



Planning

9:30	Renaud Lottiaux	Kerlabs plans for Kerrighed development
10:00	Christine Morin	Needs and Plans Concerning Kerrighed in the XtremOS Project
10:30	<i>Coffee break</i>	
11:00	Pascal Gallard	Kerrighed port on SMP machines
11:30	Renaud Lottiaux	Future developments in the container sub-system
12:00	Pascal Gallard	Communication system : current status and future developments
12:30	<i>Lunch</i>	
14:00	Louis Rilling	Process management : current status and future developments
14:30	Marko Novak	Customizable scheduler for SSI
15:00	John Mehnert	Container checkpointing
15:30	<i>Coffee break</i>	
16:00	Jean Parpaillon	Using GIT with the Kerrighed project ?
16:30	Renaud Lottiaux	Using Linux Test Project for Kerrighed testing
17:00	Open discussions	



Kerlabs plans for Kerrighed development



Renaud Lottiaux





Context: code maturity

- Kerrighed research project started 7 years ago
 - Lots of code written by many persons
 - Lots of nice features introduced
 - Very large visibility
- But...
 - Not any version has been really stable
 - No cluster installed as production machine
 - Code is too complex
 - Lots of code redundancy
 - Too much core developer turn-over
- It's time for a real “*production quality*” Kerrighed
 - Code refactoring
 - Strong stabilization effort



Context: Kerlabs, a business company

- Kerlabs is focused on open-source solutions
 - Use open-source solutions as much as possible
 - Develop open-source products as much as possible
 - Our main product : Kerrighed !
- However...
 - Our business model needs some proprietary code
 - Kernel (Kerrighed) level
 - All the core of Kerrighed will remain open-source
 - Proprietary value added pluggins
 - High-end NIC drivers, power-saving module, etc...
 - User level
 - Proprietary GUIs
 - Value added libraries
 - High performance distributed thread library, etc...



A step by step industrialization

- Software components of the 1.0.2 version will be industrialized one by one
 - 2.0: process management (summer 2007)
 - Automatic process load balancing
 - Global process management
 - SMP / 64 bits version
 - 3.0: memory management (spring 2008)
 - Distributed threads
 - Remote memory paging
 - 4.0: file management (winter 2009)
 - Distributed file system
 - 5.0: introduction of high availability for user applications



Not scheduled topic of interest

- Node addition removal (probably in 2007)
- Checkpoint of sequential applications (probably in 2007)
- High availability of Kerrighed (probably 2008)
- Fault tolerant distributed file system (2010 ?)



Short Term Schedule

- Late February
 - Start the port on a newer kernel
- Mid March
 - Start the port of SMP
- Late June / July
 - Start the port on 64 bits machines



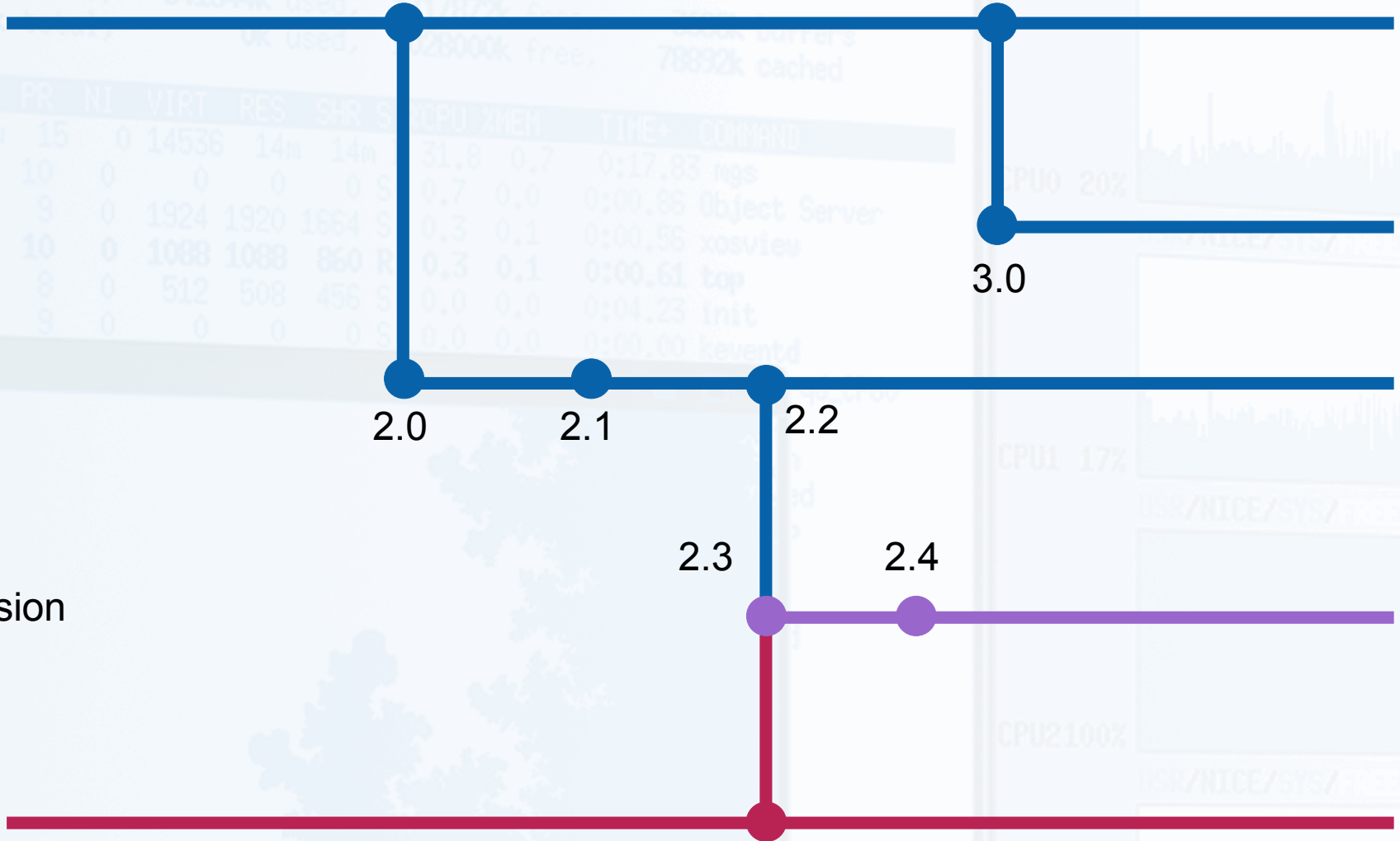
Version Management

Open Source
SVN Code

Public version

Production version

Proprietary
SVN code





Code Management

- SVN is now opened without any restriction
 - kerrighed.dev mailing list is also fully opened.
- Move the code in a “neutral” area
 - Source forge
 - Savannah
 - Gna!
 - Google code
- Switch to GIT ?



Web site Management

- Move the Kerrighed web site on a “neutral” server
- Leave only open-source related informations
 - Business informations on the Kerlabs web-site
 - Research informations on the INRIA web-site
 - A link to these informations from the Kerrighed site