

Visual MODFLOW Readme (Classic Interface)

Fixed in v.4.6.0.161 (July 2012)

- Error when editing Evapotranspiration for MODFLOW-96 flow variant
- Error message if you go to view output and UCN files are empty.
- Cannot run Seawat.exe 32-bit version, get error engine not found
- For SEAWAT run, UCN files are not re-generated after re-translate and run, when using the stand-alone Seawat.exe version outside of Visual MODFLOW
- Out of memory when importing initial concentrations for large models
- Visual MODFLOW was not able to handle binary output files greater than 2GB (.HDS, .DDN, .UCN) – removed this limitation
- MNW with point source translation was not working with MT3DMS
- MNW and WEL package translation was taking a long time; optimized the algorithm to improve the performance
- Not able to add the grid line to a precise location, when right click on the grid
- Not able to input the precise boundaries for zoom, when right click on the grid
- Program fails or gets very confused when importing storage data for the 2nd. time
- Time series plot for drawdown is incorrect and different from values shown by the drawdown contours
- Conductivity values are not imported correctly when importing from shape files multiple times

Fixed in v.4.6.0.160 (February 2012)

- When defining multiple subsequent boundary conditions in the input, if you did not click on the Save button after each one, only the most recently added/modified boundary conditions were being saved
- The Lake Plots zone budget charting was not working for a MODFLOW-SURFACT flow run
- When doing interpolation for properties/conductivity, if you used a formula for defining K_y or K_z (eg. $K_z = K_x/10$), the correct values were not being calculated
- The new EVT run setting was not being translated and saved correctly
- When importing grid layers, in IJK format, the layer bottom elevations were not being imported correctly.
- Importing IJK values sometimes did not work when doing this multiple times
- Added support for defining coalescing lakes, in the input/boundaries.

Known Issues with Visual MODFLOW

Although every reasonable effort has been made to fix any known problems with the software, there are some issues with the software we were not able to fix before the program was released. These remaining issues will not affect the results of the simulation in any way, but they do affect your ability to use the software. We are working towards the elimination of these problems, and we will be posting patch installation programs on the SWS website from time to time so you can update your program. However, in the meantime, it is important for you to

know about the issues that may affect the performance of the software and your ability to use it effectively. These issues are documented below:

- Parallel processing for RT3D, MT3D99, and PHT3D is not available; a patch will be deployed shortly after the release.
- When using MT3DMS with parallel processing, the project files must be in a directory that does not contain spaces
- When running SAMG with MODFLOW 32-bit versions and large models, you may experience out of memory issues; it is advised to use other solvers (GMG, PCG) or use on a 64-bit machine
- For SEAWAT, need to use the DRHODC parameter instead of DENSESLP when working with just the salt species.
- Access Violation error sometimes occurs when in the Properties/Database window. Workaround: Save your project, close, then re-start Visual MODFLOW.
- Error may occur when running MODFLOW-2000, 2005 with GMG solver and large models
- The transport engines MT3DMS/MT3D99/ RT3Dv.2.5 do not run with the double precision version of MODFLOW-2005 .DLL version
- MODPATH and ZoneBudget do not run with MODFLOW-2000 .EXE version, when using the SIP solver
- An "Error reading flow- Transport link file" occurs when running PHT3D v. 2 with MODFLOW-2005, Double precision, .DLL version
- In certain instances the 3D Explorer will give you a warning message about being in demo mode and will not launch. We are aware of the issue and looking into resolving it.
- Some slight instabilities in the running of numerical engines have been encountered. Solution: Close Engine Manager and re-run model. If you are running multiple engines you may need to run them individually.
- When running Visual MODFLOW on Windows 7 you may encounter errors when running engines. Solution: Turn off the UAC or run as Administrator.
- When using an older version of MODFLOW-SURFACT, e.g., v.2.0, with Visual MODFLOW, calculated head results may be incorrect. Solution: The latest version of Visual MODFLOW is designed to run with MODFLOW-SURFACT v.3.0. In MODFLOW-SURFACT v.3.0 the LOGICAL UNIT has changed from 6(16) to 28(38). If you are running MODFLOW-SURFACT v.2.0 you must manually modify the translated .BAS file before running your model to reflect the old LOGICAL UNIT. To do so, after translation, simply open the .BAS file using Notepad. On line four, locate the 28th number in the line and change it to a 0. Next, locate the sixth number in the line, and change it to 16. Save the change, close Notepad, and then start VMEngines to run the model.
- Users with Hydro GeoBuilder installed may experience a problem when creating Surfaces from point data objects in Hydro GeoBuilder, after Visual MODFLOW 2011.1 has been uninstalled from their machine. Solution: After uninstalling Visual MODFLOW 2011.1, also uninstall Hydro GeoBuilder. Once both are uninstalled, reinstall Hydro GeoBuilder.
- You may encounter a problem when running SEAWAT 4 simulations with the Multi-Node Well (MNW) package. During the model run, the simulation may terminate before completion and show an error message, or the necessary input file for the MNW package may not be generated during translation. These issues are currently being investigated.
- For MODFLOW-SURFACT projects created in v.2, after loading these projects into the latest version of Visual MODFLOW, you must do a Run and Translate with the new version of SURFACT, in order to completely update the project to the latest version of the engine.
- When integrating MODFLOW-SURFACT with Visual MODFLOW, if the connected dongle does not contain a valid SURFACT licence or the dongle is not plugged into your computer, a "HASP not found (-3)" error message will appear. Please be sure that a dongle with an appropriate SURFACT licence is connected to your computer, before you attempt to launch Visual MODFLOW.

- The observation package for MODFLOW-SURFACT v.2.2 is not supported. Please contact technical support for assistance.
- For the MIKE 11 example tutorial, the provided *.OMI file is not compatible with newer versions of MIKE 11. If you are using MIKE 11 version 2007 or 2008, you must first run the provided MIKE 11 model to generate a compatible *.OMI file, and then use this file to define the MIKE 11 river network in Visual MODFLOW.
- Currently, the following flow/transport engines do not support the Multi-Node Well (MNW) package: RT3D (v.1.0, v.5.2), MT3D (v.1.5) and SEAWAT-2000.
- When running flow and transport, Visual MODFLOW will not write results unless the appropriate time steps are selected in the output control.
- For projects using the MODFLOW 2000 flow engine with a PHT3D transport variant, if the flow engine is changed to MODFLOW 2005 after the PHT3D species have been defined, you will receive an "Abnormal Termination" error and Visual MODFLOW will shut down.
- When running MODFLOW-SURFACT version, with a license that does not include PCG5 solver, you should not select this solver from the MODFLOW / Solver settings. The run and translation will begin, however, you will not see any results.
- When running MODFLOW-2000 flow engine with MIKE 11 2008 on a Windows Vista 64-bit or Windows XP 64-bit computer, an "Application Error" message is shown and the simulation does not finish successfully.
- After performing a remote-update with a network dongle on a 64-bit machine, the network licence will turn into a local license. Solution: This is a compatibility issue with 64-bit computers. For network licenses only, be sure to run remote-updates using a 32-bit computer
- In some cases, there are display issues when running Visual MODFLOW with more than one monitor; currently this configuration is not supported.
- Run - WinPEST - Models located in a directory path that is longer than 100 characters may not run, or the results from the simulation may not be written to the hard drive.
- Some buttons and labels are not displayed properly when using DPI settings higher than 96, or with large Fonts.
- Problems deleting a bitmap, then adding a new bitmap with the same name. The new georeference points are not utilized. Change the name of the bitmap before importing again in order for the georeference point changes to take effect.
- When running a MIKE 11 simulation, and MIKE 11 river network is the only boundary condition, Visual MODFLOW will create default stress periods with start time = 0 and stop time = steady-state simulation time
- After refining the model grid, the initial concentration values are deleted
- When using MIKE 11, and interchanging a model between computers that use different date formats (as specified in the regional settings), the model result will not update automatically when executing a Run only. Solution: Do a Run and Translate on the Visual MODFLOW project to ensure the .OMI and .OPR files are updated with the system's date format
- In highly irregular layer surfaces, problems may occur when displaying color shading with transparency in cross-section view.
- Splash screen displays MODFLOW SURFACT as a supported add-on package with all installations. MODFLOW SURFACT is only available if this package has been purchased, and the appropriate dongle is attached. Otherwise, MODFLOW SURFACT will be available in a feature-restricted demo mode.
- Importing MODFLOW files: currently, an imported model always defaults to Steady-State (in the Edit-Engines dialog) regardless of the original model settings for Initial Heads, it is necessary to select the "[project].vmp.hds" file manually after importing the model (from the RUN menu MODFLOW-Initial Heads) before running the model for the first time. If this is not done, then the Specified heads are used instead. Solver settings of original model are not remembered - Solver type and settings are ignored and Visual MODFLOW defaults to the WHS solver. Please check your solver and settings after the model has been imported, before you run the model.

- When running a network installation, from the client machine, and saving a model as a new name, VMEngines may not run and translate during the first attempt. A workaround is to close VMEngines and Visual MODFLOW, then re-open and re-run the project.
- When creating a new project, if you halt midway through the process, then attempt to create another new project, an error will occur.
- When running MODFLOW 2000 and using the option "Anisotropy as Specified" it is not possible to use the BCF package; only the LPF package is supported.