Gen2 Extended Remote System (GERS)

Introduction

The Gen2 Extended Remote System (GERS) is a software package that you can install to display all eight of Subaru's Observation Control System displays, which will be helpful for you to monitor the status of observations from your home or office. Usually, it is sufficient to show only a subset of the most important displays; your Support Astronomer (SA) can explain which ones will be the most useful for your observation. The internal tests by our staff showed that it is very portable, speedy, and efficient. Currently, we are glad to provide this as a beta service for your observational convenience. The GERS (alias g2remote) software is available with a mild 'shared-risk' mode. For your observations, we recommend connecting to the SA or Operator via Zoom for communication and using GERS to monitor the observation status. If you do not plan to use the Mitaka remote observation room in Japan, or if one of your team members will participate in Zoom only, then we recommend you or your participants use the GERS system.

Policies

The maximum number of simultaneous GERS observers is two (maximum of two connections). If you want to see the GERS screen in three or more places, we recommend sharing the GERS screen(s) with Zoom's screen sharing function.

Procedures

Observers for Open-Use, UH, and Time Exchange

1. PI should notify the observer's information via the <u>Google form</u> at least three weeks prior to the observation.

2. Once you receive an email that your observation with GERS has been accepted, you can install GERS and follow the procedures for the GERS self-service web site (described below).

Observers for Other Programs

Please contact <u>gers-infodesk.org</u> to apply for GERS observation.

Note: GERS should be prepared at least two weeks prior to the observation date. <u>We may</u> not be able to accommodate last minute GERS observation requests less than 3 days prior to the observation date, even if it is unavoidable.

Requirements & Installation

Please refer to the following links for the latest versions of the operation.md (operation_jp.md) and install.md (install_jp.md) files.

https://github.com/naojsoft/g2remote/blob/master/README.md

For First-time GERS users

Please visit the web site <<u>https://github.com/naojsoft/g2remote</u>> where you can download the software and follow the instructions in the "install" and "operation" files. Follow the instructions and upload the newly generated public key (".pub" version only) using the GERS self-service web site (see details below). Keep both the public and private key files safe in a separate empty folder. From the self-service site, download the necessary configuration files to use with GERS; unzip these into the same folder as the public/private key pair.

- 1. Download and install the 'g2remote' program.
- 2. Generate a SSH keypair; upload the 'gen2_connect.pub' (public part file) to the self-service site.
- 3. Download the configuration files from the self-service site.
- 4. Read the documentation, including the <u>FAQ</u> and <u>troubleshooting</u> sections.
- 5. Connection Test on the day of observation
- 6. Observation

For Repeat GERS users

- Keep your GERS private/public keypair safe. It can be used over and over for future GERS observations with Subaru Telescope. You should not need to ever upload a new key unless you lose the old one, or we ask you to. In that case, generate a new keypair as described in the instructions and upload the public part to the GERS self service web site.
- Although you do not need to upload a new key, the configuration files change from semester to semester and will need to be downloaded and unzipped into the folder with your keypair at the beginning of each semester. These should be downloaded from the GERS self-service web site.
- If you would like to use GERS in the same semester, you are able to use the same config file. You can use the program exactly as before. In that case, simply send us an email requesting to use GERS (as described above under "Procedures")..

The GERS Self-Service Web Site

The <u>GERS self-service web site</u> is used to upload the public (".pub" file) of your SSH key pair that you will generate in the instructions. You will also download the configuration files for your GERS use from the site.

You will be emailed an initial password to be used to login to the self-service web site (the user name is your email address). After logging in, please change your password, upload your public key, and download your configuration files.

If you have trouble using the self-service web site, you may email us the public part of the SSH keypair and we will upload it for you and send you the configuration files. As this necessitates some delays, we recommend that you become comfortable using the self-service site, as it is more speedy and convenient for everyone involved. If you forget your password, email us and we will reset it for you; after receiving the reset password, please login and change it.

Additional information for GERS users

- Testing can be done anytime between 10:30 and 17:00 HST on the day of the observation.
- GERS users in the 1st half night should disconnect 5 minutes before the switching time, and for those in the 2nd half night should connect 5 minutes after the switching time.
- The observers of the 2nd half night program:
 - Do not connect GERS before the switching time.
 - Firstly, connect with Zoom before switching time and check with the SA or Operator that the observers of the 1st half program have disconnected their GERS connection.

Zoom Information

A zoom connection is necessary for communication with the operation staff members (Operators and SAs) but also with your other observers. GERS shows the Gen2 displays for monitoring of your observations but does not provide communication tools. The Zoom ID and password to be used on the day will be provided in advance via email. The policy regarding the use of Zoom for the observation is as follows.

https://www.naoj.org/Observing/Proposals/Visit/zoom_policy.html

Contact

If you have any questions about GERS and Zoom system, please contact gers-infodesk@naoj.org.