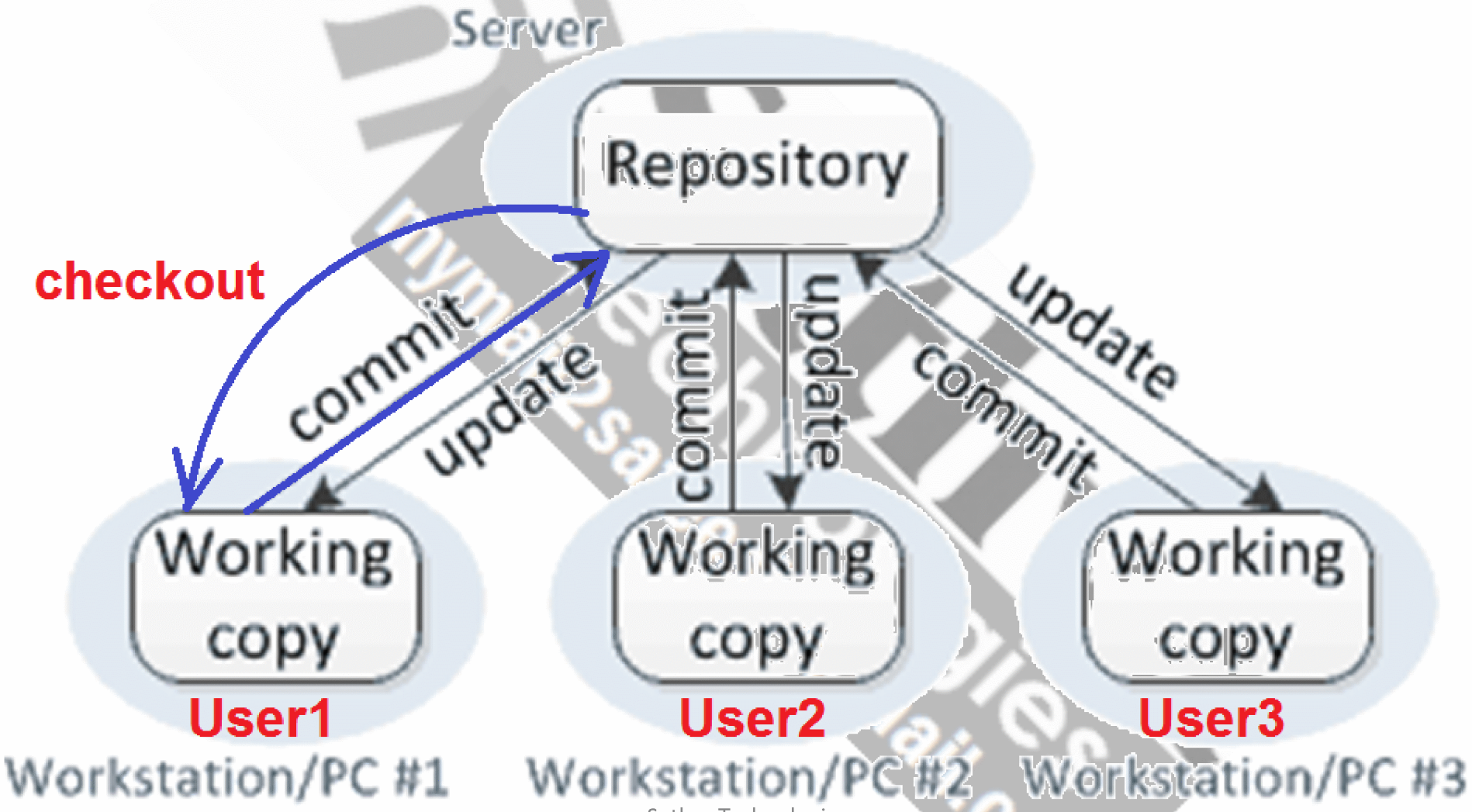
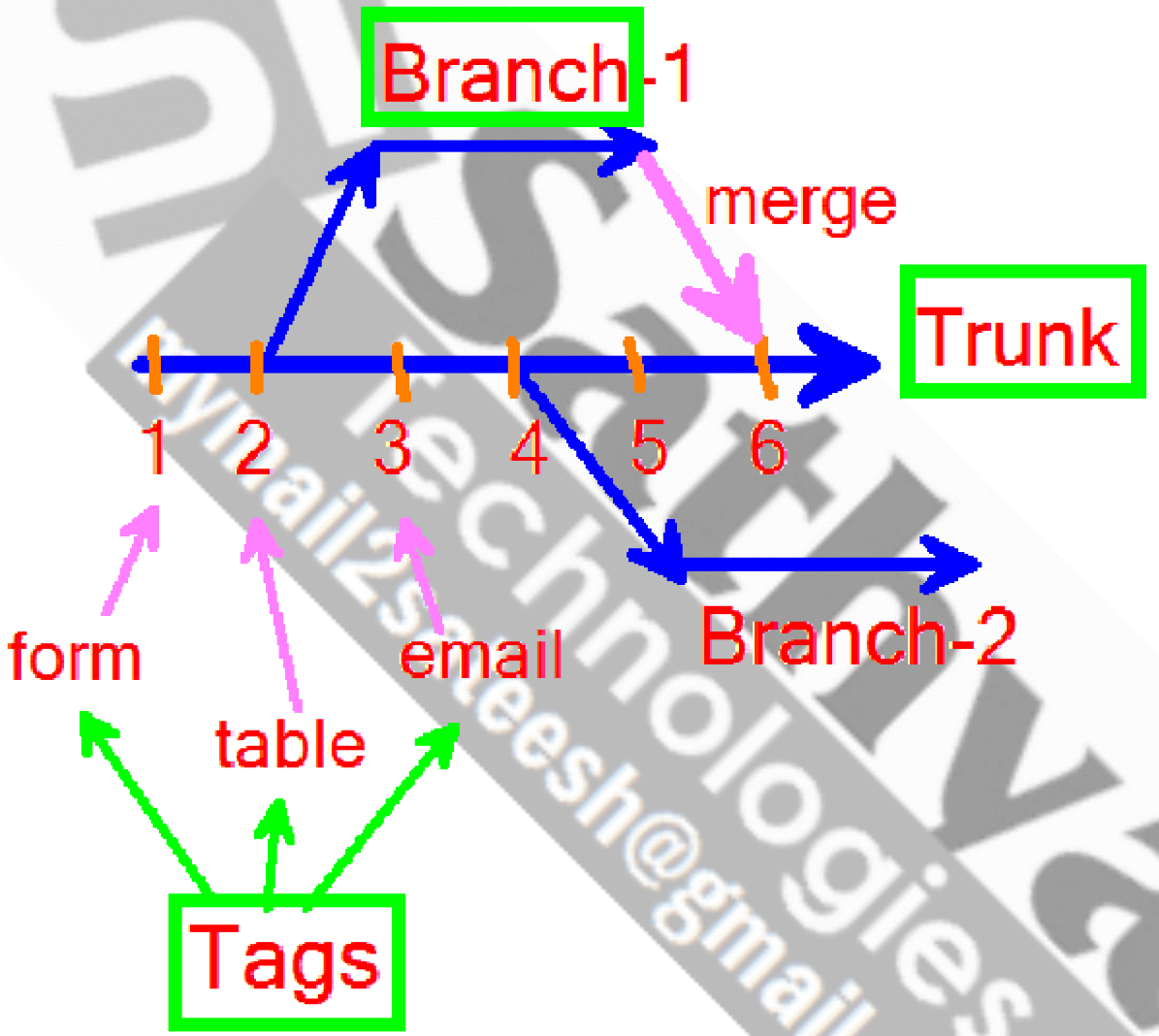
Centralized Version Control System

Sathya Technologies
mymail2sateesh@gmail.com

Centralized version control



Sathya Technologies
mymail2sateesh@gmail.com



Setup SVN server on ubuntu 14.04

1. **Login as a normal user, and update ubuntu repositories**

   sudo apt-get update

2. **download apache2 http server and SVN**

   sudo apt-get install subversion apache2 libapache2-svn apache2-utils

3. **make a folder for saving SVN repositories**

   sudo mkdir -p /svn/

4. **Edit dav_svn.conf file**

   sudo vi /etc/apache2/mods-enabled/dav_svn.conf

5. Our setting file

```
<Location /svn>
        DAV svn
        SVNParentPath /svn
        AuthType Basic
        AuthName "Subversion Repository"
        AuthUserFile /etc/subversion/passwd
        Require valid-user
</Location>
```

6. Build account and password for SVN

```
 sudo htpasswd -c /etc/subversion/passwd user1
sudo htpasswd -m /etc/subversion/passwd user2
```

**-c : create new passed file, and use for 1st create username/password*

7. Create SVN files for repository

sudo svnadmin create /svn/testrepo

8. Set the permission to access those repositories

sudo chown -R www-data:www-data /svn

9. Restart Apache2 Server

sudo /etc/init.d/apache2 restart

10. check SVN is ready or not

URL: http://localhost/svn/[repository name]

open that URL in your browser and you also have to input the username/password that you just set up.

root# mkdir -p /tmp/svn_proj/{trunk,branches,tags}

To import the directory structure into svn Repo:

root# cd /tmp/svn_proj

root# svn import . http://192.168.33.16/svn/testrepo/ -m "Creating trunk , tags , branches“

```
root#  useradd user1
root#  passwd user1  → user1
root# useradd user2
root#  passwd user2  → user2
root#  mkdir –p /home/user1
root#  chown –R  user1:user1  /home/user1
root#  mkdir –p /home/user2
root#  chown –R  user2:user2  /home/user2
root#  su user1
```

To checkout the repo. into user1 home dir:

user1# svn checkout
http://192.168.33.8/svn/testrepo

user1# cd ~/testrepo/trunk

user1# vi index.html

<h1> Hello World </h1>

user1# svn status

user1# svn add index.html

user1# svn commit -m ‘new line'

user1# svn info index.html

user1# svn update

root# su user2

To checkout the repo. into user2 home dir:

user2# svn checkout
http://192.168.33.8/svn/testrepo

user2# cd ~/testrepo/trunk

user2# vi index.html

<h2> Good Day </h2>

user2# svn status

user2# svn commit -m ‘new line from user2'

user1# vi index.html . . . .

user1# svn commit -m ‘new line from user1‘

conflict will raise . . . .

user1# svn diff

user1# svn update

- **Working with Tags:**

user1-testrepo# svn copy --revision=3 trunk/ tags/MyPage1

(or)

svn copy -r3 trunk/ tags/MyPage1

User1# svn status

User1# svn commit -m 'New Tag : Mypage1‘

User1# svn log

User1# svn log -v

Open browser then check tags . . .

Working with Branches :

user1-testrepo# svn copy -r5 trunk/ branches/table_fun

User1# svn status

User1# svn commit -m 'New Branch: table_fun‘

User1# vi branches/index.html . . . .

User1# svn commit -m ‘Table is added‘

User1# svn update

Open browser then check branches. . .

Merging a Branch into Trunk

User1-trunk# svn merge ../branches/table_fun/

User1# svn commit -m ‘branch code merged‘

SVN Status Codes

CODE	Meaning
U	Working file was updated
G	Changes on the repository were automatically merged into the working copy
M	Working copy is modified
C	This file conflicts with the version in the repo (see Conflicts below)
?	This file is not under version control
!	This file is under version control but is missing or incomplete
A	This file will be added to version control (after commit)
A +	This file will be moved (after commit)
D	This file will be deleted (after commit)