

Gitolite Installation Guide for CentOS 7

Prerequisites

Before starting, ensure you have the following: - Root or sudo privileges. - Git and OpenSSH installed. - A non-root user (e.g., git) who will manage repositories.

Step 1: Install Required Packages

```
sudo yum install -y git openssh-server openssh-clients
```

Enable and start the SSH service:

```
sudo systemctl enable sshd  
sudo systemctl start sshd
```

Step 2: Create a Dedicated Git User

```
sudo adduser git  
sudo passwd git
```

This user will manage all Git repositories.

Step 3: Set Up Admin SSH Key

On your **local machine**, check if you have an SSH key:

```
ls ~/.ssh/id_rsa.pub
```

If not, create one:

```
ssh-keygen -t rsa -b 4096 -C "your_email@example.com"
```

Copy the public key to your server:

```
scp ~/.ssh/id_rsa.pub root@your-server:/tmp/admin.pub
```

Step 4: Switch to Git User

```
sudo su - git
```

Step 5: Install Gitolite

Clone and install Gitolite in the home directory:

```
git clone https://github.com/sitaramc/gitolite.git
mkdir -p ~/bin
gitolite/install -to ~/bin
```

Initialize Gitolite using your admin SSH key:

```
~/bin/gitolite setup -pk /tmp/admin.pub
```

This creates: - ~/repositories → directory for all Git repos. - ~/.gitolite → Gitolite configuration folder.

Step 6: Test Access

On your **local machine**, clone the Gitolite admin repository:

```
git clone git@git-server:gitolite-admin.git
```

If no password is requested, Gitolite is set up correctly.

Step 7: Manage Repositories and Users

Inside the gitolite-admin repo:

```
conf/gitolite.conf
keydir/
```

Add new users by placing their SSH public keys in keydir/.

Edit conf/gitolite.conf to define repos and access rights:

```
repo projectX
  RW+    =  admin
  RW     =  dev1 dev2
```

Commit and push the changes:

```
git add .
git commit -m "added projectX repo"
git push
```

This automatically creates projectX.git under ~/repositories/.

Step 8: Fix Permissions (Optional)

```
sudo chown -R git:git /home/git
```

Step 9: Using the Repositories

Developers can clone or push using:

```
git clone git@your-server:projectX.git
```
