



# Planning

<b>9:15</b>	<b>Renaud Lottiaux</b>	<b>Introduction</b>
<b>9:30</b>	<b>Adrien Lebre</b>	<b>kDFS overview</b>
<b>10:00</b>	<b>Paulo Lopes</b>	<b>GFS overview</b>
<b>10:30</b>	<b><i>Coffee break</i></b>	
<b>11:00</b>	<b>Louis Rilling</b>	<b>Runtime configurable scheduler framework</b>
<b>11:30</b>	<b>John Mehnert Spahn</b>	<b>Incremental checkpoint</b>
<b>12:00</b>	<b>Matthieu Fertré</b>	<b>IPC and checkpointing</b>
<b>12:30</b>	<b><i>Lunch</i></b>	
<b>14:00</b>	<b>Christine Morin</b>	<b>XtreemOS plans for the Kerrighed project</b>
<b>14:15</b>	<b>Erich Focht</b>	<b>Kerrighed and Virtualization</b>
<b>14:45</b>	<b>Rainer Finocchiaro</b>	<b>SCI and Kerrighed</b>
<b>15:00</b>	<b>Renaud Lottiaux</b>	<b>Open discussion: file systems</b>
<b>16:00</b>	<b><i>Coffee break</i></b>	
<b>16:30</b>	<b>Pascal Gallard</b>	<b>Open discussion: cluster reconfiguration</b>
<b>17:30</b>		<b>Open discussion: misc</b>



## Introduction

Renaud Lottiaux



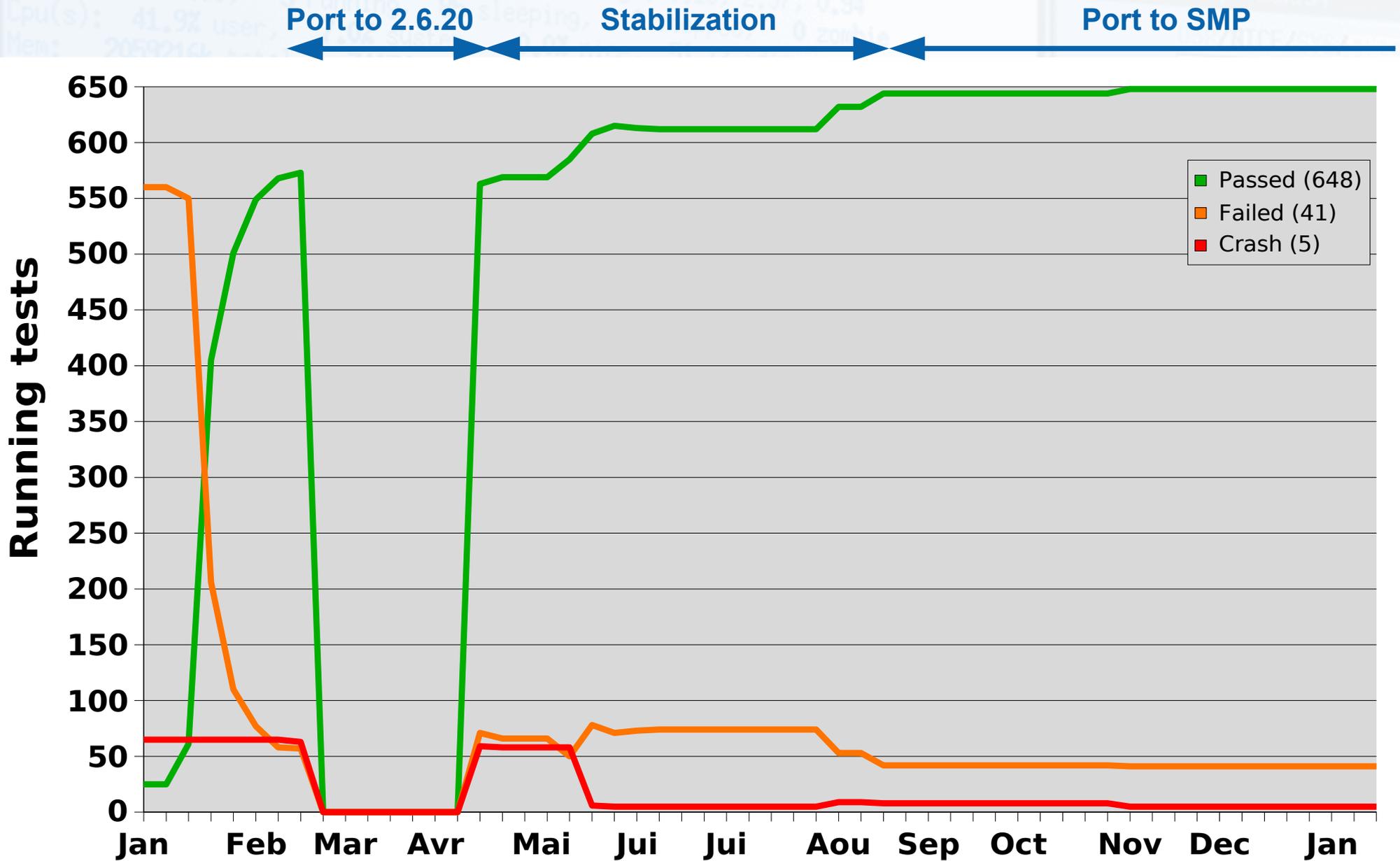


# What's new since last summit ?

- Port to 2.6.20
- Port to SMP
- Code stabilization
  - More and more tests are running with KrgLTP
    - Tons of bug fixes
    - Missing feature fix
      - IPC + tons of missing code in corner cases
  - Major memory leak fixes
    - O(100 MB) memory leak per LTP in January
    - O(1 MB) memory leak today



# Evolution of running tests with KrgLTP





## What's new since last summit ? (con'd)

- New scheduler infrastructure
- Full IPC support
- New networking stack
  - Use of TIPC instead of the “home made” comm layer.
- 64 Bits (still on going)



# Releases

- ▣ 2.0.0 : March'07
  - ▣ End of the 2.6 port (2.6.11)
- ▣ 2.1.0 : June'07
  - ▣ Port to 2.6.20
- ▣ 2.1.1 : August'07
  - ▣ Minor fixes
- ▣ 2.2.0 : November'07
  - ▣ SMP support
- ▣ 2.2.1 : January'08
  - ▣ Minor fixes
- ▣ 2.3.0 (planned)
  - ▣ 64 bits support
- ▣ 6 releases in one year !
  - ▣ The project has never been so active



## On Going Work

- 64 bits (Kerlabs team)
- Last SMP bug fixes (Kerlabs team)
- Swap and injection support (Renaud)
- Checkpoint/restart of distributed processes (Matthieu / John)
- kDFS (Adrien)
- Still lot of debugging (Kerlabs team)



# Kerlabs Roadmap

		V 2.2.0	V 2.3.0	2008
Memory	Memory sharing	Red	Red	Red
	Injection	Red	Red	Green
Disk	Distributed FS	Orange	Orange	Orange
	Unique file name space	Green	Green	Green
Processor	Process migration	Green	Green	Green
	Thread migration	Red	Red	Red
	Scheduler	Green	Green	Green
	Unique PID space	Green	Green	Green
	Advances features	Green	Green	Green
IPC	Memory segments	Green	Green	Green
	Message queues	Green	Green	Green
	Semaphores	Green	Green	Green
Communications	Migrable streams	Red	Red	Green
	High performance	Orange	Orange	Orange
Checkpoint	Process	Orange	Orange	Orange
	Applications	Orange	Orange	Orange
	Open files	Red	Red	Red
Misc	64 bits support	Red	Green	Green
	SMP support	Orange	Green	Green
	Overall stability	Green	Green	Green
	Node addition/removal	Orange	Orange	Green
	System high availability	Red	Red	Orange



# KrgLTP Policy Roadmap

- KrgLTP must follow the support of SMP and 64 bits
  - No commit in the trunk which could break this new support
- Current reference cluster
  - 32 bits machines
  - SMP
- February / March
  - 64 bits machines
  - SMP
- New LTP test script
  - krgltp-smp.sh
    - Will soon become the official one



# Community

- Regular developer phone conference
  - Regular conference (1 hour / 2 weeks ?)
  - Open to every Kerrighed developer
- New community forge to host the code
  - Migration to GIT is more and more likely to happen
  - Which GIT server ?
    - Still an open discussion
    - Kerlabs is thinking in hosting a public GIT server
- Kerlabs will soon open a public LXR server
  - Full LXR server with most previous versions of Kerrighed