



Confusion Mitigation

Correcting VisualAnalysis Misconceptions

VisualAnalysis 5.5 is a powerful piece of software. It has been described as providing Cadillac features at a Volkswagen price. It is a streamlined and easy to learn package and yet...at least for some...confusion reigns!

IES takes pride in developing VisualAnalysis to the point where most customers can be up and running within a few minutes, without ever looking at a manual. But at the same time, it is almost impossible to understand our key design intentions if you never read the "Essentials" chapter in the Help (or [User's Guide](#)). (It really is worth the 10 minutes it will take you!) This is especially true if you have spent years struggling under one of our competitor's "engineering frustration systems".

Deep and Wide

But even then, VisualAnalysis is a deep and complex package of tools and features that even those of us developing it have a hard time mastering! There are over 80 menu commands, dozens of possible mouse-click operations, and thousands of hidden options, preference settings, and, well, yes, even a few genuine quirks.

The engineers at IES are constantly *tweaking* things to help with confusion mitigation, and we rely heavily on customers to let us know when something is confusing (see [It's Your Turn](#)). At the very least we can provide documentation, tutorials, and FAQ Answers to help in times of need.

Tips & Tricks

Here are some examples of our confusion mitigation program. These examples come from the latest VisualAnalysis customer survey:

Q. I hate the load combination names in VisualAnalysis, why do I have to guess what "16.10a" means?

A. You don't. Did you know you may customize the *LoadCombo.txt* file to change the names? You can also add your own load combinations or modify the ones we provide. Search the Help for more information.

#	Name	Scale	D	L	Lr	Le	R	W	S	Sns	E	H	F	TS	T	TC
45	[ASCE 7.02 ASD]	Strength=Yes, Service=No														
46	2.4.1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
47	2.4.2	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00
48	2.4.3Lr	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
49	2.4.3S	1.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00
50	2.4.3R	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
51	2.4.4Lr	1.00	1.00	0.75	0.75	0.75	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.75	0.75	0.75
52	2.4.4S	1.00	1.00	0.75	0.00	0.75	0.00	0.00	0.75	0.75	0.00	1.00	1.00	0.75	0.75	0.75
53	2.4.4R	1.00	1.00	0.75	0.00	0.75	0.75	0.00	0.00	0.00	0.00	1.00	1.00	0.75	0.75	0.75
54	2.4.5W	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
55	2.4.5E	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	1.00	1.00	0.00	0.00	0.00
56	2.4.6W+Lr	1.00	1.00	0.75	0.75	0.75	0.00	0.75	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
57	2.4.6W+S	1.00	1.00	0.75	0.00	0.75	0.00	0.75	0.75	0.75	0.00	1.00	1.00	0.00	0.00	0.00
58	2.4.6W+R	1.00	1.00	0.75	0.00	0.75	0.75	0.75	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
59	2.4.6E+Lr	1.00	1.00	0.75	0.75	0.75	0.00	0.00	0.00	0.00	0.53	1.00	1.00	0.00	0.00	0.00
60	2.4.6E+S	1.00	1.00	0.75	0.00	0.75	0.00	0.00	0.75	0.75	0.53	1.00	1.00	0.00	0.00	0.00
61	2.4.6E+R	1.00	1.00	0.75	0.00	0.75	0.75	0.00	0.00	0.00	0.53	1.00	1.00	0.00	0.00	0.00
62	2.4.7	1.00	0.60	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
63	2.4.8	1.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	1.00	0.00	0.00	0.00	0.00

Q. The program is always defaulting to the wrong material when I select a shape. Can't you guys fix that?

A. Sure, tap your heels together three times and say, "*I can use the Shape Database Editor*". This utility ships with [ShapeBuilder](#), and allows you to modify the 'default' material used when you select a shape from the database. You can even tell it you don't want VisualAnalysis to change your material when you pick a shape.

Q. Design is annoying, I have to set the same parameters each time I create a group!

A. Did you know that you can set design default parameters? Try this command: Tools | Customize Add Ons.

Q. Why can't the software remember my custom reports?

A. Try this: Create a report you like using **Report | Report Wizard**, after the report is created, tweak it all you like to adjust WHAT is shown, and sort order. Don't base the report on "selected objects" because that does not persist very well to the future, especially on other projects. Then use **Report | Save Report As Style**. The next time you want that report, use **Report | Report Wizard**. You can even use the **Report | Manage Report Styles** command to remove the built-in reports, and make your custom reports appear in the top 5 and access them through a menu or toolbar button.

Q. It's very hard to switch between different Views or Grids.

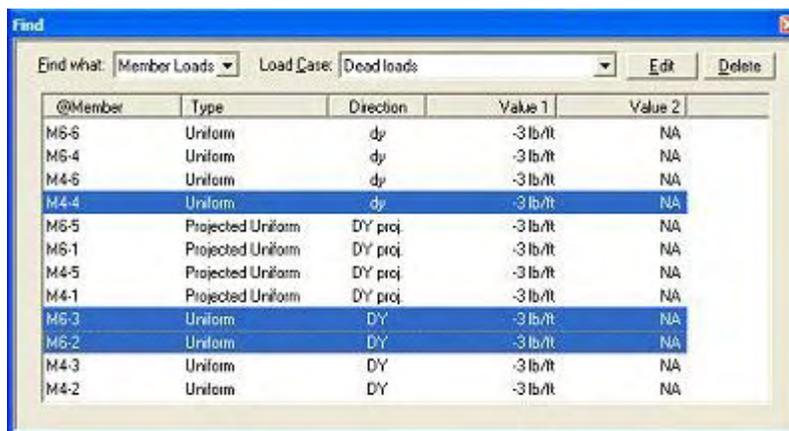
A. Try this: Get a view you like, and then **Right-Click** on it. Choose **Name Current View**. Next time you want to see this view again, select it from the drop-down in the status bar (where you see Model View, Result View...).

Q. When I zoom in our out, the model jumps too far. Zoom is too difficult to use!

A. Try this: **Tools | Customize Appearance**, on the **Filter** tab set the **Zoom In/Out Factor** (way at the bottom of the gazillion options) to 1.1, or even 1.05 for finer control.

Q. Lines are very thick in the Model View, maybe thickness could be reduced to give clearer graphics?

A. OK. Go to **Tools | Customize Appearance**, on the **Sizes** tab. Find "**Member Thickness**" and change the value to 1.



The screenshot shows a 'Find' dialog box with a table of member loads. The table has columns for '@Member', 'Type', 'Direction', 'Value 1', and 'Value 2'. The 'Find what' field is set to 'Member Loads' and the 'Load Case' is 'Dead loads'. The table lists 14 members with their respective types and values.

@Member	Type	Direction	Value 1	Value 2
M6-6	Uniform	dy	-3 lb/ft	NA
M6-4	Uniform	dy	-3 lb/ft	NA
M4-6	Uniform	dy	-3 lb/ft	NA
M4-4	Uniform	dy	-3 lb/ft	NA
M6-5	Projected Uniform	DY proj	-3 lb/ft	NA
M6-1	Projected Uniform	DY proj	-3 lb/ft	NA
M4-5	Projected Uniform	DY proj	-3 lb/ft	NA
M4-1	Projected Uniform	DY proj	-3 lb/ft	NA
M6-3	Uniform	DY	-3 lb/ft	NA
M6-2	Uniform	DY	-3 lb/ft	NA
M4-3	Uniform	DY	-3 lb/ft	NA
M4-2	Uniform	DY	-3 lb/ft	NA

Q. It is hard to pick loads for editing, they are all overlapping graphically and it is impossible to see them.

A. Two options here: 1) Cut Planes or Smart Planes in the **Grid** tab of **Project Manager**. These are really powerful, especially when combined with Named Views. Read about these in the Help. 2) Use the "Find Window" (**Edit | Find** or **Ctrl+F**) to view a list of loads, by load case, and you can select them in a list for editing or deletion.

It's Your Turn: Part 2

The Customer Has Spoken

VisualAnalysis customers responded to our survey from last month regarding future improvements in this popular tool. We were pleased to find that we had already implemented some of the most-requested feature improvements.

We were not surprised to see some recurring themes from the last few years: Wind loads (ASCE 7) are still a gnarly problem!

Who messed up?

We are struggling a little bit with some of the survey results. Partly because we didn't give you enough room to explain what you meant, and partly because we did not ask for any identification so we could follow up.

It is inevitable that customers ask for features that already exist! Other customers asked for features or made statements that we don't fully understand. Still others have used the survey to voice concerns that really should have been sent to IES Technical Support (we really do have solutions for your problems!!)

So we all messed up. If you would like to explain yourself, we are all ears. If you think your IES software is not performing up to par, please contact IES technical support for a solution!

Help is on the way!

IES is devoted to meeting customer demand and we are investing significant resources into VisualAnalysis 6.0, expected to arrive in the **Fall of 2006**. It's still not too late for you to participate in the improvements for the upcoming release. If you are running VisualAnalysis 5.5, please take the [VisualAnalysis 6.0 Customer Survey](#) today.

Squeaky Wheels

It's really too early to ask us how much this upgrade will cost or exactly when it will ship. But it's never too early to explain to IES what you want and why you want it. So far, only a few dozen customers have expressed opinions, are you going to let them decide the future of your favorite analysis and design tools?

IES User's Group

A Valuable Resource for IES Customers

Did you know IES had a "User's Group"? It's true, there is a friendly email discussion group available to all IES Customers. This list is easy to use and could be a low-cost way to improve your productivity, or help your peers.

Who? All IES Customers are invited to participate.

What? Email list. Discussion emails appear in your in-box, you can read, ignore, or respond at your leisure. You can ask questions of the group by simply sending an email.

How? [Subscribe Here](#), all you need is an email address. You will receive email instructions to confirm your subscription. You can unsubscribe at any time.

Why? Learn things about IES software and how to use it better. You can simply listen and learn, or you can ask questions, or you can help others with your vast experience.

When? Now! It only takes a minute to [subscribe](#).

You may still contact IES Technical Support for difficulties or for reporting problems in the software. IES Technical Support via email is a great way to get your questions answered promptly, or to complain about missing features or broken features. The User's Group is a fantastic way to get deeper into the software, to have discussions with other user's or IES developers who are monitoring (but not moderating) the list. This is the place to go to discuss modeling issues, the art of finite element analysis, to figure out how to create reports that can appease the most demanding plan checkers, etc. Join today, you have nothing to lose!

Latest Updates

Our bits are better than your bits

Hey dude, you've got some stale bits in your machine! Get them refreshed here:

- [VisualAnalysis 5.50.0014](#)
- [AnalysisGroup 3.00.0003](#)

Why you ask? Check [THIS](#) out, man!

Employment at IES

Help Wanted, West of Paradise!*

IES is seeking engineers for one or two positions. Perhaps you have been using IES software and you would like to get involved on the other side? If you have a desire to help fellow engineers understand, use, and or purchase structural software, we may have the job for you. We would like to fill one or two positions at IES.

Support Engineer: Qualified candidate would have BSCE (or equivalent) and 3 years of experience. Duties would include telephone and email technical support, as well as creation of tutorials, documentation, and software testing.

Sales Engineer: Qualified candidate would have BSCE (or equivalent) and a knowledge of the structural software industry and experience with a variety of software packages. Position may require some travel.

If you have an interest in either of these positions, or would like more information, please mail or email a resume to: IES, Inc. 519 E Babcock St, Bozeman, MT 59715. Send email to: info@iesweb.com

(*Paradise Valley lies just east of Bozeman and is a popular route to Yellowstone National Park, not to mention home of more than a few of the country's most rich & famous.)