# **Cyberinfrastructure Support Information and Policies**

#### 1. Introduction

The cyberinfrastructure team at SESYNC exists to support the hardware, software, and data needs of the center and its sponsored research projects; to enhance onsite and remote collaboration; and to facilitate the provision of technical resources needed to produce actionable science. This document outlines:

- The range of IT and cyberinfrastructure support the team can provide to sponsored science teams, researchers, and visitors to the center;
- Policy and expectations for dissemination of data and code related to Center projects.
- For a description of all available computational and collaboration resources, please visit our support site at https://collab.sesync.org/sites/support

## 2. Pre-proposal Discussion

Prior to submitting a proposal to SESYNC, we strongly encourage you to communicate with the cyberinfrastructure team to ensure that your expectations for cyber support are in line with our services. If you anticipate requiring significant software or personnel resources beyond basic IT and file storage support, please contact the SESYNC's Associate Director for Cyberinfrastructure (Mike Smorul, <a href="mailto:msmorul@sesync.org">msmorul@sesync.org</a>, 410-919-4809) to discuss your needs.

## 3. Priming Call

Once funding has been awarded, key SESYNC staff conduct a priming call with PIs prior to the start of a project. Discussion of data and cyber support needs, required tools and software, and analytical staffing is a major focus of the call. In addition, we provide a brief overview of the collaborative resources available to each team.

### 4. Support Requests

SESYNC IT Staff may be reached by sending e-mail to <a href="itrequests@sesync.org">itrequests@sesync.org</a>. SESYNC IT staff continually monitors the support e-mailbox from 8:30 a.m. until 5 p.m. Within the center you may dial '1000' from any conference phone or handset in case of an immediate need for technical assistance during a conference or meeting.

### 5. Hardware and Software Resources

#### a. Collaboration Support

SESYNC provides all long term groups and postdoctoral fellows access to a collaboration (collab.sesync.org) platform and mailing list for document sharing and communication.

#### b. Computing and Storage

SESYNC provides numerous computational and storage resources for groups and research fellows. All computational and storage are available by request only. Please contact SESYNC's IT staff so they can arrange access. For a full list, please visit the support site listed in Section 1.

In addition, through collaboration with the University of Maryland Institute for Advanced Computer Studies, access to traditional high performance computing (HPC) resources can be arranged.

#### c. Office Hardware

SESYNC provides a suite of commonly used office devices including copies, printers, scanners, and fax machines which are available to guests and researchers. Center IT staff and administrative personnel are available to assist in using these technologies as needed.

#### d. Network

SESYNC provides wireless coverage throughout the entire center and gigabit wired connectivity in any office or conference room. Wireless instructions are posted around the center prior to any event and wired connections can be supplied with a five business day advance notice. <u>Use of the SESYNC network is subject to the University of Maryland Policy on the Acceptable Use of Information Technology Resources (http://www.it.umd.edu/aup.html).</u>

#### e. Audio/Video and Conference Facility Support

SESYNC has four meeting rooms and a collaborative open space which can be configured in a variety of ways to support different conferencing needs. All meeting rooms are equipped with HD projectors or large screens and support remote participants via telephone of video using Microsoft Lync. To ensure that conference resources are available and prepared for each meeting, all A/V requirements including projector, wired network, and remote connectivity needs must be communicated to SESYNC IT or Travel staff at least 5 business days prior to the start of any event.

#### f. Scientific Software

Please be prepared to communicate anticipated needs for analysis software during the Priming Call. In the event that additional software is necessary during the course of a project, please communicate this need to <a href="mailto:itrequests@sesync.org">itrequests@sesync.org</a> as soon as possible to allow time for licensing and setup. We strive to accommodate software needs but cannot guarantee the ability to license or support all requests.

# 6. Database and Application Development

SESYNC is able to provide consulting support for the prototyping of socio-environmental applications. Due to the intense effort involved, we are only able to offer significant staff support for teams or fellows that can commit matching personnel time. Priority will be given to prototype applications that can be utilized by a broad community.

Visitors and projects who anticipate requiring application, database, or workflow support should contact the SESYNC Associate Director for Synthesis (Mary Shelley, <a href="mailto:mshelley@sesync.org">mshelley@sesync.org</a>) to discuss the project's data and processing requirements early in the application process.

## 7. Disposition of Data and Software

As an NSF-supported center, SESYNC is committed to public dissemination of data and to open-source software development and distribution. To this end, investigators, fellows, collaborators, and others receiving financial or in kind support from SESYNC acknowledge and agree to the terms below. SESYNC personnel are available throughout the life of a project (via <a href="itrequests@sesync.org">itrequests@sesync.org</a>) to assist investigators with these matters via discussion and identification of appropriate licenses, repositories, documentation methods, and other relevant tools and procedures.

- Data products resulting from SESYNC sponsored activities will, insofar as possible, be made accessible with no restrictions for use and dissemination through explicit use of a <u>Creative Commons Zero waiver</u> or its equivalent and will be deposited in a public repository or established open database. Such data will be adequately documented for validation and reuse, including appropriate attribution of its original source.
- All software source code developed with SESYNC funding or participation will be made freely available via an FTP or code repository service such as GitHub and will be licensed under an OSI-approved Open Source license (see opensource.org). Such source code is to be sufficiently documented, and at a minimum, state purpose, copyright and license, and acknowledge and attribute any other software or software libraries that the SESYNC-sponsored software uses or depends on, as required by the licenses of such software.
- Both data and source code will be made available in a timely manner, no later than two years after the conclusion of the SESYNC award, or immediately upon publication of an associated article, whichever comes earlier.
- As in the case with publications, datasets and software generated or created as the result of a SESYNC-supported activity will appropriately and conspicuously acknowledge SESYNC and the National Science Foundation by including the following: "This work was supported by the National Science Foundation DBI-1052875 to the National Socio-Environmental Synthesis Center."
- PIs may be asked to provide a Data Management Plan of no more than one page in length describing 1) plans for meeting the above requirements, 2) identification of data and/or source code repositories and mechanisms for providing open access, and 3) identification of areas the investigator requests SESYNC's assistance to meet these requirements.
- If for any reason, any of the above terms cannot be met, the investigator or fellow will notify SESYNC immediately upon discovery of this situation and will discuss possible alternatives and solutions with SESYNC personnel.