Tuning Your Workstation for Optimum NX Performance

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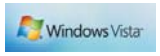
Customers Requirements for PTF

- Customers asking for additional productivity gains
  - Need shorter development times
  - Go beyond leadership hardware performance
- Getting correct graphics drivers is time consuming
  - Staying current improves performance/ but need CAD application tested drivers
  - #1 customer support problem for CAD software vendors
  - #1 customer support issue for workstations
  - Need to determine which driver if 2 or more applications are present
- Opportunity to leverage HP application expertise
  - Application tuning to improve user performance
  - Windows operating system tuning for CAD users
  - Windows commonly preferred settings for CAD users
  - Additional productivity enhancements
- Memory growing as a customer concern
  - Understanding type, speed, matching for expansion
  - 32-bit -- complexity of setting 3 GB switch
  - 64-bit – understanding memory needs – growing percentage of hardware costs

HP Application Competency Centers

HP workstations



other CAD/
CAE vendors

HP testing and certification

Reliable Solutions

Performance Tuning Framework

Certified Driver
Data Base by Application

Performance Tuning Framework

hp

HP's New Customer PTF Experience

Previous – Static Event

Hardware, Application, OS

New – Stay connected to HP

Hardware, Application, OS

+

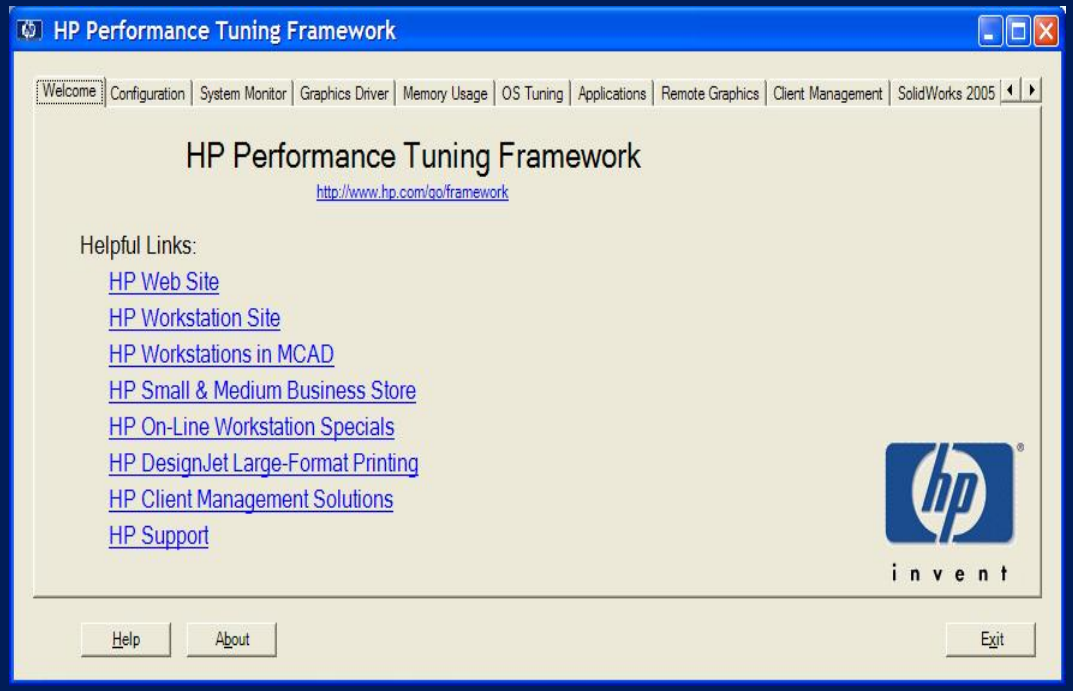
PTF Productivity Enhancers

Opening Screen

During each initialization

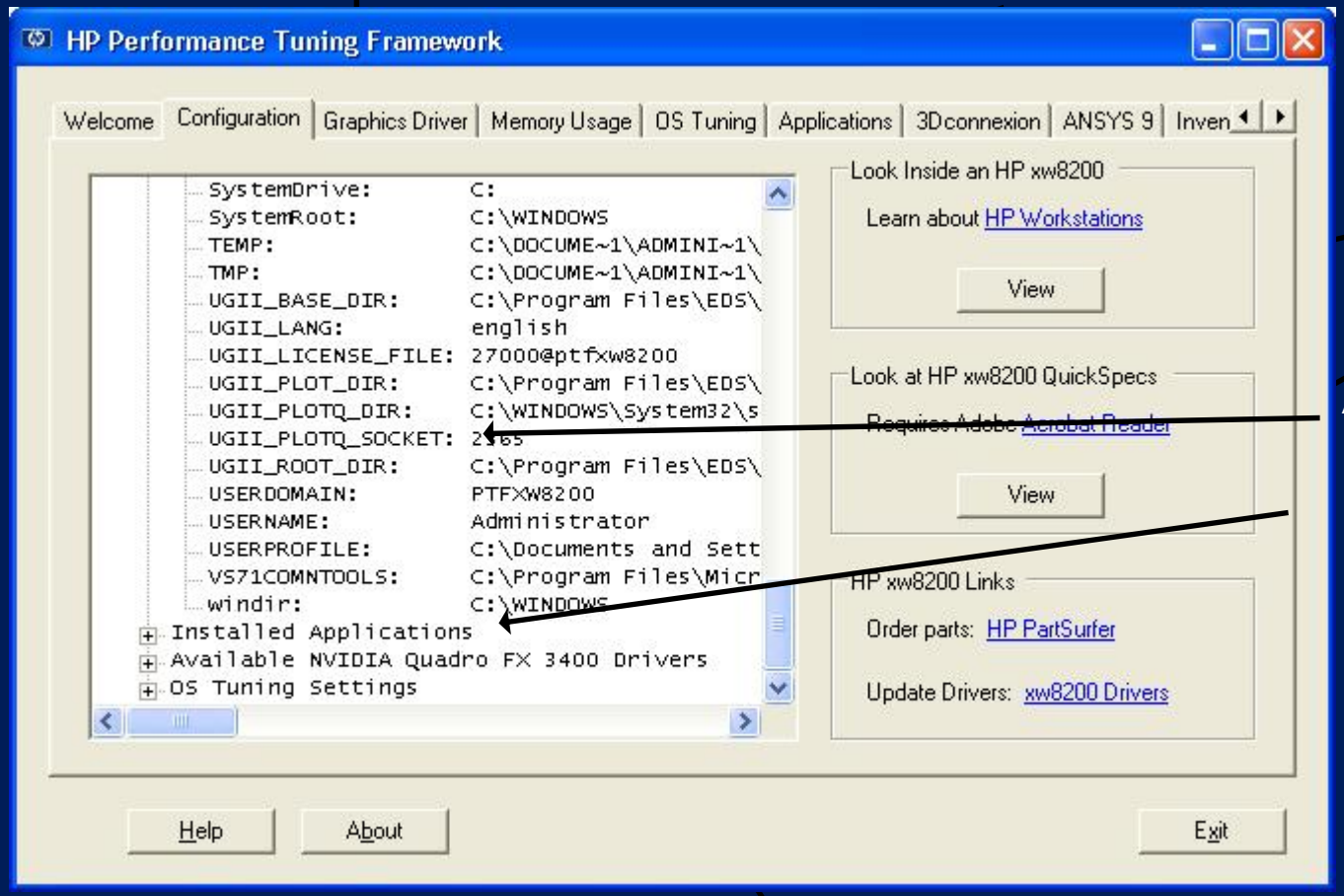
- Goes to HP's database to find the very latest driver/application data
- Scans the system and loads information for installed applications only
- Collects detailed electronic system data unique to HP workstations
- Dynamically updates PTF

- Usage requires administrative privileges on the workstation



Features for Rapid IT Support

Complete Electronic Information ex. processor with EM64T



Visuals

& Specification

Application Environment
&
Installed Applications

Part Surfer

Right click and save information to send to IT, eliminate searching for data/settings.

Understanding your system configuration

Inside of PTF link to Parts Surfer

- Your system configuration appears on HP's web page.
- Scroll over and your part numbers appear with other choices below
- Can price and order through links on this page

Configuration tab Benefits

- One location for all the systems and application data
- Can easily be sent to support group
- Provides comprehensive detailed system information
- In a typical support call searching for this data takes 20 minutes or more
- Specs and Part Surfer allows easy identification of part numbers and ordering.

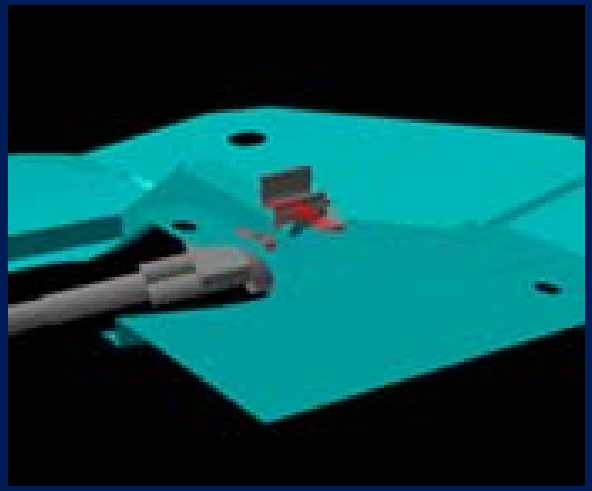
Managing Graphic Drivers

Graphic Driver Knowledge Improvement

- Avoid potential issues by using only tested/certified drivers.
- Can load the latest driver, and revert back to the certified driver if issues arise. Have more knowledge about drivers.
- Resolve driver revision conflicts when 2 or more applications are run on one workstation.
- For 64-bit new drivers are needed
  - Download a 64-bit driver certified for your specific application.
- Simple to do– a few clicks. Without PTF it typically takes 30+ minutes on the web, if you are experienced.

Example of graphic driver improvements

- Untested drivers can provide misleading images.



Colors such as red need to be valid, not artifacts

Sometimes colors that should be red, or blue such as welds won’t appear as a differentiated color

Memory management and other features

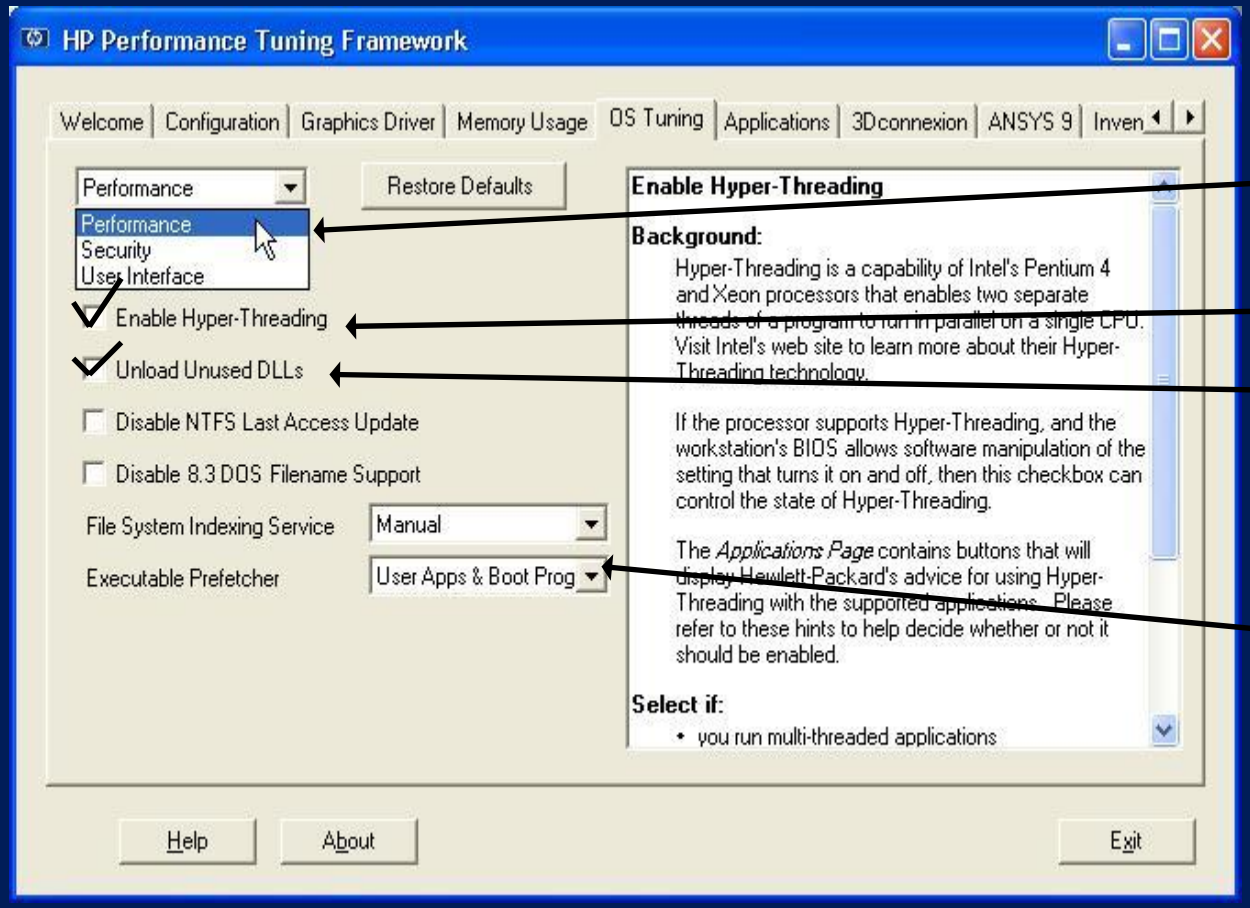
Memory sizing importance- renewed awareness

- For CAD/CAE applications memory usage varies with
  - Initial file size
  - Loaded model size
  - Number of components with data loaded
  - CAD commands chosen – some (Ex. hidden line removal) can duplicate files
  - Number of applications or instances of an application running
  - Graphic card selection

- Correct memory sizing can improve productivity, as operations in memory are a minimum of 53 times faster than pulling data from the disk. (depending on size and how much is swapping, disk times can be <u>much</u>, <u>much</u> larger)

- The Goal should be to NEVER run out of physical memory,
- Memory will take a higher percentage of the total costs.
- PTF helps users understand/manage their specific memory needs.

Optimize Windows XP For Professionals



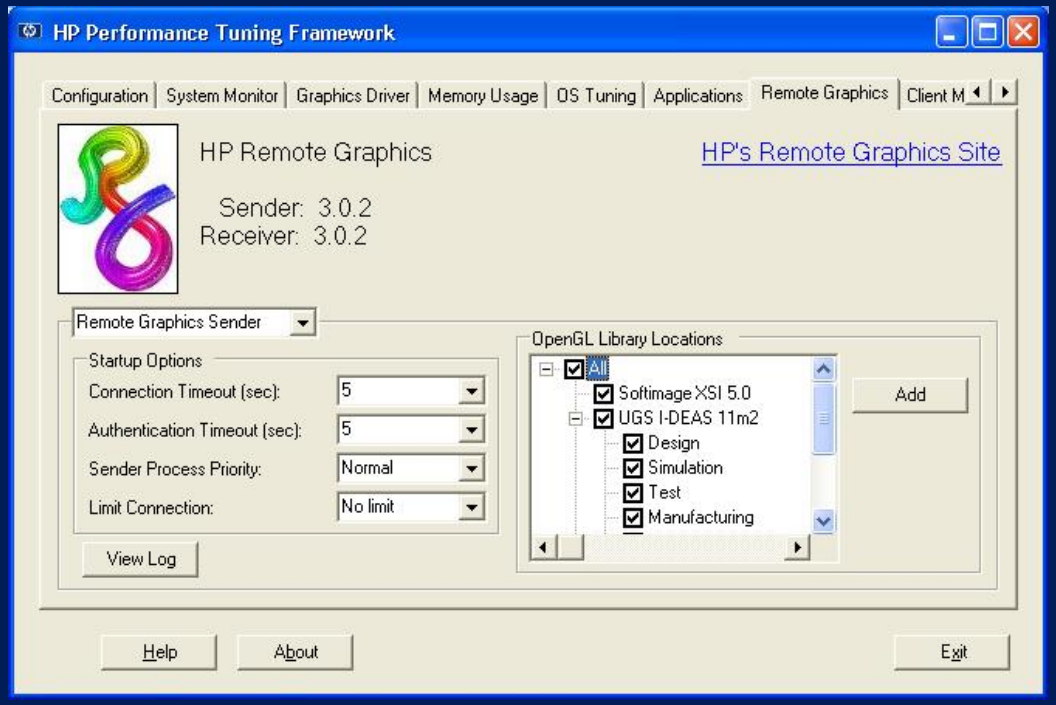
Select Performance

Enable Hyper-Threading

Unload Unused DLLs

Executable Prefetcher

PTF and Remote Graphics



Download Remote Graphics

Network performance testing

Simplify application setup

Improving Productivity – 3D Motion Controller

Select Application

Get the latest drive

Set the button to your most used CAD commands

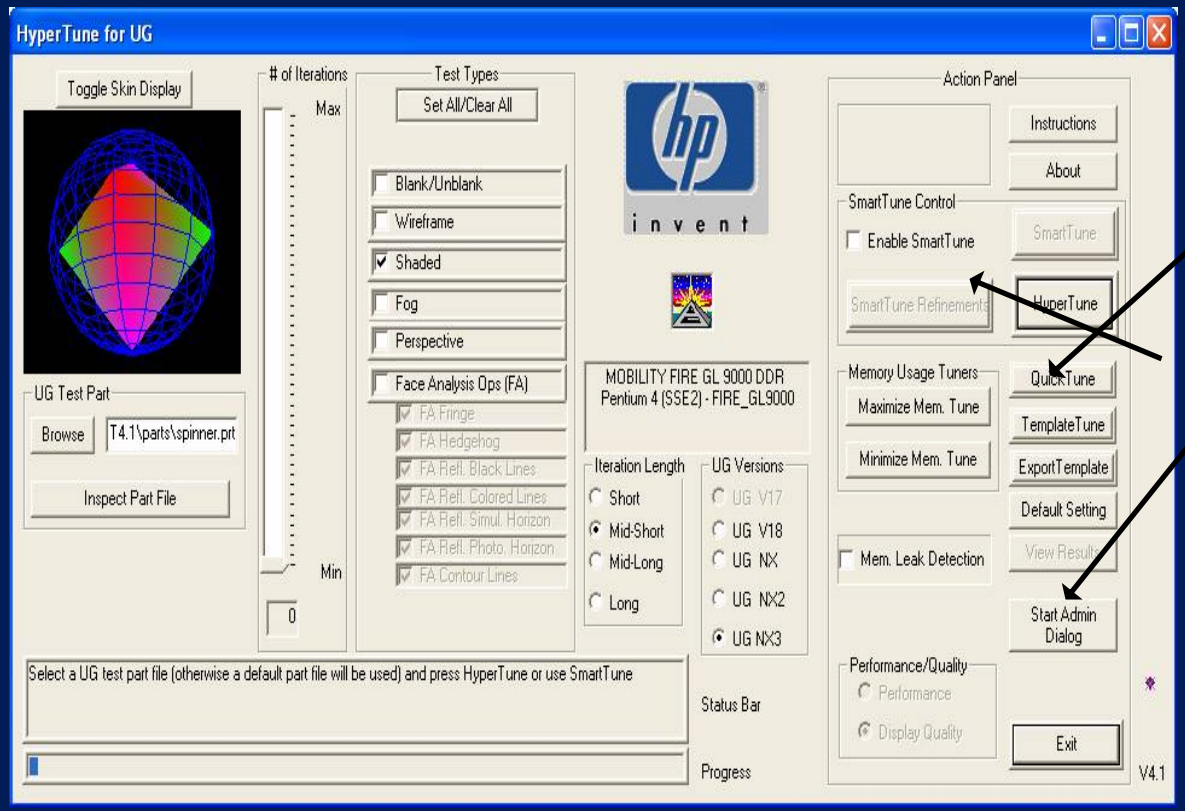
User Productivity Improvement

- Productivity studies show
  - 30% user productivity gain on average
  - 50% fewer mouse clicks
- Gains are dependant on button settings
- PTF makes it simple to set.

PTF Application Performance & Assistance

PTF Application Specific Performance Tuning

HyperTune fox NX



Detailed setting to tune to your needs

Select HyperTune to tune NX to your unique usage

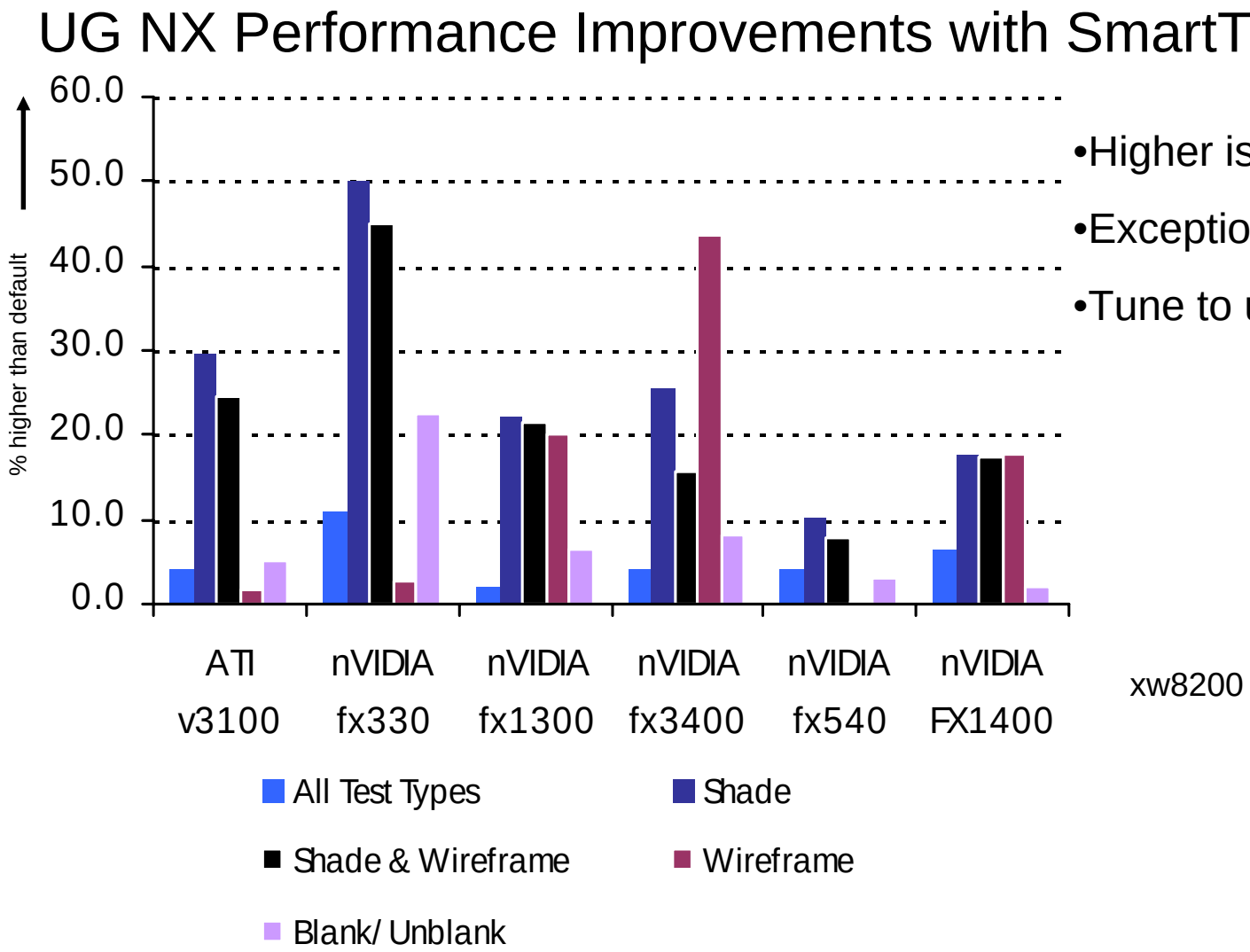
Or

Enable SmartTune

Analyze runtime logs for performance problems

Scroll for other functions

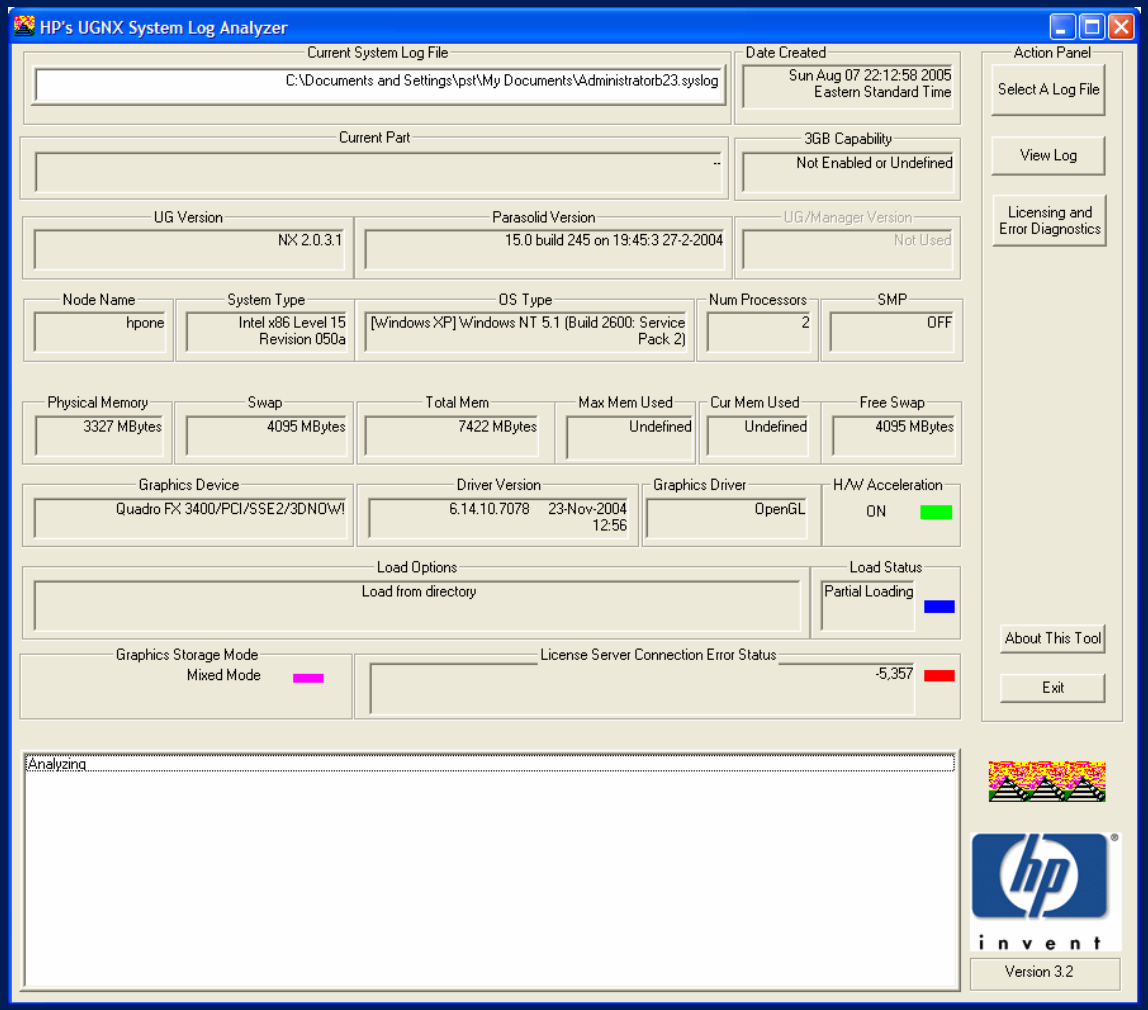
Hypertune for UG NX -- SmartTune Button



- Higher is better
- Exceptional gains
- Tune to user usage

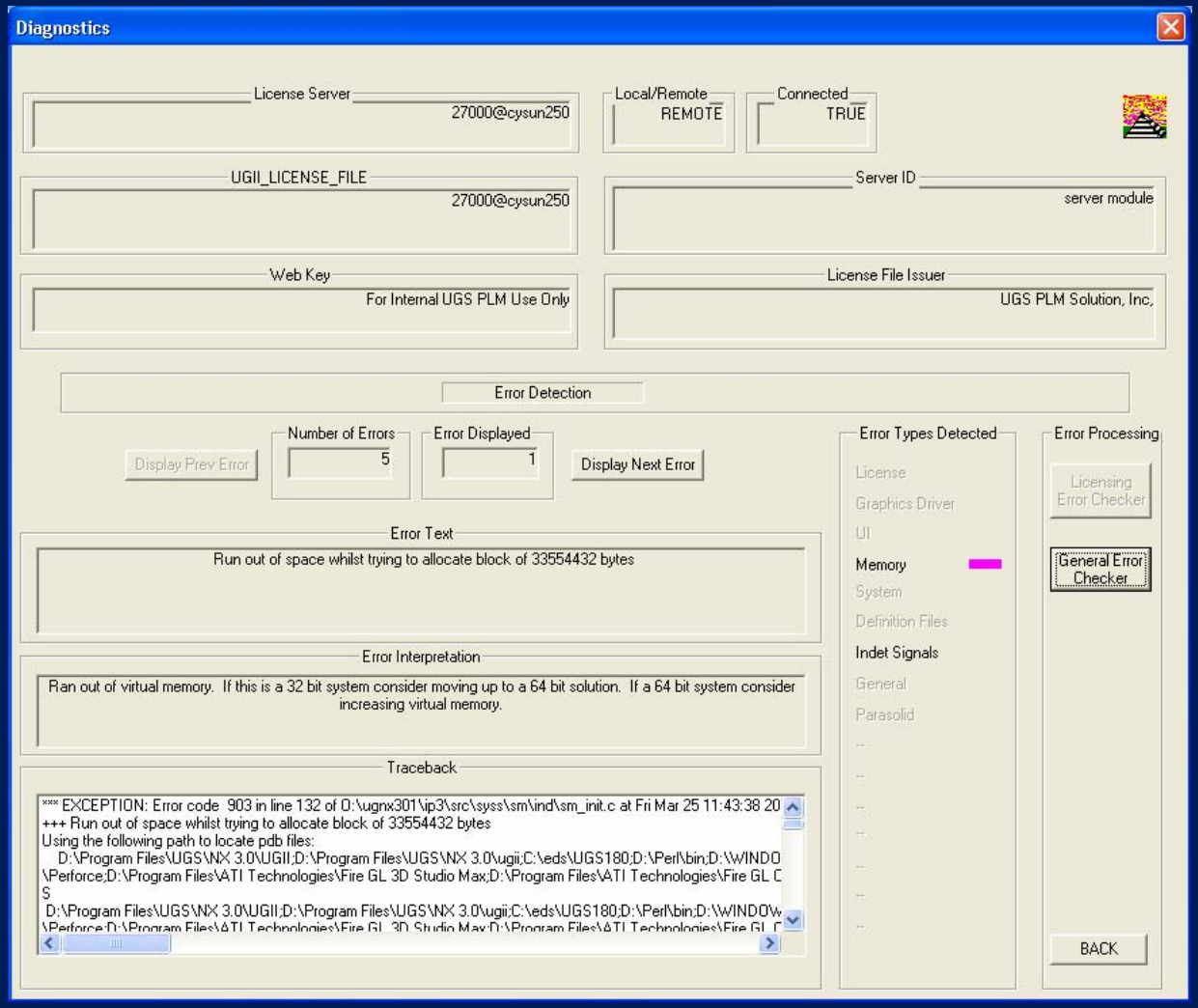
NX Syslog Analyzer

Captures Valuable Data from syslog file for Display



- Can be used to compare two syslogs
- License errors identified
- Error Diagnostics

Error Diagnostics



Provides details on exceptions and errors captured in the system log file

Summary

- Don’t do it alone – Stay connected to HP through Performance Tuning Framework
  - Simple to use
  - Beneficial
  - Productivity improving
  - Direct performance gains

- HP – improving productivity beyond the box

Where to find PTF

- Ships on each HP Workstation. Look in HP Cool Tools Folder.

- Or download at
  - www.hp.com/go/framework

hp
invent