# ANSS NetOpsXII. Messages for Management

Action items from the workshop include:

- Need system-wide security training
- Prepare for mseed3
- Need paid level for gitlab

## Personnel and Training

Security is one of the top training needs. How to protect PII (personally identifiable information) for example. Both system and data security are needed. There should be a system-wide training mechanism for security to assure we all comply with and remain up to date on best practices.

RSN's have a mixture of developers with different backgrounds. How do we onboard new people into a common tool set?

How do we carry on the conversation after NetOps. Tutorials on dockers, or many of the other session topics. Links to continuing ed. Or self-produced continuing ed modules. An anssnetops youtube channel? Need to repair anss-netops email list.

HazDev summer of software series. Intro to python. CI/CD workflows. Release workflows, etc. Is now an internal gitlab repo. How can we share this with the rest of NetOps and migrate it into something everyone can use? Is there interest in reproducing a summer of code type series? Or winter of code.

#### **Formats**

The ANSS should be aware that the mseed3 standard is in the approval process and should work with FDSN to establish standards for new source codes that networks might use. (eg. SOH, RT GPS, latency channels)

The ANSS should also start to assess the impact of adopting mseed3 into its processing software.

### **Productivity**

Make things more robust and reproducible. A Makefile for example.

Need good src documentation so future generations don't have to reverse engineer.

Sharing of both code and workflows across different RSNs. This helps in discovering better/more efficient ways of common tasks/goals.

Using gitlab as a communication platform. A place to put material from the workshop? What USGS requirements do we have to comply with? Do need another so that the aqms-swg gitlab can stay focused on aqms? Need a volunteer to set it up. Or should aqms-swg be rebranded to

anss-swg? Need to include other systems like seiscomp3 and antelope. Summer of software included a place to archive results.

Gitlab could be used as a common wiki but perhaps not the best option. Need to form a group to finally figure this one out.

Can we have a group of groups in gitlab? Yes.

ANSS is taken in gitlab. We can use anss-netops. Renate will create the group.

Need a paid level of support on gitlab. Need a budget/cost estimate for the org administering the gitlab project. Can salary be included for the gardener/curation? (ditto for software).

## Future NetOps

Informal time for open discussion at NetOps. We always seem to chop the conversation before it's finished. In-person NetOps allows for continuing the conversation over lunch and break. Remote is more rigid and not enough time for chatting.

Instead of NetOps every year or so with either Field Ops or IT, can we have two netops each year, one for Field Ops and one for IT. Parallel tracks at a single netops? Field ops every other year might be enough.

Software release standards. This session needs additional conversation there was much more to discuss.

Operational items such as SOH and networking and cloud/virtualization is becoming a bigger and bigger topic and the speed of progress warrants annual discussion at minimum. Have subworking groups that report back to a larger group.

Big movements in standards as well with, for example, a change in station identification. Since the format is being nailed down, so must the conventional naming standards for SOH channels and others.