

PTC® Live Global

CUST104 - An Admin's Guide to System Evaluation

David Haigh
CAD Administrator

LLNL_PRES-10000
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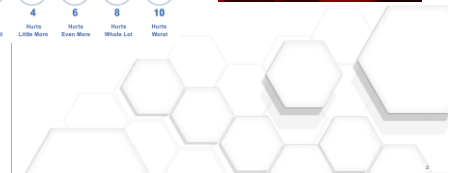
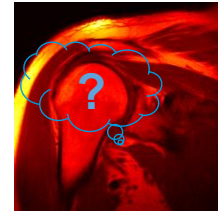
June 8th, 2015



A Story

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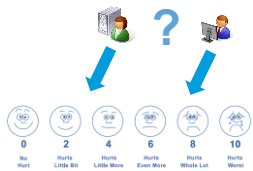
Importance of Proper Diagnostic Tools



Why Benchmark?

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- Without a before picture how do you know what's wrong?
- How do you know what areas have been affected?
- Is the new PTC Creo build better than the old one?
- Which computers should get replaced soonest?
- Do some areas of your company work better than others?



Today's Topics

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- OCUS Benchmark – Making it easy to run and gather results
 - Olaf Corten's site – <http://proesite.com>
- Roll your own Benchmarks
- Workspace Download Performance
- Other topics are covered in the Appendix
 - Choosing Computer Hardware
 - Help with Trail Files



OCUS Benchmark

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- I install the benchmark file when installing PTC Creo
- Special startup script – In the users Windows Start menu
- Special Script to gather information about the computer
- Combine the computer info with the results

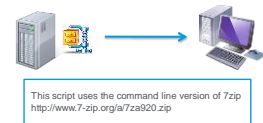


OCUS Benchmark – Install Script

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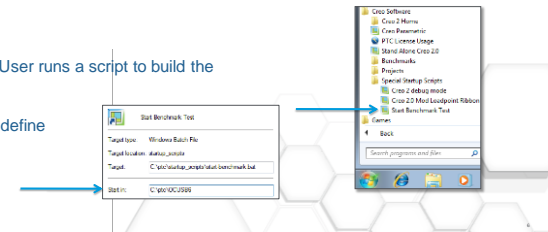
- My PTC Creo install script ends with these lines:

1. set PATH=%PATH%;"%P:/bin/"
2. echo d|xcopy "P:\OCUSB\ocusb6.0.1.zip" "C:\ptc"
3. cd /d "C:\ptc"
4. 7za x "ocusb6.0.1.zip"
5. del C:\ptc\ocusb6.0.1.zip



After PTC Creo is installed the User runs a script to build the Windows Start menus

The properties for this shortcut define the start in directory



OCUS Benchmark – Startup Script

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- Determine the maintenance install of PTC Creo
- Delete files from previous run
- Kill knowledge of PTC Windchill
- Remove loadpoint configs
- Set cache & PTC Help folders
- Run the benchmark
- Count the results
- Get information about the computer & user



OCUS Benchmark – Startup Script

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```
1. for /F "tokens=3 delims=\ usebackq" %%A IN ( findstr "%cf%" "C:\ptc\Creo 2.0\Parametric\bin\ptcstatus.bat") DO
   set CREOVERSION=%%A
2. del ocus_bench_results.txt*
3. del ocus_bench_time_stamps.txt*
4. del traillist.txt
5. del trail.txt*
6. del ocusbenchmark.dxf
7. del ocusbenchmark_dxf__out.log*
8. del ocusbenchmark.pdf
9. del current_session.pro
10. del ocus_bench_orig_assy__out.log*
11. del ocus_bench_orig_assy_asm.stp
12. del ocus_bench_orig_assy__out.log
13. del ocus_bench_largest_assy_asm.igs
14. del ocus_bench_largest_assy_asm__out.log*
15. del global_intf.inf*
16. del ocus_bench_largest_assy.m_p
17. del ocus_benchmark.jpg
18. del std.out
19. del support.inf*
```

Determine the maintenance install of PTC Creo

Delete files from previous run



OCUS Benchmark – Startup Script

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```
20. tskill creoaagent
21. rmdir "%CD%\cache\ProENGINEER"
22. attrib -R "C:\ptc\Creo 2.0\Common Files%\CREOVERSION%\text\config.pro"
23. attrib -R "C:\ptc\Creo 2.0\Common Files%\CREOVERSION%\text\config.sup"
24. attrib -R "C:\ptc\Creo 2.0\Common Files%\CREOVERSION%\text\creo_parametric_admin_customization.ui"
25. del "C:\ptc\Creo 2.0\Common Files%\CREOVERSION%\text\config.pro"
26. del "C:\ptc\Creo 2.0\Common Files%\CREOVERSION%\text\config.sup"
27. del "C:\ptc\Creo 2.0\Common Files%\CREOVERSION%\text\creo_parametric_admin_customization.ui"
28. set PTC_WF_ROOT=%CD%\cache\ProENGINEER
29. set PTC_HELP_CENTER_URL=C:\ptc\Creo 2.0\Help\help\creo_help
30. call "C:\ptc\Creo 2.0\Parametric\bin\parametric0.bat" pro_wait ocus_bench_60-64bit_creo2.txt
31. call countocus6 -n
32. call "C:\ptc\startup_scripts\record_benchmark.bat"
```

Remove knowledge of PTC Windchill

Delete loadpoint configs

Set location for cache & help

Record the computer info & results

Run the benchmark & Count the results

Line 30 calls a specific license configuration, not parametric.exe

OCUS Benchmark – Record Benchmark

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- This script gathers the following info from the computer:

- Username
- Computer Name
- Computer Model
- CPU type
- Amount of Memory
- GPU type
- OS & Version
- Bitness, i.e. 32 or 64bit OS
- PTC Creo Maintenance Build
- OCUS Benchmark Results

Output looks like this

```
hugh1
BLASTFURY
Precision M4800
Intel(R) Core(TM) i7-4940MX CPU @ 3.10GHz
Total Physical Memory: 32,673 MB
NVIDIA Quadro K2100M
OS Name: Microsoft Windows 7 Enterprise
OS Version: 6.1.7601 Service Pack 1 Build 7601
64-Bit
M140
Checking trailfile trail.txt.1 ...
```

OCUS Benchmark v6.0-64bit-CREO2 run with PTC Creo 2.0. CountOCUS6 v6.0.8

```
-----
22-Apr-15 10:08:06 = Start OCUS Benchmark
22-Apr-15 10:08:30 = 24 seconds = Retrieve generic assembly (CP)
22-Apr-15 10:08:59 = 29 seconds = Retrieve assembly 1 (CP)
22-Apr-15 10:09:32 = 33 seconds = Retrieve assembly 2 (CP)
22-Apr-15 10:10:09 = 37 seconds = Retrieve assembly 3 (CP)
22-Apr-15 10:10:40 = 40 seconds = Retrieve assembly 4 (CP)
22-Apr-15 10:11:34 = 45 seconds = Retrieve assembly 6 (CP)
```

OCUS Benchmark – Record Benchmark

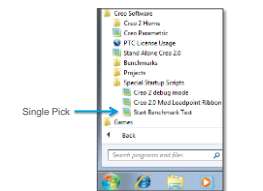
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```
1. FOR /F "tokens=2 delims==" %A IN (WMIC csproduct GET Name /VALUE ^| FIND /I "Name=") DO SET machine=%A
2. for /F "tokens=" %n in (wmic PATH Win32_videocontroller GET description^| findstr "NVIDIA AMD") do set GPU_NAME=%n
3. FOR /F "tokens=2 delims=" %A IN (WMIC cpu GET Name /VALUE ^| FIND /I "Name=") DO SET machinecpu=%A
4. for /F "tokens=3 delims=\usebackq" %A IN ("findstr %c1%* "C:\ptc\Creo 2.0\Parametric\bin\ptcstatus.bat") DO set
   CREOVERSION=%A
5. if exist C:\Windows\SysWOW64 (Set bitness=64_Bit) ELSE (Set bitness=32_Bit)
6. set OUTNAME=%username%_%creoversion%_%date:~10,4%-_%date:~4,2%-_%date:~7,2%-_%time:~0,2%-_%time:~3,2%.txt
7. rem ** Output information about the computer to a file
8. echo %username% > %USERPROFILE%\Documents%\OUTNAME%
9. echo %computername% >> %USERPROFILE%\Documents%\OUTNAME%
10. echo %machine% >> %USERPROFILE%\Documents%\OUTNAME%
11. echo %machinecpu% >> %USERPROFILE%\Documents%\OUTNAME%
12. systeminfo | findstr /C:"Total Physical Memory" >> %USERPROFILE%\Documents%\OUTNAME%
13. echo %GPU_NAME% >> %USERPROFILE%\Documents%\OUTNAME%
14. systeminfo | findstr /B /C:"OS Name" /C:"OS Version" >> %USERPROFILE%\Documents%\OUTNAME%
15. echo %bitness% >> %USERPROFILE%\Documents%\OUTNAME%
16. echo %CREOVERSION% >> %USERPROFILE%\Documents%\OUTNAME%
17. type C:\ptc\OCUSB6\ocus_bench_results.txt.* >> %USERPROFILE%\Documents%\OUTNAME%
18. copy %USERPROFILE%\Documents%\OUTNAME% P:\Benchmark Results\
```

OCUS Benchmark – Benefits

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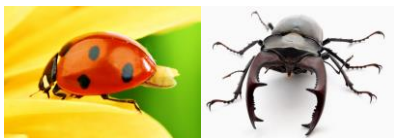
- You'll still have to hound the users to run this
 - No matter how easy you make it, it still takes time
 - at least 20 minutes
- My incentive to the users... computer replacement
 - You'll know where all your machines rank
 - You can compare against the results on Olaf's website
- If a user starts complaining about their machine
 - Run another benchmark and compare the results



Roll your own Benchmark

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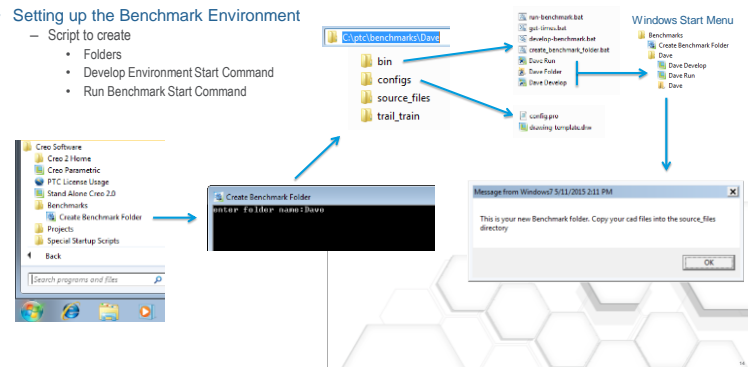
- Olaf's benchmark doesn't test everything
 - Pro Report
 - Sheet metal
 - Surfacing
 - Detailing
 - Etc...
- Send Performance Issues to PTC
 - Everything required to recreate the issue
 - Trail file & startup script to demonstrate the problem
 - Use to verify the fix provide by PTC
- Test new Maintenance Releases
 - Create standard tests to run on new releases
- Develop Trail files for automation



Roll your own Benchmark – Making it easy

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- Setting up the Benchmark Environment
 - Script to create
 - Folders
 - Develop Environment Start Command
 - Run Benchmark Start Command



Roll your own Benchmark – Folder Script

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```
1. @echo off
2. set /P folder=enter folder name:
```

Prompt User for Folder Name
Create Folders using the name the user entered

```
3. if not exist "c:\ptc\benchmarks\%folder%\configs" (mkdir "c:\ptc\benchmarks\%folder%\configs")
4. if not exist "c:\ptc\benchmarks\%folder%\source_files" (mkdir "c:\ptc\benchmarks\%folder%\source_files")
5. if not exist "c:\ptc\benchmarks\%folder%\trail_train" (mkdir "c:\ptc\benchmarks\%folder%\trail_train")
6. if not exist "c:\ptc\benchmarks\%folder%\bin" (mkdir "c:\ptc\benchmarks\%folder%\bin")
```

```
7. echo f|xcopy "P:\benchmark\benchmark_config.pro" "c:\ptc\benchmarks\%folder%\configs\config.pro"
8. echo f|xcopy "P:\benchmark\drawing-setup.dtl" "c:\ptc\benchmarks\%folder%\configs\"
9. echo f|xcopy "P:\benchmark\drawing-template.dwg" "c:\ptc\benchmarks\%folder%\configs\"
10. echo f|xcopy "P:\benchmark\trail_file_command_cheat_sheet.txt" "c:\ptc\benchmarks\%folder%\trail_train\"
11. echo f|xcopy "P:\benchmark\*.pdf" "c:\ptc\benchmarks\%folder%\trail_train\"
12. echo f|xcopy "P:\benchmark\*.bat" "c:\ptc\benchmarks\%folder%\bin\"
```

Copy important files to various folders

Roll your own Benchmark – Folder Script

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```
13. P:\bin\xmmlink "c:\ptc\benchmarks\%folder%\bin\%folder%" "c:\ptc\benchmarks\%folder%" ""
    "c:\ptc\benchmarks\%folder%\Working Dir for %folder%" "" "C:\ptc\startupscripts\icons\folder.ico"
14. P:\bin\xmmlink "c:\ptc\benchmarks\%folder%\bin\%folder% Develop" "c:\ptc\benchmarks\%folder%\bin\develop-
    benchmark.bat" "" "c:\ptc\benchmarks\%folder%\Develop Trail File in %folder%" ""
    "C:\ptc\startups_scripts\icons\Parametric.ico"
15. P:\bin\xmmlink "c:\ptc\benchmarks\%folder%\bin\%folder% Run" "c:\ptc\benchmarks\%folder%\bin\run-benchmark.bat"
    "" "c:\ptc\benchmarks\%folder%\Run Trail File in %folder%" "" "C:\ptc\startups_scripts\icons\Parametric.ico"
```

Create Shortcuts in the bin folder

The screenshot shows a 'Shortcut Properties' dialog box for a shortcut named 'Develop Develop'. The 'Target' field contains a path with a tilde placeholder: '~\benchmarks\Develop\bin\develop-benchmark.bat'. The 'Start in' field contains 'c:\ptc\benchmarks\Develop'. The 'Target type' is 'Windows Batch File' and the 'Target location' is 'bin'.

This script uses xmmlink, available here: <http://www.xxcopy.com/xxcopy38.htm>
Command syntax of XXMKLINK:
xmmlink spath opath [arg [wdir [desc [mode [icon{n}]]]]]
where
spath path of the shortcut (Link added as needed)
opath path of the object represented by the shortcut arg argument string
wdir path of the working directory (for 'Start in')
desc description string (shown in Shortcut's Properties)
mode display mode (1:Normal [default], 3:Maximized, 7:Minimized)
icon{n} icon file [with optional icon index value n]

Roll your own Benchmark – Folder Script

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```
16. if not exist "%USERPROFILE%\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Creo
Software\Benchmarks%\folder%" (mkdir
"%USERPROFILE%\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Creo
Software\Benchmarks%\folder%")
17. echo f|xcopy "c:\ptc\benchmarks%\folder%\bin%\folder% Folder.Ink"
"%USERPROFILE%\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Creo
Software\Benchmarks%\folder%\%folder%.Ink" /y /t /s /e
18. echo f|xcopy "c:\ptc\benchmarks%\folder%\bin%\folder% Develop.Ink"
"%USERPROFILE%\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Creo
Software\Benchmarks%\folder%\%folder% Develop.Ink" /y /t /s /e
19. echo f|xcopy "c:\ptc\benchmarks%\folder%\bin%\folder% Run.Ink"
"%USERPROFILE%\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Creo
Software\Benchmarks%\folder%\%folder% Run.Ink" /y /t /s /e
20. explorer c:\ptc\benchmarks%\folder%
21. msg "%username%" "This is your new Benchmark folder. Copy your cad files into the source_files
directory"
```

Create Windows
Start Menu picks

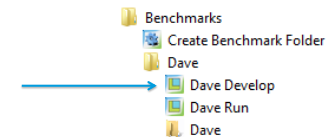
Open the folder and put a message
on the screen for the user.

Best to use **Save a Backup** in PTC Creo to populate this folder

Roll your own Benchmark – Develop Script

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- Now you want to startup PTC Creo and record what you want the benchmark to do
- That's what the Develop script is for



Roll your own Benchmark – Develop Script

PTC Live
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```
1. for /F "tokens=3 delims=\ usebackq" %%A IN ("findstr "%cf%" "C:\ptc\Creo 2.0\Parametric\bin\ptcstatus.bat")DO
set CREOVERSION=%%A

2. tskill creoaagent
3. rmdir "%CD%\cache"

4. echo y|del *.*

5. attrib -R "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.pro"
6. attrib -R "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.sup"
7. attrib -R "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\creo_parametric_admin_customization.ui"
8. del "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.pro"
9. del "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.sup"
10. del "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\creo_parametric_admin_customization.ui"
```

Remove the loadpoint configs

Kill knowledge of PTC Windchill

Figure out the maintenance build

Delete everything in the directory

Roll your own Benchmark – Develop Script

PTC Live
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```
11. set PTC_WF_ROOT=%CD%\cache\ProENGINEER
12. set PTC_HELP_CENTER_URL=C:\ptc\Creo 2.0\Help\help\creo_help

13. echo f|xcopy "%CD%\configs\*" "%CD%\*" /y /r
14. echo f|xcopy "%CD%\source_files\*" "%CD%\*" /y /r

11. call "C:\ptc\Creo 2.0\Parametric\bin\parametric0.bat" pro_wait

12. move trail.txt.1 %CD%\trail_train\bench_trail.txt

13. set OUTNAMW=%CREOVERSION%-date:~-10,4%-date:~-4,2%-date:~-7,2%_%time:~-0,2%-time:~-3,2%.txt
14. set mydir="Develop-%OUTNAME%"
15. mkdir %mydir%
16. move *.* %mydir%\.
```

Set the cache to the current directory
Set the help location

Copy files to the start in directory

Start PTC Creo with pro_wait option

Move and rename the trail file

Save everything to a new directory with
version, date, & time

Pro_wait – This option pauses the execution of the script until PTC Creo
exits. Then the script continues executing any remaining lines

Roll your own Benchmark – Setting up Timing

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- Must Edit bench_trail.txt to add the time commands
 - First command in trail file should be time
 - This sets zero seconds
- Syntax of Time command
 - - Command 'ProCmdUtilTime'
- command to find the times in the resulting trail file.
 - find "!Time" trail.txt.1 > timestamp.txt
- Outputs a file like this:

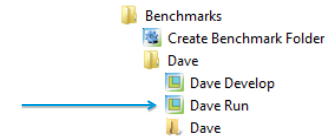
```
-----TRAIL.TXT.1
!Timer enabled
!Time since previous time stamp: 00:00:01 Total elapsed time: 00:00:01
!Time since previous time stamp: 00:00:01 Total elapsed time: 00:00:02
!Time since previous time stamp: 00:00:00 Total elapsed time: 00:00:02
!Time since previous time stamp: 00:00:00 Total elapsed time: 00:00:02
```



Roll your own Benchmark – Run Script

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Global

- Once your finished editing your ready to run it
- That's what the Run script is for



Roll your own Benchmark – Run Script

PTC Live
Global

```
1. for /F "tokens=3 delims=\ usebackq" %%A IN ("findstr "%cf%" "C:\ptc\Creo 2.0\Parametric\bin\ptcstatus.bat")DO
set CREOVERSION=%%A

2. tskill creoaagent
3. rmdir "%CD%\cache"

4. echo y|del *.*

5. attrib -R "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.pro"
6. attrib -R "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.sup"
7. attrib -R "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\creo_parametric_admin_customization.ui"
8. del "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.pro"
9. del "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\config.sup"
10. del "C:\ptc\Creo 2.0\Common Files\%CREOVERSION%\text\creo_parametric_admin_customization.ui"
```

← Kill knowledge of PTC Windchill

← Figure out the maintenance build

← Delete everything in the directory

← Remove the loadpoint configs

Roll your own Benchmark – Run Script

PTC Live
Global

```
11. set PTC_WF_ROOT=%CD%\cache\ProENGINEER
12. set PTC_HELP_CENTER_URL=C:\ptc\Creo 2.0\Help\help\creo_help

13. echo f|xcopy "%CD%\configs\*" "%CD%\." /y /r
14. echo f|xcopy "%CD%\source_files\*" "%CD%\." /y /r
15. echo f|xcopy "%CD%\trail_train\bench_trail.txt" "%CD%\." /y /r

16. call "C:\ptc\Creo 2.0\Parametric\bin\parametric0.bat" pro_wait bench_trail.txt

17. find "Time" trail.bt.1 > timestamp.txt

18. set OUTNAMW=%CREOVERSION%-date:-10,4%-date:-4,2%-date:-7,2%-time:-0,2%-time:-3,2%.txt
19. set mydir="Results-%OUTNAME%"
20. mkdir %mydir%
21. move *.* %mydir%
```

← Set the cache to the current directory
Set the help location

← Copy files to the start in directory

← Start PTC Creo with pro_wait option
and tell it to run the trail file

← Get Time Stamps from trail file

← Save everything to a new directory with
version, date, & time

Removed the line to move the trail file to the trail_train directory.
Replaced with the get times command.
move trail.bt.1 %CD%\trail_train\bench-trail.txt

Roll your own Benchmark – Issues with Trail Files

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- The Trail File Crashed!
 - Look at the std.out in the Results folder
- Reducing Crashing Trail Files
 - Config path settings
 - Current directory is best when you want to share the files
 - Use Selection Filters
 - Use the Find Command
 - Place with Absolute Coordinates
 - Plot to File
 - Use Append when making multiple plots
 - Copy/Paste text instead of typing
 - Don't move or resize windows
 - Work in one window
 - Switch Windows in PTC Creo, not Windows

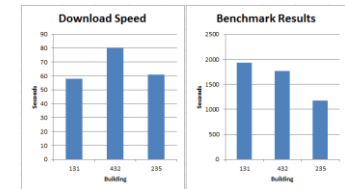
Olaf's config sets all paths to current directory

```
campost_dir .  
plot_file_dir .  
pro_colormap_path .  
pro_crosshatch_dir .  
pro_dl_setup_dir .  
pro_format_dir .  
pro_group_dir .  
pro_library_dir .  
pro_material_dir .  
pro_mdb_dir .  
pro_mfg_cmdsyn_dir .  
pro_mf_cd_dir .  
pro_mf_param_dir .  
pro_mf_tprm_dir .  
pro_mf_workcell_dir .  
pro_note_dir .  
pro_plot_config_dir .  
pro_sheet_mat_dir .  
pro_spool_dir .  
pro_surface_finish_dir .  
pro_symbol_dir .  
pro_texture_library .  
regen_backup_directory .  
tolerance_table_dir .  
trail_dir .
```

Network Performance

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- Measuring the Add to Workspace speed
- Different speeds in different buildings
- There are many PTC Creo knobs to fiddle with
 - Config Options
 - Registry Settings
- Necessities
 - Consistent data set – I used the World Car from PTC
 - Clean Cache
 - Run PTC Creo in Debug Mode
- Test Steps
 - Add data set to Workspace
 - Exit
 - Get time stamps from log file



Network Performance – PTC Creo Debug Mode

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- Configuration File
 - Look at CS140107
 - I've been using these settings

```
Logging.cfg.debug
verbose_level DEBUG
enable CIPSOP DEBUG
enable UWGMCLNT_PDM_ACTIONS DEBUG
enable UWGMCLNT_CAD_ACTIONS DEBUG
enable PROVT_PDM_ACTIONS DEBUG
enable UWGM_COMM DEBUG
enable Communication DEBUG
enable ContentPlugin DEBUG
enable CurrentLogger DISABLED
enable DfObjectArea DEBUG
enable Download DEBUG
enable HTTPDownload DEBUG
enable LocalCache DEBUG
enable Merge DEBUG
enable PartIBA DEBUG
enable Persistence DEBUG
enable Profile DEBUG
enable RefTable DISABLED
enable ServerCache DEBUG
enable ServerDownload DEBUG
enable IndexLogging DEBUG
enable ServerProfile DEBUG
enable ThreadQueue DEBUG
enable ToDo DISABLED
enable Upload DEBUG
enable WorkspaceCache DEBUG
enable Ipc DISABLED
enable wifimport DEBUG
enable DetailActionInfo DEBUG
enable Wildfire DEBUG
enable UWGMLIB_CONTENT_MANAGER DEBUG
enable UWGMLIB_PREFERENCES DEBUG
enable UWGMCLNT_PREFERENCES DEBUG
enable UWGM_CADADAPTER_TRL DEBUG
enable WVGW_ADAPTER_LOGGING DEBUG
enable WVGW_PREFERENCES DEBUG
enable PROVT_JSCB_LOG_AREA DEBUG
enable UWGM_ADAPTER DEBUG
enable UWGMLIB_VFS DEBUG
enable UWGMCLNT_VFS DEBUG
enable UWGMLOCK DEBUG
enable WVGW_CLIENT_VERSION DEBUG
enable HTTP_INIT_AREA DEBUG
enable PROVT_PROP_AREA DEBUG
enable ConfigAssembly DEBUG
use_local_time yes
```

Network Performance – PTC Creo Debug Mode

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- Move users cache
 - Make a backup of user cache if testing with users cache
 - Replace the users cache when done testing
 - Easier to test with a new cache

- Additional lines in startup script

1. Delete %USERPROFILE%\pro\creo_2_home\cache\Benchmark_cache\PTC\ProENGINEER\cache2008\xxxx.xxxxx.xxx##\sid\wifcont
2. set PTC_WF_ROOT=%USERPROFILE%\pro\creo_2_home\cache\Benchmark_cache\PTC\ProENGINEER
3. set UWGM_PRINT_XML_FILES=yes
4. set PTC_JS_COMMAND_LOG=true
5. set PTC_LOG_ACTIVATE=t
6. set PTC_LOG_CONFIG=P:\bin\logging.cfg.debug
7. set PTC_LOG_DIR=%USERPROFILE%\pro\creo_2_home
8. set BSC_LOG_ACTIVATE=t

Line #1 deletes cached files before each test

You'll need to modify these paths to match your environment.

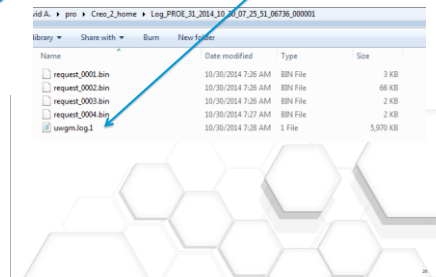


Network Performance – PTC Creo Debug Mode

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- Log File Location
 - Set in the startup script (previous slide)
 - `%USERPROFILE%\pro\Creo_2_home\Log_PROE_B1_2014_10_30_07_25_51_06736_000001\wgm.log`

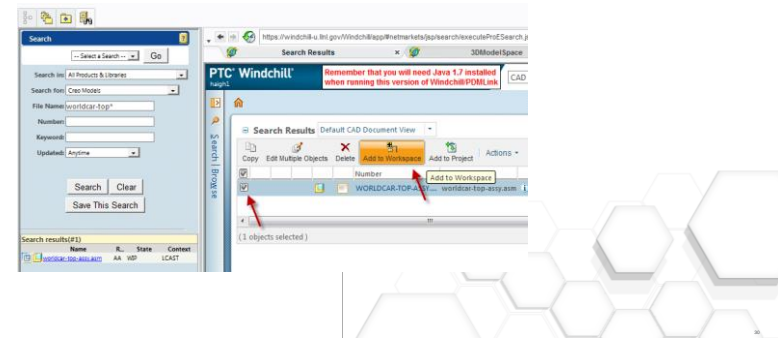
Unique String



Network Performance – Test Steps

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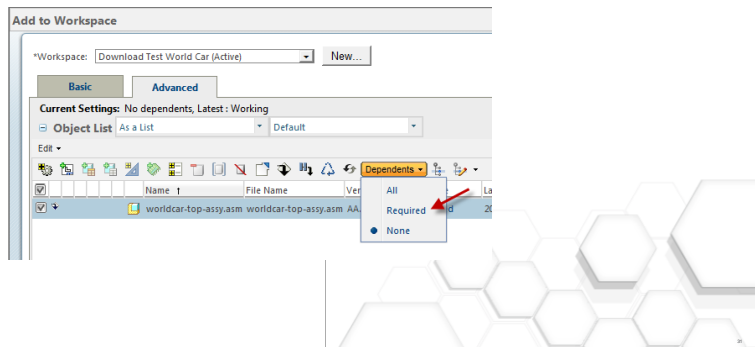
- Search for file, Add to Workspace



Network Performance – Test Steps

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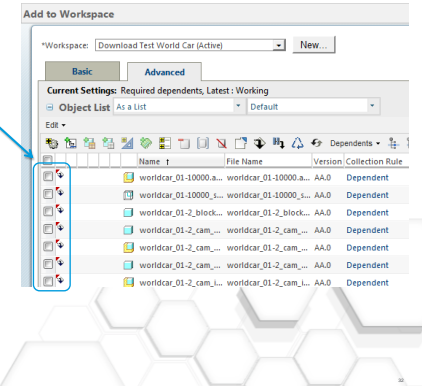
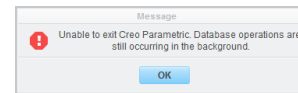
- Select Required Dependents



Network Performance – Test Steps

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- On the Advanced Tab,
 - Verify all are selected for download
 - Pick OK to download
- The download continues in background even after the user interface is free



Network Performance – Download Controls

PTC Live
Global

- What's going on under the hood
 - Files are given a temp name during download
 - They are renamed sid_XXXXXX.wfcont when complete

File Name	Date	Type	Size
sid_6692358.wfcont	11/17/2014 6:38 AM	WFCONT File	90 KB
wf46581.tmp	11/17/2014 6:38 AM	TMP File	0 KB
sid_6692305.wfcont	11/17/2014 6:38 AM	WFCONT File	1,953 KB
sid_6692384.wfcont	11/17/2014 6:38 AM	WFCONT File	4,883 KB
sid_6692387.wfcont	11/17/2014 6:38 AM	WFCONT File	98 KB
wf45542.tmp	11/17/2014 6:38 AM	TMP File	0 KB
sid_6692389.wfcont	11/17/2014 6:38 AM	WFCONT File	1,993 KB

- Concurrent downloads config setting
 - dm_network_threads 4

File Name	Date	Type	Size
wf46501.tmp	11/17/2014 6:35 AM	TMP File	48,768 KB
wf46878.tmp	11/17/2014 6:43 AM	TMP File	0 KB
wf46821.tmp	11/17/2014 6:41 AM	TMP File	7,808 KB
wf46866.tmp	11/17/2014 6:43 AM	TMP File	0 KB

- Also these registry settings

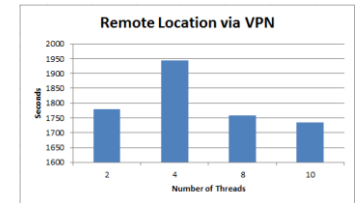
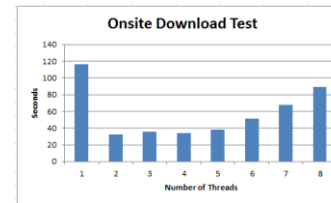
- [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet Explorer\MAIN\FeatureControl\FEATURE_MAXCONNECTIONSPERSERVER]
- "iexplore.exe"=dword:0000000a
- "xtp.exe"=dword:0000000a
- "uwmgm_client.exe"=dword:0000000a
- "ptc_ie_server.exe"=dword:0000000a
- [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet Explorer\MAIN\FeatureControl\FEATURE_MAXCONNECTIONSPERSERVER]
- "iexplore.exe"=dword:0000000a
- "xtp.exe"=dword:0000000a
- "uwmgm_client.exe"=dword:0000000a
- "ptc_ie_server.exe"=dword:0000000a



Network Performance – Download Controls

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Global

- More Threads Isn't Better
 - PTC recommend 3 or 4



Network Performance – Actual Download Time

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Global

- The actual times for these graphs
 - In the uwgm.log file

This command:

```
findstr /c:"Download Transaction" "C:\Users\haigh1\pro\Creo_2_home\Log_PROE_31_2014_11_06_15_06_04_05760_000001\uwgm.log.1"
```

Returns these lines:

```
– 2014-11-06T15:07:39.118-8:00: S: T250c: uwgm.session0.act#732476434350966: Download Transaction  
  'haigh1@10.251.102.241 2014-11-06T15:06:04.312-08:0'@732476434350966 started  
– 2014-11-06T15:08:24.990-8:00: F: T0208: uwgm.session0.act#732476434350966: Download Transaction  
  'haigh1@10.251.102.241 2014-11-06T15:06:04.312-08:0'@732476434350966 finished
```

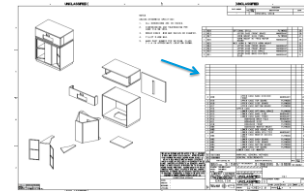
Subtracting the times indicates this download took 45 seconds



Conclusions

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- Use benchmarks with PTC Support
 - I've used it to send problems with repeat region pagination to PTC.
- Benchmarks are a good way to test config options
- Benchmarks to test detailing issues
 - The detailing package has had nagging issues forever
 - Trail files are a good way to get these on PTC's radar
- Trail files can be used for automation
 - This is a good way to develop those



- Tools for choosing new computers
 - Olaf Corten's Proesite.com Specifically the [Results and Conclusions](#) page
 - PassMark Software
 - This site has many benchmarks of various computer components
 - For PTC Creo performance you should always consult the [Single Threaded Performance – CPU benchmark](#)
 - Raid 0 works much better on SSD drives than it ever did on conventional drives.
- Trail File help
 - An Award winning presentation from 2014 PTC Live, by Leonard Erickson
 - [Mapkeys and Trail Files – Increase Creo Drawing Productivity](#)
 - This video is worth watching several times.
 - Blog by Marc Mettes
 - [Pro/ENGINEER: Anatomy of a Trail File, Parts 1, 2, & 3](#)
(all three blogs are on this one page)



- David Haigh
 - Phone: 925-424-3931
 - email: haigh1@lnl.gov
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