Creating a PhenoMeNal cloud research environment with Amazon web services (AWS) cloud

1. Create a PhenoMeNal cloud research environment (CRE) by clicking on the ‘CRE’ tab, ‘Create Cloud Research Environment’ button (Figure 1A) or the ‘Galaxy Workflow’ button (Figure 1B) on the PhenoMeNal Gateway homepage.

![PhenoMeNal Gateway homepage](image)

**Figure 1** PhenoMeNal Gateway homepage.

2. Log in using Elixir Single Sign-On (SSO) (Figure 2). You can do this using your existing ORCID, LinkedIn or Google account credentials. Alternately, log in using your institutional account.

Elixir SSO is an authentication and authorisation infrastructure (AAI) provided by Elixir. It enables people from the biomedical community to use their own credentials to register and log into a new service.
3. Next, you need to choose the cloud provider you want to use. To use Amazon web services (AWS) you need to have an Amazon AWS account with credit. Click on ‘Select’ under the AWS logo to choose this service (Figure 3).
4. Log into AWS using your AWS Access Key ID and Secret Access Key (Figure 4).

If you have an account with Amazon AWS, but you don’t know access key ID and Secret Access Key see the Amazon AWS user guide.

Make sure to switch off the deployment once you are finished using it, otherwise it will continue to use your Amazon AWS credit.
5. Create an admin account for accessing the PhenoMeNal Galaxy instance via Amazon AWS (Figure 5). You need to keep track of these details, as you will need them to log-in into the Galaxy instance. With this account you will be able to administer the instance and create more users if needed.
6. Once you have created your PhenoMeNal CRE you will be able to access the PhenoMeNal Galaxy instance which contains a set of tools for metabolomics analysis.

You will first need to log into the PhenoMeNal Galaxy instance, with the username and password you created in the previous step. Go to the ‘User’ drop-down menu (Figure 7) and select the ‘Login’ option in the menu.

Note that the branding differs depending on where and when the instance of Galaxy was deployed. Note that the ‘Workflow’ and ‘Visualization’ drop-down menus are disabled before login.
Find the User drop-down menu as shown, and click on the Login option to start the login.

7. Log in using the username and password used to create your account at the CRE Portal (step 5), (Figure 8).

Enter the user and password previously used on registration.