

# Viz Interoperability ~ Just Do It! ☺



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Visualization Tools and Interoperability Panel  
DOE Computer Graphics Forum, Santa Fe, NM  
Tuesday, April 27, 2004

# The “Problem” with Viz Geeks



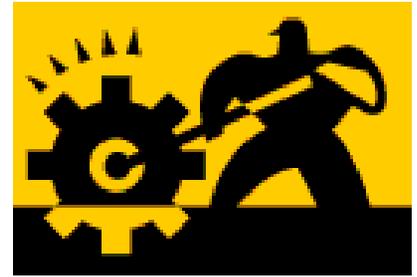
- Wes’ Claim ~ “The (DiVA) workshops were not as successful as they might have been because we (geeks) tend to get too hung up on *implementation details...*”
- “And we're more territorial than Tennessee Raccoons.”

# Jeeembo's View...



- Get Off Yer Butts...!! 😊
- We (geeks) *also* need to actually make a COMMITMENT to “do something.”
  - I understand “fear of commitment”...
  - I promise to be gentle...
- Talk is good, and thinking carefully before forging ahead is good, but...
- Failure to “ACT” in the end is bad...

# The “Engineer Way” ...



- Build “something” and then “tweak it” until it works! 😊
  - Forge ahead and damn the torpedoes...!
- We should stick our necks out and \*build\* something.
  - If it doesn't work 100% perfectly, just tweak it/fix it
    - It's only a bunch of (wrapper) code. It can be changed...
- Component Interfaces can be Modified and Extended.
  - “Standards” usually *evolve* over time...
- Not all prototypes must be assimilated as final products.
  - I can't think of a good counterexample, but still... 😊
- So how to proceed? Let's actually “Proceed”!

# What to use? CCA.



- Need *some* component-based framework!
- CCA is a lightweight, efficient infrastructure.
  - High-Performance by design, supports parallelism
  - Language Interoperability through SIDL/Babel
  - Simple component wrappers ~ One Method...
- Component-to-Component Interfaces (Ports)
  - The Real Work Goes Here...
  - How do specific components talk to each other?
    - A Challenge for *Any* Component-based Solution...

# CCA Concerns...?



- “Vaporware”? Not True.
  - Functional CCA frameworks & components.
  - Not “Production Quality” software yet...
    - Some effort required for basic install & build...
- “Proliferation”? Emerging...
  - Many application domains “considering”...
  - Climate, Fusion, Chemistry/Combustion serious.
- A “Safe Gamble”...
  - Any Interfaces can easily be ported to other environments.

# An Aside: Why NOT Swig?



- “Slow Wrapper Interface Goo”
  - Not a Run-Time System, Just Auto-Gen Wrappers
- **Only** Provides Interoperability **TO** C/C++
  - Not *Reverse* Interoperability to Other Languages
  - No Fortran77/90/95/2000 Support (Sci Appls)
    - Intermixing Appl and Viz Code in One Framework...

Summary...

Viz Interoperability?

JUST DO IT! ☺

Do Not Be Afraid...

