NWS VLab Gitlab Services Support Multiple Ken's 10 Initiatives to Transform the NWS Software Development Process

Kenneth Sperow (/DOC/NOAA/NWS/OSTI, Silver Spring, MD)

The National Weather Service (NWS) has put incredible effort into improving efficiency and collaboration across forecast boundaries. The NWS's mission depends on our staff collaborating and communicating well. The information technology space has solved this challenge with Commercial-Off-The-Shelf tools like Git (GitLab, GitHub) and practices (Git-flow, CI/CD, Innersource models, working in the open). For this reason, the NWS adopted GitLab as a VLab offering to rapidly increase our capabilities in software development, information technology adoption, and cloud infrastructure as code. We want all of the NWS to work in a unified secure and highly available GitLab environment. GitLab provides a one-stop solution for Version Control, Continuous Integration, Documentation, Wikis, Intranet sites, Project Management, Product Management, Program Management, and Service Desk.
There are two tiers of Gitlab offered through VLab:

GitLab Community: no license required. Fully open sign up to NOAA users/teams. Users would leverage this tier if they have an individual or small team project with basic version control and project management needs. They would also choose the community edition if they needed broad NOAA and/or NWS access to their project.
GitLab Licensed: NWS purchased 225 Gitlab Premium Licenses. Users of this tier have a more active version control need, with multiple reviewers, push rules, infrastructure deployment. These users also need issue weights, multiple assignees, or other more advanced project/product management features. Licenses are requested and approved through the Ken's 10 IT Architecture and Governance team.
This session will discuss the motivation for offering GitLab, our experiences and use cases, and lastly how GitLab is being offered in a highly available architecture hosted within the Cloud. Come see how the VLab's GitLab services are supporting multiple Ken's 10 initiatives to transform the NWS to be mobile, nimble, flexible, and eye-to-eye.