

Evolutionary Sprint 2009/11

Speaker: Eugene Gorbunoff

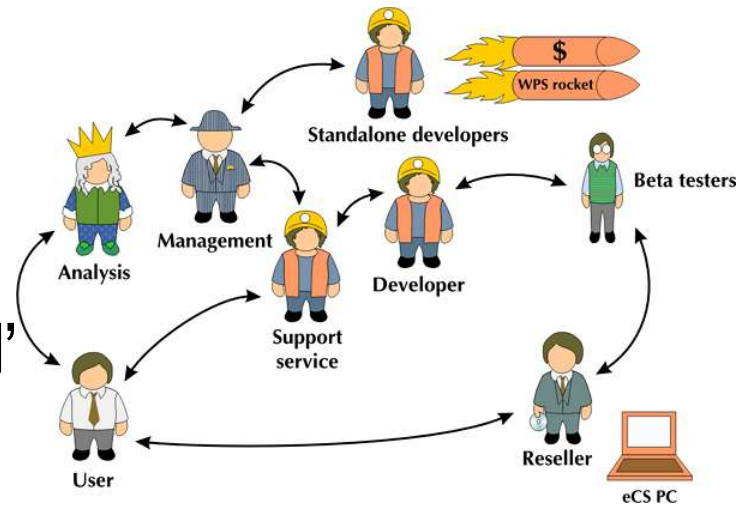


Perspectives of eComStation



2008/11

“Build non-sinking constructions”



2007/11

“Change your mind”



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)

What's new?
PC in 2010

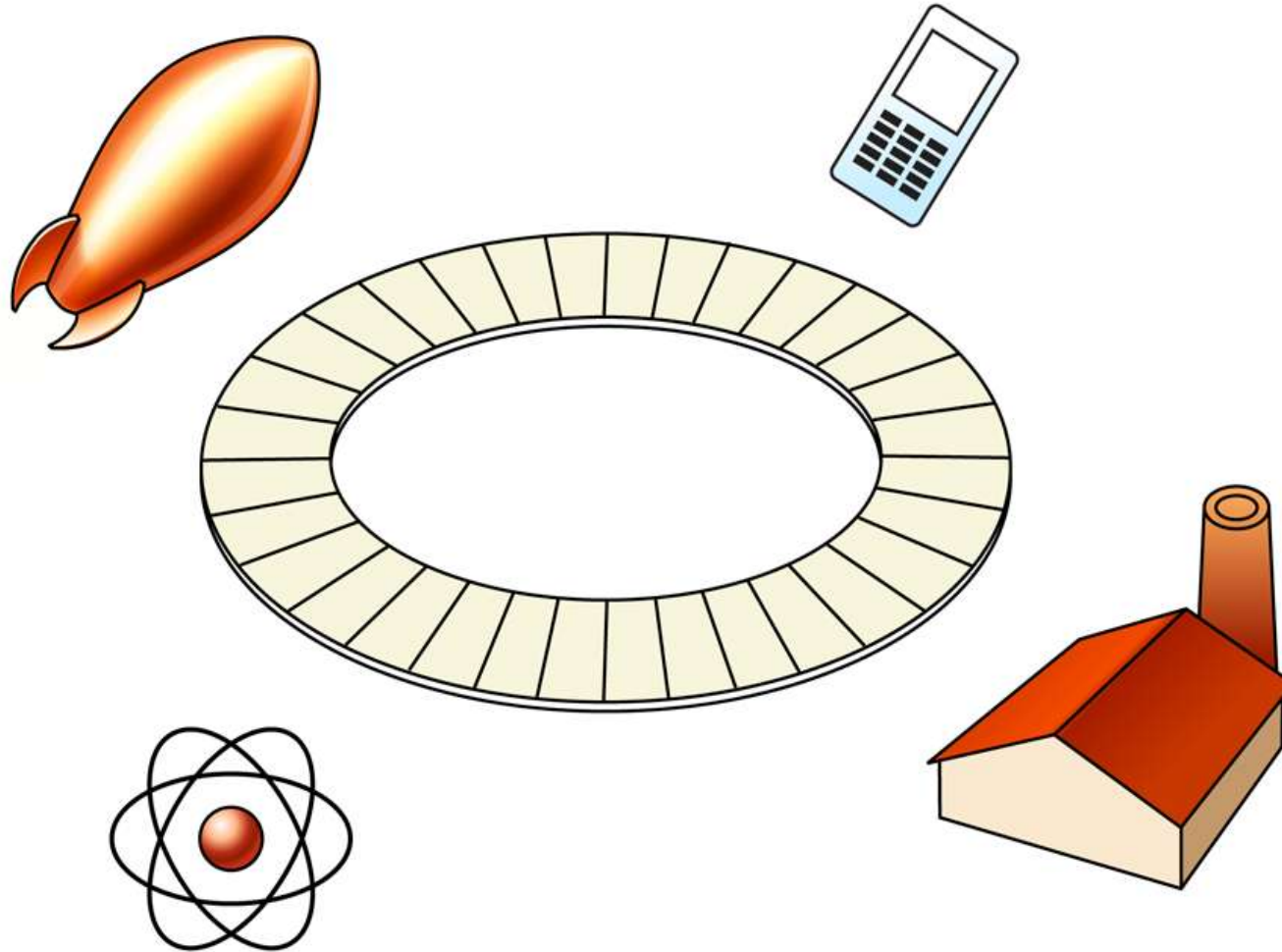
(B)

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

(C)

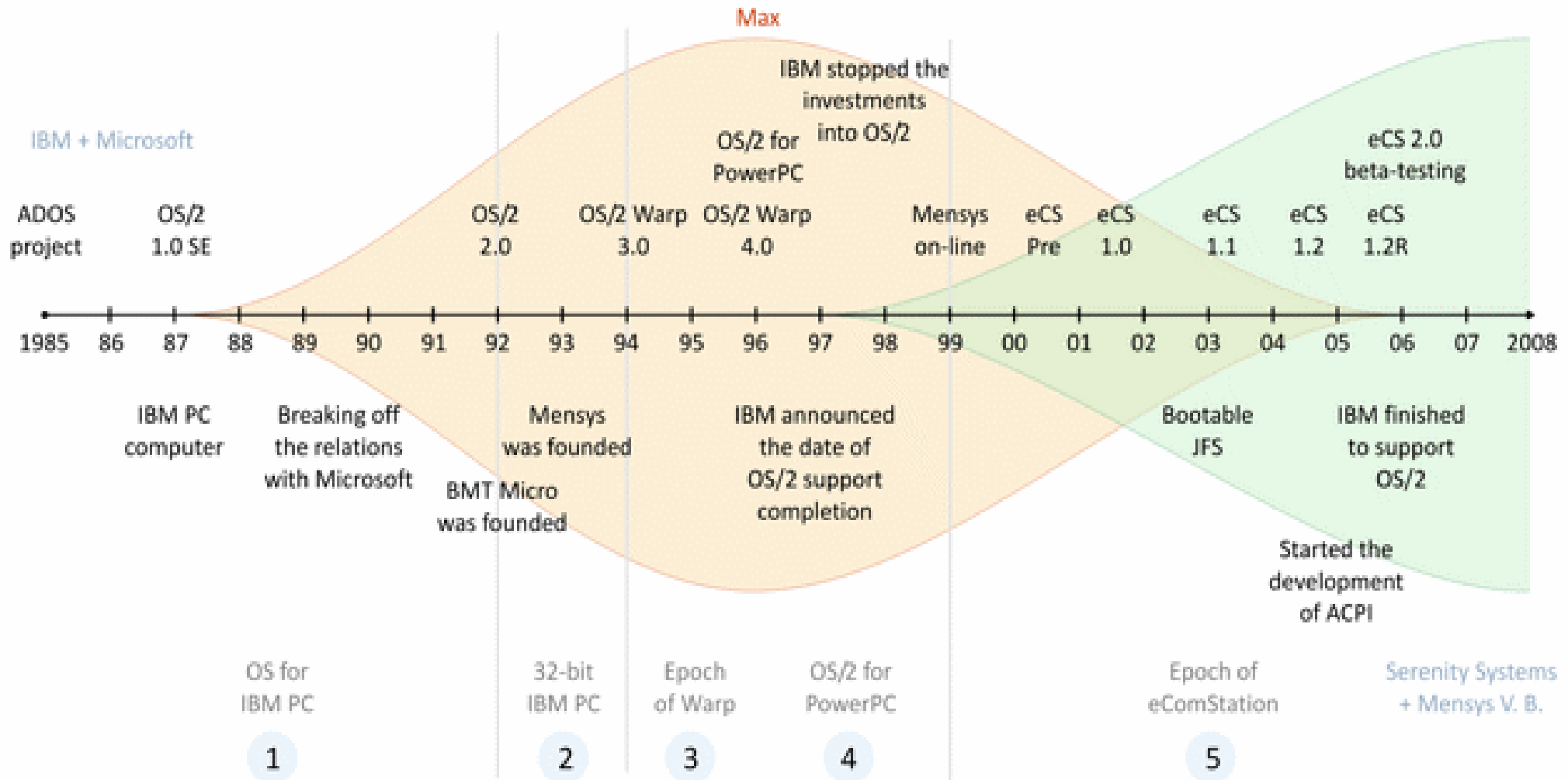
Roles
FAQ

Perspectives of eComStation



Perspectives of eComStation

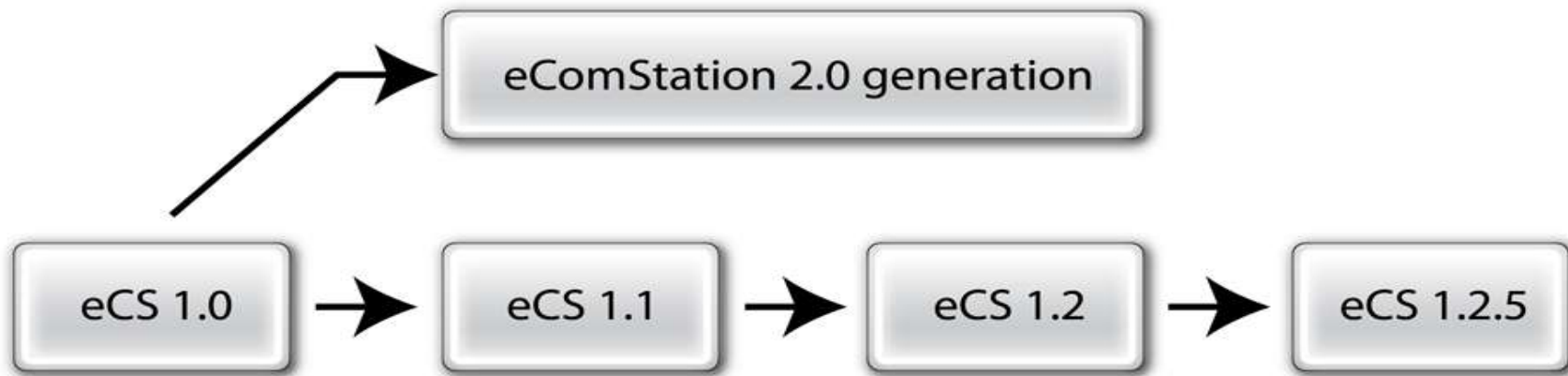
OS/2 - eComStation evolution



Perspectives of eComStation

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 compatibility (uconv.dll)
- * WPS associations // drink.milk.mp3

New sites (promo sites):

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

Perspectives of eComStation

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

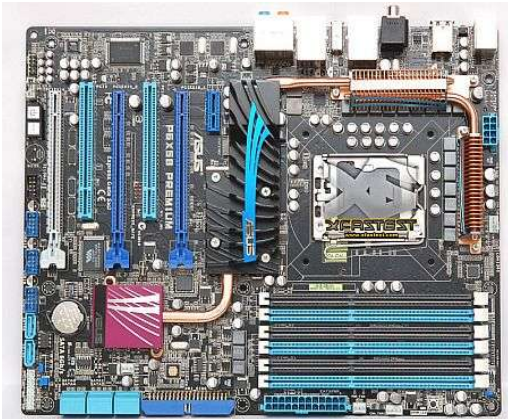
Perspectives of eComStation

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 monthes 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
- 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

Perspectives of eComStation

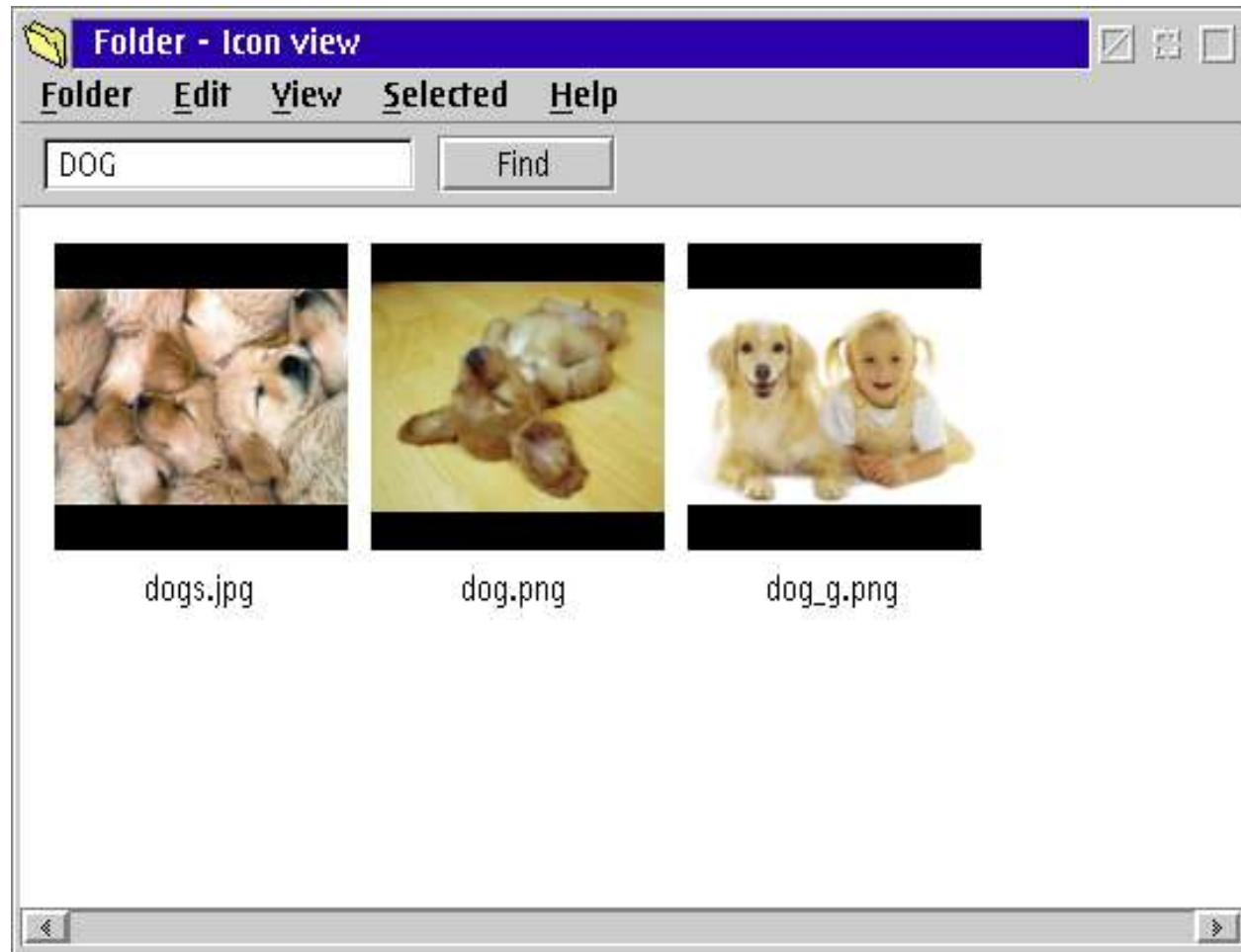


eComStation 3.0: Desktop search engine

#08-25

Search engine from
Yuri Dario

- * Beagle
- * WPS-folder

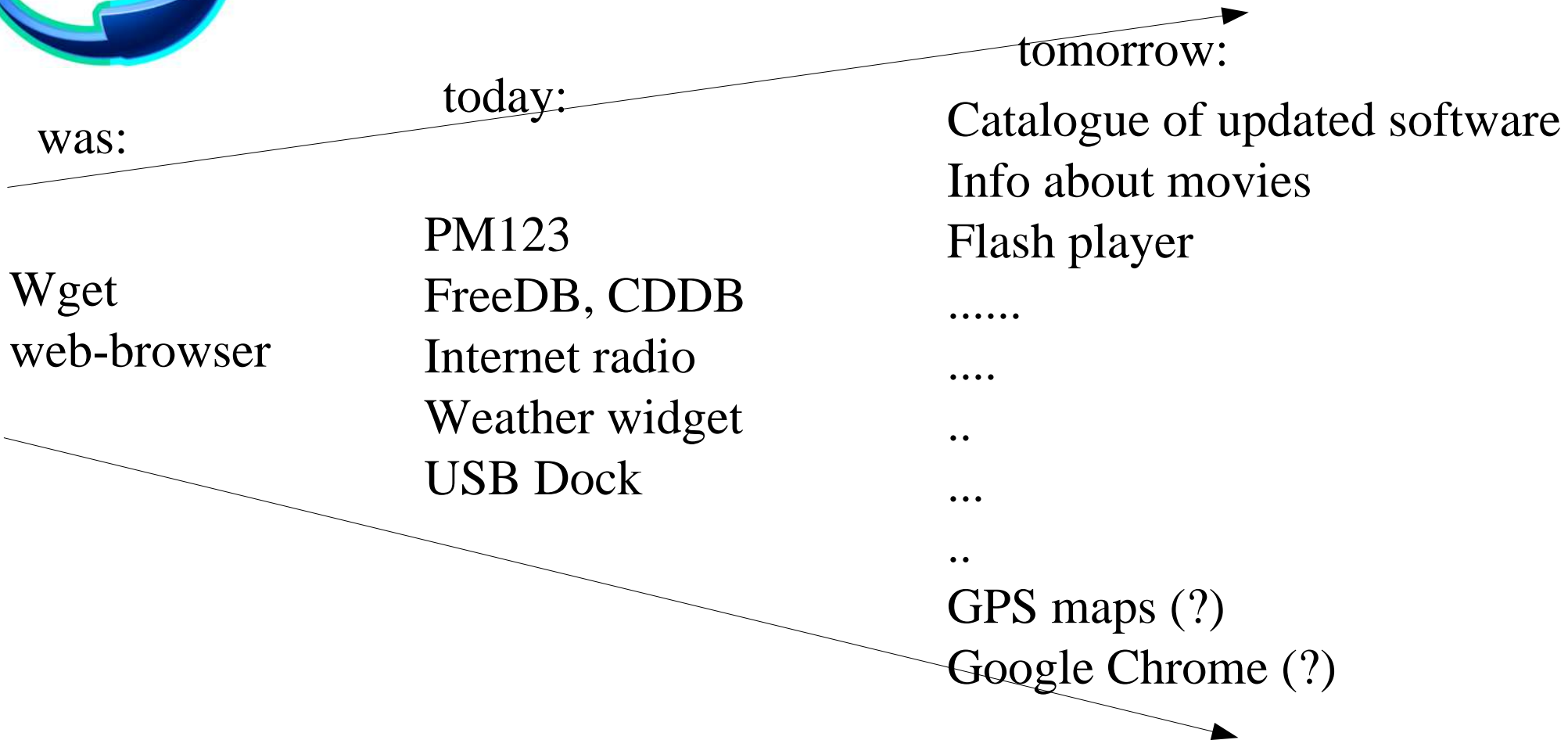


Perspectives of eComStation



eComStation 3.0: Internet applications

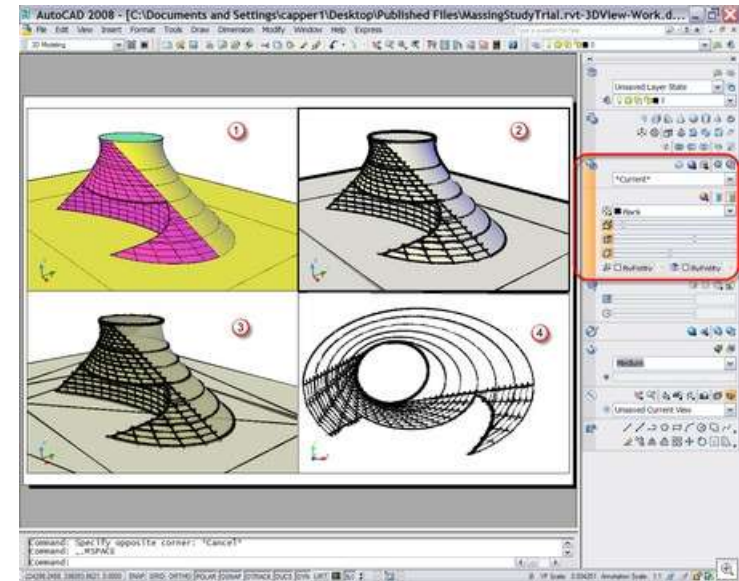
#80-30



Perspectives of eComStation

SOFT: Area of eComStation usage

#08-50



Perspectives of eComStation

SOFT: Area of usage #08-60

Axis X

Axis Y

Axis Z

Games

Standard PC

Student

Sci-tech labs

Notebooks

Home user

Office user

Office

Netbooks

Engineer

Businessman

Multimedia

Servers (medium)

..

.

CAD

...

...

Designer

Musician

SOFT: Extend area of usage

08-80

A.

Sci-tech = = = = = >

Multimedia = = >

Office = = >

B. School, universities

school - REXX

student - <http://ecomstation.ru/student>

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.

? Do we need more PMView-like applications?

// Yes, internal competition

SOFT: SIP-phone

#08-90

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

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

\Rightarrow 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!

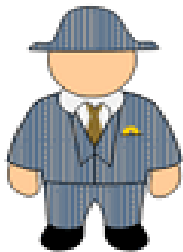
- 1) Fast boot of Firefox
- 2) WorkPlace shell: operations with files/documents
- 3) OpenOffice.org static build
- 4) ..

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..



#09-10

Developers of software

Q: Where is the toolkit?

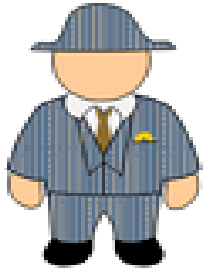
Q: How to sell software?

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



Fans (+ /roles)

#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 of 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: Where is eComStation 7? I need it today!

#09-90

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

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

- * 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

Perspectives of eComStation

This presentation is prepared by:

Joseph Shrago (solutions developer)

Ivan Smirnoff AKA Wizard (designer)

Yuri Prokushev (developer)

Dmitry Steklenev AKA Glassman (developer)

Dmitry Frolov AKA froloff (developer)

Andrey Vasilkin AKA Digi

Evolutionary sprint

<http://ecomstation.ru/esway>