

# Oasys 9.2

## Oasys 9.2 – What is new?



- **Multiple Models and Automatic Processes**
  - Generate a series of models in Primer in one operation
  - Submit list of models to queue for LS-DYNA
  - Post-process list of models automatically
  - Special features in Reporter for creating a report summarising multiple analyses
- **PRIMER: improved error checking, multiple model assembly, and various other enhancements**
- **D3PLOT, T/HIS: new user interface, major upgrade**
- **Presenter now renamed REPORTER, major upgrade**
- **SHELL: Support for multiple analyses & Job Monitoring**
- **NOTE: new licence files are needed to run version 9.2. Please contact Oasys or your local Oasys distributor.**

*LS-DYNA is a registered trademark of Livermore Software Technology Corporation*



- Oasys software Version 9.2 is fully compatible with LS970 v6763
- It is also compatible with the majority of the new LS971 keywords. Known exceptions are \*CASE and \*EF.
- The full manual for LS971 Release 1 will be issued by LSTC in Summer 2006; we anticipate releasing an update of Primer around that time to maintain full compatibility.

## Hardware platforms supported

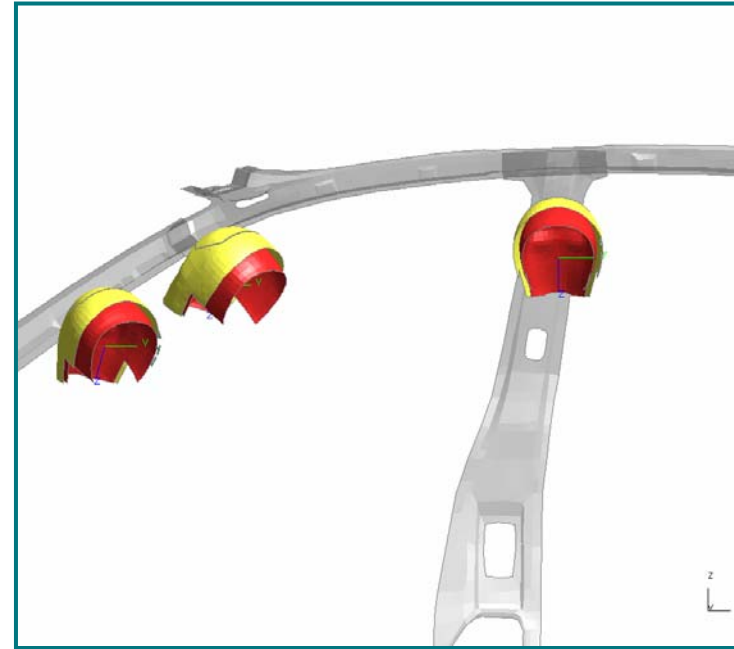
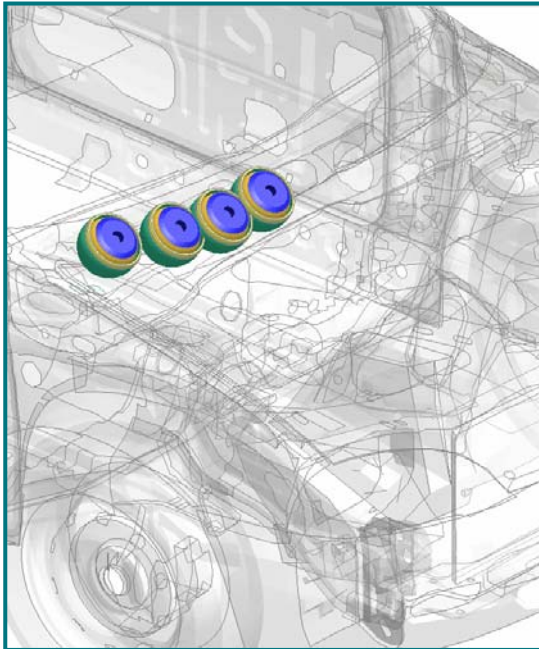


- Windows 32bit (Windows 2000/XP)
- Windows 64bit (Windows 64bit XP)
- Linux Kernel 2.4 (32 bit)
- Linux Kernel 2.6 (32 and 64bit)
- HP-UX 11.0 PA-RISC 32 & 64bit
- HP-UX 11.23 IA64 32 & 64bit
- SGI Irix 6.5 32 & 64bit
- Sun Solaris 10 32 & 64bit
- Sun Solaris 8 32bit
- IBM AIX 4.3 32bit
- IBM AIX 5.1 32 & 64bit
- Compaq Alpha (64bit)

## PRIMER 9.2



- Automatic model assembly & positioning
- Generation of multiple models
- Improved error checking
- Miscellaneous enhancements



# D3PLOT 9.2



File Window Tools Display Images Viewing Options Blank Parts Key in:

WV1 LI HI SH CT LC SI VE CL ISO

D3PLOT	T/HIS	Memory	
Blank	Deform	Measure	Utilities
Coarsen	Disp opt	Overlay	Vol Clip
Colour	Entity	Prop'ies	Write
Cut Sect	Groups	Trace no	XY Data

Data Part Tree

Data

2D/3D	Beam	Contact
Principal		
Surface	MIDDLE surface	
Envelope	OFF	
Averaging	ON	
Ref frame	GLOBAL	
Contours	13 : Auto Medium	
Component	DX_X_DISPLACEMENT	

2D/3D Components

Nodal results

- User Interface upgraded to match Primer
- New plotting modes (ISO, Cloud, Trace, "blob" plots for externally-generated data)
- Quicker animation, especially on large models

Stored group 16 (BELT)  
Successfully read SETTINGS file  
H:\DATA\DEMO\D3PLOT2\SLED5\d3plot001.set  
D3PLOT\_MANAGER >>> [H for help] \_

Manua	CT	LC	SI	Draw	Li	Hi	Sh	B	Lock
Stop	Vel	CL	Iso	AC	Zoom	CN	F	All	
Tidy	+XY	+YZ	+XZ	+ISO			Views	Rev	
?	-XY	-YZ	-XZ	-ISO			Typ	Ent	

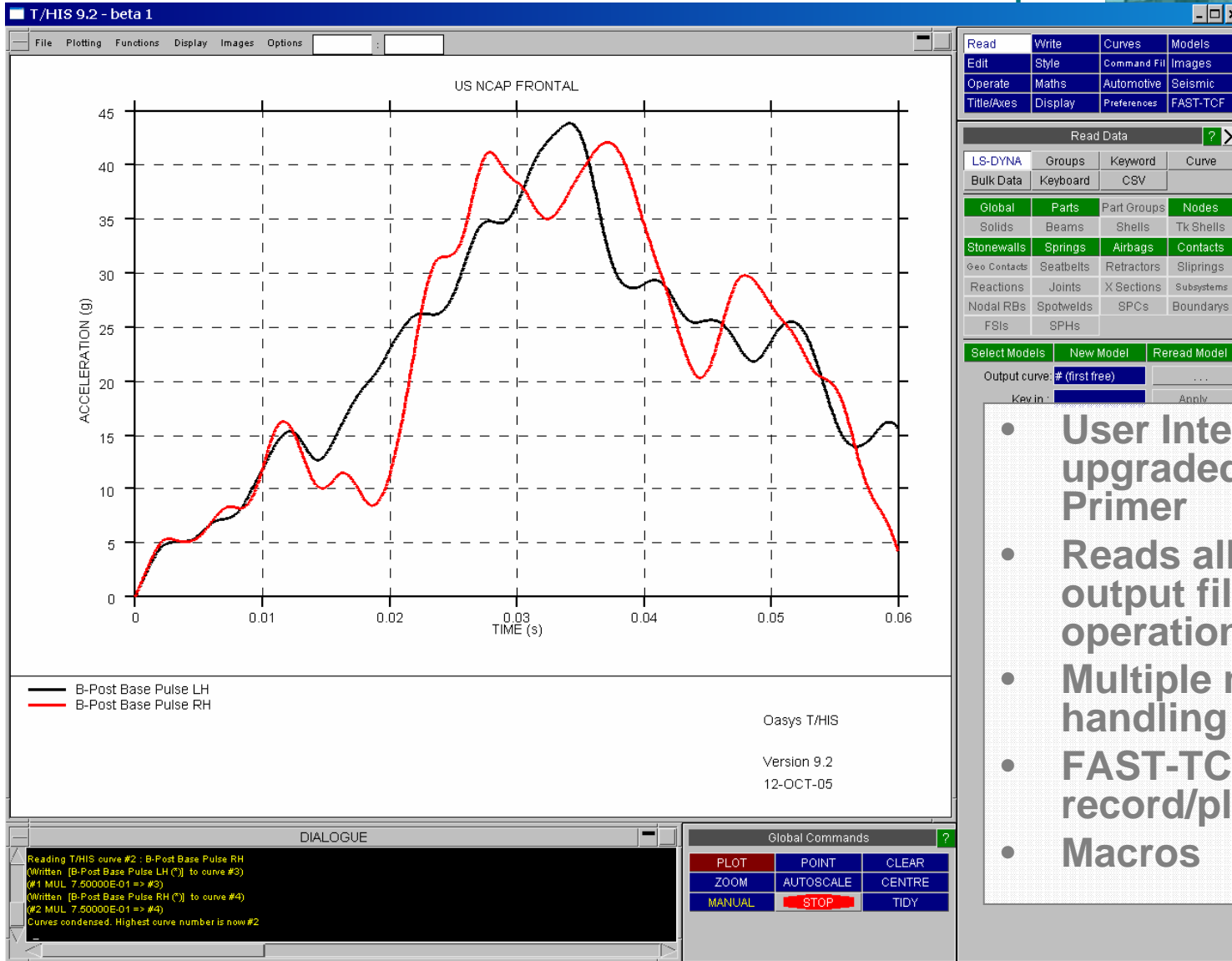
0.000000000

1 ?

0.0000E+00

File Anim Draw

# T/HIS 9.2



- User Interface upgraded to match Primer
- Reads all LS-DYNA output files in one operation
- Multiple model handling
- FAST-TCF script record/playback
- Macros

Oasys Presenter 9.2 - [Page 1: G:\Dyna\_Environment\Marketing & PPTs\OasysPPTs\OASYS92\temp\presenter92\_demo\presenter\_demo...

File Edit View Insert Page Script Window Help

100%

**Oasys Presenter**  
Crush Tube Model

Data From Analysis :

Model TITLE :	Crush Tube
Executed on host :	atghp011
CPU time :	2 hours 48 minutes 24 seconds
Final % added mass :	0.3%
Termination status :	Normal
Date of execution :	11/29/2002
Keyword file :	tube2.key

Deformed Geometry

Von Mises Stress

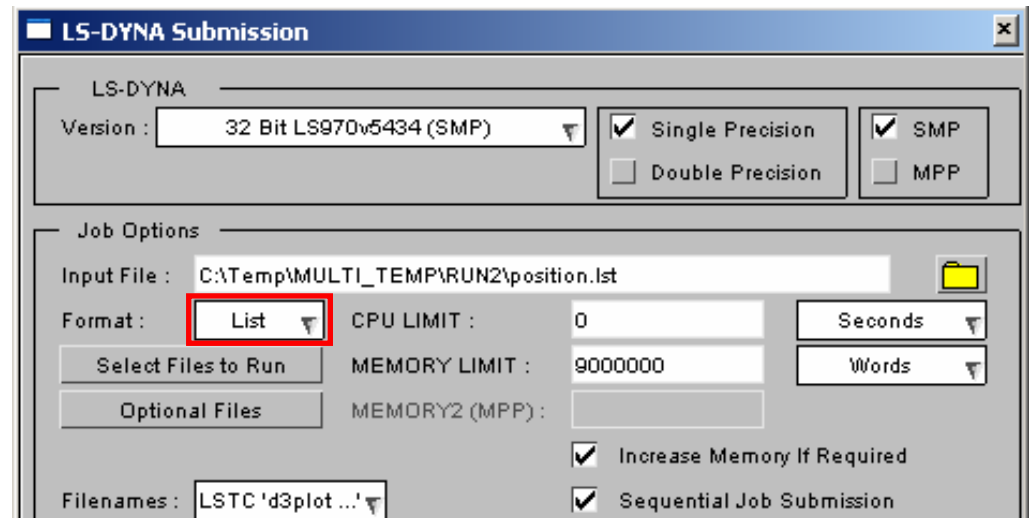
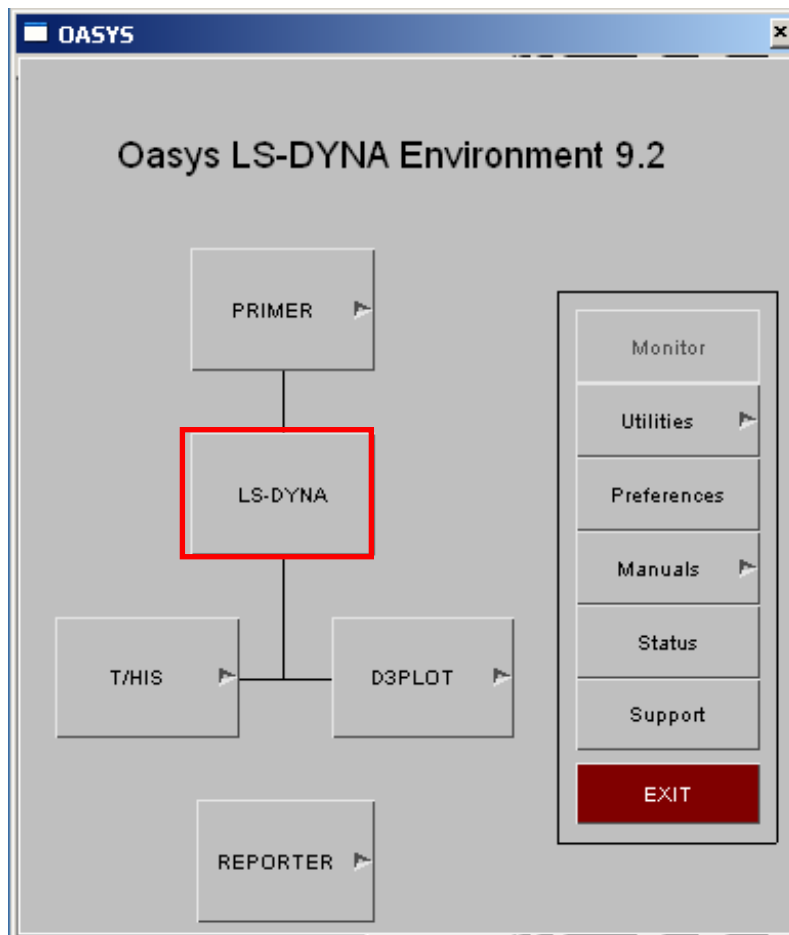
ARUP

- Easier and quicker to use
- “Capturing” of D3PLOT images and T/HIS graphs
- Conditional formatting
- Summary tables for multiple analyses
- Hyperlinks

# Oasys 9.2 Shell – Multiple Analyses



- Submit a list of LS-DYNA analyses to the queue (or run them sequentially if no queue is available):



**The “keylist” file is simply a list of the keyword files (with full path) to be run:**

```
/data/DEMO/C1A/childhead_c1a.key  
/data/DEMO/C1B/childhead_c1b.key  
/data/DEMO/C2B/childhead_c2b.key  
/data/DEMO/C4A/childhead_c4a.key
```

# Oasys 9.2 Shell – Multiple Analyses



- Select which analyses should be run

The screenshot shows the 'LS-DYNA Submission' dialog box with the 'Select Jobs' sub-dialog open. The 'Select Jobs' dialog lists several input files for selection:

File Path	Selected
LS-DYNA Input File	<input checked="" type="checkbox"/>
C:\temp\MULTI_TEMP\RUN2\01\example_head.key	<input checked="" type="checkbox"/>
C:\temp\MULTI_TEMP\RUN2\02\example_head.key	<input checked="" type="checkbox"/>
C:\temp\MULTI_TEMP\RUN2\03\example_head.key	<input checked="" type="checkbox"/>
C:\temp\MULTI_TEMP\RUN2\04\example_head.key	<input checked="" type="checkbox"/>
C:\temp\MULTI_TEMP\RUN2\05\example_head.key	<input checked="" type="checkbox"/>
C:\temp\MULTI_TEMP\RUN2\06\example_head.key	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

The 'Close' button is highlighted in green in the 'Select Jobs' dialog.

# Oasys 9.2 Shell – Automatic Post-processing



- Define automatic post-processing requirements before submitting analyses...
- Use this menu to run LS-DYNA then Reporter

LS-DYNA Submission

LS-DYNA

Version : 32 Bit LS970v5434 (SMP)  Single Precision  SMP  
 Double Precision  MPP

Job Options

Input File :

Format : Keyword  CPU LIMIT : 0  Seconds   
Select Files to Run MEMORY LIMIT : 9000000  Words   
Optional Files MEMORY2 (MPP) :   
 Increase Memory If Required  
 Sequential Job Submission

Filename : LSTC'd3plot ...'

Parallel Options

Number of CPU's : 1    Consistency Flag :  ON  OFF

Submission Options

Online Analysis Start Time : 00 : 00 Start Da  Now   
 Delayed Queue CPU LIMIT : 0  Seconds   
 Batch Queue MEMORY LI 15000000  Words   
 Queue Queue Name :  CPU Limit : 0

Restart Options

Select Restart Tim Restart Number : Restart Time :   Input Deck

Post Processing Optio

Run T/HIS after analysis  DISPLAY :   
 Run REPORTER after analysis



- For each analysis, the Reporter template and required outputs (e.g. pdf, html...) can be defined. The initial value of variables for the presenter template can be set.

The screenshot shows the 'PRESENTER Options' dialog box with a table of configurations. A red box highlights the 'Input File' column, and another red box highlights the 'Post-process this analysis?' text.

Input File	Template	Output Dir	Filename	Variables
F_2005\child_head2.lst				Variables
<input checked="" type="checkbox"/> EMO/C1A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C1B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C2A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C2B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C4A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C5A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C5B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C6A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C6B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C6C/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables

OUTPUT FORMATS:  HTML  PDF  PostScript  VBA Script

**Post-process this analysis?** Save Close

# Oasys 9.2 Shell – Automatic Post-processing



- This information may be input via the keylist file:

**\$variables,ZONE,XCOORD,YCOORD,ZCOORD**

**\$presenter summary, /data/DEMO/summary.opt**

**/data/DEMO/C1A/childhead.key,  
/data/DEMO/C1B/childhead.key,  
/data/DEMO/C2A/childhead.key,**

**/data/DEMO/individual.opt,  
/data/DEMO/individual.opt,  
/data/DEMO/individual.opt,**

**C1A, 899.98401, 1393.1749, 895.182  
C1B, 841.03717, 1276.2445, 896.854  
C2A, 804.94501, 1171.8967,**

Input File	Template	Output Dir	Filename	Variables
F_2005\child_head2.lst				Variables
<input checked="" type="checkbox"/> EMO/C1A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C1B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C2A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C2B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C4A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C5A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C5B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C6A/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input type="checkbox"/> EMO/C6B/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables
<input checked="" type="checkbox"/> EMO/C6C/childhead.key	ta/DEMO/individual.opt	\	childhead	Variables

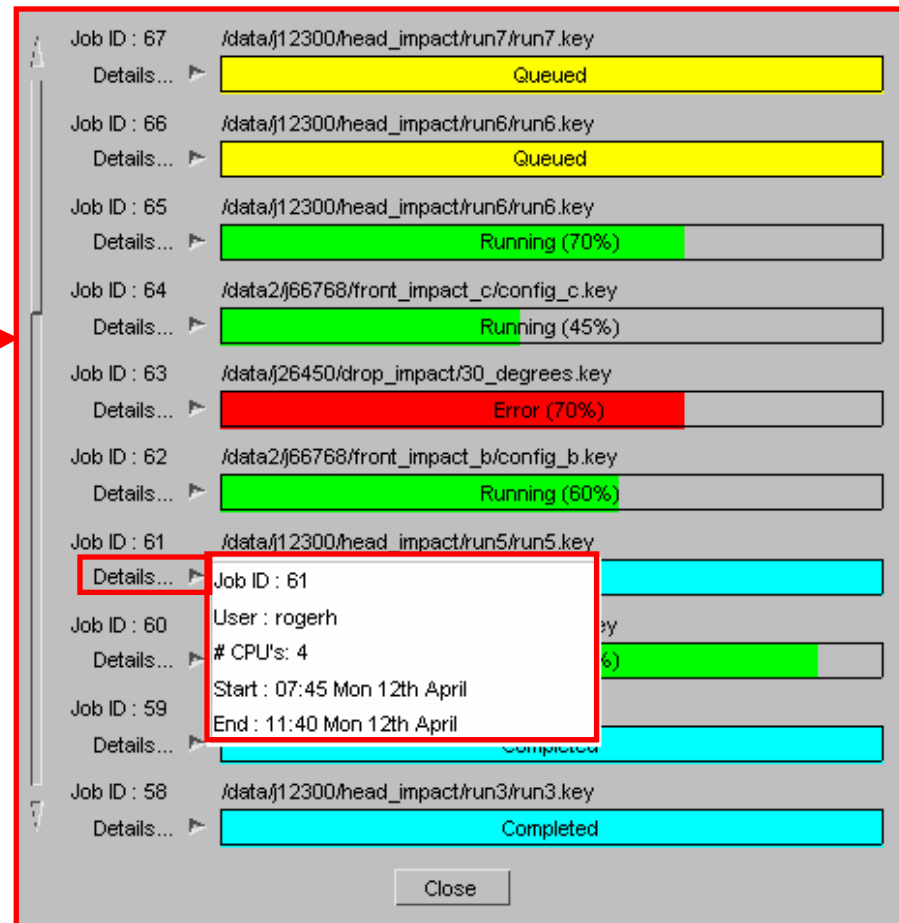
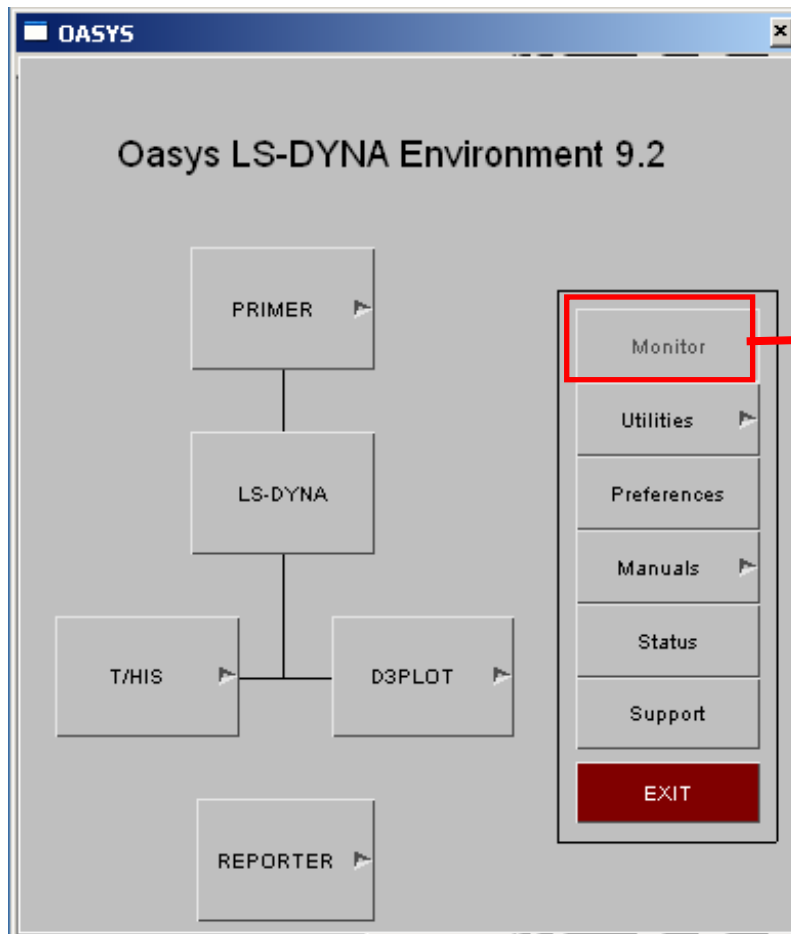
OUTPUT FORMATS:  HTML  PDF  PostScript  VBA Script

Save Close

# Oasys 9.2 Shell – Job Monitoring



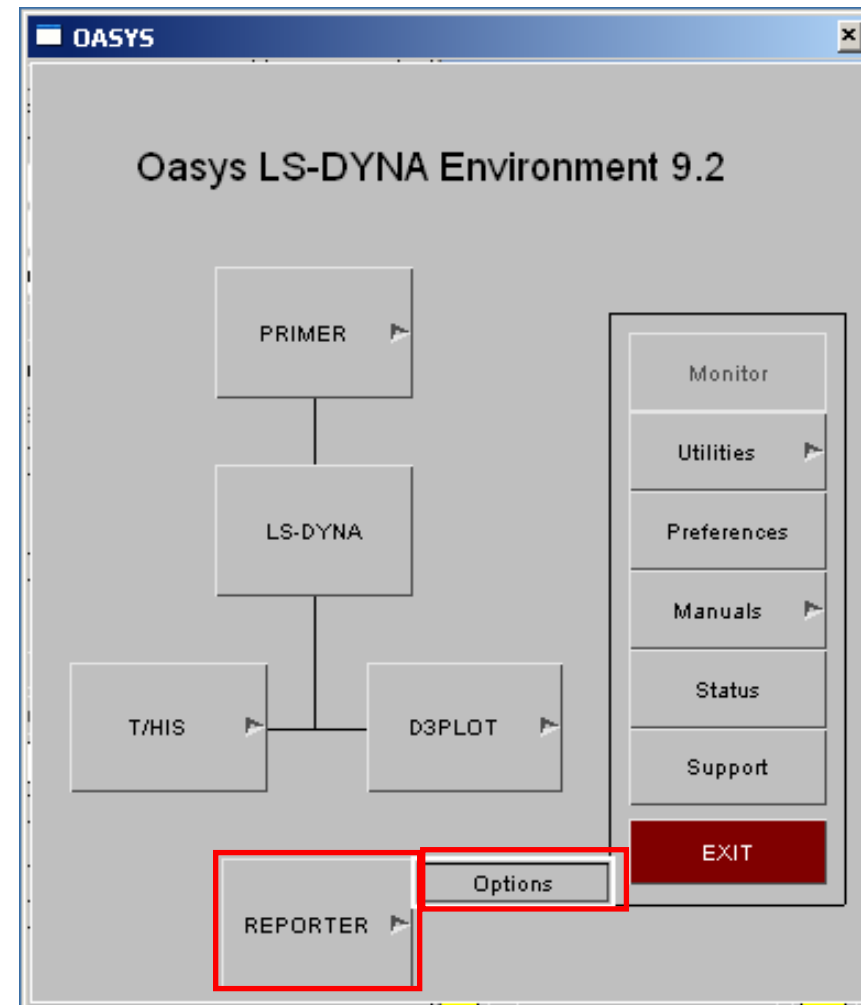
- Job monitoring – colours indicate status of each analysis (queued, running, error termination, or completed)



# Post-processing multiple analyses



- To run Reporter on many analyses without running LS-DYNA, right-click on Reporter, click on Options...



# Post-processing multiple analyses



Can still use a keylist file to define the list of analyses...

... Finally, Run Reporter

REPORTER Options

Input List : p\MULTI\_TEMP\RUN2\position.lst

Run Reporter

Clear Panel

Input file	Template	Output Dir	Root Output filename	Variables
<input checked="" type="checkbox"/> 2\C1\example_head.key	EMP\ind_lstc_names.ort	MULTI_TEMP\RUN2\C1	example_head	Variables
<input checked="" type="checkbox"/> 2\C2\example_head.key	EMP\ind_lstc_names.ort	MULTI_TEMP\RUN2\C2	example_head	Variables
<input checked="" type="checkbox"/> 2\C3\example_head.key	EMP\ind_lstc_names.ort	MULTI_TEMP\RUN2\C3	example_head	Variables
<input checked="" type="checkbox"/> 2\C4\example_head.key	EMP\ind_lstc_names.ort	MULTI_TEMP\RUN2\C4	example_head	Variables
<input checked="" type="checkbox"/> 2\C5\example_head.key	EMP\ind_lstc_names.ort	MULTI_TEMP\RUN2\C5	example_head	Variables
<input checked="" type="checkbox"/> 2\C6\example_head.key	EMP\ind_lstc_names.ort	MULTI_TEMP\RUN2\C6	example_head	Variables
<input type="checkbox"/>				Variables
<input type="checkbox"/>				Variables

Summary Output Options

summ\_lstc\_complete.ort

Output Formats :  HTML  PDF  PostScript  powerPoint

Save List As : MULTI\_TEMP\RUN2\position.lst

Save Close

... or select individually from browse buttons

# Oasys 9.2