



Feb 10, 2012
Sao Paulo, Brasil

#CPBR5

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The ACM Turing Awards

1983



Ken Thompson
Dennis Ritchie

For their development of generic operating systems theory and specifically for the implementation of the **UNIX** operating system

2003



Alan Kay

For pioneering many of the ideas at the root of contemporary **object-oriented programming** languages, leading the team that developed **Smalltalk**, and for fundamental contributions to personal computing

Speaker Information

Carlos Crosetti

Business Analyst – Telecom SME

Verizon Business Argentina (2005 - present)

Open Cobalt – involvement

Smalltalk practitioner

Joined the OC community back in 2008 as code contributor

Areas of interest include:

Adding Morhic-based applications to Open Cobalt

Collaboration: Scrum project management in a 3D environment

Enterprise Integration



Open Cobalt: Overview



- OC is a free, open-source multi-platform **virtual space browser**
- Allows end-user 3D content creation, editing and sharing
- Content import from several media formats (jpg, mp3, kmz, etc)
- Hyper-linking between virtual spaces
- Collaborative document sharing/editing
- Programmers can create 3D animated/scriptable objects and simulations



Demo

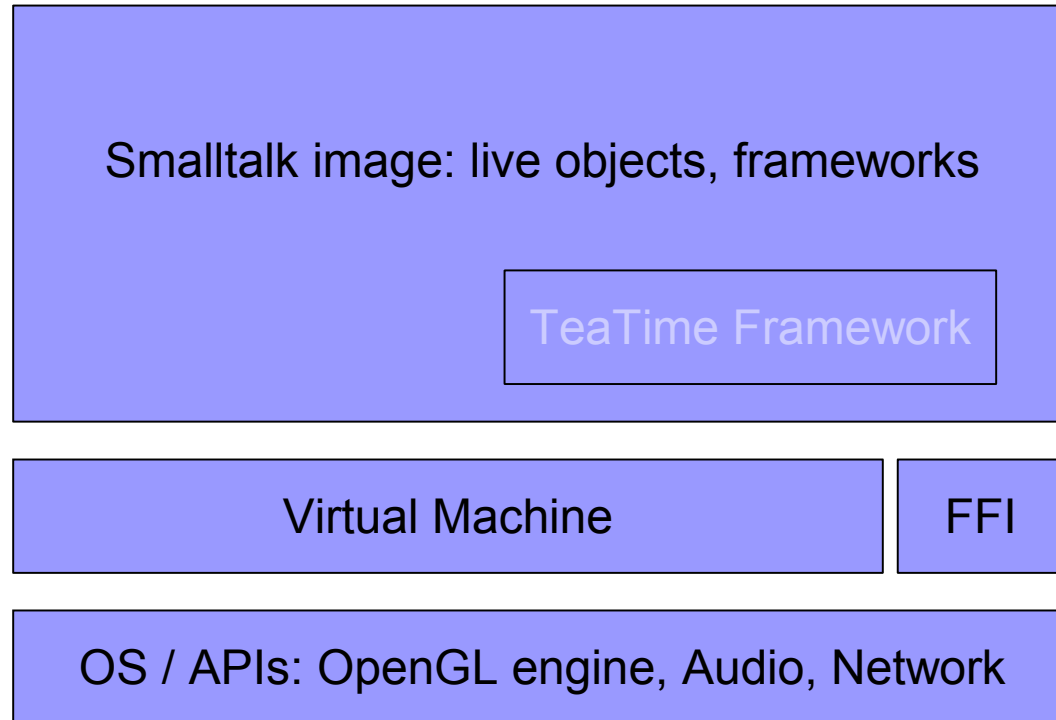
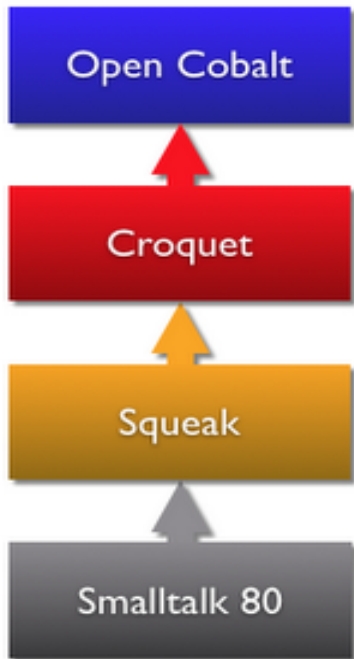


Video

Demo

http://www.youtube.com/watch?feature=player_embedded&v=1s9ldlqhVkm

Technical Architecture





Projects Showcase

- Education: EduSim

The EduSim 3D Smartboard Application being developed by Rich White of the Greenbush Southeast Kansas Educational Service Center, is designed to provide educators and students with a way of linking 3D activities across multiple white boards.

- Research: Lorenz Attractor

GPGPU (general-purpose computing on graphics processing units) techniques leverage a computer's graphics processor (GPU) to perform calculations that in most applications are traditionally handled by the computer's main processor (CPU)

- Collaboration: SW3D

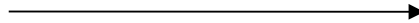


Using Open Cobalt

- 3D browser
- Controlling avatar and camera
- Adding basic objects, externally contributed models, drawings
- Hyperlinking
- Teleporting
- Xrfb/VNC
- Audio

OC in Education/Training

Classical room with desks and projector
Trainer with PC showing slides



Each student in a Lab with LAN-based
PCs loaded with Open Cobalt
joining the trainer's virtual space



Programming Environment



- Squeak Smalltalk
www.squeak.org,
www.squeakbyexample.org
- Wrapped OpenGL calls
- Add code and test while OC is running
- Glitch: cannot save the image while OC is up
- Development image demo follows...
- In-World 2D Morphic

The screenshot displays the Squeak Smalltalk environment. On the left, a 3D world view shows a character in a room with a "To Do" list and a "Sprint Simulation Pad" interface. The "To Do" list includes "CroquetHarness cleanup." and "Cobalt Space Add Vi". The "Sprint Simulation Pad" shows a table with columns for "Sprint Duration", "Reset Start Date", "Burn All Tasks by", "Change current day", and "Update Summary".

On the right, the "System Browser" window is open, showing a class hierarchy for "WingTeamMember". The class list includes "Wing-Team", "Wing-Notifica", "Wing-Backlog", "Wing-Sprint", "Wing-Transac", "Wing-Tasking", "SGrid-Test", "SGrid", "Plot-Morph", "Wing-2D-Dem", "Hungry-FN", and "PicChart-Test". The "WingTeamMember" class is selected, and its class definition is shown below:

```
Class definition for WingTeamMember
browse senders impl vers inher hier iVa
Object subclass: #WingTeamMember
instanceVariableNames: 'id name initials rc
emailAddress teamName daysWeek hoursDay
notificationMethod growlEndPoint jabberId ne
neSprintSummary neTaskDone'
classVariableNames: ''
poolDictionaries: ''
Main comment stating the purpose of this clas
relevant relationship to other classes.
```

Enterprise Integration Backlog



Feature	User Story	Complexity	Notes
Cobalt URI Resource Support	As an Internet User I want to hyperlink into a Cobalt space by clicking on "cobalt://host:port/path" from an HTML page or an e-mail	Medium	
Bullet-proof Jabber Implementation	As a Cobalt User I want a robust instant messaging model based on Jabber	Medium	Built-in
In-World VNC Launcher	As a Cobalt User I want to keep a clickable VNC session registry	Low	
In-World Presence / Buddy List	As a Cobalt User I want to set my avatar availability, whisper, chat and videoconference with another avatar with a single click	Medium	
WebCam Support	As a Cobalt User I want two-way in-world video conferencing feature like Skype	Medium	
E-Directory Navigator	As a Cobalt User I want to navigate the Corporate LDAP directory, browse people profiles and invite the selected profile to join my current virtual space	High	LDAP is supported

Enterprise Integration Backlog



Feature	User Story	Complexity	Notes
Slide Show Navigation Buttons	As a Cobalt User I want to browse my presentation slides using “first, end, back and forward” buttons	Low	Slide Show Support
In-World SSH Client	As a Cobalt User I want to open a secure session into a Unix-based host so other avatars can see terminal output	Medium	
Growl Notifications Support	As a Cobalt User I want to subscribe Cobalt space notification events even I am logged off from Cobalt	Low	
Clickable World Map	As a Cobalt User I want to locate virtual spaces like I find terrestrial places on Panoramio.com – spaces must feed coordinates	Medium	
In-World IdentiCa Client	As a Cobalt User I want a shared in-world client to Twitter-clone IdentiCa for team-level microblogging	Low	Ready open source REST API
In-World Filesystem Explorer	As a Cobalt User I want to navigate the disk, folders and files like I do on MacOS or Windows, so other avatars can follow	Low	

How To Contribute



- Try the latest build from OpenCobalt.org
- Join the community: opencobalt@googlegroups.com
- Join the chat room <http://www.opencobalt.org/community/chat>
- Work open defects - Mantis Bug DB at:
http://croquet-src-01.oit.duke.edu/mantis/view_all_bug_page.php
- Roll your own Open Cobalt based project, share code and videos
- Join the Enterprise Integration efforts

Google grupos



Obtén una vista previa de l

Mis grupos

[Columna única »](#)



[Open Cobalt](#)

No se ha registrado actividad en este periodo: últimos 0 minutos

Q & A



#CPBR5 campuseros: Thank You!



 @ccrosetti



Icons and pictures from **OpenClipArt.org**