



# metrowerks

## CodeWarrior® for NINTENDO DS™

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# Overview

- **State of CodeWarrior® NINTENDO DS™**
- **Future releases of CodeWarrior® NINTENDO DS™**
- **Advanced features in CodeWarrior® NINTENDO DS™**

# State of CodeWarrior® NINTENDO DS™

- **Project Management and Build tools**
  - IDE/Debugger version 5.6
    - Project management for handling of files and dependencies
    - Debugging
      - Ability to drag and drop executables generated on command line
      - Register View and Register details
      - Synchronized multi-core debugging
      - Multi-process/Multi-thread debugging
  - IDE plugins and command line build tools
    - Full C/C++ support
    - Option for generating thumb code
    - Supports interworking
  - Metrowerks Standard Libraries (MSL) C and C++ libraries

# Future releases of CodeWarrior® NINTENDO DS™

- **Release 0.9 (~Late September 2004)**
  - IDE/Debugger version 5.7
  - Overlay Debugging support
  - Command Line Debugger interface
  - Batch file PRE and POST linker plugins
- **Release 1.0 (~Early October 2004)**
  - Long veneer branch support
  - Watchpoint support
  - Simple Profiler
  - Cache Viewer

# Advanced features in CodeWarrior® NINTENDO DS™

- **Overlay support**

- IDE organizes overlays using an “overlay group” and a “overlay” hierarchy in the Overlays tab
- Overlay tree is one-level deep
- Linker generates overlay files through directives in the Linker Command File (.LCF) file
- Pre-Linker automatically generates the LCF corresponding to your application with overlays
- Management is done by NITRO SDK functions: FS\_LoadOverlay() and FS\_UnloadOverlay()

# Advanced features in CodeWarrior® NINTENDO DS™

- **Simple profiler**

- Turn on by selecting checkbox in Processor Panel or –profile flag for command line tools
- Calls to control the profiler:
  - ProfilerInit() : initializes the profiler
  - ProfilerClear removes existing profiling data
  - ProfilerSetStatus turns profiling on (1) and off (0)
  - ProfilerDump("*filename*") dumps the profile data to a profiler window or to a file named *filename*
  - ProfilerTerm exits the profiler
- Easy to navigate profile data viewer within the IDE

# Advanced features in CodeWarrior® NINTENDO DS™

- **Cache Viewer**
  - Graphical interface options:
    - Refresh data
    - Write
    - Invalidate one line of the cache
    - Invalidate the entire cache
    - Flush one line of the cache
    - Flush the entire cache
    - View data as Raw and Assembly

# Peanut butter demo time!



# Thanks

**Thanks from the Metrowerks Games team!**

**Come by the Metrowerks table to say Hi**