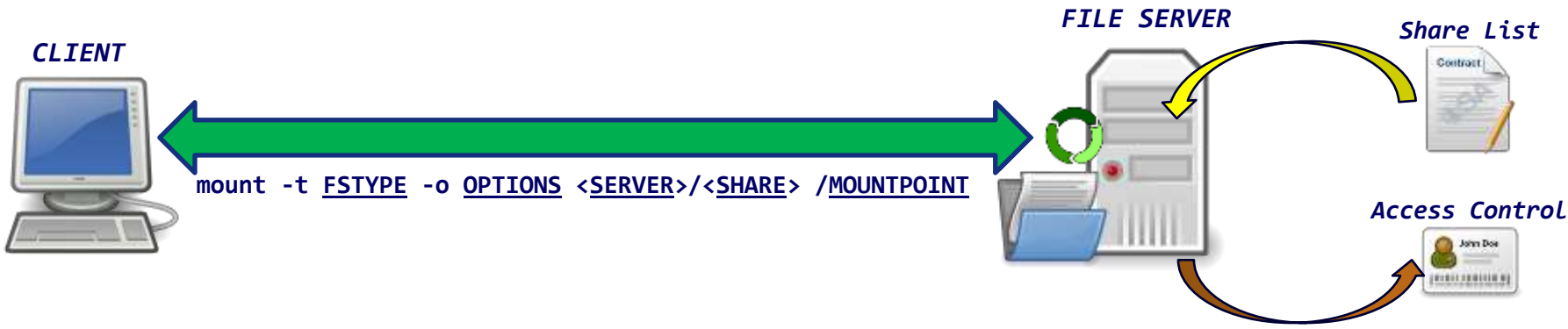
LPIC-2 TRAINING COURSE

Topic 209: SAMBA & NFS

File Sharing: SAMBA vs NFS



		SAMBA (CIFS) - Server Message Block	NFS - Network File System
SERVER	OS Support	Windows, Unix/Linux	Unix/Linux
	Components / Ports Used	**smbd** (TCP: 135, 139, 445) **nmbd** (UDP: 137, 138)	**portmap** (TCP: 111, UDP: 111) **rpc.nfsd** (2049), **rpc.mountd**, **rpc.lockd**, **rpc.statd**
	Configuration File	***/etc/samba/smb.conf***	n/a
	Export/Share List	***/etc/samba/smb.conf***	***/etc/exports***
	Access Control	host, user/group	host, TCP Wrapper (***hosts.allow***, ***hosts.deny***)
	Server Management Tools	***smbpasswd***, ***testparm***, ***smbstatus***	***exportfs***, ***nfsstat***, ***showmount***, ***rpcinfo***
	Advanced Features	Printer Sharing, Windows Domain supports	
CLIENT	OS Support	Windows, Unix/Linux	Unix/Linux, Windows(*)
	Mount Command	`mount -t cifs -o username=x,password=x //Server/Share /mountpoint`	`mount -t nfs Server:/share /mountpoint`
	Client Tools	***smbmount***, ***smbclient***	***showmount***, ***rpcinfo***

SAMBA Configuration File

- **Path: *`/etc/samba/smb.conf`***

```
[global]
        hosts allow = 192.168.1.
        security = user
        passdb backend = smbpasswd
…
[share]
        comment = Share Folder
        path = /share
        public = yes
        writable = yes
        valid users = ipmac
…
```

  - Reload configuration: #**`service smb reload`**

- **Add new SAMBA user**
  - Add new system user: #**`useradd username`**
  - Add user to SAMBA: #**`smbpasswd -a username`**

NFS Configuration File

- **Path: *`/etc/exports`***

```
/share-dir     host1(options) host2(options) …
#host: single host, wildcard, IP networks, nothing
#options:
#       secure
#       ro: read only access (default)
#       rw: read-write access
#       noaccess: denied access
#       root_squash: client's root changed to nobody (default)
#       not_root_squash: client's root is server's root
#BE CAREFUL: host(options) vs host (options)
```

  - Reload configuration: **`exportfs -r`**

- **Access control using TCP Wrapper**
  - **`/etc/hosts.allow`**

    `portmap:  192.168.1.1`
  - **`/etc/hosts.deny`**

    `portmap:  ALL`

Thank You !

BACKUP SLIDES