

NWFSC Github.com Instructions

Purpose

The purpose of this instruction is to guide the usage of github.com source code repositories for Northwest Fisheries Science Center (NWFSC) personnel.¹

Guidance

This instruction follows the guidance as set forth by the Department of Commerce and NOAA OCIO in their github.com policies. References for these documents are identified in the References section at the end of this instruction. Note that most of the links in this document require one to be on the NOAA network or connected to it via VPN.

Usage Steps

There are four roles that staff involved with a github.com repository can assume: team member, team member sponsor, information owner, and repository owner. Steps for these four roles are described below. In addition to these four roles, there are two additional roles that will only ever be held by OMI/IT staff: Information System Security Officer (ISSO) and System Owner.

Note: All Github members/owners must register with their NOAA email, should maintain independence from any personal activities and accounts you may have on GitHub, and shall utilize a different password than that associated with any NOAA Account (NEMS, ICAM, etc.).

Repository Owner - The person responsible for the public github.com repository or group of repositories. Only NOAA federal employees can be repository owners and have administrative privileges for the repositories. The process for establishing and maintaining a repository lies with the repository owner and is as follows:

1. Work with the information owner to identify source code to be pushed to github.com. Capture information about the repository on the [NWFSC github.com google spreadsheet](#) to include:
 - a. Github.com organization
 - b. Repository Name + link to repository
 - c. Repository Owner
 - d. Repository Description - a short, one phrase description
 - e. Release Policy (this is actually specified by the Information Owner as described below)
 - f. Information Owner
 - g. ISSO

¹ NWFSC personnel not wanting to publish their source code on the public-facing github.com, but still wanting to implement version control, are encouraged to use the internal gitlab server located at <https://nwcgit.nwfsc.noaa.gov>. Please contact Marcus Nedelmann in OMI/IT for an account.

- h. System Owner
 - i. Team Members
 - j. Gold Copy Link - provide link to the NWFSC internal copy of the repository. This will likely be stored on the NWFSC internal gitlab server [here](#).
 - k. Public Web Link - provide link to zipped repository location on the <https://www.nwfsc.noaa.gov> website.
2. Once identified, create the github.com repositories, ensuring that no proprietary, Personally Identifiable Information (PII), Business Identifiable Information (BII), or other sensitive code or information (including passwords) is pushed to the repositories
 3. Add the requisite [LICENSE.md](#) and [README.md](#) files to the repository
 4. Once approved by the information owner and the team member sponsors, add team members to the repositories. Only NOAA federal employees will be repository administrators and thus will have the authority to add and remove team members.
 5. Submit a Pull Request to the [OMI-maintained NWFSC github.com repository list](#) to add the new repository to the list of NWFSC repositories. This repository list does not exist yet.

Information Owner - The person responsible for the software that will be pushed to github.com. He or she must:

1. Comply with the DOC [social media policy](#). Note that github.com has been approved as a social media application per the DOC [Approved Social Media Services and Online Applications](#). The Information Owner should read and understand the social media policy. Given that NWFSC users will be posting source code and data content to github.com, the particularly relevant piece of the policy is to ensure that no proprietary, PII, BII, or other sensitive data is posted to github.com. Details for how this will be handled are described in the team member steps as those are the people who will actually be pushing content to github.com.
2. Ensure that the content to be pushed is a Scientific Product per [NOAA Scientific Integrity Policy](#).
3. Ensure that the content to be pushed to github.com is considered FISMA Low. See the [NOAA Use of GitHub.com](#) Acceptable Content section.
4. Authorize team member access to the repository. An email to the team members, their sponsors, and the repository owner authorizing this access is sufficient.
5. Add the authorized team member names to the repository row on the [NWFSC github.com google spreadsheet](#). This list should be reviewed annually for accuracy.
6. Review all published code. This will likely be delegated to the team members, although the information owner is ultimately responsible for the content on github.com.
7. Ensure repositories are replicated back to the NOAA 4600 FISMA system and a copy of the model data is maintained for 1 year. NWFSC will perform an automated nightly pull of all NWFSC repositories for gold copy storage of the repositories on an internal NWFSC server. An existing [NOAA PMEL auto git pull script](#) will be leveraged for this.
8. Agree to the NOAA and DOC acceptable use policies. See [NOAA Use of GitHub.com](#).

9. Establish an access/release policy for this repository. Capture this on the [NWFSC github.com google spreadsheet](#). If the owner wants to impose a more expanded access/release policy, please do that via a separate google document and provide a link to it in the NWFSC spreadsheet.
10. Sign the [risk assessment memo](#) and place in the [Risk Assessment Memos folder](#).
11. Sign the [NOAA GitHub Checklist](#) for team members.

Team Member Sponsor - This is the supervisor of the github.com team member. The sponsor must do the following:

1. Sign the [NOAA github.com checklist](#) for team members.
2. Provide email authorization for using github.com to team members, repository owners, and information owners.

Team Member - A member of the NWFSC github.com repository who will be pushing source code content to the repository. The team member must complete the [NOAA github.com checklist](#) and return the fully signed copy to the repository owner. The repository owner will place the fully signed copy in the [Signed Team Member Checklists folder](#). This checklist includes sixteen steps, which are numbered below in the order that they appear on the checklist. The list below contains NWFSC-specific amplifying information, and in certain cases, indicates when the team member does not need to perform the task as it is the responsibility of the information or repository owner:

1. **Read and understand NOAA Memo/Policy** - NOAA [GitHub Authorizing Official Memo](#) and [GitHub Policy](#).
2. **Create a github.com account** - Use your noaa.gov email address and a password that is different than existing NOAA passwords. Provide an actual picture of yourself for your profile. Team members need to maintain independence from any personal github.com accounts that they may have.
3. **Enable Two-Factor Authentication for the GitHub account**- Once logged in on github.com, enter Settings and then Security and it is listed in the middle of the page.
4. **Ensure content to be published is a scientific product** - The information owner will verify this.
5. **Ensure the scientific product is reasonably classified as FISMA Low** - the information owner will verify this.
6. **Remove Sensitive Information** - In addition to manually ensuring that no sensitive information is pushed to github.com, NWFSC users are also required to install and automatically run git-secrets against their github.com repositories. NWFSC git-secrets installation instruction is [here](#).
7. **Set Read Only Permissions** - The repository owner will complete this task. It is worth noting that the public can submit pull requests, although approved NOAA federal employees or affiliates must merge these external pull requests into the master branch.
8. **Set Write Permissions to only NOAA employees and contractors** - the repository owner will complete this task.

9. **Publish Content to NOAA website** - Since NOAA has not yet established the website for this task, NWFSC repositories will be zipped and shared publicly via the <https://www.nwfsc.noaa.gov/> website. This may change in the future if and when NOAA establishes a centralized web location for these repository copies.
10. **Ensure code contains no proprietary code or information**
11. **Provide a link to the location of the code on the NOAA website** - The link to the location on the <https://www.nwfsc.noaa.gov> website will be captured on the [NWFSC github.com google spreadsheet](#).
12. **Include the appropriate license file in the repository** - the repository owner will include this file.
13. **Include the appropriate readme file in the repository** - the repository owner will include this file.
 - a. Document Gold Copy where and how - the information owner will do this
14. **Scan content destined for github.com with git-secrets** - Git-secrets must be installed for all team members for all of their github.com repositories as outlined [here](#).
15. **Notify NOAAGov administrators of the repository** - The repository owner will complete this task.
16. **Follow Federal Requirements for:**
 - a. [DOC Social Media Policy](#)
 - b. [Section 508](#)
 - c. [DOC Privacy Policy](#)
 - d. [DOC Comment Policy](#)

The following signatures are required for the checklist: team member, team member sponsor, information owner, ISSO, system owner, and repository owner. Note that NWFSC personnel may also contribute as team members to non-NOAA github.com repositories, however that person must follow all of the team member guidelines established above. Additionally, those repositories must also be replicated back internally to NWFSC to act as the gold copy.

Points of Contact

The NWFSC points of contact for github.com are Alicia Matter, OMI/IT and Todd Hay, FRAM Data Team lead. Please contact them with questions or comments concerning this instruction.

References

The Department of Commerce and NOAA OCIO have both published policies/memorandum authorizing the use of github.com. NOAA Fisheries provides informational documents only. This local instruction is based upon the NOAA guidelines, which in turn complies with the DOC policy.

Department of Commerce

- [Department of Commerce Github Guidance](#), 4/11/2018
- [Department of Commerce Recommendation to use Github](#), 6/2/2016

- Department of Commerce [Policy on the Approval and Use of Social Media and Web 2.0](#), 7/13/2017
- Department of Commerce [Approved Social Media Services and Online Applications](#)

NOAA

- NOAA CIO Memo, [Use of Github.com at NOAA](#), 8/28/2017
- [NOAA GitHub.com Usage Guidelines](#), 8/23/2017
- [NOAA GitHub Publishing Content Checklist](#), 9/1/2017
- [NOAA Scientific Integrity](#), 12/7/2011

NOAA Fisheries

- [NOAA Fisheries Github.com Frequently Asked Questions \(FAQs\)](#), 5/25/2018
- [NOAA Fisheries GitHub Informational Update](#), 5/10/2018

NWFSC

- [Git-secrets pre-commit hooks installation instructions](#), 5/24/2018
- [NWFSC github.com google spreadsheet](#), 6/16/2018
- [NWFSC Internal gitlab server](#)

Other

- NOAA PMEL, [Usage of GitHub at NOAA, Practice and Policy](#), Presentation at recent NOAA EDM conference, 5/11/2018
- NOAA PMEL, [GHOrgSync](#), Auto git pulling from github.com to an internal repository