



# INTRO TO SOURCE CONTROL, GIT AND GITHUB

OnRamp 2022

# It's Alive!



- Your code lives for a purpose
- Team work product
- Continuous integration/Continuous Delivery
- Scripting and automation should not be ad-hoc and disposable

# The Role of Source Control

Who changed something?

What did they change?

Can we roll it back?

Source control is not a back-up replacement

# Source Control Concepts

Open file

- Check out

Edit file

- Local changes
- Optional branch

Commit changes

- Log what was changed
- Log who made the change

Centralized vs De-centralized source control

- Check-In/Check-Out
- Access to source store

# git

Wide-spread command-line source control tool

Developed to manage linux kernel development

Decentralized repositories

Install from <https://git-scm.com/>

- Winget
- Chocolatey
- Other package managers

There are graphical front-ends

- <https://git-scm.com/download/gui/windows>
- Integrated into VSCode
  - Git related extensions





# GIT BASICS

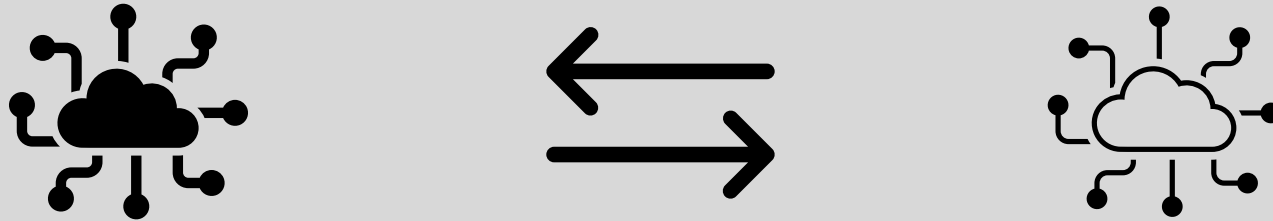
Show and Tell

# GitHub

- One repository for open-source projects
- Free to use
- Based on git
- Cloning vs Forking
- Pull Requests



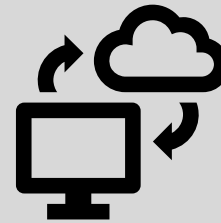
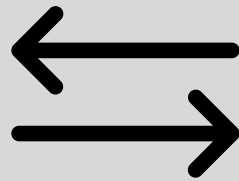
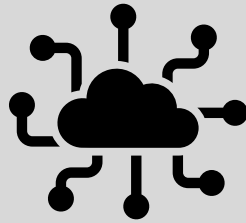
# Integration and WorkFlow



Clone a GitHub repository to your GitHub account

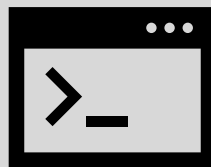
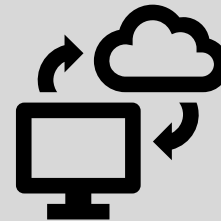
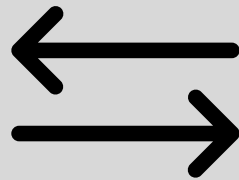
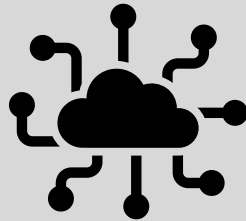


# Integration and WorkFlow



Clone from your GitHub  
repository to local desktop

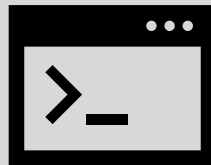
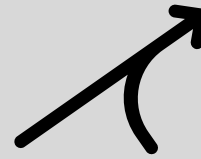
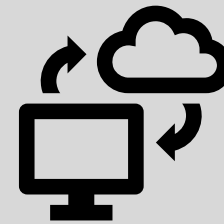
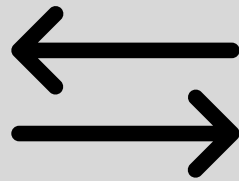
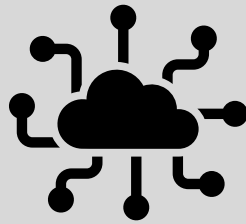
# Integration and WorkFlow



Edit locally

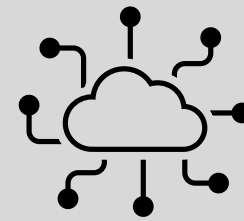
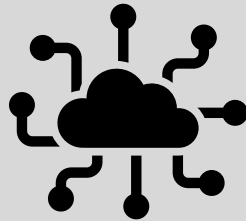
New branch

# Integration and WorkFlow



Push new branch to your  
GitHub

# Integration and WorkFlow



Submit a Pull Request to  
the original repository



# GITHUB BASICS

Show and Tell



## Questions & Answers