Git & Github Fundamental by Rajesh Kumar

About me

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What is git

Manage your source code versions

Who should use Git

- Anyone wanting to track edits
  - Review a history log of changes made
  - View differences between versions
  - Retire old versions
- Anyone needing to share changes with collaborators
- Anyone not afraid of command line tools

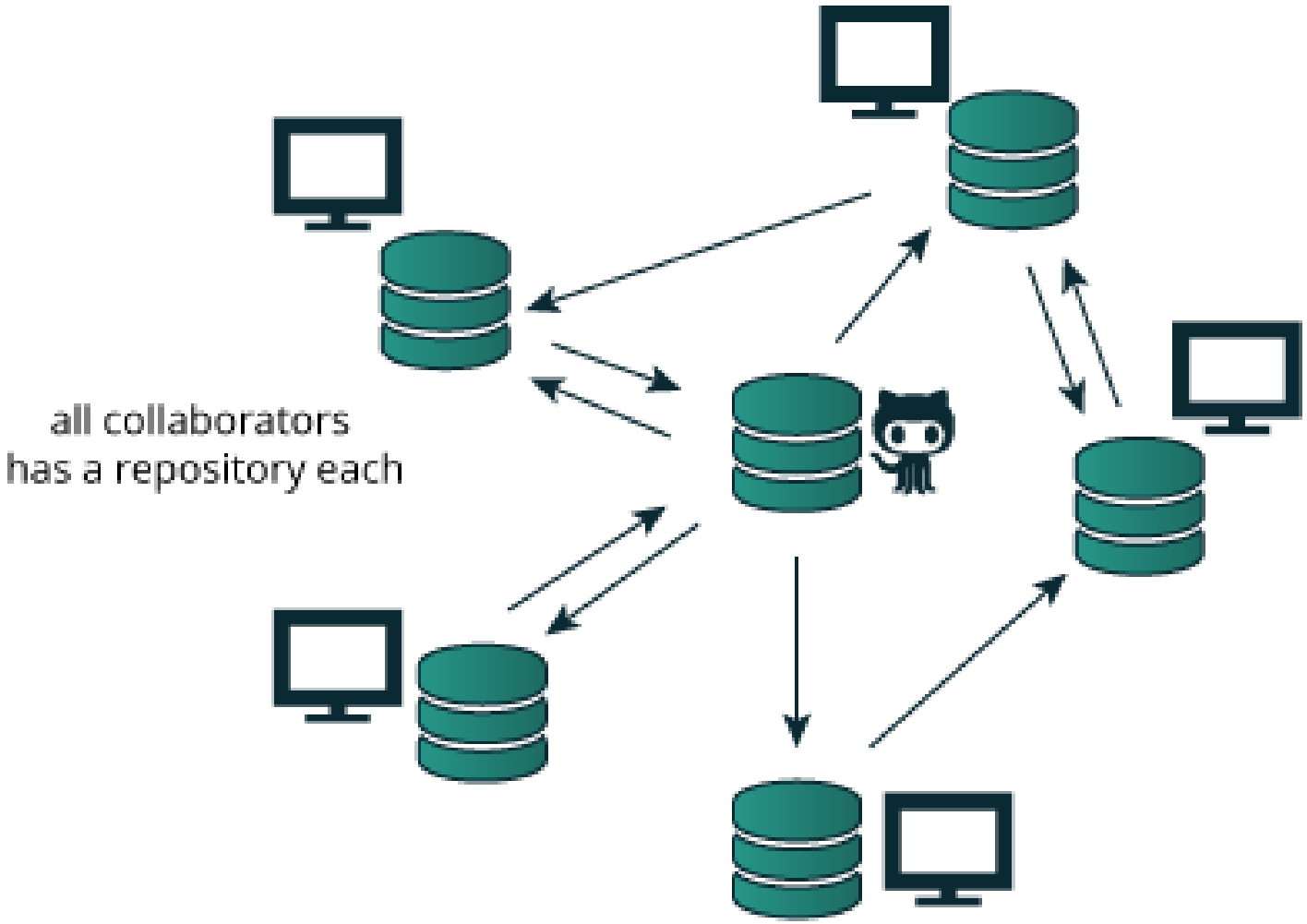
Git is Popular

- **Distributed Version Control**
- Open source and free software
- Compatible with Unix-like Systems (Linux, Mac OSX, and Solaris) and Windows
- **Faster than other SCMs (100x in some cases)**

Distributed version Control

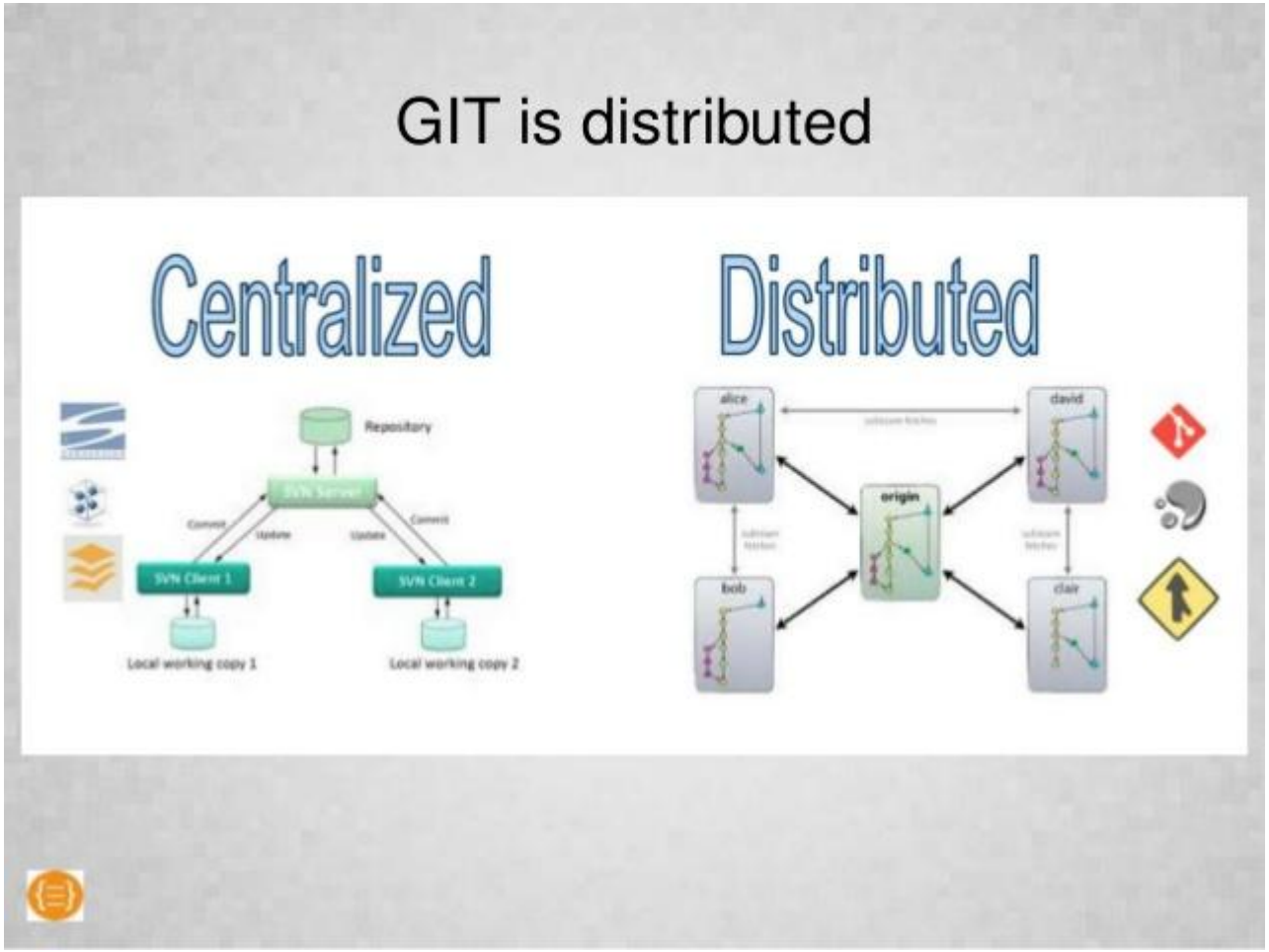
- No Need to communicate with a central server
  - Faster
  - No network access required
  - No single failure point
  - Encourages participation and “forking” of projects
  - Developers can work independently
  - Submit change sets for inclusion or rejection

Distributed



http://www.scmgalaxy.com/

Centralized Vs Distributed



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No network Needed

- Performing a diff
- Viewing file history
- Commiting Changes
- Merging branches
- Obtaining other revision of file
- Switching branches

Get a Virtual Machine

http://bit.ly/scmGalaxy-getvm

Install

http://git-scm.com/downloads

Verify

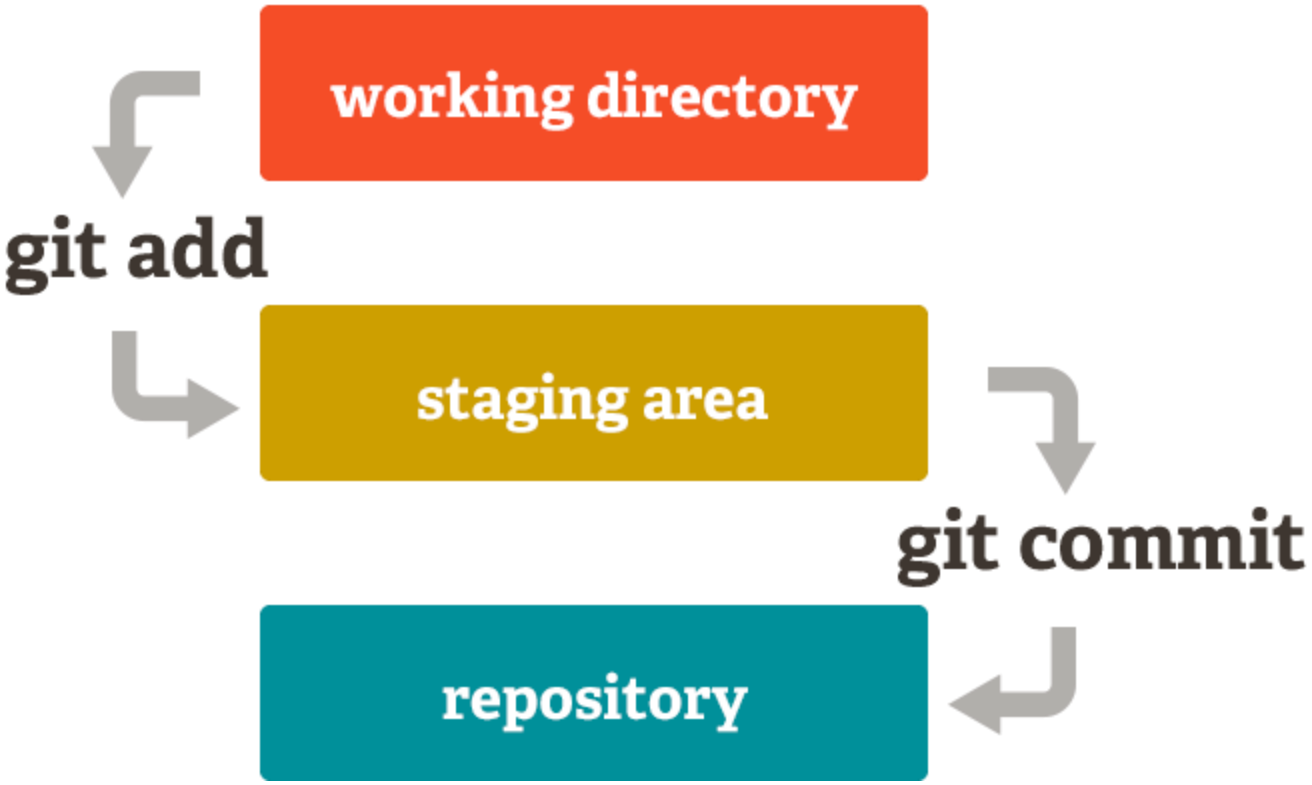
> git --version

> which git (linux)

Git Basic Workflow (working with local git repo)

- git init
  - It create a git empty repo. Also creates a .git in the current dir
- git add <directory tree>
  - Adds all files (except .git)
- git commit
  - Commits the changes (in this case initial commit)
  - Creates a branch named **master**
  - HEAD points at master

Git workflow



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Create a git repo

> git init

Configuring Git…

- git config --global user.name "rajesh kumar"
- git config --global user.email someon@nowehre.com
- git config --list

Create some files/code

- Linux
  - touch filename
  - vi filename
  - cat > filename
  - echo “some text” >> filename

Add file to git repo

> git add <filename>

Commit to git repo

> git commit –m”This is my First commit”

Check the list of commit

> git log

Check the status of current repo

> git status

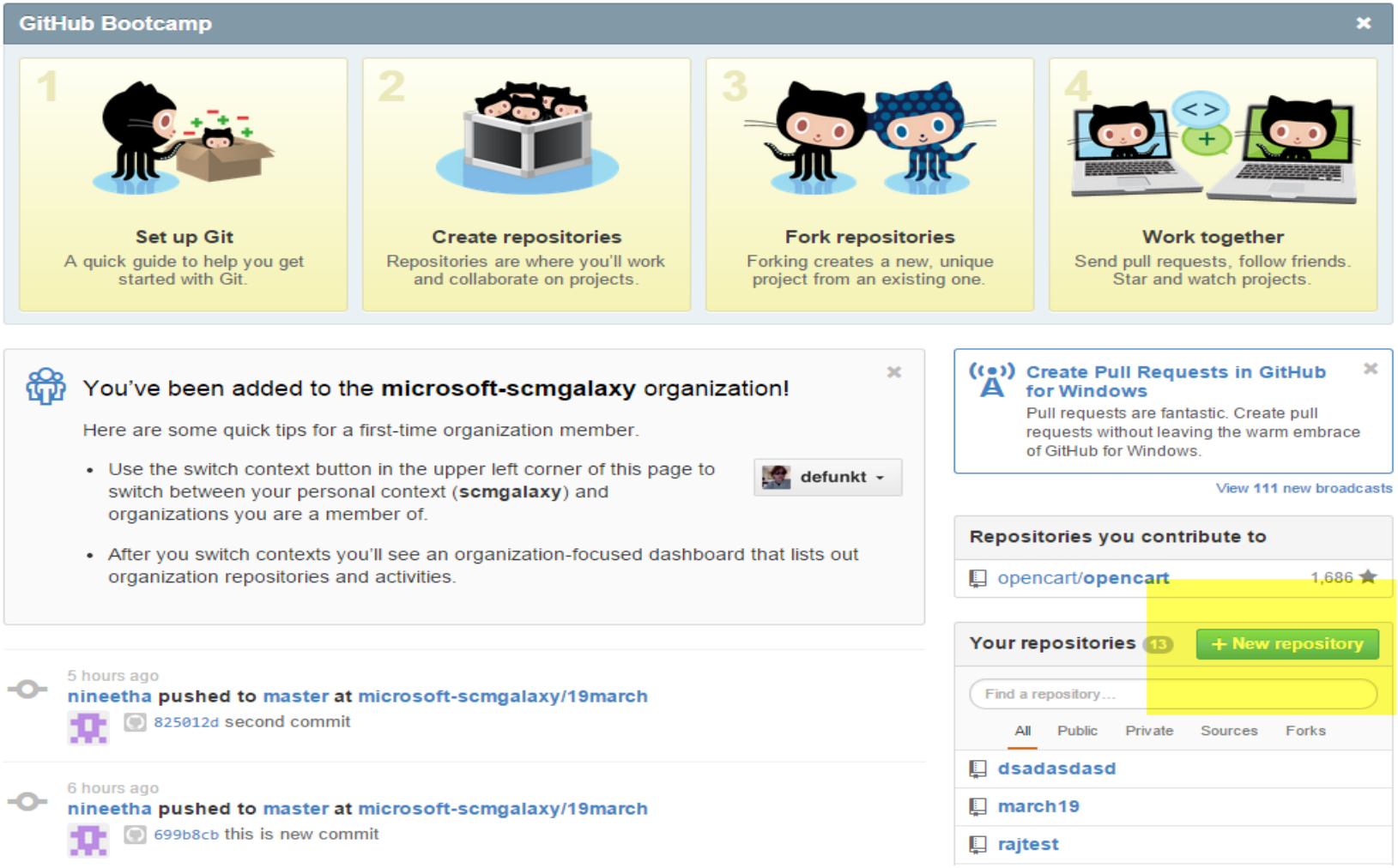
Working with remote repo (github)

Git Basic Workflow
(working with remote git repo)

Sign up

https://github.com/

Create a new repos in github



http://www.scmgalaxy.com/

Add remote depot to config

> git remote add origin git@github.com:scmgalaxy/dsadasdasd.git

Push to Remote repo

> git push -u origin master

github to local git workflow

- **Working with Remote Repos**
  - git clone
    - Creates a git repo from an existing repo
    - All remote branches are tracked
    - Remote HEAD branch checked out as your initial master branch as well
  - git add <directory tree>
    - Adds all files (except .git)
  - git commit
    - Commits the changes (in this case initial commit)
    - Creates a branch named **master**
    - HEAD points at master
  - git push

github

https://github.com/

Linux	Linux	Git
pwd – Current Directory	mkdir git-training – Create a directory called git-training	git init
ls – Listing the directory	ls – Listing the directory	git --version – To know the version of git.
which git – where the git is installed	history – Display the list of all run commands	git status – To know the status of my current git repo
sudo apt-get install git – To install a git in Ubantu	cd – Change directory.	git add . Or git add <filename>
clear – Clear the screen	ls -la – To List files n directory including hidden	git commit –m”This is my message”
	touch ashok.txt – To create a file	git log
	vi harikiran.txt – To create a file	
	cat > rajesh.txt – To create	

scmGalaxy Community

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https://www.facebook.com/scmgalaxy

http://www.scmgalaxy.com/

http://bit.ly/scmgalaxy-linkedin

Questions?

http://bit.ly/scmgalaxy-forum