

Handling of files in eGroupWare

Virtual filesystem based on streams

C. Weiss

<http://www.cwtech.de>

2006-11-26 eGroupWare developer days

Outline

- 1 Current state of file handling in eGW
 - File backends
 - Dependencies
 - Missing features
- 2 Approach using streams
 - What are streams
 - Virtual fstab
- 3 Current state

A Whole Bunch Of Backends

- VFS plain fs with ACL in app logic (SQL / filesystem)
- VFS2 plain fs with ACL in app logic (SQL / filesystem)
- MyDms versioning fs with acl in app logic (filesystem cryptic names)
- Files in docroot Plain fs with no acl needed for performance reason.
- FTP There is also a FTP client (no joke)

Who Understands All This?

- VFS and VFS2 can't run together.
- You need to have VFS to get Filemanager and files in the link tabs working.
- You need to have VFS2 to get FilesCenter working.
- You need to have FileManager enabled to get files in Wiki and pictures in Resources working.
- You need to give write access to the webserver in some directories to get FileUpload working in SiteMgr and Wiki
- WebDAV only works on VFS and NOT on MyDMS or htdoc files.

What Would We Like To Have?

- We need a **common user concept** all over eGW
- We want to be able to access **network shares** (e.g. samba) in eGW
- We want to have a **smart** and **understandable** backend.

A Powerfull Native Interface

- A common interface to linear resources
- Anything you could imagine with `fopen()` and `fwrite()` ...
 - Files on localhost
 - Files from other web servers (GET / POST)
 - Could also be database
- Programmable as PHP extension (C, C++) AND as PHP classes!
- `fopen("compress.zlib://test.txt.gz", "wb");`
- `fopen("egw.vfs.dms://docs/test.odt", "r");`
- `http://php.net/stream`

Putting It All Together

- Mounting different filesystems into a virtual root fs.
- Just one { Konqueror | Nautilus | Finder | Explorer } like app
- Each stream has it's capabilities (usage of context menus)

virtual fstab

mountpoint	filesystem	options
/docs	egw.vfs.dms	
/public	egw.vfs.smb	smb://somehost/public,guest
/website	egw.vfs.file	fmask....
/home	egw.vfs.smb	smb://somehost/\$user,username=\$user,password=\$pwd

Work In Progress

- This won't come into eGW version 1.4!
- Replacement for vfs class is done by Stefano Salvador
- It's in the discussion how to handle acl correctly in streams
- It's in the discussion how to handle metadata correctly in streams
- A really funky filemanager app is considered (just working with standart php functions)

Your Help Is Really Aprecheated!

- Good ideas (show me the code) { and | or }
- Code { and | or }
- Artworks { and | or }
- Userdocs { and | or }
- Funds

Thanks for your attention!