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# Delphi Academy

Dicas rápidas, truques e técnicas



## Técnicas de Debug e Log de Aplicações

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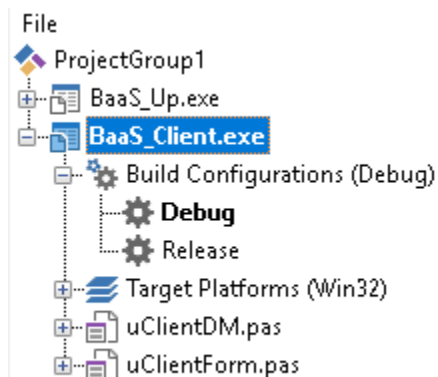
# AGENDA

- Debugging
  - Debugger/Project Options
  - Breakpoints
  - Call Stacks
  - Local Variables
  - Watches
  - Source breakpoints (Conditions, Pass count, Log message)
- Debug Remoto (PAServer)
- Log
  - Log.d ()
  - Ferramentas

# DEBUGGER/PROJECT OPTIONS

Target: Debug configuration - 32-bit Windows platform Apply... Save...

<b>Code generation</b>	
<input checked="" type="checkbox"/> Code inlining control	On
<input checked="" type="checkbox"/> Code page	0
<input checked="" type="checkbox"/> Emit runtime type information	<input type="checkbox"/> false
<input checked="" type="checkbox"/> Minimum enum size	Byte
<input checked="" type="checkbox"/> Optimization	<input type="checkbox"/> false
<input checked="" type="checkbox"/> Pentium-safe FDIV	<input type="checkbox"/> false
<input checked="" type="checkbox"/> Record field alignment	Quad word
<input checked="" type="checkbox"/> Stack frames	<input checked="" type="checkbox"/> true
<b>Debugging</b>	
<input checked="" type="checkbox"/> Assertions	<input checked="" type="checkbox"/> true
<input checked="" type="checkbox"/> Debug information	Debug information
<input checked="" type="checkbox"/> Local symbols	<input checked="" type="checkbox"/> true
<input checked="" type="checkbox"/> Symbol reference info	Reference info
<input checked="" type="checkbox"/> Use debug .dcus	<input checked="" type="checkbox"/> true
<input checked="" type="checkbox"/> Use imported data references	<input checked="" type="checkbox"/> true

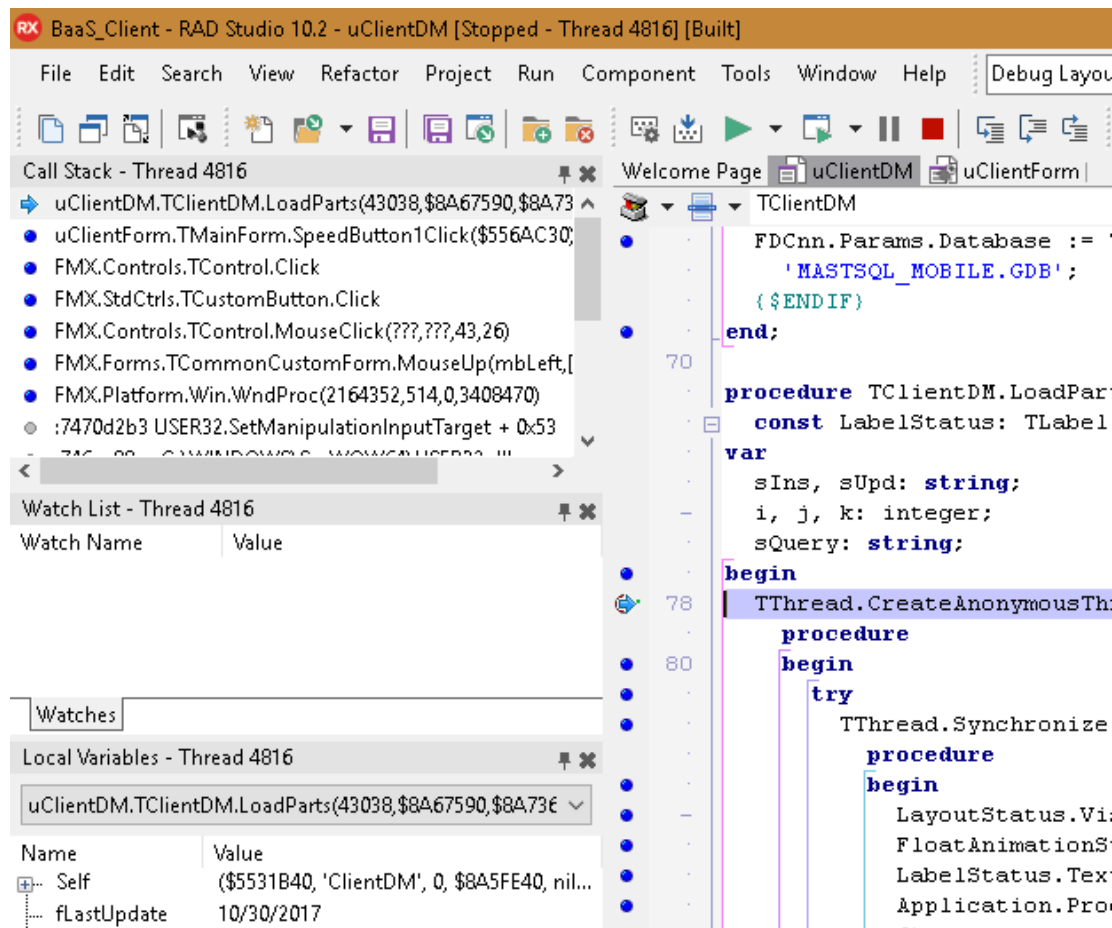


# BREAKPOINTS

- F9 Run/Start
- F8 Step over to next source line
- F7 Trace into (source of function/procedure)
- F4 Run to cursor (and skip the other source lines)
- F5 Add/remove break

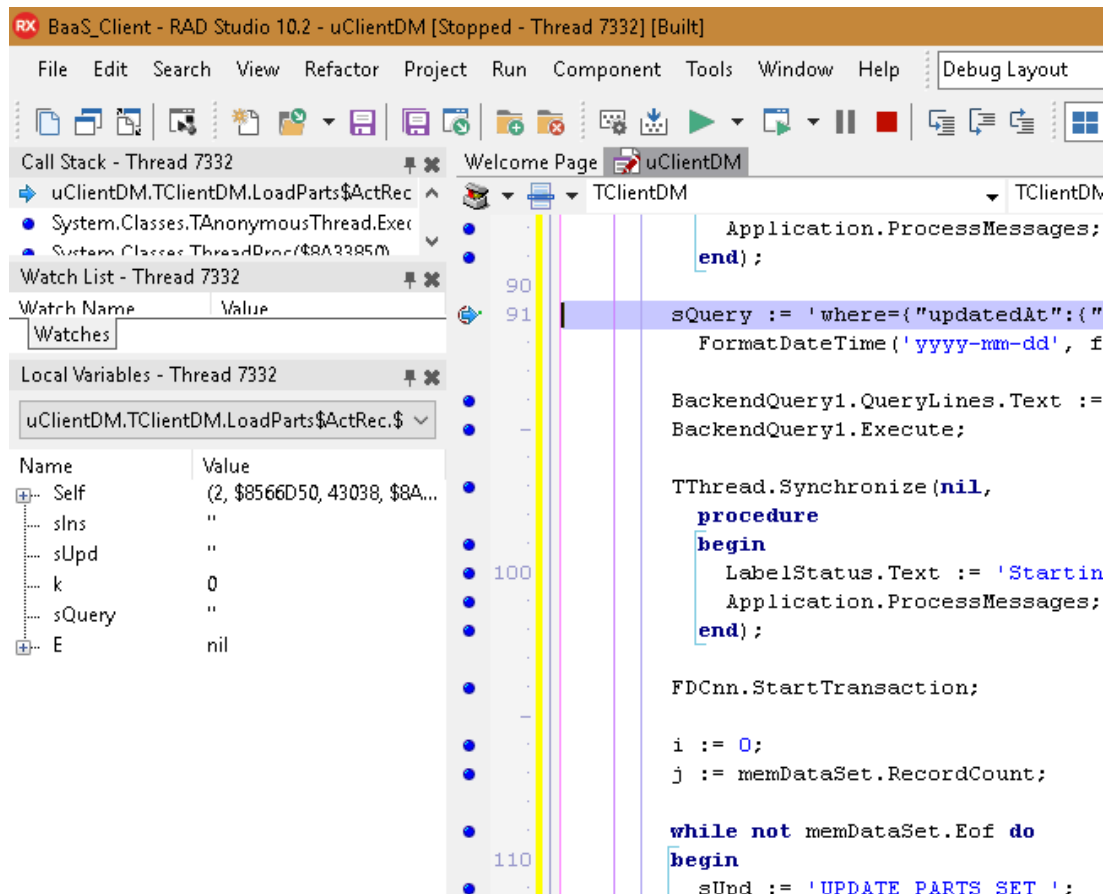
# CALL STACKS

- A janela Call Stack exibe as chamadas de que o levaram à sua localização atual do programa e os argumentos passados para cada chamada de função.



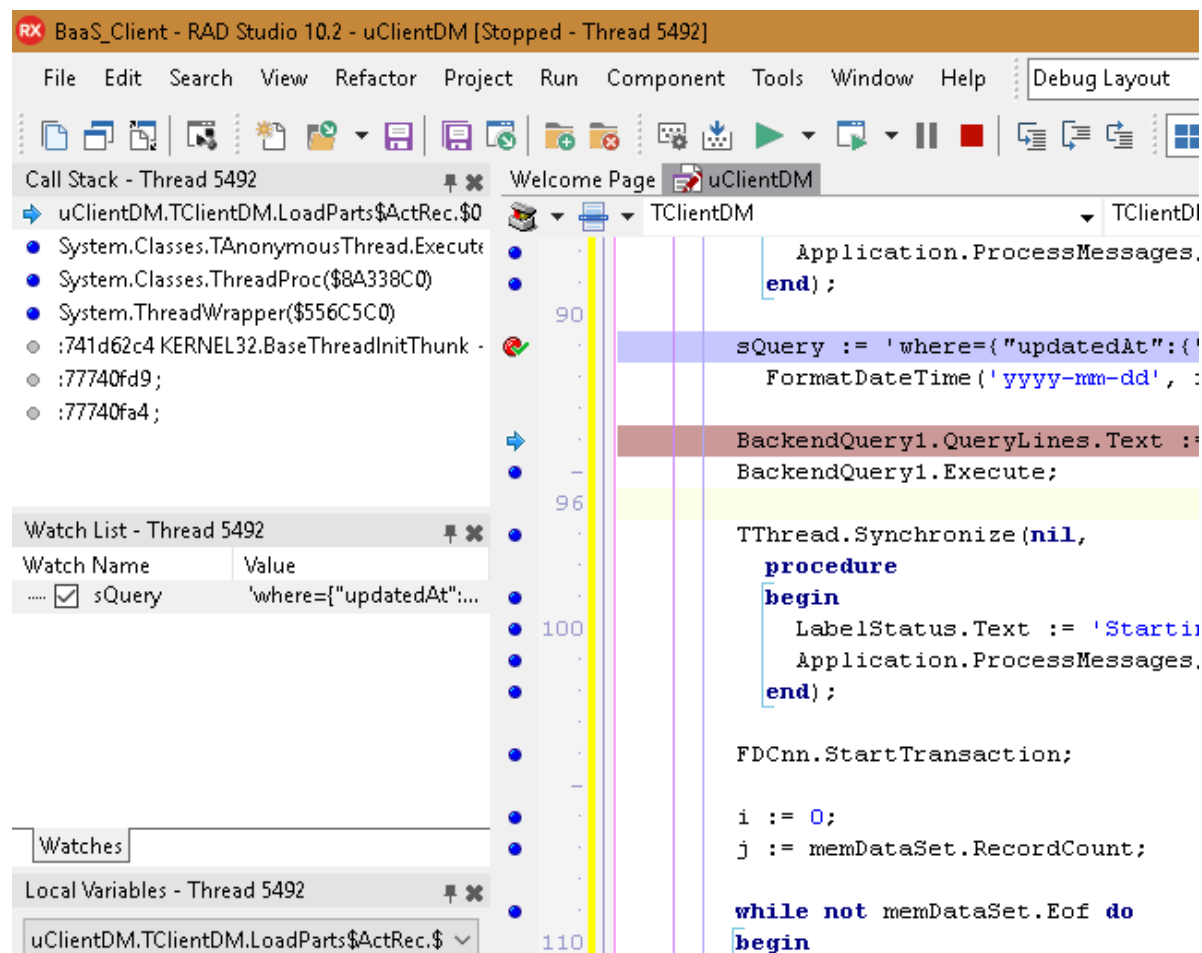
# LOCAL VARIABLES

- Esta janela mostrará todas as variáveis locais e seu valor atual na função ou procedimento atual.



# WATCHES

- Clique com o botão direito do mouse e escolha Adicionar Watch.



# SOURCE BREAKPOINTS (CONDITIONS, PASS COUNT, LOG MESSAGE)

Source Breakpoint Properties

Filename: C:\DelphiAcademy\36-DebugAndLog\BaaS\_1\BaaS\_1.dpr

Line number: 159

Condition: i = 5

Thread:

Pass count: 0

Group:

Advanced <<

Actions:

☒ Break

☐ Ignore subsequent exceptions

☐ Handle subsequent exceptions

Log message:

Eval expression:

☒ Log result

Enable group:

Disable group:

☐ Log call stack

☒ Entire stack

☐ Partial stack

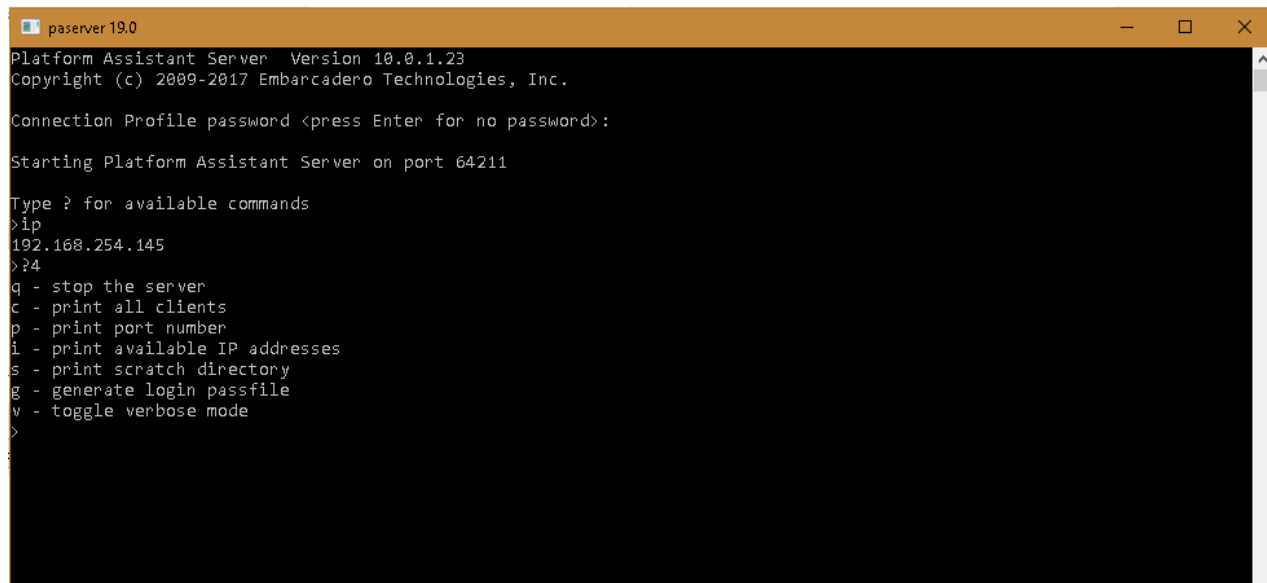
Number of frames: 5

OK Cancel Help



# DEBUG REMOTO (PASERVER)

- Permite debug remoto em todas as plataformas, mobile e desktop



```
paserver 19.0
Platform Assistant Server Version 10.0.1.23
Copyright (c) 2009-2017 Embarcadero Technologies, Inc.

Connection Profile password <press Enter for no password>:

Starting Platform Assistant Server on port 64211

Type ? for available commands
>ip
192.168.254.145
>?4
q - stop the server
c - print all clients
p - print port number
i - print available IP addresses
s - print scratch directory
g - generate login passfile
v - toggle verbose mode
>
```

# LOG.D

- Disponível para FMX (neste momento)
- Fornece métodos estáticos para mensagens de depuração
- <http://docwiki.embarcadero.com/Libraries/Berlin/en/FMX.Types.Log>
- <http://docwiki.embarcadero.com/Libraries/Berlin/en/FMX.Types.Log.d>

Description and Parameters	Code Snippet
Simple debug message. > <code>Msg</code> : The text of the message.	<b>Delphi :</b> <pre>Log.d('Simple Message');</pre> <b>C++:</b> <pre>Log::d("Simple Message");</pre>

# FERRAMENTAS

- <https://www.raize.com/devtools/codesite/> (\*)
- <https://smartbear.com/product/aqtime-pro/overview/> (\*)
- <http://www.gurock.com/smartinspect/>
- <https://github.com/danieleteti/loggerpro>
- <https://docs.microsoft.com/en-us/sysinternals/downloads/debugview>
- <https://developer.android.com/studio/profile/monitor.html>

DEMOS

# RECURSOS ADICIONAIS

## ■ Documentação

- [http://docwiki.embarcadero.com/RADStudio/Tokyo/en/Debugging Applications Index](http://docwiki.embarcadero.com/RADStudio/Tokyo/en/Debugging_Applications_Index)
- [http://docwiki.embarcadero.com/RADStudio/Tokyo/en/Debugging Multi-Device Applications](http://docwiki.embarcadero.com/RADStudio/Tokyo/en/Debugging_Multi-Device_Applications)
- <http://docwiki.embarcadero.com/RADStudio/Tokyo/en/PAServer, the Platform Assistant Server Application>
- <http://docwiki.embarcadero.com/RADStudio/Tokyo/en/Paclient.exe, the Platform Assistant Client Application>
- <http://docwiki.embarcadero.com/Libraries/Berlin/en/FMX.Types.Log.d>

## ■ Blogs

- <http://www.blong.com/Conferences/BorCon2002/Debugging/3188.htm>
- <http://www.davidghoyle.co.uk/WordPress/?p=1754>
- <https://github.com/marcocantu/ObjectDebugger>

# OBRIGADO!

## Perguntas?

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