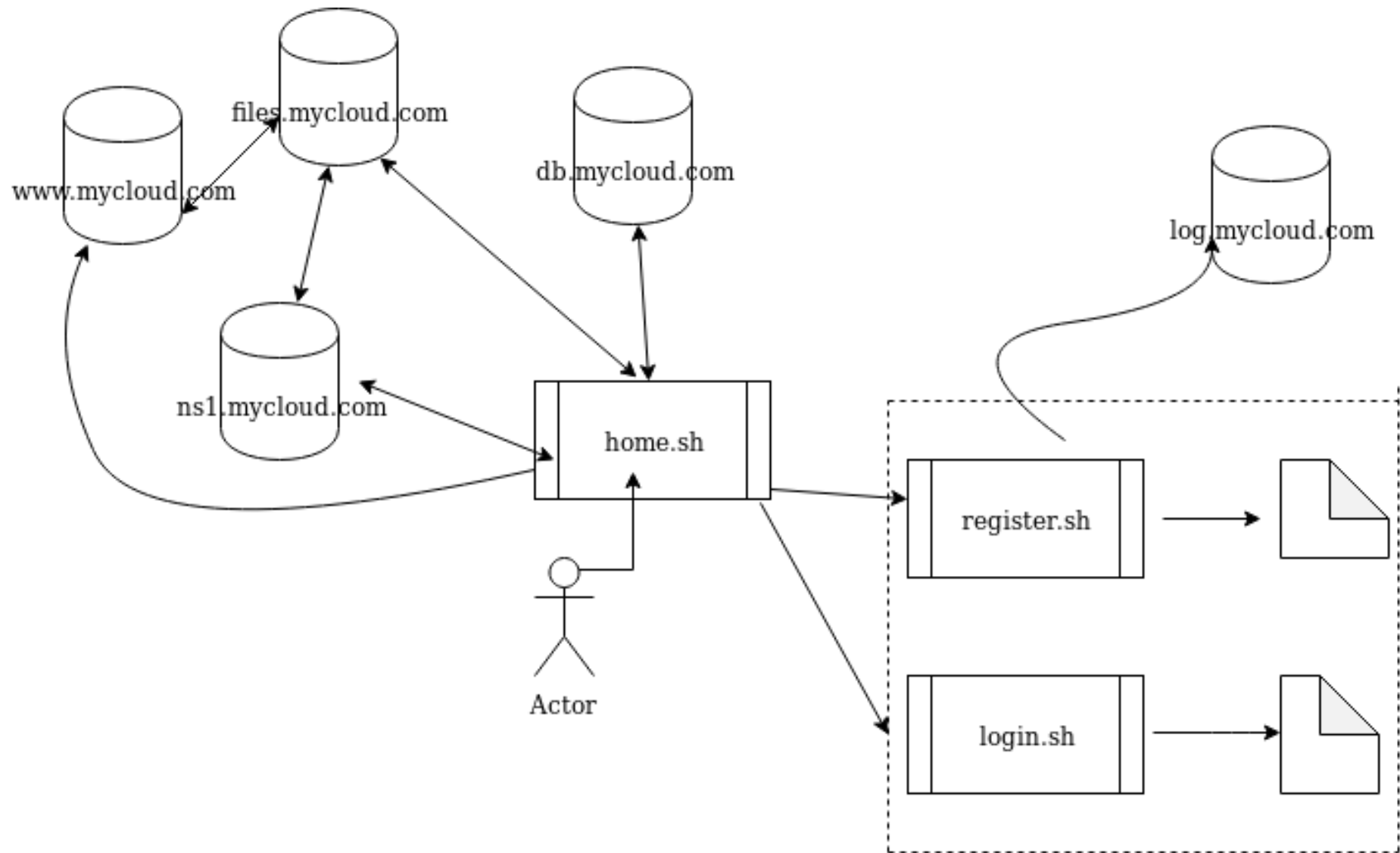


Project : mycloud

Architecture
Application design
Backend (DNS, Mysql, Apache, Shinken)

Ashish Kakran

architecture



Front end

- **User initiates “home.sh” script (assumes root user)**
- **Major script includes register.sh and login.sh**
- **These two scripts call other sub scripts**
- **Every script is modular**

functions

- **Register and login**
- **Sync files to cloud**
- **Checkout backups/files**
- **Rollback changes to local repo**
- **Automated and manual backup support**

DNS server (ns1.mycloud.com)

- **Used bind on a separate lxc so that other servers can query it**
- **Defined “who can query ns1”**
- **Defined zone**
- **Defined NS, A, PTR records**
- **Requires other lxc use this name server**

Database server (db.mycloud.com)

- Users can perform queries via client account on mysql server
- This account has select,insert,update permission on mycloud database
- Mycloud database has two tables
- `accounts<username,name,email,status,password>`
- `plans<username,storage,backup,payment>`

Web server (www.mycloud.com)

- Simple apache setup
- Every user has a file in `var/www/html/`
- This file shows available backups for user
- This file is “curled” from `login.sh` of user

Logging (log.mycloud.com)

- **Application level logs sync to separate log server**
- **Logger.sh script is invoked with necessary argument**
- **Meanwhile, apache, bind,mysql logs are kept in corresponding server, later synced to logging server.**

Monitoring (monitor lxc)

- Used shinken with nagios plugins
- check_ping plugin is used to monitor the up status of corresponding server



Questions?