DM-13: Small-scale data transfer

A **researcher**, **educator**, **science gateway developer**, or **application developer** (hereafter referred to as **"researcher"**) needs to move a small amount of data (a handful of modest-sized files) to or from a community resource. We assume the researcher belongs to a project with an allocation to use the resource and knows the hostname of the resource's login server.

In most cases, the researcher expects it to work as follows.

1. First, the researcher authenticates to the community and activates access to the resource. In response, the interface tells the researcher which username to use in Step 2. *Activation means obtaining a short-term credential that can be used to authenticate with the resource's login server via an SSH client. This could be either explicit (the researcher manages the credential) or implicit (the interface handles the credential without the researcher's awareness).*
2. Then, the researcher uses one or more scp commands to transfer the files to the resource's login server. Each command specifies the username obtained in Step 1.
3. When finished, the researcher "deactivates" access to the resource. *Deactivation means the short-term credential obtained in Step 1 can no longer be used to access the resource.*

We'll accept any solution as long as the following are true.

1. The researcher can complete this use case using any device with a standard (up-to-date) SSH client and web browser.
2. In Steps 1 and 3, the interface is either a command-line tool or a web app. If the interface is a command-line tool, the command-line tool is available under a free-use license, is available for use on Mac, Windows, and Linux systems, and is as easy to install as ordinary applications.
3. In Step 1, the researcher can authenticate using the researcher's community identity and credentials.
4. In Step 1, if the access policy of the service provider that operates the login server requires it, the researcher can provide a second authentication factor.
5. In Step 1, the confidentiality of the researcher's credentials is never compromised. (The connection is encrypted and confidential and the researcher's credentials are never visible on a display.)
6. In Step 2, the scp commands use standard SCP syntax. The command's name may vary, however.
7. In Step 2, the scp command uses the short-term credential obtained in Step 1 to authenticate with the resource's login server.