

Table of Contents

- **Introduction**
- **General guidelines and philosophy**
- **Workshop leaders**
- **Pre-Workshop Planning**
 - Initial discussions on workshop/event scope
 - Communicate requirements to local host to host a workshop
 - Work with contacts provided by local host to ensure that requirements are met and verified in a timely manner
 - Work with NSRC core staff to finalize instructor team
 - Prepare a workshop wiki
 - Assign topics to instructors and create workshop agenda in conjunction with instructor team
 - Assist instructor team with access to NSRC Git repositories as necessary
 - Make sure instructor staff book travel
 - Remote lab access
 - Connectivity
 - Power
 - Lodging and meals
 - Transport
 - Equipment shipping
 - Books
 - Kit Preparation
 - List of participants
 - Mailing list
 - Network diagrams or other participant submitted documents
 - Social events planning
 - Instructor briefing
 - Materials to print on-site
 - Work with local host to prepare for certificates
- **During the Workshop**
 - Workshop preparation day
 - Lead or coordinate opening session
 - Consider an initial, short questionnaire set of questions to determine participant level
 - Verify participant list details
 - Work with local host to create, print and have signed certificates during the week
 - Workshop wiki and web site
 - Videos and photos
 - Group photo
 - Social media
 - Materials
 - Arrange for distribution of workshop books
 - Closing exam
 - Survey/evaluation
 - Event notes

- **Post Workshop**
 - Ensure that local workshop wiki is synchronized back to nsrc.org public copy
 - Ensure that workshop group photo is published
 - Post to Facebook and Google+ a workshop update, or work with NSRC core staff to do this
 - Upload photos to photos.nsrc.org
 - Supply post event notes / report
 - Follow up on workshop mailing list with appropriate post-workshop items as needed
 - Archive the survey, and deactivate it, after a week or so
- **Checklist of all items by recommended dates**

INTRODUCTION

This manual describes the processes we go through to prepare for, do and then complete NSRC training events. If you are an NSRC employee or contractor and you are the lead for a workshop or tutorial, then details of what is expected from you are described here.

General guidelines and philosophy

The NSRC responds to requests for assistance and training from organizations. This is one of the key aspects of NSRC's ongoing success at what we do: we guide and recommend, but do not dictate how things will proceed. It can, at times, be difficult to understand how things are on-the-ground in a remote location. So, be open minded and let your local contacts assist you with what will work, what's possible and what is needed.

We will provide strong feedback on what combinations of curriculum modules work, and which ones don't. In particular, be wary of not trying to fit too much in too short a time span. Also, materials are often built to follow a logical set of steps, and a mix-and-match approach may not always function.

Here are some good discussion about other groups and people who understand this philosophy:

- http://www.ted.com/talks/ernesto_sirolli_want_to_help_someone_shut_up_and_listen.html
- <https://www.usenix.org/sustainable-model-ict-capacity-building-developing-countries>
- https://www.usenix.org/sites/default/files/conference/protected:files/gevaert_lisa12_slides.pdf

Workshop leaders

If you are working as the workshop leader for an NSRC event there are a number of items that need to be completed for each event. NSRC full-time, core staff will assist you in any way you need and with any part of this process, and may have already taken care of some items, but it is your responsibility to verify this. Below is a list of each item that needs to be completed for each NSRC training. The rest of this document includes detailed information for completing these tasks:

PRE-WORKSHOP PLANNING

At some point during the planning process for a workshop NSRC core staff will engage with potential instructors. If you are the workshop lead instructor, then you will be more involved with the various steps along the way to plan for and prepare a successful training. There are many steps and details to keep track of, and NSRC core staff will assist you with this or take care of some of the details. This will be a back and forth effort between you (lead trainer) and NSRC core

staff. In some cases it will make sense for one person to handle certain specifics based on prior relationships, language, expertise, etc.

Initial discussions on workshop/event scope

What workshop is to be taught, and what modules in particular You may be involved in engaging the event host to determine the best fit for the participants. This is something that will be typically coordinated between the event host and the NSRC core team. You may already be involved in the discussions at this point.

Communicate requirements to local host to host a workshop

You can find pre-workshop planning items at the following links:

- What we (NSRC) need: <https://nsrc.org/workshops/planning/wiki/TrainingRequirementsEN>
- Workshop Planning Items: <https://nsrc.org/workshops/planning/wiki/TrainingPlanningEN>
- Other Workshop Planning Items and Outlines: <https://nsrc.org/workshops/planning/>

Work with contacts provided by local host to ensure that requirements are met and verified in a timely manner

NSRC core staff and the workshop leader will work with the local host to ensure that these items are fulfilled before the workshop takes place. You may find that this is easier said than done in some cases, but this is all part of the process. Again, NSRC core staff is available to assist with pre-workshop planning as needed.

Work with NSRC core staff to finalize instructor team

In many cases we will use NSRC contractors to build out an instructor team for an event. In some cases we'll use NSRC staff and friends of the NSRC involved with the event from other organizations. Often these instructors will have their costs covered by their organizations. In some cases the NSRC may assist financially as needed. Finally, you may either have a local instructor available to you to be part of the team, or it may be appropriate to invite the local host to nominate someone to assist with the workshop. This is a great way to cultivate technical expertise locally and we strongly encourage this whenever possible.

Prepare a workshop wiki

NSRC core staff will assist with initial wiki setup and creation.

You can find sample public and planning wiki pages here:

- Sample Public workshop pages: <https://nsrc.org/workshops/planning/wiki/PublicWikiSample>
- Sample Private workshop pages: <https://nsrc.org/workshops/planning/wiki/PrivateWikiSample>
- Sample blank agenda page: <https://nsrc.org/workshops/planning/wiki/BlankSample>

Typical items that belong on a workshop wiki (think web site) include:

- **Public Workshop Wiki**
 - Local host
 - Venue

- Logos
- Description
- Agenda
- Software
- Participants list (name, position, institution, country, email)
- Organizers/Instructors
- Sponsors
- Books
- Placeholder for photos and group photos
- References (page with relevant reference documents)
- **Private/Planning Workshop Wiki**
 - Standard is workshopname/wiki/Planning that is not linked
 - Planning area includes consignee information
 - Pre/During/Post workshop checklist
 - Arrival/Departure information
 - Local host contact information

Assign topics to instructors and create workshop agenda in conjunction with instructor team

In most cases it makes sense to come up with the initial agenda. There are multiple sample agendas available at <https://nsrc.org/workshops/planning/>. In addition we strongly suggest you review recent workshops with similar or same topics to see what was done. You can do this either by going to <http://nsrc.org/workshops/> or looking at individual event wikis by year at <https://nsrc.org/workshops/YYYY/> (for instance <https://nsrc.org/workshops/2012/>, <https://nsrc.org/workshops/2013/>, etc.). Once you have a good feel for what you would like to teach in the time allotted, then you can create the agenda. Feel free to ask your instructor team for feedback and adjust as needed. At that point you can ask people what they would like to teach and start to fill in the specifics of who is leading what in the agenda.

In general once someone takes lead on a topic in the workshop, then it is their responsibility to:

- Verify that the materials are up-to-date for that topic,
- are what they expect, and
- test the associated lab(s) against the workshop infrastructure once it is put in place.

They should be ready to present and to run an associated lab based on the materials presented before and after their presentation.

In some cases you may have more than one person leading a topic. That's fine and you can indicate that in the agenda. Once the instructor has finished presenting and the class is working on the associated lab(s) it is the responsibility of the entire workshop team to assist with the lab as needed. In some cases you may have 1 or 2 other instructors assisting while others are working on upcoming workshop items, assisting with other local issues, or just keeping up with their day jobs as needed.

As a workshop leader it's expected that you will show the local host your more detailed agenda to verify that what you plan on teaching makes sense to them and to the audience they expect to be in attendance.

You should review the materials (located in the NSRC Git repositories) you plan on using to verify that:

- They are up-to-date

- Properly translated if necessary (Spanish, French, English)
- If new labs are to be developed we recommend using markdown/text as the format

Naturally if large changes are required, then you should coordinate this with your training team to spread the load among them. If significant new materials are required you can work with NSRC core staff as necessary.

Assist instructor team with access to NSRC Git repositories as necessary

Many of the NSRC contractors already have access to the NSRC Git repositories of workshop materials. If you have a member of the instructor team who does not and needs access, including non-NSRC personnel, please feel free to work with NSRC core staff to facilitate this. If you have less experienced or guest instructors you may wish to request that they send changes to the materials to you first for vetting to verify everything looks acceptable before submitting the changes back to the appropriate Git repository. You can do this for other instructors if it makes sense.

Make sure instructor staff book travel

Many NSRC contractors will simply book their travel on their own and invoice this using their existing NSRC contracts. In some cases, however, it will make sense to have instructors book travel using the NSRC travel agent and having the NSRC pay for the travel up front. There is a sample request form [here](#) that you can fill in for the instructor, or you can request NSRC core staff to do this. Once the form is filled in, then work with NSRC core staff to have it approved and to introduce the instructor to the NSRC travel agent. The travel agent will need the following information if it the first time working the instructor:

- Full name as it appears in their passport
- Nationality
- Seating preference
- Itinerary
- Frequent flier number(s)

If there are specifics about airlines, routing or fare classes this should be communicated as well.

If a visa is needed to enter the country, then you may need a letter from the local host to facilitate this. The letter will need to have the local host's or sponsoring organizations' or both logos in the letter head and it will need to be signed as well. The letter will very likely need to be personalized with each instructor's name and passport information.

Remote lab access

If you are going to use the rack-mounted switching and router lab located at the University of Oregon, then connectivity from the remote venue to the University of Oregon must be tested by the local host at least 1 month before the event. You need to book the lab as well using the online calendar and form available here at <https://nsrc.org/projects/projects/nsrckb/wiki/NSRCLab>. Follow the instructions on this page to verify remote access capability.

Connectivity

In general you only need fairly minimal connectivity to run a workshop. However, more is certainly better. If you have very minimal bandwidth, then be sure to build your workshop kit with everyone pre-loaded, which is always a good idea in any case. Here are some questions and guidelines to consider:

- What is available bandwidth? 2 Mbps is about the minimum needed to be able to update packages, etc... on site.
- Is access blocked in any way? Experience shows it almost certainly is - even if the local host says it is not. So, be prepared for this. If you can negotiate (perhaps, on-site) to open up access fully that can be very useful.
- You only need a single IP address for most workshops. It does not even need to be public, although that is nice.
- If you do have a public IP address is SSH open both outgoing and incoming? Is it open 24 hours? This is a really critical piece. If you can obtain a public IP address with open SSH, then you can access your workshop servers remotely (i.e. from the hotel/lodging) to test materials, fix issues, do remote demos, etc...
- Can you obtain access to your equipment remotely reliably (see power below)?

Power

In many parts of the world power is not reliable. If you can obtain a UPS for your core workshop equipment (MacMini and switch/router(s)) this can be invaluable. If your Access Point can be on a UPS as well, then it's possible to keep working in class even if power goes out - assuming students are using laptops.

After hours power is another big issue. Will the power stay on overnight in your workshop venue? If you need remote access to your workshop lab, or you are maintaining statistics during the week, then be sure to address this issue. In many hotels the staff will come by at night and turn off the main circuit breaker for your room, or training rooms in general. You may need to talk with hotel staff about this.

Be sure you have determined what types of plugs and current are in use at the training location. This is a helpful resource for figuring out what plugs, current and hertz are in use:

- <http://www.kropla.com/electric2.htm>

It is very useful to bring a power strip with the correct plugs for your hardware so that you can use fewer adapters. You can consider purchasing a universal plug strip as well. Note, if the power strip includes a fuse, then it may not work in countries with different hertz (50 vs. 60 hertz for instance) as the fuse may trip. From experience, verify that each piece of hardware you are using has a switching (100-240V) power supply.

Lodging and meals

The NSRC will often wire money to the local host to cover the cost of meals for the instructors and their lodging. In addition we may send monies to cover a social event, assist with breaks if necessary, etc. In general the local host will cover the cost of any breaks during the day (2 is normal) and associated food and drinks. Often they will cover the cost of lunch for everyone as well. They may recover some of this cost with a registration fee to the participants as needed. Often dinner will be the responsibility of each participant and instructor. You will find that it's common to have several invitations or social events where dinner is paid for as well. If instructors have to pay for meals they can do this and be reimbursed, but please work with core NSRC staff ahead of time to see if meals can be figured out in advance for all instructors.

Transport

If you will be staying far enough away from the training venue that you cannot walk, then be sure to verify that transport is arranged by the local host. Payment for transport is usually done by the local host, but the NSRC can assist if necessary. You can work with core staff on this as needed. If instructors and participants are in separate venues be sure to figure out how transport will work.

Find out how long (realistically) it takes to get from where you are staying to the venue, then add in 10 or 15 minutes for offloading, walking to the venue, set up, etc.

In some cases you may wish to consider different lodging, if available, to make transport easier to the venue. For instance, if teaching at a university it might be possible to stay on campus - in many cases on-campus accommodations are simpler in terms of network access, food and logistics.

In addition, determine how transport will work to and from the local airport. If the location merits it, be sure that instructors are met by someone from the local organizing committee when they arrive. You will want to get local contact phone numbers and post these to the planning section of your workshop wiki as well. These can be invaluable if there are issues at the airport.

Equipment shipping

If you are planning on shipping hardware to the event work with NSRC core staff to facilitate this as necessary. You will need consignee information from the local host in order to ship; this includes name, a physical street address, at least one phone number and an email. DHL requires all of this before they will ship, so none of these items are optional.

Books

If it would be useful to make available electronic versions of O'Reilly technical books for your workshop work with NSRC core staff so that they can make the request to O'Reilly. You can view available O'Reilly books at <http://www.oreilly.com/>. The NSRC already has a significant number of electronic versions of O'Reilly technical books available. The entire collection is available on nsrc.org in the /usr/local/repositories/books directory. Once you have selected the books you wish to use, then the simplest thing to do, generally, is to copy over the entire /usr/local/repositories/books directory to your local workshop noc server. From there you can edit the file 00_README.html (English) or 00_LEAME.html (Spanish) and remove the books you are not planning on providing. You should, also, remove the associated directories.

These books are only for workshop participants and the local host. They are not to be shared further than that. The README files make this clear. If you place these books on your workshop server be sure that you include a rule in your server's web server to allow only access from your local network to the books directory.

In some cases we may be able to ship USB thumb drives to the event and you can place the books on these and give them out in class.

Kit preparation

If you are bringing a server with virtual images on it, then this needs to be prepared before the workshop. Ideally this should be completely set up and made available to your other instructors a week, or two, before the workshop begins so that they can test labs and verify that their presentations make sense for the environment you will be using. In order to do this you may need to:

- Install appropriate software
- Build Virtual Machines and/or a virtual switching/routing environment.
 - You can view the workshop-kit and net-design Git repositories on nsrc.org for detailed information
- Be sure to coordinate who is bring what items, and if you have backup equipment available to bring in case of on-site failures. Equipment to consider includes:

- MacMini server(s)
- Access points
- Switch with VLAN capability
- Power adapters
- Cabling, adapters for video, small keyboard, mouse, etc...

You may want to ascertain if the local host can provide a monitor and keyboard that can be used with your server equipment in case of problems. In some cases finding a monitor at the last minute can be harder than you might think.

List of participants

Ideally you should have a complete list of participants that includes:

- Full name
- Email
- Organization
- Position

This is necessary to create a workshop mailing list, a participant list, to gauge how many people are attending, what equipment is needed and, potentially, what level of technical skill your participants may have.

Mailing list

Once you have a participant list you can create a mailing list for the event with appropriate NSRC staff, instructors, local hosts and trainers and participants included. To create the mailing list contact NSRC core staff for assistance.

Once the mailing list has been created you may want to introduce yourself, allow the participants access to the class web site to view the agenda and reference materials, set expectations, request documents or diagrams and so forth. If you would like assistance with this initial email NSRC staff can provide several examples.

Network diagrams or other participant submitted documents

If it is expected that participants will submit diagrams or other documents for the purpose of a round table, you will need to send out a mail to the list explaining the requirements, and the deadlines for doing so. Remember to follow up and check/upload the documents as you receive them to your class web site. Here is one example of uploaded network diagrams:

- <https://nsrc.org/workshops/2013/nsrc-myanmar-nren/wiki/ParticipanDiagrams>

You should let the participants know that we have a guideline document for creating network diagrams if they wish to refer to it. The document is available at:

- https://nsrc.org/workshops/planning/raw-attachment/wiki/WikiStart/00_Network_Diagram_Hints.pdf

Social events planning

Be sure to ask the local host if there will be a social event during the week. If there will be one, then work with the local host to determine:

- Who is sponsoring the event?

- Are there any expectations of speeches from local instructors?
- Do participants need to be informed of this during the week or ahead of time?
- What transport will be provided?
- Time and location.
- Is there an expectation that the NSRC will help cover costs? Work with core NSRC staff on this issue.
- Will there be more than one event?

Coordinate this with the event host, but you remain in charge of communication with the rest of the team.

Instructor Briefing

Remember, you are the lead between the event host and the other instructors, it is your responsibility to make sure that practical information is communicated/collated, such as:

- Travel details
- Visa requirements
- Invitation letters
- Medical requirements (vaccinations, malaria pills necessary and **don't** forget to bring a Yellow Fever Certificate).
- Currency
- Transport to/from the point of arrival
- Week planning and disruptions to schedule (social events, round tables, interventions)
- Contact information for the trainers and event hosts (mobile / email)
- Accommodation details

In addition, you should assist the instructor team with workshop materials (presentations and labs). Assuming there are materials in the NSRC Git repository to be used, then make sure each instructor has access to what they need. If updates are needed to materials, or labs be sure to coordinate this and to push back updates to the NSRC Git repository as appropriate. As you build out the workshop agenda it is often very useful to link in PDF versions of the presentations and labs, or to do this during the week when items are ready. If materials are largely ready, then we often link in the current version of each presentation and lab and if updates are made during the week, then the lead instructor is responsible for making sure these are available on the local workshop wiki.

Materials to print on-site

If you plan on printing while on-site arrange to have a printer available that can be used. For most workshops the only items we print are the initial questionnaire at the start of the week and the final exam. In addition, the local host may need to print certificates. We make all workshop materials available during the week for download and in a permanent manner by maintaining a public copy of the workshop web site indefinitely on nsrc.org.

Work with local host to prepare for certificates For the most part the local host should prepare, print and arrange for class certificates, but it is likely that you will need to coordinate and organize this ahead of time to avoid last minute problems. The easiest thing to do is to arrange to have the certificate ready before the workshop begins. Next you will want to verify who is actually in your class during the first day, or two - by having the participants verify their names and attendance. Once you have this, then you can generate the individual certificate for each participant, have them printed and, this is important, ensure that whoever needs to sign the certificates is available to do so before the end of the workshop.

Things to remember:

- Are certificates expected? In most cases they are and the participants are likely expecting them.
- Does the event host have specific requirements, such as no certs for people who miss out even one day.
- Who's going to create the certificate? You can find sample certificate files at <https://nsrc.org/workshops/certs/>.
- Who's going to be on the certificate and sign? Likely this will be you, the appropriate local person and, in some cases, someone else.
- Are the people signing available during the week?
- When can certificates be printed, signed?
- List of names to be checked by participants themselves on the first or second day.
- What logos should be on the certificate?
- Plan to give the certificates out near the end of the last day (in most cases).
- Does the local host plan on having any special guests to hand out the certificates?

A final note - The simplest method to do this is to use one of the sample Photoshop (PSD) files that includes layers. There is a layer for the participant name. You can duplicate this layer as many times as you want and enter in each person's name. Then, simply, hide/unhide the layers as needed and print, or export to PDF and give to the local host to print.

DURING THE WORKSHOP

A number of the items listed below you will have already put in process or coordinated during the pre-workshop planning, now you just need to remember that they are done during the actual event.

Workshop preparation day

It usually takes a half to a full day to be ready for the workshop. You need to verify access to the training facility the day before the workshop and to ensure that any technical staff that are needed are available as well. Items that need to be considered include:

- Installing equipment
- Testing local connectivity (will the setup be reachable from the outside)
- Printing any materials
- Ensuring the room is available the day before the workshop (Weekends and holidays can be problematic)

If you need to connect your workshop kit to local infrastructure you will need the appropriate local technician to assist with this. This should be planned for and arranged for before you arrive to the local facility for workshop preparation.

Lead or coordinate opening session

During the workshop opening, as team leader, you should probably lead a session on the logistics of the workshop. What the week will be like, when breaks are, transport, schedule, etc... Anything else that is useful. There are sample Welcome presentations in the NSRC Git repositories. NSRC core staff can help you if needed as well.

In some events a more formal opening is expected - even, perhaps, at a separate venue with speeches. In such a case you may be expected to say a few words. If you have any questions about this let NSRC core staff know.

Consider an initial, short questionnaire set of questions to determine participant level

To start your workshop you may want to hand out a printed, short (1 page if possible) questionnaire to assist you and your fellow instructors in gauging the technical level of your participants. Again, for several of the workshop tracks we offer there are sample Questionnaires available in the NSRC Git repositories.

This is one of the few items you may wish to print. Be sure to arrange for this ahead of time, or print the questionnaire yourself at home before traveling to the workshop.

Verify participant list details

Be sure that you verify with each participant who is actually present:

- Their correct name and how they would like it to appear on a certificate.
- Their correct title, position and email address
- The country they come from if appropriate for the event.

After the second day of the workshop you should have a finalized list of participants. Please let NSRC core staff know what your final numbers are, including both men and women attendees.

You may discover that the local host wants to take attendance during the week. Having an updated participant list can assist with this.

Work with local host to create, print and have signed certificates during the week

You should have already been working on this closely during the pre-workshop planning. During the week you can generate the final certificate files based on your final participant list, or someone on the local host can do this using your updated participant list. It will be up to the local host to have the certificates printed in time to ensure that anyone who is signing the certificate is available to do so before the end of the workshop. At all costs try to avoid having certificates mailed to the participants after the event has ended. This has, generally, not worked very well in the past and can leave some feeling a bit frustrated.

Workshop wiki and web site

While the workshop is taking place you should have a local copy of the workshop wiki that was created on nsrc.org. This local copy will be the live copy during the event. Ideally if you can update the remote wiki by synchronizing from the local wiki during the week that is nice, but not 100% necessary. The general steps for creating your workshop NOC and web pages are:

- Create a main page for the workshop. This will include links to:
 - Local book repository (only accessible to workshop IP range)
 - Download directory
 - Local copy of the workshop wiki
 - Any other items you think are useful
- Be sure that you set the remote wiki to be read-only. This is important so that instructors do not accidentally log in and make remote changes when these belong on the local wiki.
- Review the proposed items for the workshop wiki in the pre-workshop planning section.

During the week you will be lead on updating workshop web pages as items are updated, added, removed, etc...

When the workshop is over it's expected that the final wiki will include an Agenda with all items linked, a participant list and a workshop group photo at an absolute minimum.

Videos and photos

If anyone is responsible for shooting video/photo during the workshop or event, make sure that you allocate time for interviews and/or answering questions about the workshop contents. If interviewing people, remember to get their full name, title/position and if possible, business cards.

Otherwise, as workshop leader, you are responsible to ensure that some photos of the event are taken as well as a group photo and that these are uploaded to a private folder photos.nsrc.org. If other instructors in your class wish to upload photos as well that is great. The idea is to earmark a private folder on photos.nsrc.org where your workshop photos will go. After the event is over NSRC core staff will organize the photos and print them publicly. At this time you may be asked to assist with captioning the photos. NSRC core staff can assist as needed to give access to the private area for photo uploads on photos.nsrc.org.

Be sure that some photos of participants and instructors in action are taken. These can be part of potential updates made to Facebook, Google+, etc. during the week (see below).

Group photo

One group photo should be taken. In particular, it should be easy to identify how many men/women are/have attended the workshop. Don't schedule the group photo on the last day as attendees sometimes have to depart early, therefore it is usually a good idea to plan for this beforehand. Please post the group photo on the workshop wiki and upload it to the private area on photos.nsrc.org.

Social media

Post to Facebook and Google+ workshop updates, or work with NSRC core staff to do this. You may not have access to the NSRC social media accounts, so you can remind core NSRC staff to do this and provide them with something to post. Items should include:

- One or two updates during the week
- Pre-workshop announcement shortly before the event begins.
- Try to set up the posts during the week to include pictures of participants and instructors in action.

Materials

If NSRC training materials are updated be sure they are pushed back to proper NSRC Git repository. If instructors are uploading new materials you should be the coordination point. Some instructors will be comfortable work with the NSRC Git repository, others won't. It's often simpler to accept an updated presentation and incorporate in the NSRC Git repository yourself.

You are responsible for updating the local workshop wiki agenda with links to PDFs of the latest versions of presentations and labs as the workshop takes place. Other instructors can do this as well, but you are the coordination point for this.

Arrange for distribution of workshop books

Work with core NSRC staff to obtain books in electronic format that can be distributed during the workshop. This should be completed during the pre-workshop planning phase. You can make the

books available on your local web server to just the IP address range of the class, or if you have USB sticks you can give them out at your discretion. Often books and certificates are given out at the same time, but if you feel it would be useful for the participants to have the books earlier in the week you are free to give them out whenever you like.

Closing exam

If you consider giving a closing exam with some of the same questions as your initial questionnaire this can help you to determine if people learned about some of the topics that were taught during the week.

The simplest way to do a closing exam is to print up a 1 or 2 page (max) document, hand it out and give people enough time to finish (15-20 minutes). Then, what we usually do is to ask the students to swap their exam with their neighbors and have them correct it for them. We, then, go through each question, give the correct answer(s) and discuss the answers as people see fit. If you can get the participants to grade the exams, then it's less work for you later.

Once that is done we ask that all the exams be given back to us. As the lead instructor if you can determine the final scores on each test, collate and report this back to the group that is most useful - including any comments you may have about people's answers, etc...

There are several sample exams available in the NSRC Git repositories. If you need help finding one ask core NSRC staff for help.

Survey/evaluation

At the end of the workshop you can ask participants to take some time to fill in a survey about the workshop. We make these available under <http://nsrc.org/limesurvey>. You can, also, include the link to the survey in your post workshop email(s) and urge people to fill in the survey to assist us with future workshops. The information we gather from the survey helps us to adjust workshops and methods over time.

You can work with NSRC core staff to have your survey activated and, then, deactivated at the appropriate time.

The software we use is [LimeSurvey?](#). Once surveys are deactivated they are stored in Excel spreadsheet files on nsrc.org.

Event notes

During the workshop we ask that lead instructors collect notes and thoughts on things of interest, people that you talked to, new opportunities that have emerged, etc... This will be the basis for a small activity report post-event. This activity should only require a few minutes each day, but is much simpler to do each day vs. trying to remember what happened later on. See the Post Workshop section below for more details. More specifically the items we hope you will track include:

- Names, titles, organizations and emails of people you have discussed any specific items with that may be of future interest to the NSRC
- Context and description of items, events, etc. that may be of interest to the NSRC
- Any thing else that you feel may be relevant.

POST WORKSHOP

Ensure that local workshop wiki is synchronized back to nsrc.org public copy

There are scripts available to synchronize back to nsrc.org from your local NOC box the workshop wiki you have used in class. If you need assistance to do this you can create a tar.gz file of the entire wiki, make it available and NSRC core staff will take care of synchronizing the wiki instances. Once this process is done, then the remote wiki should be made read/only. That is, no other users should be allowed to register on the wiki after the workshop ends to avoid potential spammers abusing the wiki instance.

Ensure that workshop group photo is published

The workshop group photo should be published on the workshop wiki and made available to be published on photos.nsrc.org. If you have uploaded photos from the workshop to photos.nsrc.org, including the group photo, then you can link to that copy from the wiki. You may want to let the participants know when photos and/or other post-workshop items are available.

Post to Facebook and Google+ a workshop update, or work with NSRC core staff to do this

You may not have access to the NSRC Facebook and/or Google+ accounts. If so, please remind NSRC core staff to post about your workshop and if you can make available a group photo, or some other good photo from the event with information then the NSRC staff member can post to social media as appropriate.

Upload photos to photos.nsrc.org

You can work with NSRC core staff to make sure you have an account for uploading on photos.nsrc.org. You can upload all your workshop photos to a private upload area and then core NSRC staff will sort through your photos to pick the ones to publish publicly. You may be asked to provide information so that photos can be captioned, such as student and local organizers names, organizations and titles as you have available. **Supply post event notes / report** During the workshop it is expected that the lead trainer will make notes of each days activity. It's expected this should be no more than a 10 or 15 minute task. The idea is to try and collect information that includes:

- Names, titles, organizations and emails of people you have discussed any specific items with that may be of future interest to the NSRC
- Context and description of items, events, etc. that may be of interest to the NSRC
- Any thing else that you feel may be relevant.

The idea is to let the rest of the organization know about your event in more detail and to provide information for the entire organization to help better plan future events and assist others. In addition, if you can request notes about the overall event from each participating instructor and collect these to be put in with your notes that would be most useful.

This final document serves as an event report that can be referred to by NSRC staff as needed and as a more detailed historical record of our activities, which we have found to be invaluable on numerous occasions in the past.

Follow up on workshop mailing list with appropriate post-workshop items as needed

Items to follow up on include:

- Any specific information you had promised to the participants during the workshop.
- A reminder to complete the online workshop survey to those who have not filled it out (if there are any).
- Details about where the final workshop web site is located.
- Pointers to pictures taken during the workshop.
- A reminder to people to join our Facebook or Google+ pages or follow us on Twitter if they wish to see what we are up to in the future. The URLs for these pages are:
 - <http://www.facebook.com/nsrc.org>
 - <https://plus.google.com/+NSRCorg/>
 - <http://twitter.com/nsrcworld>
- Anything else you feel is pertinent.
- And, most importantly, in many cases stress that the mailing list is a good place for people to ask questions and discuss issues. Some post-workshop mailing lists on nsrc.org have remained active for years after an event.

Archive the survey, and deactivate it, after a week or so

You will probably need to ask NSRC core staff to do this, so please remind them once you think it's time to deactivate your class survey. You may have already been given read access to the admin section of the survey software so that you can view survey results. If you have not, feel free to ask for this from NSRC core staff. The survey software is LimeSurvey. The admin login page is located at <https://nsrc.org/limesurvey/admin>

Once surveys are deactivated the survey results are saved in Excel files located in:

- <https://nsrc.org/workshops/evals/limesurvey/>

A password is required to access this directory. If you wish to gain access to the Excel file after the survey has been deactivated contact NSRC core staff.

CHECKLIST OF ALL ITEMS BY RECOMMENDED DATES

This is a sample of what has worked, more or less, in the past. These dates are not set in stone for each item, but as a general guideline it's useful to try and follow them to make workshop/event planning, organization and post workshop items go as smoothly as possible.

ITEM	SUGGESTED DATES
Pre-Workshop Planning*	Months/Weeks Prior
Initial discussions on workshop/event scope	3 months
Communicate requirements to local host to host a workshop	2 1/2 months
Work with contacts provided by local host to ensure that requirements are met and verified in a timely manner	Start at 2 months
Work with NSRC core staff to finalize instructor team	2 months
Prepare a workshop wiki	12-4 weeks
Assign topics to instructors and create workshop agenda in conjunction with instructor team	4-2 weeks
Assist instructor team with access to NSRC Git repositories as necessary	4-2
Make sure instructor staff book travel	12-4 weeks
Remote lab access	4 weeks

Connectivity	8-4 weeks
Power	8-4 weeks
Lodging and meals	12-4 weeks
Transport	8-4 weeks
Equipment shipping	4 weeks
Books	4-2 weeks
Kit preparation	2 weeks
List of participants	2-1 weeks
Mailing list	2-1 weeks
Network diagrams or other participant submitted documents	2-1 weeks
Social events planning	4-2 weeks
Instructor briefing	2 weeks
Materials to print on-site	1 week
Work with local host to prepare for certificates	2-1 weeks
During the Workshop	Timeline
Workshop preparation day	1 day before workshop
Lead or coordinate opening session	Day 1
Consider an initial, short questionnaire set of questions to determine participant level	Day 1
Verify participant list details	Day 2
Work with local host to create, print and have signed certificates during the week	Day 3-4
Workshop wiki and web site	All week
Videos and photos	All week
Group photo	Before last day
Social media	All week
Materials	All week
Arrange for distribution of workshop books	Last day
Closing exam	Last day
Survey/evaluation	Last day
Event notes	All week
Post Workshop	Timeline
Ensure that local workshop wiki is synchronized back to nsrc.org public copy	Last day
Ensure that workshop group photo is published	Day 4 or 5
Post to Facebook and Google+ a workshop update, or work with NSRC core staff to do this	Last day
Upload photos to photos.nsrc.org	within 1 week
Supply post event notes / report	within 1 week
Follow up on workshop mailing list with appropriate post-workshop items as needed	within 3 to 4 days
Archive the survey, and deactivate it, after a week or so	within 1-2 weeks

- Naturally you can do any of these items earlier if you wish :-)