



# Large File Transfer

What wheel?

# Agenda

- What is this service
- Who wants this service
- Why did HEAnet deliver it
- How did HEAnet deliver it
- Lessons learned so far...
- Some screen shots (demo?)
- Summary

# What is it?

- A simple web (mostly) interface
- Allows users to upload files to a private account
- Users can send urls for each file to allow anonymous downloads
- Users can manage their files, and see basic statistics

# Who wants it?

- Researchers with very large files
- IT Staff, who need to send very large datasets irregularly
- IT Managers/Directors who do not want to look after FTP/SSH/... servers full of files they do not understand

# Why?

- Why not just use email?
  - Usually limits on file size are quite modest
  - IT departments scan all files, and really big files block mail queues
- Why not just use FTP (or ssh or ...)?
  - Users want an easier interface
  - IT Departments do not want to operate it

# Why?

- Why not use a commercial provider?
  - Authentication is usually per user
  - Cost also usually scales per user
  - Clients want to use their existing authentication infrastructure – usually only NRENs will listen to this
  - Very Large Files (> 2GB) are usually not catered for anyway

# Why?

- Why not partner with another NREN to do this?
  - We should have done this!
  - We couldn't really though, because we do not yet have a federated identity infrastructure
  - Our needs/development effort ran roughly simultaneously
  - Our requirements are not (yet) uniform

# How?

- Simple implementation:
- Ubuntu server (Gutsy Gibbon)
- In-house software (php/MySQL)
- Locally attached storage (1 TB, RAID1, RAID5)
- Not resilient
- Not federated

# How?

- Web based upload for files < 1 GB
- Windows clients:
  - Drag/drop interface for files > 1 GB
  - Feeds into a batch script which calls curl (bundled)
- Linux clients:
  - Curl command line for files > 1GB

## Lessons learned (so far)

- NREN group effort would produce much richer feature set
- Group effort seems to be hard to initiate
  - Why?
  - In our case, we do not have a dedicated developer resource
  - Developers can be shy sharing code

## Lessons learned (so far)

- Very Large Files are not well supported by web browsers
  - ...but users much prefer web browser based interface – conflicts with basic requirement
- We need more management functionality for users
- We need federated identity infrastructure before leaving Beta

# Lessons learned (so far)

- Users are happy to test our Beta software
  - *Already asking for enhancements*

# BITEY - Large File Transfer

HEAnet

## My Files

File Upload (Files less than 1GB)

## OneDayPass

4iEzc

[reload](#)

## Help

Uploading Files Greater than 1GB

Large File Upload - [Windows](#)

Large File Upload - [Linux](#)




## File Information

## Admin

[List Users](#)

[New User](#)

## My Files

 bitcomet_setup.exe	[download] [1]	2008-06-19 16:10:13	delete
 Fedora-9-i386-DVD.iso	[download] [1]	2008-09-10 17:37:37	delete
 ubuntu-8.04.1-server-i386.iso	[download] [2]	2008-09-10 17:24:34	delete

# BITEY - Large File Transfer

HEAnet

 Browse...

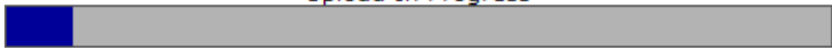
Reset

Upload

# BITEY - Large File Transfer

HEAnet

Upload In Progress



**Percent Complete:** 6%  
**Files Uploaded:** 0 of 1  
**Current Position:** 41887 / 660657 KBytes  
**Elapsed time:** 00:00:03  
**Est Time Left:** 00:00:30  
**Est Speed:** 20924 KB/s.

\\Wooster\users\bboyle\Windows 98SE\worp-win98se.bin

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4iEzc | reload

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Large File Upload - [Linux](#)

## File Information

Name

Size

Date





Link

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 Fedora-9-i386-DVD.iso	[download] [1]	2008-09-10 17:37:37	delete
 worp-win98se.bin	[download] [0]	2008-09-11 11:54:42	delete
 ubuntu-8.04.1-server-i386.iso	[download] [2]	2008-09-10 17:24:34	delete

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To upload files larger than 1GB from a Windows based system, you will first need to download the upload scripts linked below. This includes a copy of the 'curl' executable and a batch script.

Download upload scripts : [here](#)

- Unzip bitey.zip.
- Keep batch file and curl executable in same directory.
- Create shortcut to batch file in preferred location.
- Drag & Drop file to be uploaded onto shortcut.
- When prompted, provide **OneDayPass** (not your own password).
- When prompted, provide a filename to save upload as.
- Once upload is completed it will appear in "My Files" on web interface.

## If you use a proxy server please enter the details below and click the "Submit" button.

This will generate a customised file that will let you upload files through your proxy server.

Host:  Port:

If you know, please select your proxy type. If you don't know what this means, don't change the current selection.



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[New User](#)

To upload files larger than 1GB from a Linux based system, you will first need to install 'curl'. Once installed, the following command line arguments will upload your file to to the server.

```
curl -T FILE.NAME "http://bitey.heanet.ie/put.php?name=FILE.NAME&pass=$OneDayPass" -o output.txt
```

# Summary

- This was a quick overview
- It is a simple service
- Who / what / why / how
- A quick look
- First question?