

NSRC Training Materials

Generation and access



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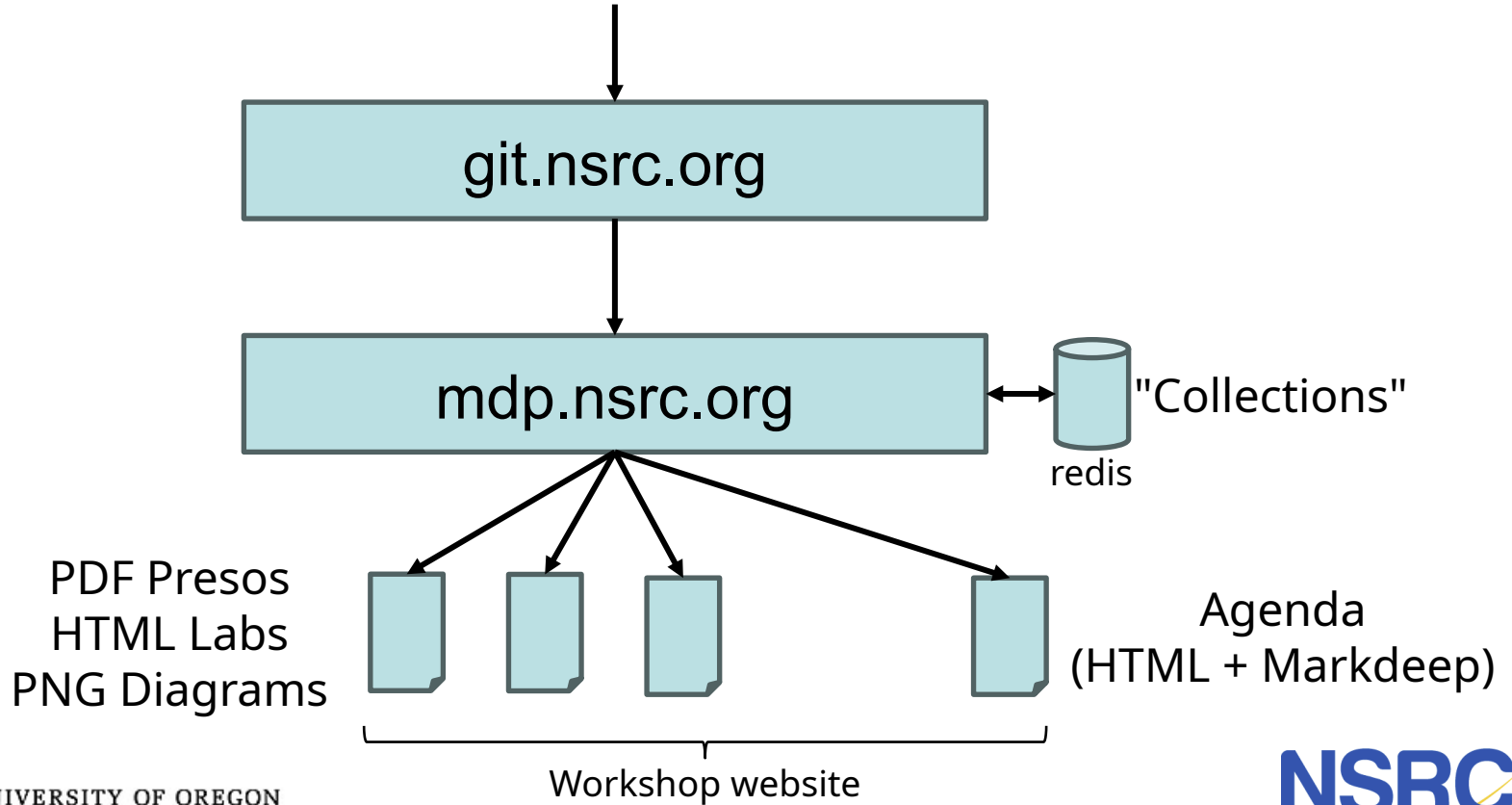


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Source materials (.pptx, .md, .drawio)
MDP modules (.mdp)



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git.nsrc.org

- Where the editable source materials are committed
 - Presentations: Powerpoint (.pptx)
 - Lab worksheets: Text Markdown (.md)
 - Diagrams: DrawIO
- Keeps a history of all the changes
- Access via web interface and via SSH (git clone/push)
- If you have an account on git.nsrc.org, you can:
 - Download the native file formats (e.g. present directly from the .pptx files)
 - Commit new materials, open tickets



mdp.nsrc.org

- NSRC in-house developed "materials deployment platform"
- Materials within a repository are grouped into "modules"
 - e.g. a presentation and the labs which go with it
 - defined in .mdp files (YAML text)
- A "collection" is a set of modules, to create a course
 - Can contain modules across different repositories
 - Modules organized into a "schedule" to create the agenda page
- Downloading a collection performs automated format translation
 - e.g. pptx to pdf, md to html, drawio to png
 - You get the whole set of course materials in a single zip file



Public collections

- mdp periodically generates materials for important collections
 - These are published at <https://nsrc.org/activities/outlines>
 - Refreshed every 30 minutes
 - These are public: you don't need a git or mdp account to access these
 - You can pick individual files, or click "*A ZIP archive of these materials*" at the bottom of the agenda to get them all at once
- **The easiest way to obtain the materials!**

RESOURCES

LEARN site
Interactive Map
Archived Materials
Bios of NSRC Trainers
Case Studies
Internet Exchange Points
NSRC Publications
Training Course Outlines
Where is the NSRC?

UPCOMING ACTIVITIES



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Agenda page

- The students refer to this throughout the course, to access presentations and lab worksheets
- It is often customized for each course - even as the course runs!
 - including course-specific details like instructors for each session
- To make it easy to edit, it is in "Markdeep"
 - Markdown embedded in HTML, rendered dynamically by Javascript
 - Edit using a text editor of your choice
 - Quite easy to move sessions around (one line = one table row)

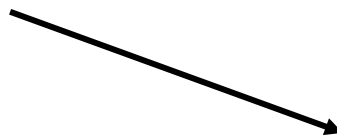


Markdeep table rendering

agenda.html (text)

```
## Time Schedule ##
```

Schedule	Time
-----	-----
Session 1	09:30 - 11:00
Break	11:00 - 11:30
Session 2	11:30 - 13:00
Lunch	13:00 - 14:00
Session 3	14:00 - 15:30
Break	15:30 - 16:00
Session 4	16:00 - 17:30



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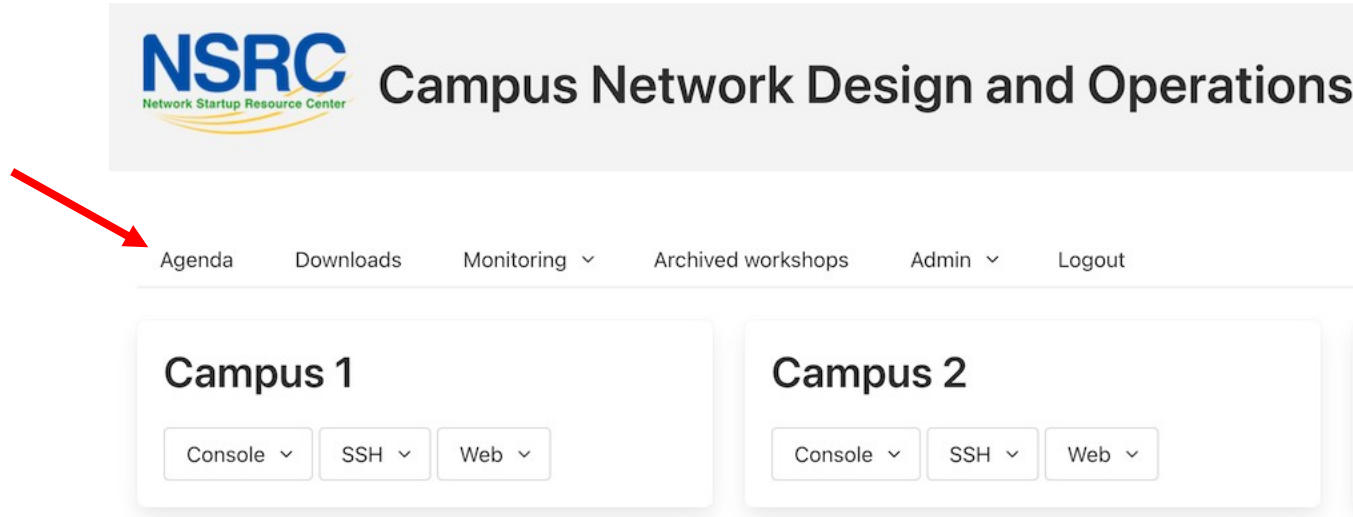


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Many examples at nsrc.org/workshops



Making the materials available to students



Index page

- Inside the container: `/var/www/html/index.html`
- The "Agenda" link points to `/current/agenda.html`
- The `/var/www/html/current/` directory *does not exist*
 - We don't know what course you want to teach with this topology!
- Options:
 1. Upload content to `/var/www/html/current/` in the container (e.g. using "incus file push" or "incus file mount")
 2. Edit `index.html` and make the Agenda link point somewhere else
 3. Mount a directory from the host over `/var/www/html/current/`



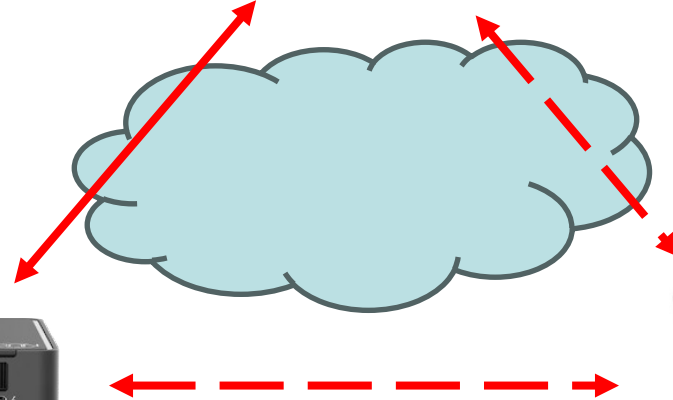
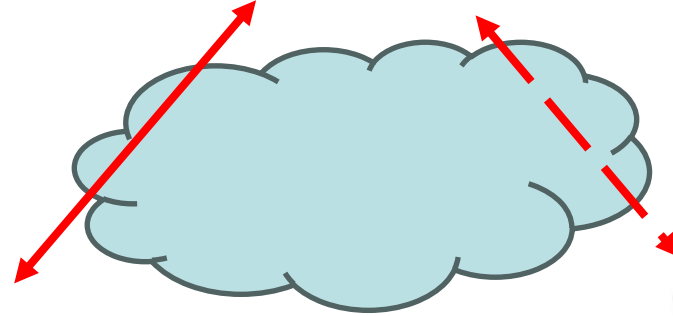
What we do at NSRC

- We keep a copy of every workshop website at **`nsrc.org/workshops/<year>/<name>`**
 - So that students can access it from the public Internet, even if the training kit is on a private network, and forever after the course has ended
- We synchronize content between this central server and the training host and/or instructor laptop using "syncthing"
- The directory containing the content on the server is also mounted into the container at `/var/www/html/current/`
- Only one syncthing instance is needed on the host, even for subsequent workshops (just create new folders)



syncthing replication example

`/var/www/workshops/2026/example-ws`



lab container

`/var/www/
html/current`



`/home/nsrsc/syncthing/example-ws`

`/Users/hervey/ws/example`



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syncthing usage

- To mount the folder into the container:

```
incus config device add <container> syncthing disk \  
    source=/home/nsrc/syncthing/example-ws \  
    path=/var/www/html/current readonly=true
```

- Syncthing replicates the folder with workshops.nsrc.org
- You can edit the content directly on the training server
- Or you can sync the content to your laptop, and edit it there
 - sync laptop to workshops.nsrc.org, or to training server, or both
 - once set up, more convenient than ssh'ing into the server



You don't *need* all of this

- We can help you prepare the agenda and materials for a course
 - but please give us plenty of notice!
- We can help you with syncting and publishing your course at nsrc.org/workshops
- Some NREN partners prefer to assemble their course website themselves
 - But they probably still should be downloading and using the latest available materials
- Use the labs and the materials however best suits you

