What’s New in FieldView 16.1

FieldView 16.1 is an update to FieldView 16 that brings many improvements to our users without requiring updated passwords. It delivers numerous customer requests as well as new features that advance extract-based workflows.

New MP4 Video Export with Frame Rate Control

Straight from FieldView to YouTube and PowerPoint

Our new high quality video export conforms with the format and encoding recommendations from these two applications. This is your guarantee of the highest portability, without the confusion of countless video exports or the need for 3rd party converters.

This new export introduces control for frame rate.

FieldView 16.1 also brings automatic graphics window resizing to 1080p, 720p and 480p.

Logarithmic Colormap Scaling

Easier analysis of simulation results with a wide range

FieldView can now apply a logarithm function when mapping results to any colormap. This capability makes it easier to highlight orders of magnitude for scalar fields with a wide range, such as vorticity magnitude or Q criterion.

When Log Scale is on, a new legend type is available to automatically display annotations for powers ten.
Defined Views

Easily rotate around screen axis

You’ll never have to worry again about which axis should be up when applying a predefined view. Just rotate it 90° with the click of a button until your view is properly oriented.

These rotations apply to any view and can be found in the Defined Views panel, under the View menu.

Support for Advanced Python GUI Toolkit

Create your own GUI panels for FieldView

FieldView can now execute Python scripts containing function calls from Tkinter, the Python API to Tk, one of the most widely used Graphic User Interface (GUI) toolkits. That means you can customize FieldView with your own GUI panels, using the many widgets offered by Tkinter (some examples shown left).

From automating common tasks to developing full vertical applications, customization options are endless.

If you need training or help in developing these scripts, our team of experienced consultants stands ready.
New Help Menu Entries

Easily access the FieldView Customer Center

Our Customer Center is open to all FieldView users and provides access to rich content: downloads, tutorials and over 150 FAQs. You can now directly access it all from the Help menu.

And if you’re maintaining your own wiki or FAQ page, you can customize the same menu with a link that you and your colleagues can access.

Licensing via Server

Run FieldView when only the FieldView Server has access to the License Manager

You can now run FieldView when using a secured connection away from the office. With “Licensing via Server”, the FieldView Server will provide the connection between the License Manager and your FieldView Client.

This optional capability is available to customers with FieldView Parallel 16 and higher.

License Manager Update, Forward Licensing Compatibility and more…

Reduce your exposure to cyberattacks, simplify licensing on virtual OS instances and adopt a version of FieldView that you can rely on for years to come

The FieldView License Manager is now based on FlexNet 11.13.1.3. This new version provides a fix for a FlexNet vulnerability issue for License Managers visible from the internet. It also no longer supports binding a virtual system to a physical one, a feature known in the past as lmbind. All customers willing to run their License Manager on a virtual system will have to use the much easier feature based on UUID (Universal Unique Identifier).

Finally, we’re removing restrictions on running older versions with newer passwords. This means that FieldView 16.1 will continue to run with passwords for FieldView 17, 18 and beyond. This has been a key request from our customers for which CFD is mission critical.
New VTK Reader

Read VTK extracts from your batch or in situ workflows

FieldView 16.1 introduces two new readers for structured and unstructured VTK datasets. They're based on the actual VTK library and can read full VTK results written either from a solver or VTK extracts generated by Paraview or Catalyst.

Surface Sampling

Faster comparison between datasets without the need for volume data

Sampling is a required step for visualizing differences between results based on different designs or grids. It can take a very long time when done with two full volume datasets.

FieldView 16.1 introduces a new surface based sampling method that is many times faster and removes many of the limitations of Dataset Sampling. The compared surfaces don’t have to overlap and can come from full volume datasets or extracts (boundary-only read, XDB, VTK...).

Simulation results courtesy of the AIAA Hover Prediction Workshop
Other Improvements

FieldView 16.1 brings over 35 additional fixes and improvements, including:

- Faster batch hardware rendering
- Faster XDB exports
- Faster Surface Flows computation (for types “Euler” and “Offset”)
- Panels are no longer rendered outside of your current display after disconnecting a monitor or switching to a smaller resolution
- FVX support for user defined readers
- AcuSolve reader options are now preserved from session to session
- Support multi-phase and mid-step mesh displacement for AcuSolve results
- Resolved an issue with the creation of a Boundary Surface while the current Boundary Surface is being swept
- Face-based [BDNY] vectors are now correct when viewing XDB exports
- Resolved a problem in how the GuideFVX script was loading colormaps
- Vortex Core Restarts can no longer lead to rendering a legend for an invisible surface
- The FLOW-3D reader now accepts Restart Data with more than 2 billion result values in a grid
- Resolved a problem that was causing a Preference Restart to fail
- Resolved a problem with partial integration for surfaces with very short face edges, after clipping or thresholding
- In some rare cases, FieldView could return an incorrect error message when reading a transient dataset
- Resolved a problem reading split grid & results FVUNS with face-based variable using PFPR
- FieldView can now correctly change time step for two transient datasets with face-based variables read in parallel
- Resolved a problem related to face-based variables when standard and arbitrary polyhedral faces and interlaced in a file
- FieldView Client-Server and FieldView Parallel no longer crash when a user-defined formula is deleted
- Removed unnecessary warning messages from the console when reading some particular PLOT3D cases
- FieldView now successfully converts to cylindrical coordinates some PLOT3D grids for which it was failing previously
- Corrected the normals used for surface integration of sampled results obtained using Dataset Sampling on an XDB grid target
- Reading cases with hanging nodes or a forced triangulation of arbitrary polyhedra in “boundary-only” mode will now produce correct results
- FieldView no longer asserts after canceling a data read operation for a dataset with Regions
- Non-finite variable values on structured Boundary Surfaces are now rendered with the correct color (magenta)
- XDB export now succeeds even if the output path contains dots or spaces
- GuideFVX now supports the use of multiple dynamic clip planes
- FieldView now returns the correct error message when the maximum number of dynamic clip planes has been reached
- GuideFVX now supports the simultaneous use of dynamic clipping and multi-windows
• Resolved an issue with the numbering of datasets when using dynamic clipping and multi-windows
• Resolved an issue that was causing "gas constant (R)" to have incorrect values if used in a formula for multi-species OVERFLOW-2 data
• FieldView now supports the FV_NO_MAGIC environment variable for datasets with over 2GB of results in a single grid
• Resolved an issue that was causing FieldView to assert when computing streamlines at a specific location
• FieldView no longer starts additional parallel server processes when browsing remote files
• Resolved an issue that caused streakline spheres not to be saved into animations generated in batch with software rendering
• Up to date documentation

End of life notice

FieldView 16.1 is the last version to be supported on Windows 32bit

For more details on FieldView 16.1

See the “Welcome to FieldView 16.1” document, accessible from FieldView’s Help menu.
Contact your Account Representative at sales@ilight.com
Contact FieldView’s Technical Support team at support@ilight.com