Evolutionary Sprint

Evolutionary Sprint 2009/11

Speaker: Eugene Gorbunoff







2008/11

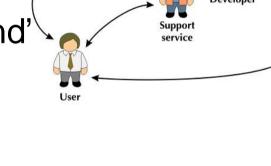
"Build non-sinking constructions"

Analysis



2007/11

"Change your mind"



Standalone developers

2006/11

"OS/2 Village"





What is Evolutionary Sprint?

- Evolutionary = don't migrate to other platform
- Sprint = 2-3 years to improve situation (starting from fall 2006)



Contents of the presentation:

(A)

(B)

(C)

What's new? PC in 2010

What is successful eCS?
Make quick changes
eComStation 3.0
We need new software

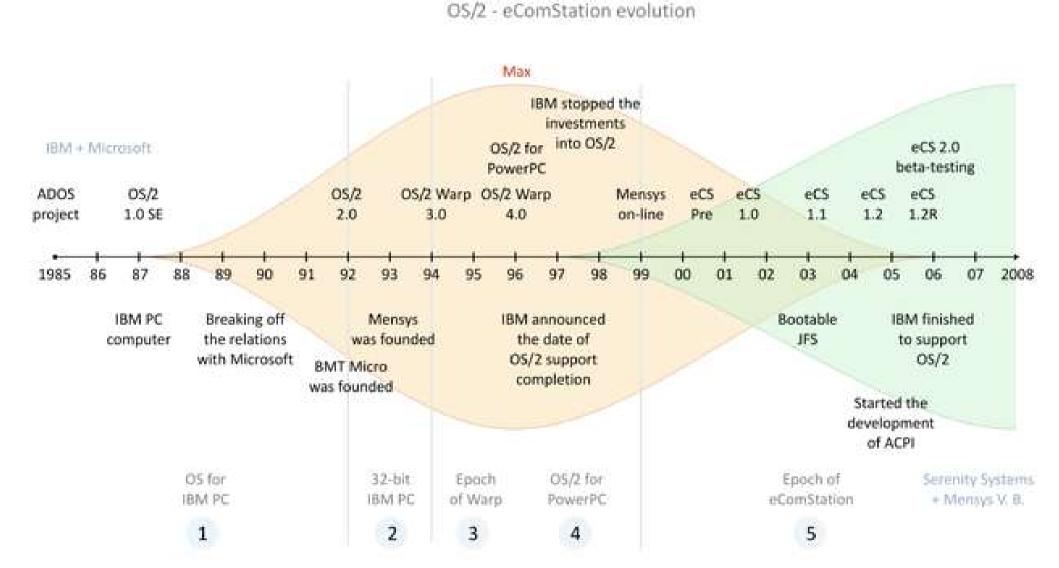
Roles FAQ



Key slide: #04-00

Sci-tech labs.. development of technologies..

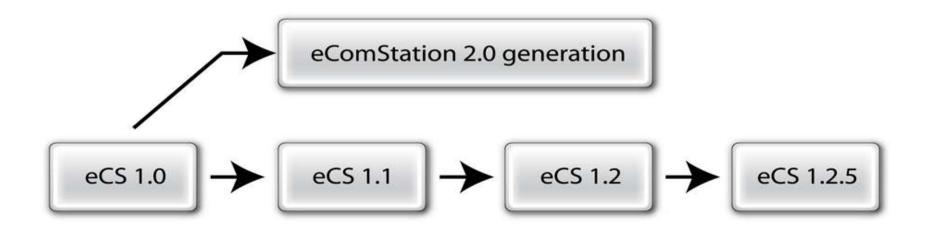






Keep in mind..

eComStation 2.0 was started in 2002!!





What's new in 2009?

05-00

eComStation 2.0 RC7, eComStation 2.0 GA

Applications:

- * OpenOffice.org 3.1 GA
- * PMView (2009/05) improved for SMP/Panorama VESA
- * always the latest Thunderbird, Firefox
- * DFSee 10.0

New technologies:

* Flash-player



What's new in 2009?

05-02

ACPI

- * Poor support of users during 2009
- * Intel ACPI source code 2008/12
- * ACPI is patching the kernel on-the-fly (suspend/resume)
- * support of Embedded controller is implemented

Hardware support:

* CUPS (USB, debugging)



What's new in 2009?

Work with community:

* http://ecomstation.ru/student

New libraries/toolkits:

- * GCC 4.x
- * eCo Software toolkit is updated
- * Qt4 toolkit

Shareware products:

- * DVD/CD Toys,
- * Virtual keyboard

(2008: SearchPlus + eCo Tunes + eCS FAQ brochure)



What's new in 2009?

Networking:

* Samba server/client (heavy debugging)

Improvement of base OS/2

- * New method: Patching kernel via ACPI (example: suspend/resume)
- * New method: patching dll / exe (example: WPS associations)
- * Better ACPI/SMP compatiblity (uconv.dll)
- * WPS associations // drink.milk.mp3

New sites (promo sites):

- * ecomstation.tv
- * ecomstation.com -> ATM machines



PC computers in 2010/2011: Current state # 05-90



Garage -> Consolidation -> Stagnation



Garage -> Consolidation -> Stagnation



Garage -> Consolidation -> Stagnation



PC computers in 2010/2011: Common tendency # 05-95

- * Multi-core computers eComStation is READY
- * Progress with GPU (video adapters) eComStation doesn't participate
- * Netbooks, UMPC (Intel video adapters, Realtek network, ..)
- * More touch-screens, multi-touch mouses



PC computers in 2010/2011: USB 3.0

06-00

Declared: 2007, Specification: 2008

2009/07



2009/09





2009/10





How to make eCS successful?

#06-10

Attract new users

TV Advertisement?

NO, Zeta (BeOS) failed

Google Adv

Yes, minimal results

Post to OS news sites

No news for such sites

eComStation PC

Not available in real shops



How to make eCS successful?

06-20

Attract new users

flood the Internet with screenshots / movies of eComStation





How to make eCS successful?

06-20

Attract new users

Person interested in eCS => Search .. => Good demo-CD

// ? Your suggestions what to include to demo-CD



How to make eCS successful?

Attract new users

- * How to catch random people in Internet?
- * Equip new PC with eCS for your friend/child

LiveBook (short stories + PNG screen-shots)

- * How to read e-mail
- * How to use web search engines
- * How to input text document
- * How to use flash disk, burn DVD



How to make eCS successful?

06-30

Attract new young developers

Young developers = students

Todo:

- * DevCon site
- * Templates of applications and drivers



How to make eCS successful?

#06-50

Create unique technologies

- 1) Other applications
- 2) Applications which extend the area of PC usage
- 3) Combine existing technologies

4)

Examples from the past:

- * SciTech SNAP
- * PMView



How to make eCS successful? Quick changes

06-60

Include popular applications to eComStation:

- * Twitter client
- * Smart House utilities (T measurement, remote controls, ..)
- * Warehouse management (for home users)
- * Applications oriented on health of person
- * Multimedia package
- * ???



How to make eCS successful? Quick changes #07-15

Concentrate all efforts on implementation of foreign APIs

- * Android API (market: 2% -> 14% in 2012)
- * Java API
- * coLinux
- * Qt4 toolkit
- *



Quick changes: Lift user interface #???

We are making efforts:

- 1) WPS extenders (eSchemes, amptr, ..)
- 2) New transparent icons
- 3) New PM-controls
- 4) Bring more pictures to the desktop



Quick changes: Linux host + VM + eComStation guest #07-10

Conditions:

- A) Slow migration: 6 months passed.. 20% migrated to eCS+VM, other are using eCS real.. => 0 investments into original eCS.
- B) Investments into new system

Results:

- 1) => no need in drivers => no need in the specialists
- 2) => No need in native software because people can use software on host
- 3) No need in support service
- => 0 investments into specialists => 0 developers =>

Conclusion: kills the platform



Quick changes: Catalogue of software (since 2005!)

Today:

- * User goes to web-sites => read news => download application => install
- * 1 time per month, 2 times per year

Change to:

- * User gets all 100% notifications automatically
- * Selects what to download and install from the list



Plan of work / 2010

Mensys:

- * eComStation 2.1: updates + include CUPS + Samba server + LDAP
- * New MPTS replacement (Alex Taylor)
- * Disk problem: 2 Tb, 512 Gb

eCo Software:

- * Two-three new applications
- * Modern SysInfo, remake of system utilities
- * ACPI utilities
- * Update frozen applications

Netlabs.org:

- * Qt4 runtime and applications
- * VirtualBox





eComStation 3.0 (UNOFFICIAL PLAN)

#08-00

- 1) ACPI is the engine of eComStation
- 2) Run-times with new APIs

New sub-systems:

- 3) Notification system for users: banners, animations (suspend/resume, "One or more of your connections failed..")
- 4) Central configuration area config.sys -> USB Cfg, ..





eComStation 3.0 Multi-language

#08-05

ENG, DE, JP, NL, IT, RU, Swedish Simplified Chinese, Traditional Chinese

- 1) All new apps multi-language
- 2) Translators here: http://ecomstation.ru/babylon
- 3) Local user groups to promote NLV





eComStation 3.0: Drivers

#08-10

- 1) AHCI (SATA controllers)
- 2) USB 3.0 drivers
- 3) Panorama VESA
- 4) Upgrade ACPI (ACPI 3.0 standard -> ACPI 4.0)





eComStation 3.0: Sync

#08-11

Empty site: http://ecomstation.ru/sync

Roadmap:

step1: Self-made sync utilities

step 2: library for developers of applications

step 3: ActiveSync





eComStation 3.0: Installer

08-12

- 1) System information BEFORE installer
- // in shop; else hangs/traps
- 2) The installer should download updates from the Internet // applications, drivers, databases
- 3) Utility to clone eComStation, AirBoot boot manager
- 4) it's difficult to join all languages on 1 DVD





eComStation 3.0: Security

#08-20

Task: Protect system files, system directories

How to implement?

- * update .ifs drivers
- * Patch the kernel via ACPI





eComStation 3.0: More applications

#08-22

http://ecomstation.ru/essentials

Add more applications

* communications

More system utilities

* recover

More multimedia applications

* players, converters





eComStation 3.0: Desktop search engine #08-25

Search engine from Yuri Dario

- * Beagle
- * WPS-folder







eComStation 3.0: Internet applications

#80-30

was:

Wget web-browser today:

PM123

FreeDB, CDDB

Internet radio

Weather widget

USB Dock

tomorrow:

Catalogue of updated software

Info about movies

Flash player

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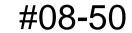
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GPS maps (?)

Google Chrome (?)



SOFT: Area of eComStation usage











SOFT: Area of usage #08-60

Axis X Axis Y Axis Z

Games Standard PC Student

Sci-tech labs Notebooks Office user

Engineer

Office Netbooks Businessman

Multimedia Servers (medium) .

CAD ...

Designer Mariaire

Home user

Musician

SOFT: Extend area of usage

08-80

A.

B. School, universities



SOFT: The needs of users changed, we need new different applications

08-85

What do the users need?

* Automate operations // simply automate

Example: "Invoice"

Office suite -> input -> print to PDF -> e-mail program -> attach -> [Send]

Future: input -> [Send]

* Look at other Oses

* Listings of requests

1) All applications should be designed very well



SOFT: Notepad to keep bits of information

Users need applications aimed to collect

- * pictures
- * texts
- * urls
- * unicode texts
- * ..

How to implement?

- * integrated to desktop
- * based on Firefox?



SOFT: Web-site creator

08-88

Users need:

- * Main page
- * Downloads
- * Photo gallery
- * Forum

The program may bring many useful utilities and internet-libraries



SOFT: Personal databases

08-89

Manage:

- 1) Inventory
- 2) Customers
- 3) Assets
- 4) ..

Options today:

* Sundial Systems DBExpert is not available

* php + MySql



SOFT: The 1001-st graphics editor

08-89-b

! Don't try to create Photoshop clone

Simple editors with several functions.



SOFT: SIP-phone

#08-90

// Any user needs video-phones, internet-phones

Commercial solution is possible if > 1 million of customers (eComStation =~ $10\ 000$ users)

- => Open source solutions is the only way to go
- 1) Poor quality (poor SIP stack or poor user interface or ..)
- 2) SIP Phone for eComStation + WAV (PCM) was tested (not published)



SOFT: Improve some applications

#???

// concentrate on details!

- 1) Fast boot of Firefox
- 2) WorkPlace shell: operations with files/documents
- 3) OpenOffice.org static build
- 4) ..



Roles, questions and answers

#09-00

http://ecomstation.ru/community

-> Roles

















Developers of software

#09-05

How can I influence on eComStation?

USB-devices

Good design on PM apps

Technical reviews





Developers of software

#09-05

Old developers:

* change your specification (WPS -> Networking, PM -> REXX,)

New developers:

* Find eCS license, find documentation, find tasks...





Developers of software

#09-10

Q: Where is the toolkit?

Q: How to sell software?

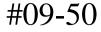
Q: What do users need?

Q: What is the roadmap of eCS development?

Q: What is new API of eCS 2.0?

DEV05
Developer
Connection







Companies working on eCS market:

- * Mensys / Serenity
- * eCo Software
- * AROA Informatik AG (Qt4 porting)
- * Netlabs.org

Q: Why companies don't invest into development of software for eCS?

- 1) the 2-nd life for frozen software
- 2) buy technologies (Windows/Linux) and port to eCS

// if you own a company then invest money, buy software/tech and port





#09-80

Q: How can I influence on eComStation popularity?

Method 1: Head the creation of add-ons:

- a) eComStation CD "web-server add-on"
- b) eComStation CD "download center (so people can use old PC with eCS)
- c) HowTo: "NAS based on eComStation"



Perspectives? eComStation is strong

- + Market of PC computers
- + The market exists already
- + eCS 2.0 is expected on 9 languages
- + N hundred applications
- + N hundred REXX scripts
- + Virtual machines
- + Fast, simple, supports SMP

Features:

- * object desktop
- * drag&drop
- * no viruses
- * requirements to hardware
- * REXX integration to..



FAQ: How to get more new applications?

New applications IF ..

More templates and libraries



#09-90

FAQ: Where is eComStation 7? I need it today!

Overstated expectations

eComStation differs from Windows/MacOSX/Ubuntu:

- * No large releases, every small update is very valuable (expensive)
- * Restricted support of hardware, always buy extra adapter

We don't plan to create a clone of Windows

eComStation is growing as compact comfortable for use platform.



FAQ: What to do with Bluetooth?

10-00



2009/october: Wi-Fi Direct (AKA WiFi peer-to-peer) (specification from Wi-Fi Alliance)

- + new kind of Wi-Fi network
- + direct Wi-Fi connections between devices
- + New devices to support connectivity with legacy devices

It can be implemented in any Wi-Fi device, from mobile phones, cameras, printers, and notebook computers, to human interface devices such as keyboards and headphones.



FAQ: USB Touch screen, multi-touch mouse, ..

10-05

- 1) USB touch screen.
- * Select 1 family of devices: ELO USB touchscreens and monitor panels.
- * Buy for 200 EURO
- * Implement control program in 1 week
- 2) Multi-touch mouse
- * select a family
- * buy the mouse / pad
- * port linux driver
- * release a library for developers of applications
- 3) USB web-camera:
- * select 1 model (Logitech), create a driver, library.



FAQ: What is reason to develop native software? #10-20

Example: Accounting software Example: PMView

Implement as OS/2-only version?

* application in web-browser

* Qt4-application OR

OR OS/2, Windows

native application?



FAQ: Open-source eComStation, Testing for FREE #???

- 1) Part of eCS is FREE / open source // open sourced when possible
- 2) Testing for FREE is impossible
- ?? BONUSes for testers!



FAQ: Poor-quality of software for eComStation

// eCS dev — labor-expensive. Many bugs in other sub-systems Step 1: Collect bugs, portal of bug-trackers

- 1) Internal competition
- 2) Guidelines (DevCon), suggestions via forums
- 3) More templates and libraries = simplify the development
- 4) Make the developers open-source the programs
- 5) Investors buy the program and invest into development



FAQ: How to make eCS competitive platform?

- #10-30
- eCS can't compete. Proof: a) Qt apps overcome native software,
- b) Users install VM, c) Users change the platform
- 1) Develop technologies and standards on the territory of eComStation village
- 2) Sort the list of needed applications/utilities/drivers.
- * All system utilities and simple applications => port using Qt4, GCC
- * All eCS developers should switch to the development of new technologies, don't make dirty work.
- // forum. -> discuss
- 3) All applications should be designed very well.
- Simple interface + colors + .. + internet usage
- // DevCon



FAQ: Is it possible develop OS using patching?

#10-80

This is the only way to develop the operating system today

Kernel patching (via ACPI)

"+" Yes, it's useful if we want to replace a function in the kernel "+"?

"-" difficult to extend API

Replacement of dll/exe

* New fake dll (new function + redirects to old dll)

! Making all efforts to create new components and modules.



Conclusion: Perspectives

30-10

- * PC is changing => eCS follows the changes
- * Old slogan: "We need more software, 50 shareware per year." No, 5 applications per year + **Quality software**
- * Users should promote the OS
- * "Government" reward, create infrastructure
- * Let's collect success stories about usage of eCS at home/office!
- eCS community it's a large corporation, discuss/develop all together



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Evolutionary sprint

http://ecomstation.ru/esway

