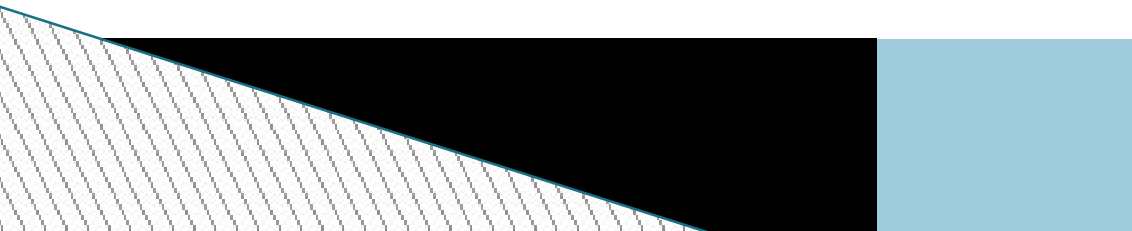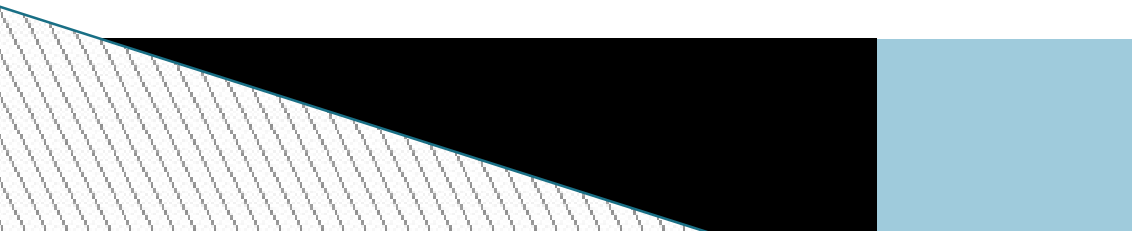# Caché User Group Benelux

November 28th, 2013

Agenda

- Welcome

○ Meeting overview

○ Build Rich Internet Applications with Caché
○ Development tools for Caché

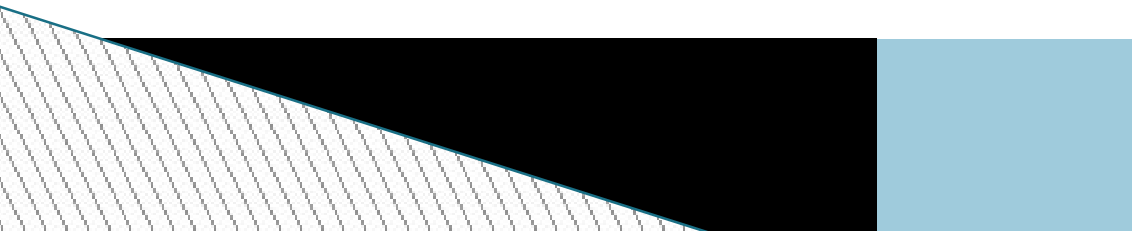○ Demo's and round tables
○ Closure / informal discussions

Welcome

- Actual status
- Interaction with the CUG: new website (blog)
- Purpose of this meeting: overview of development platforms and tools
- CUG is the place to show, exchange & discuss new ideas & approaches to development

Development frameworks

- Essentially two approaches:

  - Client-server
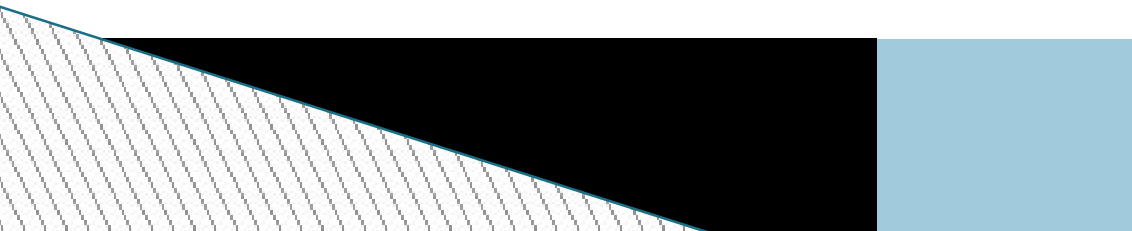
  - Rich Internet Application (RIA)

Development: client-server

- Applications installed on a client-pc, written with development tools generating native code
- Broad choice of tools, e.g.:
  - Windows: Visual Studio
  - iOS: Xcode
  - Android: SDK/ADT/Eclipse
  - Cross-platform: RAD Studio XE5
  - Cross-platform: Java (Eclipse WindowBuilder Swing/SWT)
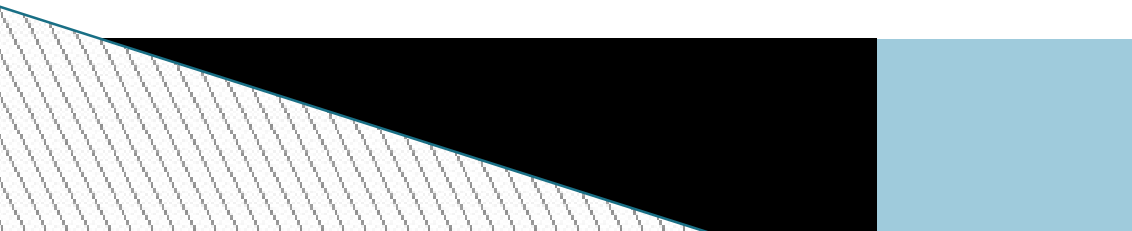 - Plugins sandboxed in browser: Flash / Flex / Silverlight

Development: client-server

- Tools either generate native code or work with a runtime engine, e.g.:
  - C++: native code
  - .NET: running in a CLR on Windows
  - Java: running in the JVM

- GUI control libraries for most development tools, very extensive feature set
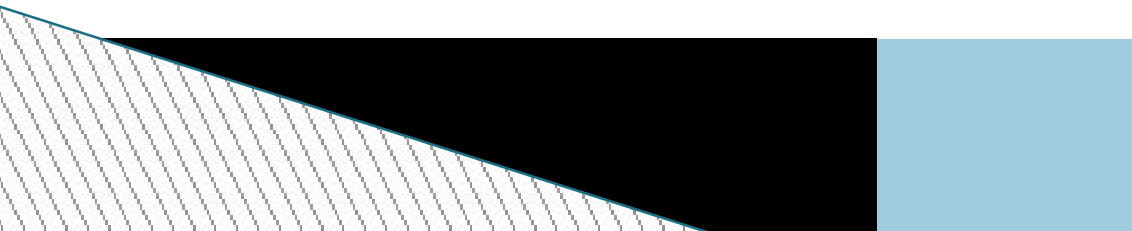
Development: client-server

- Advantages:
  - Native, fast code
  - GUI can use latest graphical OS features
  - Direct access to the hardware
  - Most complete feature set for OS-specific GUI design

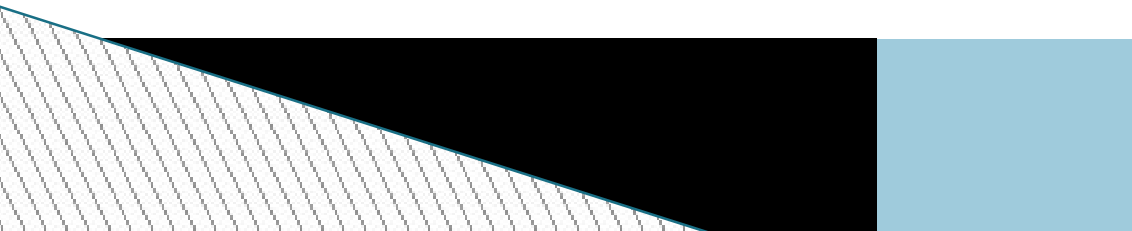- Unfortunately … not only advantages!

Development: client-server

- Disadvantages:
  - Setup needed for every client + updates
  - If you use .NET or Java, no "real" native code anymore
  - OS-specific development, many code versions and builds needed (+ x86/x64)
  - BYOD is a big challenge: you'll need versions for Windows, iOS, Android, …
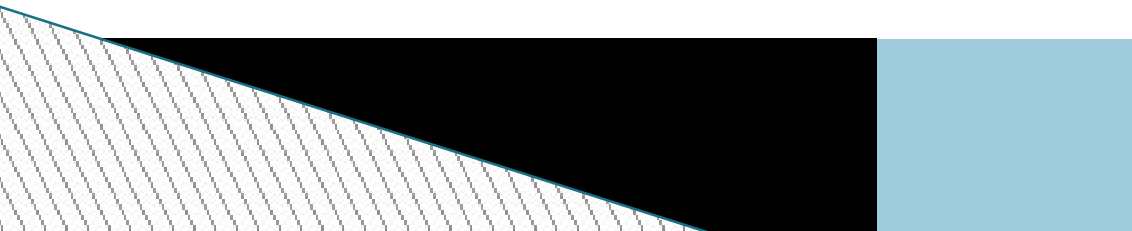 - …

Development: RIA in browser

- HTML5 is there: are RIA's the best choice for today's development?
- Many challenges:
  - Browser versions
  - Different languages needed for front- and back-end (HTML, JavaScript, COS)
  - Desktop GUI not easy to design in HTML (document oriented language)
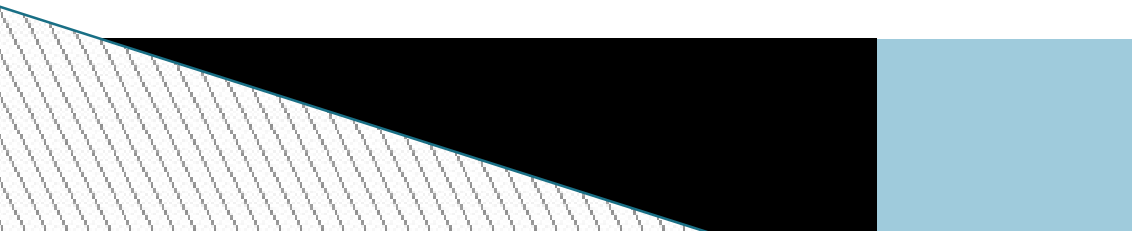 - No access to hardware on the client
  - ...

Development: RIA in browser

- Look for the tools that fit the job
- Many pitfalls – think before you code!
- Integrated platform needed that reduces coding to application-level, not system-level
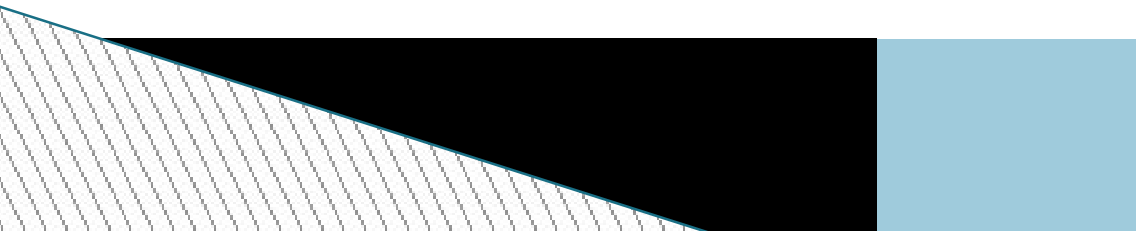- Take advantage of the latest HTML5 features!

Development: RIA in a browser

- Default choice for Caché: Zen framework

- Today: Enterprise Web Developer (EWD) web development platform
  - Integrates with standard GUI control frameworks using XML-tags
  - Principles: page fragments, page setup & action code
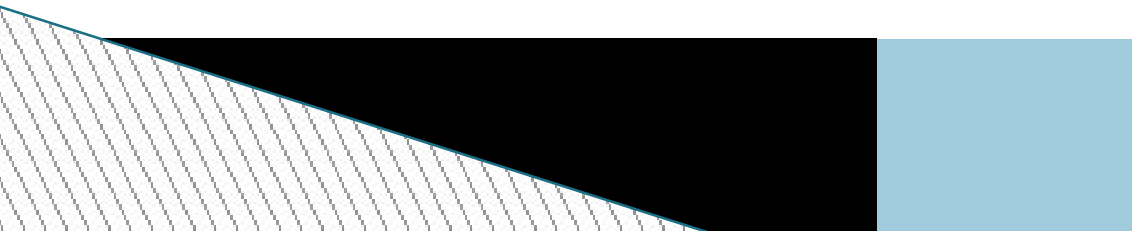 - Separation between GUI & business logic

Development: RIA in a browser

- Latest version of EWD (today's demo)
- EWD.js: new, revolutionary approach you'll see in the next presentation from M/Gateway Developments
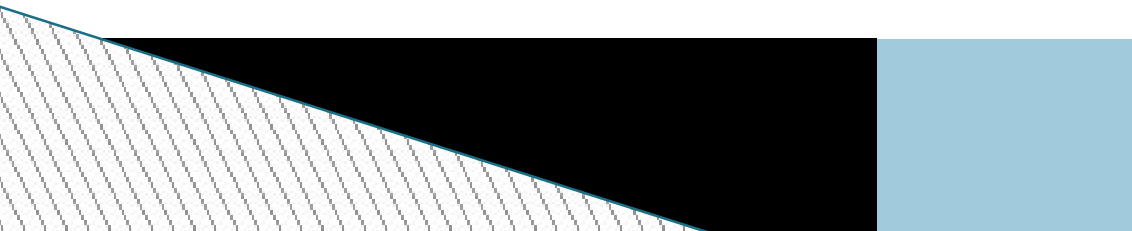- Build your applications using only JavaScript!

Development: tools

- Caché development with Studio is working well
- Studio's toolset can be further extended by adding e.g. version control using built-in Studio class hooks, but this has to be coded
- Why would you reinvent the wheel when it exists?

Development: tools

- Third party tools from George James Software you'll see will enhance further you development experience with Caché for:
  - Debugging
  - Modelling
  - Version control
  - Code analysis, optimisation, refactoring
  - …

Caché User Group Benelux

See you at the next meeting!
Thank you!