

Loading Grids into CVLGrid

CVLGrid is 2D grid generation software developed by DSI for use with curvilinear orthogonal models, and in particular for use with EFDCPlus/EFDC_DSI, EFDC_SGZ, EFDC_EPA, and EFDC_Hydro models. As all EFDC models require 2D curvilinear orthogonal grids this tool has been developed to meet this need for DSI and our clients and customers. This tool has been further optimized for use with the EFDCPlus/EFDC_Explorer Modeling System. CVLGrid can be used to refine and modify existing grids and if the I, J map is not changed then model can be loaded back into EE without needing to update the boundary conditions settings.

CVLGrid uses several files types to develop a grid for use in EFDC. The **.CVP** file is a CVLGrid project file and saves all the different files the user has loaded, including the actual grid (**.CVL**), background maps (.JGW, .GEO), splines (.SPL). In addition, if the user has any overlays (e.g. shoreline files) or DTM (e.g. bathymetry XYZ data), the full pathname is saved in the CVP file so those annotation layers will be added to the display when the **CVP** file is opened.

1. Loading a Project File

To load a CVLGrid project file (*.CVP), the user should click *Files* menu on the CVLGrid main form then select *Load Project* as shown in Figure 1. Next, browse to the folder containing the CVLGrid project file (**CVP**), select the CVP file and click the *Open* button as shown in Figure 2 . After clicking *Open* button, the CVLgrid will load the grid (**CVL**) and any other files such as overlay files and background maps as shown in Figure 3.

Optional Methods

- The user can simply load CVLGrid project file by selecting the project file in the Window Explorer folder (LMC) then drag and drop the file into workspace of CVLGrid.
- The user can simply drag any **CVL** or recognized overlay format onto the CVLGrid form and it will load and display the file contents.

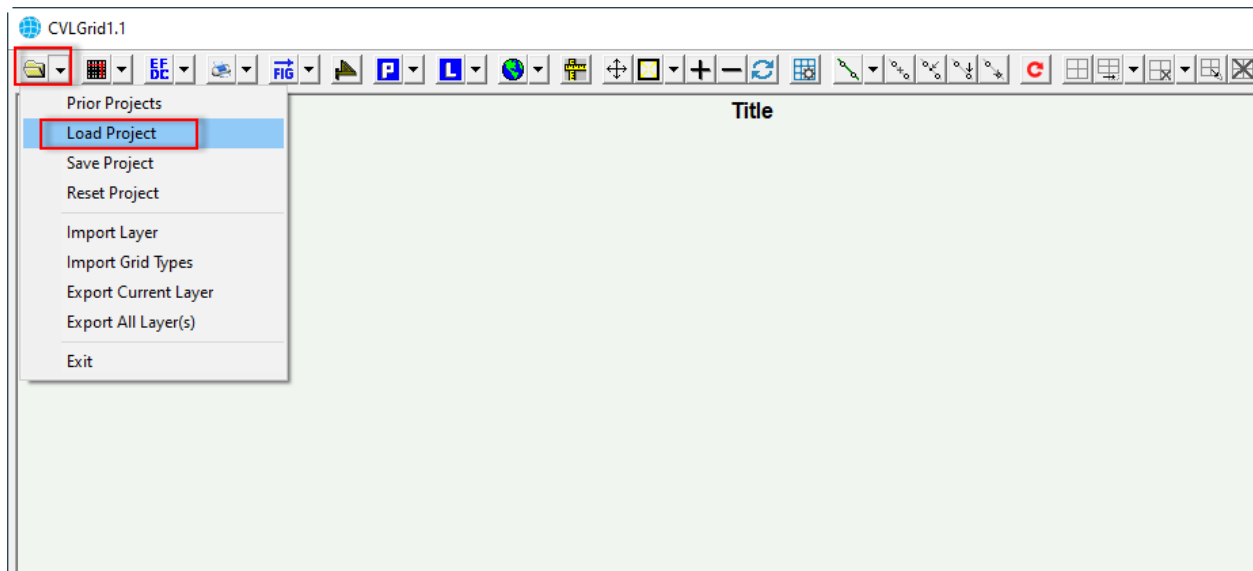


Figure 1 Load a CVLGrid project file.

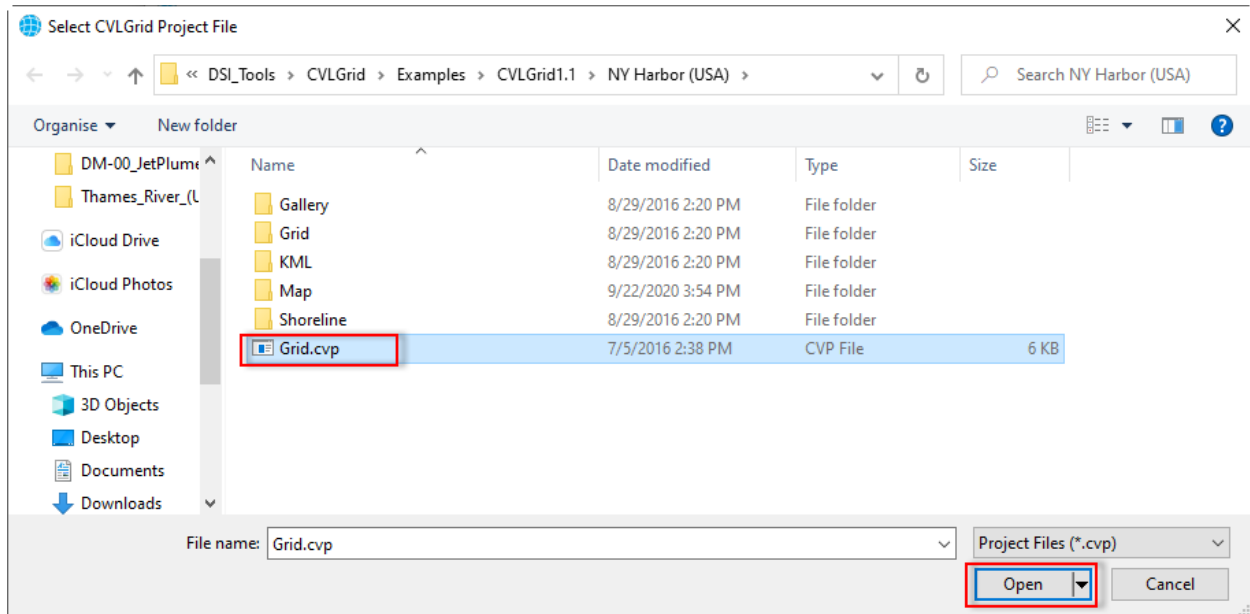


Figure 2 Browse to a CVLGrid project file.

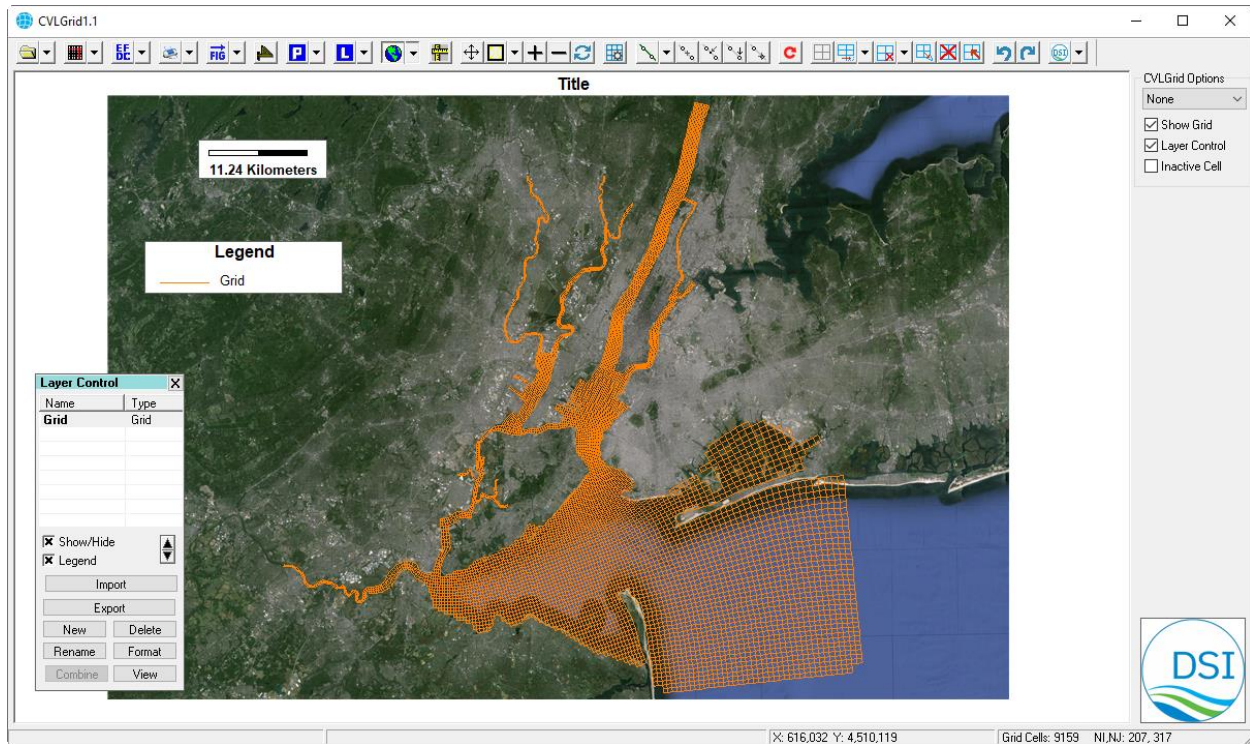


Figure 3 A project file loaded into CVLGrid.

2. Loading a Grid File

To load just the CVLGrid grid file (*.CVL), the user should click the *Import* button on the *Layer Control* form. If the *Layer Control* does not appear in the workspace of CVLGrid, the user should select the check box for *Layer Control* on the right side as shown in Figure 4. After clicking the *Import* button, the user should browse to the CVLGrid file then click the *Open* button as shown in Figure 5. After clicking the *Open* button CVLGrid will load just the grid file as shown in Figure 6.

Multiple grids can be loaded and displayed at the same time. Only the currently selected grid in the *Layer Control* can be edited. Click on the layer name to select each grid.

Another option is that the user can load the grid file by selecting the grid file (LMC) then drag-and-drop the file into the workspace of CVLGrid.

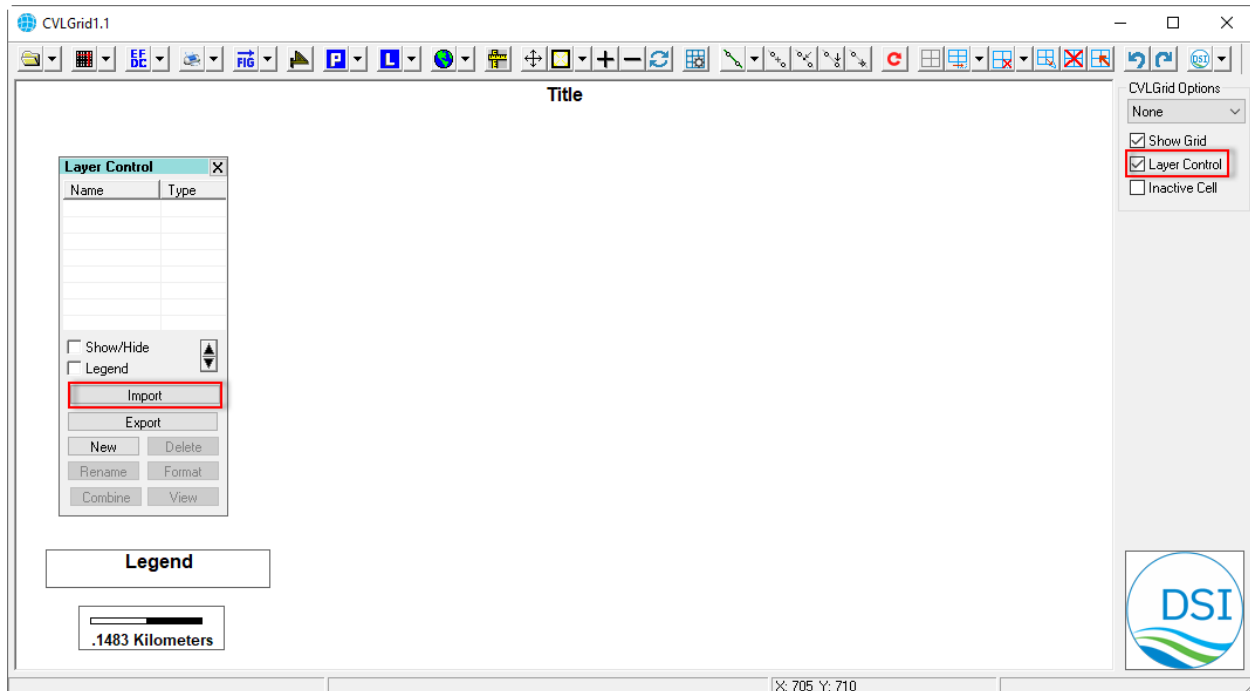


Figure 4 Import CVLGrid file.

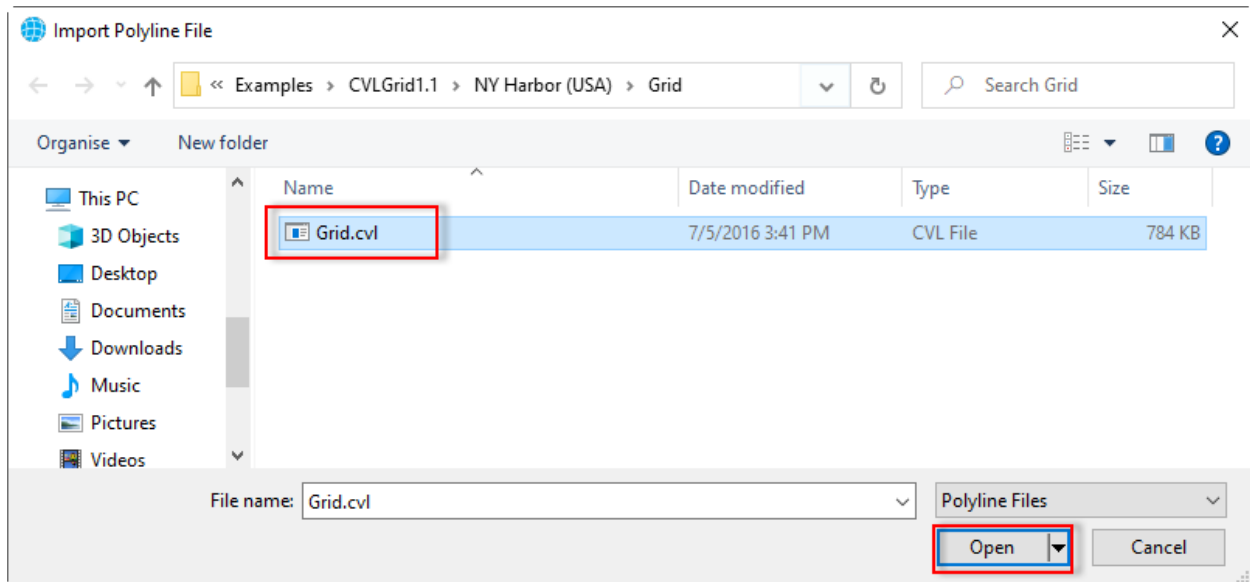


Figure 5 Import Polyline File form.

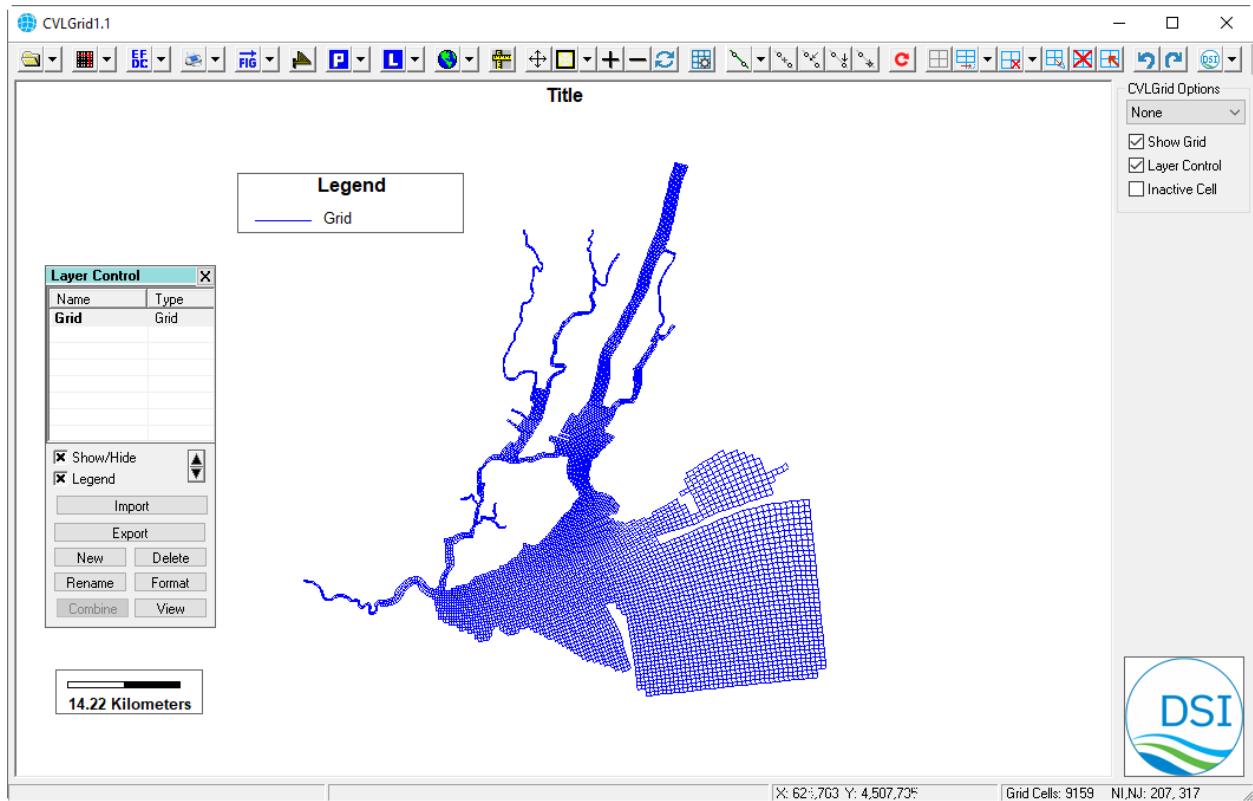


Figure 6 A grid file loaded into CVLGrid.