

Running Sample Data with VELMA 2.0

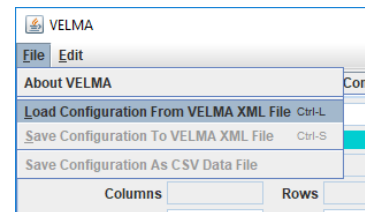
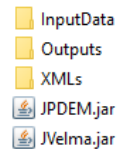
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Download and Unzip the Sample Data

1. Download one of the 4 Sample Datasets located on the VELMA website under the “Sample Data” section on the “Documentation and Data Download” tab.
(<http://humboldt.reclaim.hosting/VELMA/data-download/>)
2. The file will be downloaded as a zipped/compressed file. Unzip/uncompress the file and move the file to your desired location (ex: desktop)

Launch VELMA and Load the Configuration

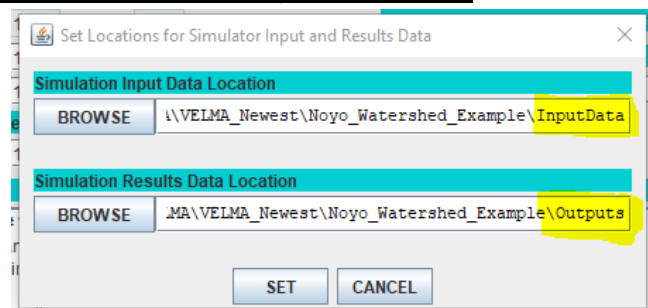
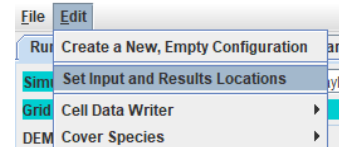
1. Open the Watershed Example file. There will be 3 folders and 2 executable Jar Files
2. Double click JVELMA.jar to launch VELMA
3. In the VELMA window, Select File > Load Configuration From VELMA XML File
4. This will open a file selection window.
 - a. Navigate to your Watershed Example File
 - b. Open the XMLs folder
 - c. There will be an XML titled “Name_Watershed_DayMonthYear.xml”
 - d. Select the XML and click OK to load the configuration



Setting the Input and Output File Locations

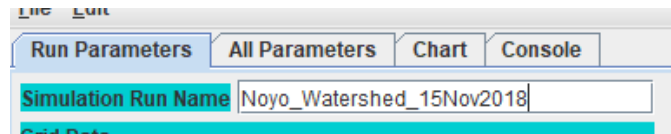
This sample configuration already has all inputs, parameters, files names, etc. entered in correctly. All you need to do is set the correct input and output file locations and the simulation will be able to run.

1. In the VELMA window, select Edit > Set Inputs and Results Location
2. A new window will pop up.
 - a. Use the top Browse button to set the “Simulation Input Data Location”. This file path needs to lead to the “InputData” folder
 - b. Use the Browse button to set “Simulation Results Data Location”. This file path needs to lead to the “Outputs” folder.
 - c. Once the correct file paths have been selected, click “SET”



Name the Simulation and Save the Configuration

1. In the upper left of the VELMA window, change the “Simulation Run Name”
 - a. We recommend using the date (ex: Noyo_Watershed_15Nov2018)



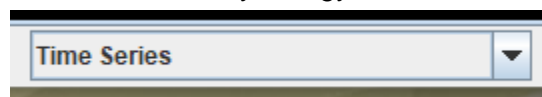
2. To Save your new configuration, select File > Save Configuration to VELMA XLM File
3. Save your new configuration into your XMLs folder. Don't save over configurations!
4. Select Save File

Run the Simulation

1. In the bottom left corner, select “START”. A yellow box that says “STARTING Simulation” will appear in the bottom right corner
 - a. If you received an error message (see image below), revisit all previous steps.
 - b. Alternatively, you could review the error messages, however it can sometimes be tricky to find the correct error message within the text

```
at java.util.concurrent.ThreadPoolExecutor$Worker.run(Unknown Source)
at java.lang.Thread.run(Unknown Source)
ava.lang.Exception: The input data directory is missing or invalid; simulation cannot proceed.
at gov.epa.velmasimulator.GlobalState.initializeInputDataLocation(GlobalState.java:2083)
at gov.epa.velmasimulator.VelmaSimulatorEngine.initializeVelmaSimulatorEngine(is
```

2. If the set up was all done correctly, a black Time Series set of charts will appear. In the top right corner it will say “Jan. 1, 1990.”
3. Once the simulation starts, the date will change and the charts will begin to fill themselves out
4. Using the Drop down bar in the bottom panel, you can observe different charts. A particularly useful one is “Calibration Hydrology”.



As the simulation runs, VELMA populates the Outputs folder with data results. **The VELMA simulation must run to completion to obtain all output information.**

As of now a VELMA simulation cannot be paused or saved part way through and continued later. We suggest running the simulation overnight using either a mouse jigglng software or disabling sleep mode on your computer.

Approximate Time Duration for Sample Data 1990-2017 VELMA Simulation:

Noyo Watershed: 5 hours 30 min

Trinity Watershed: 11 hours 30 min

Eel River Watershed: 12 hours

Russian River Watershed: N/A