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General – Internet Explorer 7 Conflicts

Beware of installing *Internet Explorer 7*. It conflicts with *ANSYS* and *UGNX* preventing those programs from working properly.

ANSYS/IE7 Conflict Information

ANSYS 11, due to be released in January, will support *IE7*. After that time, there will also be a patch released for *ANSYS 10* that will support *IE7*. Do NOT install *IE7* until then.

Technote #55

ANSYS Products and Microsoft Internet Explorer 7 Compatibility

At this time, ANSYS products are not certified to run on systems with any version of the Microsoft Internet Explorer 7 web browser. The ANSYS v11 release, which will be available in January 2007, will support this browser. Following the v11 release, ANSYS will provide a service pack for version 10 products to be compatible with the Internet Explorer 7 browser.

UGNX/IE7 Conflict Information

For *UGNX*, there is a quick fix; delete the *%UGII_BASE_DIR%/ugii/psapi.dll* file.

SOFTWARE FIELD BULLETIN
NX 4 and NX 3 Will Not Start After Internet Explorer V7.0 Is Installed

Symptom/Problem
Attempting to start NX 4 or NX 3, once IE V7.0 is installed, will display an error:

Fatal Error
Fatal error detected unable to continue
The syslog file will have the entry:

    Daylight Time
    +++ Unhandled operating system exception: e06d7363
    [1] 7C812A5B
    (kernel32)
    [2] 202B908A
    (libsyss)
    [3] (libsyss)
    [4] 202B7AD8

Solution/Workaround
Delete the %UGII_BASE_DIR%/ugii/psapi.dll file.

I-DEAS – User Group Meeting

There will NOT be an I-DEAS User Group Meeting in January.

I-DEAS – **PC Performance Tuning Tips**

Here are some general tuning tips that can improve your PC's performance while using *I-DEAS*.

1. Defrag your hard drive regularly. Weekly should be a good starting point.
2. Free up available RAM by exiting all unnecessary programs while using *I-DEAS*. If free RAM is not available, *I-DEAS* is forced to use the Page File (swap space) on the hard drive as virtual RAM greatly slowing down your session.
3. Disable *Hyper-Threading*. Disabling it will allow *I-DEAS* to use 100% of the CPU instead of only 50% with *Hyper-Threading* enabled.

I-DEAS – Best Practices for Working with Large Assemblies

Use Subassemblies to Organize Your Product's Structure

Using subassemblies gives you the following advantages:

- You can more easily manipulate (and simplify) the assembly's display at the subassembly level.
  For example, create hardware assemblies for grouping fasteners together. This allows you to show/hide dozens or hundreds of fasteners quickly and easily.

- You can create assembly relations at the lowest possible level of the hierarchy.
  If you need to constrain one of those subassemblies with respect to another instance, you will need to create only one more relation.

- You can lock a subassembly's instances in place with *Fuse* if you don't need to change the relations that you created within its context.
  This suppresses all the assembly relations within the subassembly, which enables I-DEAS to solve the constraint network for the top-level assembly faster.

- Implement a "Global System Model" strategy by using a global coordinate system that every subassembly can reference and orient itself.
  Intelligent use of this concept can greatly improve performance when working with large top-level assemblies by eliminating the need to retrieve top-level assemblies entirely. Only select interfacing subassemblies can then be retrieved and overlaid in your model file without having to bring in everything which would bog down your model file.

Use Assembly Relations Prudently

Unless you design assemblies in place, the larger they grow, the more complex their constraint networks become. As a consequence, I-DEAS needs increasingly more time to solve all the constraint equations. Therefore, in creating assembly relations:

- Keep the constraint network for the assembly as simple as possible.

- Do not overcontrain assemblies.
  There are 6 degrees of freedom (DOF) per instance; XYZ translation and XYZ rotation. Do NOT over constrain any of these DOF or performance can suffer.

  For example, a single face-to-face coincident constraint eliminates 3 DOF: 1 translational & 2 rotational. Constraining a box on three of its sides tries to constrain **9** DOF (3 per constraint) causing the box to be over constrained by 3 DOF.

- Avoid creating coupled constraints. They form constraint loops, which take *I-DEAS* longer to solve.
  An example of a coupled constraint is a four-bar linkage. You can create one by relating four instances (coupling them) to one another. The constraint loop forms once you relate the last

instance to the first instance. I-DEAS needs additional time to solve the constraint network when these instances become part of a complex assembly.

- <u>Attach constraints to a part's reference geometry, not to the part's geometry, in the early stages of the part's design.</u>
  Part modifications can remove geometry. Reference geometry is more reliable. Part designers must consider the effects of changes to reference geometry, as this geometry now helps to orient the part within the assembly.

- <u>Adjust the solver tolerance for the assembly constraint network as a last resort. The default values should serve in most situations.</u>

Prune Library Assemblies Before You Get Them to Your Model File.
　　　Pruning assemblies greatly reduces the size of your model file and can provide a huge performance boost. Also, create '*Prune Sets*' to better manage pruning.

Use 'Groups'
　　　Create '*Groups*' to better select and display instances and their features onscreen.