Working with Reports

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Introduction

The Voxel Farm platform features a spatial reporting system. This system allows to run a custom program, a report, across a large scope of space. As the program goes over space, it can analyze different layers of spatial data and perform useful computations or discoveries with the data.

Even if the report code is deceptively simple and serial, the platform is able to execute reports in a massively parallel fashion. This is achieved by running many instances of the same report program in parallel, each one looking at a different region of space. The platform integrates the results produced by the swarm of reporting nodes into a single, coherent result set.

This section covers how to run existing Report programs. To see how to create new Report programs, please visit the Report Program section of the Developer manual.

Viewing Reports

The WebUI keeps track of all Report entities in the Project's Catalog and provides a dedicated section in the UI to access them. To access the reports, select the "Reports" section in the WebUI:



The reports are organized using the same hiearchy of Folders in the Project.

To view a Report, click on its name on the Tree View. The Report results will show as a table in the right panel.

Use the "Download CSV" link to download a CVS file with the results of the Report.

Creating a Report

To create a new Report entity, go to the Project Catalog, browse to the Folder that you want to contain the Report, and click on the "Add" button.

This will display a list of Entities to add. Chose "Report" from the list:



This will display a modal dialog prompting for information about the report:



Name	Provide a name for the report
Region	Select one of the regions available in the Project as the scope where the Report will run. Visit the Working with Regions section to see how to define a new region.
Resolution	Allows to select the voxel resolution that will be used to compute the Report.
Program	Select which Report Program will be used to compute the Report. For more about these special programs, see the Report Programs section. Based on the input expected by the program, the dialog will contain other custom input fields.

Click on the "Create" button to start the Report. While it is computed, the Report will appear list in the "Pending" section of the Project.

Once the report completes, it will become accessible for viewing and downloading.