBFS space, then access it from the public computing areas located on campus.

If you do not have a printer at home, save to UBFS those files that you need to print, then print them on the public computing area printers.

Files stored in UBFS can be accessed from either Windows or a UBUnix machine. To transfer files between the two systems, simply copy the file to your UBFS space. There is no need for FTP (File Transfer Protocol).

**NOTE:** Currently, there is no UBFS client for Windows 2000 or Macintosh systems, so you must use a Web browser to access UBFS from these platforms. For more information, see the section *Viewing UBFS Files via the World Wide Web: WebDFS*.

#### **UBFS Directory Structure and Naming Conventions**

UBFS is configured like a tree. The root (or beginning) of the tree is indicated by /ubfs. Your personal storage space is located in a subdirectory at the following position in the tree:

#### /ubfs/user/u/s/username/ub,

where *u* and *s* are the first two letters of your *UB IT Name*, which is represented by *username*. If your UB IT Name is *abcde*, for example, then your personal storage space is located at */ubfs/user/a/b/abcde/ub*.

Once at the *ub* level, the tree structure appears as in the following diagram:



This diagram illustrates the directory structure of your personal storage space in UBFS. In this diagram, each occurrence of *data* refers to the same directory. Whether you access this directory as ub/nt/data, ub/data, or ub/solaris/data, you will see the same directory with the same files in it. The references to  $public_html$  are set up in a fashion similar to that of the *data* directory.

The *public\_html* directory is where your homepage for the World Wide Web resides. Everyone has a *public\_html* directory by default. However, it is not initially viewable via the Internet. To make your homepage visible via the Web, visit the following URL:

http://wings.buffalo.edu/computing/ubfs

Click the Turn on/off Home Page link and follow the directions.

You can store files in the *data*, *nt*, or *solaris* directories, depending on where and how you access UBFS. For more information, see the section *Where and How to Access UBFS*.

In addition to personal storage area, UBFS has shared space for departmental or University-wide software and electronic resource sharing. Shared files are located in the UBFS tree under /ubfs/shared.

#### Where and How to Access UBFS

You can access UBFS area from any NT workstation in a Public IT Service Area, from your own computer, or from UBUnix.

If you access UBFS from an NT machine in a Public IT service area, the **S**: drive places you in the *nt* directory of your UBFS space, while the **T**: drive places you at the root (/ubfs) of UBFS.

If you access UBFS from your own computer by connecting to the campus network from home, ResNet, or OpenPort, you need to install the *UBFSHome* software package on your computer. UBFSHome for Windows 95/98/NT can be obtained from the *Tech Tools 2000 CD*, available at *UBMicro* in the UB Commons, or the *iConnect@UB* web site at the following URL:

http://www.buffalo.edu/iconnect/

Follow the **Download Software** link at the top of the page. Note that this software currently is not available for Macintosh or Windows 2000.

When you use UBFSHome to access UBFS, the **S**: drive places you in the *nt* directory of your UBFS storage space, while the **T**: drive places you at the root (/ubfs) of UBFS.

**NOTE**: If the *S*: or *T*: drive is already in use on your computer, the UBFS space will be mapped to an alternate letter.

## JumpStart: UBFS

## Document Number: GEN-JST-014 Revised: November 2000 Published by: Academic Services, Computing and Information Technology The State University of New York at Buffalo

*JumpStart* documents help users get started using systems, compilers, and applications with minimal start-up time.

For additional help, contact the CIT Help Desk, 216 Computing Center, at (716) 645-3542, or send email to *cit-helpdesk@buffalo.edu*.

You can access your UBFS space from UBUnix just as if it were another directory by typing the following command:

#### cd \$UBFSHOME

*\$UBFSHOME* is a UBUnix environment variable that is defined as */ubfs/user/u/s/username/ub/solaris*, following the naming convention mentioned previously in the section *UBFS Directory Structure and Naming Conventions*.

If you receive the error *Permission denied*, then you need to type *dce\_login*. You will be asked to enter your UB IT Name and password. Once you have entered the required information, you should be able to access your UBFS space.

If you want to access the same file from both UBUnix and Windows machines, you should store it in the *data* directory. For example, a file saved as *myfile.dat* in the *data* directory can be found as S:\data\myfile.dat on a Windows machine, or as \$UBFSHOME/data/myfile.dat on UBUnix. If a file is part of your web site, you should save it in the *public\_html* directory.

## Permissions

Files stored in UBFS space have permissions on them known as *Access Control Lists (ACLs)*. These permissions control who can access the files, including reading them, writing to them, and executing them. By setting proper permissions on your files, you can share files with others (study group partners, for example).

## Setting UBFS File Permissions via the Web: WebACL

*WebACL* is a web-based tool that allows you to view and change permissions for your UBFS files via a web browser. The URL address for *WebACL* is:

https://webacl.buffalo.edu

For more information about managing ACLs through the Web, refer to the CIT document *Insights: Control Access to UBFS Files and Directories via Web Interface.* 

## Setting UBFS File Permissions via UBUnix: DCECP

On UBUnix, you can use the UNIX *Distributed Computing Environment Control Program* (*DCECP*) *ACL* command interface to view and modify ACL permissions. UBFS and UNIX *Network File System* (*NFS*) are two different types of file systems. As a result, commands that show permissions for UNIX NFS files do not properly show permissions for files stored in UBFS.

The UNIX command *Ls* should not be used to view permissions for UBFS files, nor should the UNIX command *chmod* be used to change them. For more information about *DCECP*, refer to the CIT document *Insights: Control Access to UBFS Files and Directories via DCECP*.

## Viewing Files in UBFS Space via the Web: WebDFS

*WebDFS* is a Web interface for UBFS. Using a browser like *Netscape* or *Internet Explorer*, you can view or download files stored in your UBFS space from a remote location in a convenient and secure way. Storing files in UBFS space and allowing access via a browser is also a convenient way to share information with others at UB. You can view UBFS files via a browser at the following URL:

#### https://webdfs.buffalo.edu

This web site will prompt you for your UB IT Name and password. As a result, only those people with valid UB IT Names may gain access to this web-based service.

By using ACLs, you can limit file access to a specific set of people at UB. For example, you could limit file access to the students in a class, members of a student or professional organization, or the people in a study group

## Locating Your UBFS Disk Space on WebDFS

*WebDFS* uses the same naming convention for user directories as described in the section *UBFS Directory Structure and Naming Conventions*. For example, suppose user John Doe has *jdoe* for his UB IT Name, and his UBFS disk area is located in:

user/j/d/jdoe/ub

In this example, John Doe would select the **user** link, followed by the **j** link, followed by the **d** link, and then the **jdoe** and **ub** links to get to his area. Alternately, he can use the following URL to access his UBFS space on *WebDFS*:

https://webdfs.buffalo.edu/user/j/d/jdoe/ub

## **Additional Help**

To learn more about UBFS, visit the following URL:

http://wings.buffalo.edu/computing/ubfs

In addition to information about UBFS, this web site includes the current time on UBFS, which is important to know when using the UBFSHome software. To check your UBFS disk quota from this site, click the **Check Disk Quota** link and follow the directions. To check your UBFS quota from UBUnix, use the command *fts lsquota* from one of your UBFS directories.

For more information about creating and maintaining your Web homepage located in your UBFS *public\_html* directory, see the CIT documents *Schedules: IT Workshops* and *Insights: Introduction to HTML*.

For additional help, contact the CIT Help Desk, 216 Computing Center, at (716) 645-3542, or send email to *cit-helpdesk@buffalo.edu*.