DEBUG FASTER
DEBUG SMARTER

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INFO

Slides and code are available at
http://thedelphigEEK.com/p/presentations.html
BASICS

- F9 Run with debugging
- Shift+Ctrl+F9 Run without debugging
- Ctrl+F2 Program reset
- F4 Run to current position
- F8 Step over
- F7 Trace into
- Shift+F7 Trace to next source line
- Shift+F8 Run until return
- F5 Toggle breakpoint
- Shift+F5 Enable/disable breakpoint
SETTINGS / PROJECT OPTIONS

- Project, Options, Delphi Compiler, Compiling
  - Optimization
  - Debug information
  - Use debug .dcu’s

- Selective Debugging Expert by Uwe Raabe
  http://www.uweraabe.de/Blog/2015/05/08/selective-debugging/
SETTINGS / IDE OPTIONS

• Tools, Options, Debugger Options
  • General
  • Event log
BREAKPOINTS
PROPERTIES

• Enabled
  • Shift-F5
• Condition
  • slow
  • code
  • DebugBreak(condition)
• Pass count
  • slow
  • Narrowing down reproducible problems
SIDE EFFECTS

• Break
• Log message
• Eval expression
  • OutputDebugString
  • Loggers (CodeSite ...)
  • Log to console
• Log call stack
GROUPS

• Group
• Enable group
• Disable group
• manual toggle
MULTITHREADED PROGRAMS

- Properties, Thread
- Freeze all other threads
- Thaw all threads
EXCEPTIONS

• Tools, Options
  • Debugger Options
  • Embarcadero Debuggers
  • Language Exceptions
• Ignore subsequent exceptions
• Handle subsequent exceptions
• ExceptionClass
HARDWARE BREAKPOINTS

• Address
  • Code execution
  • Can be set on read-only memory
• Data
  • Data access
• Limited number
  • DR0 ... DR3
• Disabled on program restart
**Tips and Tricks**

- Run until return
- Moving a breakpoint
  - with mouse
  - Options, Line number
- Moving execution point
  - with mouse
  - Set next statement
  - “repeat last statement”
- Call stack breakpoints
- Disable/enable all
Q & A

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