# **Git / GitHub Repository Lab**

**Note**: If you do not already have a GitHub account, create a free account at <a href="https://github.com">https://github.com</a> before starting this exercise and generate a Personal Access Token. This exercise can be done on either a Linux or Windows computer. Unless stated otherwise, use a terminal window or command prompt for all steps. Root or administrator credentials are required.

## **Verify Git and GitHub Configuration:** (Refer to the "Git / GitHub Setup Lab" for help with these steps)

- 1. Verify that the git command is working and using your GitHub credentials
- 2. Verify that the GitHub CLI is working and using your GitHub credentials

#### **Create a GitHub repository:** (Use either the command-line tools or web browser)

- 1. Create a folder to be used for local repositories on your computer and make it your working directory. (e.g. mkdir projects ; cd projects)
- 2. Create a new repository in GitHub with a name of your choice. (e.g., "gh create-repo repo123")
- 3. Verify that the repository has been created from your browser (https://github.com login)
- 4. Clone the remote repository to your local computer. (e.g. "git clone <remote repo.git>")
- 5. Make the new local repository folder your working directory (e.g. "cd <remote repo>")
- 6. Verify the status of the repository by running "git status"

## Add files to the local repository:

- 1. Create or add two simple text files to the local repository folder.
- Verify that git recognizes the change by running: "git status"
- 3. Add the two new files to the staging area (e.g. "git add -all")
- 4. Update the local repository with the changed files (e.g. "git commit -m "First repo update")
- 5. Verify your repository commits with the command: "git log"

## **Update the remote repository:**

- 1. Push the local repository changes to the remote repository (GitHub): "git push"
- 2. Verify that the repository has been updated from your browser (<a href="https://github.com">https://github.com</a> login)

## Add files to the remote repository (GitHub):

- 1. Create or add two simple text files to the repository on GitHub using your browser.
- 2. Update the local repository with the changes on GitHub: "git pull"