

Rapid Application Development

AppeX & Google Chrome Dev Tools

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We love **Smalltalk!**

Why?

Many answers:

- Elegant
- Simple
- Productive
- etc...

Excels at:

Rapid Application Development

Rapid Application Development

Tools, Methods, Interpretations vary

Smalltalk Favourite:

- Halt
- Change code
- Resume

Can it be done with Web Applications?

RAD on the Web

Browser capabilities vary

Google Chrome Developer Tools are the most advanced

Maps a network resource to a local file, e.g.:

- http://localhost/my-script.js
- file:///Users/my-user-id/www/my-script.js

Edit & save **my-script.js** locally, http server will 'see' the change

Not quite like Smalltalk Debugger - yet?

JSFile

Allows **AppeX** to keep JavaScript code synchronized between a Smalltalk image and the local file system

Cincom® VisualWorks® IDE and web browser Developer Tools can be used together in round-trip RAD

Key classes in **AppeX-Tools** parcel:

- JSFileMonitor
- JSFileComposer
- JSFileParserActor

JSFile

JSFileMonitor

- periodically checks .js file timestamps
- newer versions are parsed into AppeX
- location of files and frequency of updates are configurable

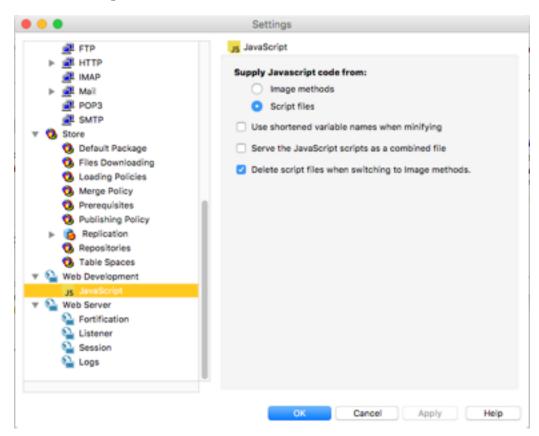
JSFileComposer

ensures source code is written from VisualWorks IDE into the file system

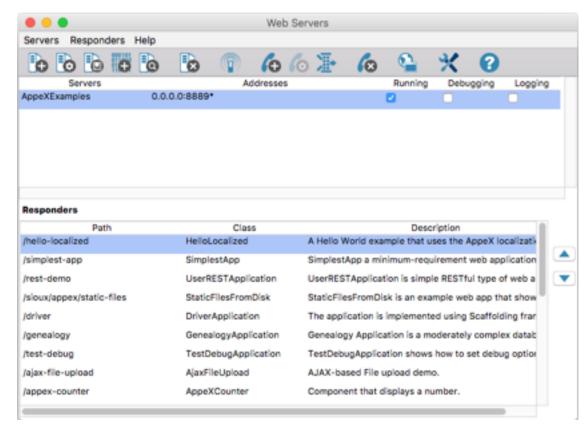
JSFileParserActor

reads source from the file system back into the IDE

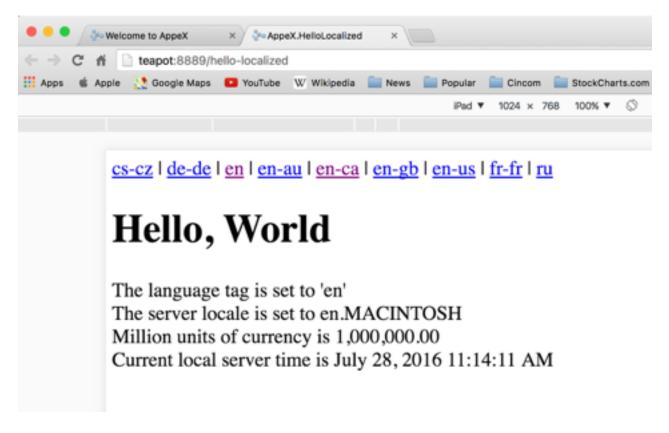
Setup



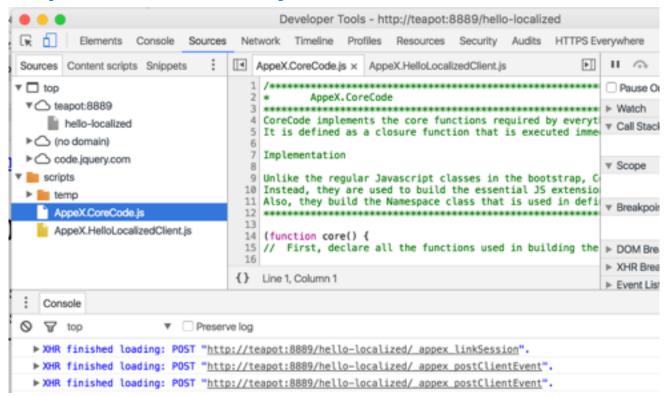
Start a Server instance

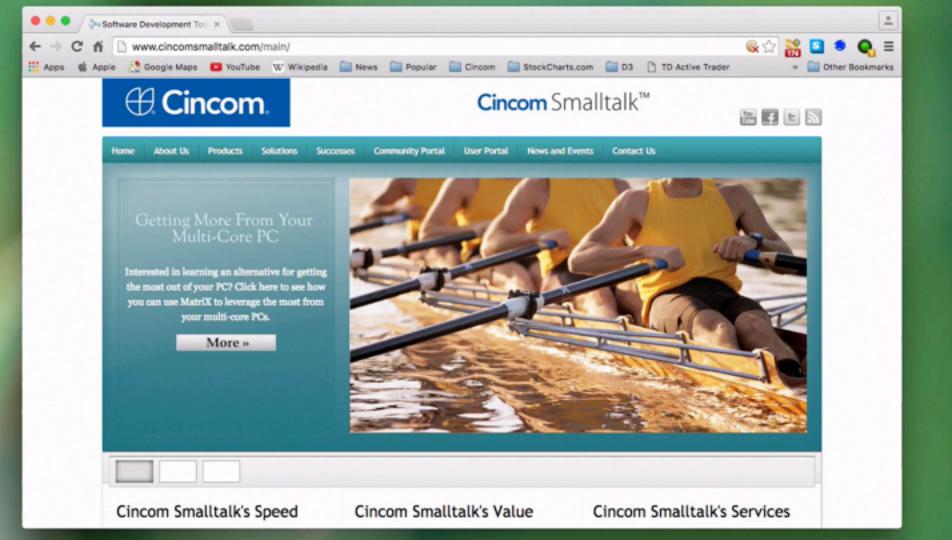


Open your application



Open Developer Tools





Programmatic use

Activation

```
AppeX.Application scriptDirectory. AppeX.Application useJSFile.
```

Deactivation

AppeX.Application useImageCode.

AppeX-Tools parcel

- JSFileComposer
- JSFileMonitor

Challenges

Platform-specific line-end conventions

Currently only Google Chrome has the capability

Developer Tools are evolving - what works one day may not work next day after a Chrome update

Still not quite the 'halt, edit, resume' workflow Smalltalkers love.

In closing...

RAD means different things for different people

We Smalltalkers are spoiled

RAD for the Web is especially challenging - the code generally runs in a different environment than the IDE (if there is one)

Still evolving, JavaScript is as malleable as Smalltalk

Expect more tools in this field, and AppeX to continue to evolve to leverage those tools

Questions?

Thank You!

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