RTSC Ease of Use Update

Goal

• “Gradual entitlement” to RTSC benefits
Common Problems

• Hard to start: confusion due to deluge of files, directories, options, etc.
• XDCPATH errors
• Javascript errors difficult to understand/fix
• Keeping up with changes in RTSC (getLibs, GCArmv5T, etc.)
• Poorly/Improperly packaged RTSC deliverables

Summary of Solutions in Progress

• IDE Integration
  – Configuration project
    • Targeted toward component user
    • config is fixed/unchanging, i.e. clean/rebuild does not re-do all the configuration (similar to kconfig in Linux)
  – Package project
    • Targeted toward component producer
• Closure tool for delivering lib and headers to app developer
  – takes libraries and header files being referenced and builds them directly into a bundled package "Package not found errors" - unique error messages for package-not-built problems
• XDC trace to track down build errors
  – GNU Make trace: http://rtsc.eclipse.org/docs-tip/Command_xdc#Environment_Variables
  – Cfg trace: http://rtsc.eclipse.org/docs-tip/XDCscript_xdc.traceEnable
• ROV graphical tool
• XGCONF
• Platform wizard
Configuration Tooling

- Product-Specific Display
- Module & Instances in Configuration
- Module & Instances Properties

Real-Time Analysis

- Module-Specific Data Analysis
- Real-Time Trace Logging
- Domain-Specific Displays
Future Possibilities (1/2)

• Wizards for wrapping legacy libs
• Wizard to build components
• RTSC best practices documentation
• Need the RTSC team to give more assistance to groups inside TI to properly use RTSC
• Need more examples available for people to get comfortable with RTSC (e.g. BIOS6)

Future Possibilities (2/2)

• Print error message when path added to XDCPATH that contains no valid packages
• Error for package referenced by cfg but not added to XDCPATH
• Validation tool to check packages against the TI packaging standard
• Better evangelization of the RTSC benefits, comparison of tools users are already familiar with (GNU make, auto-make, etc.)
• Create wiki page on rtsc.eclipse that details some use cases and corresponding tools, tutorial video would be a plus