RTSC Ease of Use Update

Goal
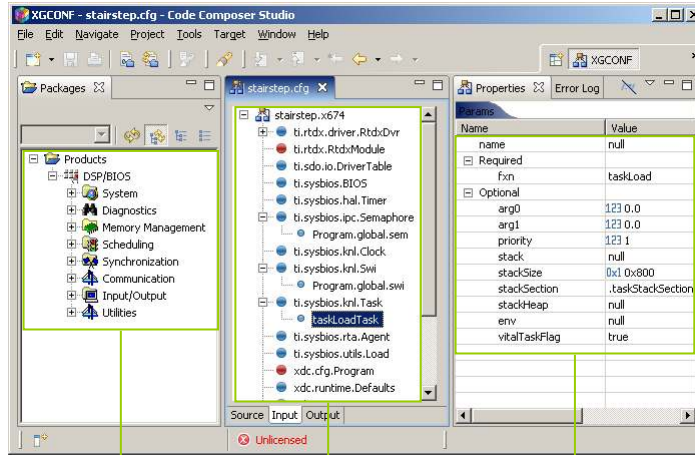
- "Gradual entitlement" to RTSC benefits

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
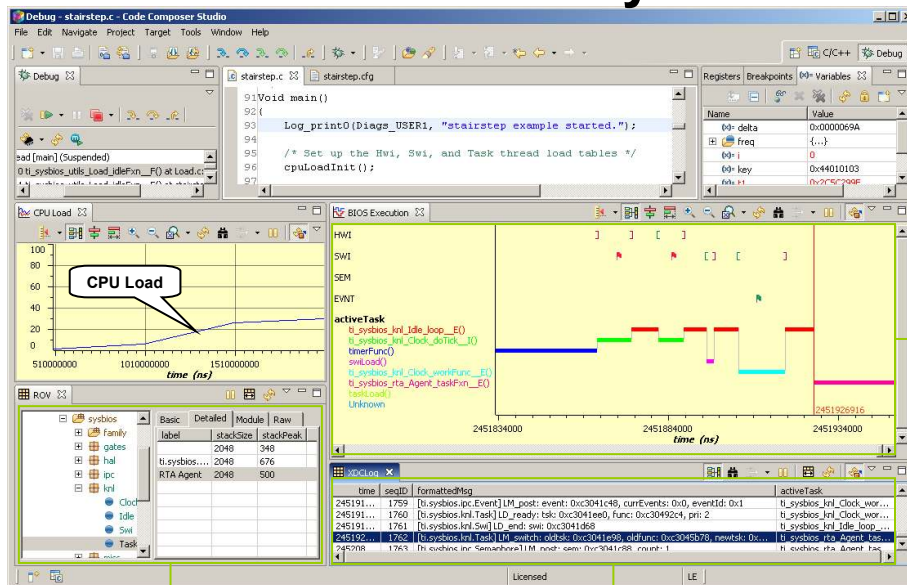
Configuration Tooling

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