

# **Technical specifications for Mandriva Linux 2009**

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### Revision History

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initial version

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# Introduction

This document describes the ideas of new functionalities or improvements for Mandriva Linux 2009 products. Each part has an author which can answer questions if some things are unclear (Author field), a version (Version field), an id (Id field) to identify uniquely the part for external reference, a person and a team responsible for the realisation (Implementor and Team fields), a Priority field between 0 and 3 (3 being the more priority) and a Status field to show the development status.

# Chapter 1. Main focus

The main focus of Mandriva Linux 2009 is . A non exhaustive list of the main changes is:

- No critical bugs in bugzilla and test plans for the major components in testzilla.

The products derived from the developments are:

- Free
- One
- PowerPack

The version of the main components will be:

- gcc 4.3
- KDE 4.1
- GNOME 2.24
- kernel 2.6.26 (estimation)

# Chapter 2. Distribution Core

## 2.1. Kernel

Author	Anne NICOLAS
Version	0.1
Id	spec100
Team	core
Implementor	
Priority	
Status	

### 2.1.1. Switch to libata

Implementor	Kernel team
Priority	3
Status	0%

#### 2.1.1.1. General specifications

switch to libata : validated and started right now. Will need some more tests to check any regression that may occur for eample on JMicron, pata AMD... This is high priority to avoid nasty bugs later in Cooker.

### 2.1.2. Stable ABI for modules

Implementor	Kernel team
Priority	3
Status	0%

### 2.1.2.1. General specifications

We need to get a complete policy on that point. Bogdano started work on it and we need to get common position and write it down.

### 2.1.3. Kernel packages set

Implementor	Kernel team
Priority	3
Status	0%

#### 2.1.3.1. General specifications

List of kernel flavours has been validated now. We will remove laptop kernel and keep only 3 flavours, server, desktop and desktop586.

### 2.1.4. Improve DKMS management

Implementor	Kernel team, oblin@mandriva.com
Priority	3
Status	0%

#### 2.1.4.1. General specifications

Allow to reuse binary DKMS packages if kernel ABI has not changed, instead of rebuilding them. Bogdano is already working on that. We should also have a close look to weak-modules in RedHat.

## 2.2. Boot

Author	Anne NICOLAS
Version	0.1
Id	spec101
Team	Distribution Core
Implementor	
Priority	3
Status	

### 2.2.1. Improve boot time

Implementor	Engineering team
Priority	3
Status	10%

#### 2.2.1.1. General process

Work to be done in 3 main steps:

- collect concrete data (with bootchart) on our boot process to get a complete view of what can be improved
- collect internal practises about implementation of boot time improvements (OEM team, general ideas...)
- try to merge OEM hacks (if they are clear) or fix the root cause which requires those hacks
- list final points of identified improvements and implement in Cooker
- evaluate if readahead can improve boot time
- evaluate if prelink can improve boot time

#### 2.2.2. GFXBoot bugs

Implementor	pixel@mandriva.com
-------------	--------------------

Priority	3
Status	0%

### 2.2.2.1. GFXBoot freeze

GFXBoot freezes on some systems, preventing boot.

### 2.2.3. Switch to GRUB2 ?

Implementor	pixel@mandriva.com
Priority	0
Status	0%

#### 2.2.3.1. switch to grub2

We need to wait for SUSE to switch to GRUB2 so we get gfxboot for it.

### 2.2.4. Ghost compliant mode for GRUB

Implementor	pixel@mandriva.com
Priority	0
Status	0%

#### 2.2.4.1. Add Ghost compliant mode to our grub installation

Unlike some distributions (Fedora), our way to install grub is not compatible with Ghost.

## 2.2.5. initscript improvements

Implementor	oblin@mandriva.com
Priority	3
Status	0%

### 2.2.5.1. initscript improvements

Fedora has replaced rc.sysinit by upstart, starting with Fedora 9. This mean initscripts will probably no longer be maintained by Redhat soon. We should check upstart and see if it fits our needs (and doesn't duplicate with prcsys).

## 2.2.6. splashy boot splash

Implementor	oblin@mandriva.com
Priority	3
Status	0%

### 2.2.6.1. Splash boot splash

Bootsplash is not longer official supported by upstream (but SUSE is still using it) and is being slowly replaced by splashy. Splashy is supported by an upstream community and works on non VESA platform (ie Loongson).

## 2.3. Packaging System

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec102

Team	Core
Implementor	
Priority	3
Status	

### 2.3.1. Underlinking / Overlinking

Implementor	pixel@mandriva.com
Priority	3
Status	0%

#### 2.3.1.1. Underlinking / Overlinking

Some programs or libraries might not be linked with all the libraries they are using, but can still build correctly, obtaining those needed libraries by linking transitivity. This can prevent detecting when a rebuild is needed when library ABI changed. It also prevent prelink to work correctly.

Libtool (and pkg-config) is always trying to link libraries / binaries with all dynamic libraries in the linking chain, not only the one requested by Makefile. This can slow dynamic linker for applications startup and clutter rpm database for programs / libraries dependencies.

Distribution will be fully rebuild automatically to detect failure and maintainers will have to fix build failure.

### 2.3.2. LZMA in RPM

Implementor	pixel@mandriva.com
Priority	3
Status	0%

### 2.3.2.1. LZMA in RPM

LZMA is supported in Mandriva RPM since 2008.0. This prevent easy upgrade from 2007.1 to 2009.0 using urpmi --auto-select. An updated package should be pushed to 2007.1 through update channels to allow easy upgrade from 2007.1 to 2009.0 without requiring drakX.

Contingency plan : if this package can't be created, "auto-select" upgrade should be advertised only for distributions 2008.0 and newer. Older distributions should use DrakX installer upgrade.

### 2.3.3. Orphans in urpmi

Implementor	pixel@mandriva.com
Priority	3
Status	0%

#### 2.3.3.1. Orphans in urpmi

Installing and uninstalling (or upgrading) packages often leave orphan packages, pulled by dependencies, installed on system, cluttering the system after a lot of upgrades / install-uninstall cycles. urpmi should track such packages at install time and should uninstall them when they are not needed (this behaviour should be configurable). apt-get has such a feature called "autoremove"

### 2.3.4. Mirror handling, based on geographical localisation

Implementor	pixel@mandriva.com
Priority	3
Status	0%

#### 2.3.4.1. Mirror handling, based on geographical location

Mandriva 2008.1 introduced autoconfiguration for mirrors, based on system timezone. It proved to work quite well and geoup server to improve this location is probably overkill. A better way to improve

location would be to ask for user localisation on a map (with timezone selection available as fallback). This information could also be used for weather forecast.

### 2.3.5. Aria2 improvement for urpmi

Implementor	Aurelien Lefebvre <alefebvre@mandriva.com>
Priority	3
Status	0%

#### 2.3.5.1. Better mirror fallback

Aria2 (already supported in urpmi on 2008.1) has been designed to download large files (ISO) from many file servers (ftp/http) at the same time or be able to fallback if one server is not available and also to choose faster server. We would like to get Aria2 development team to try to handle issues we are seeing with small files (ie packages). Aurelien will try to explain those issues to upstream and fix those with them.

### 2.3.6. Always configure all available urpmi sources

Implementor	tvignaud@mandriva.com, pixel@mandriva.com
Priority	3
Status	0%

#### 2.3.6.1. Always preconfigure all available urpmi sources by default

Currently, installer only configure updates repository (when user ask for it) and edit-rpm-sources ask if people want "full sources" or "update sources". This choice is too complex for users (and badly worded). Moreover, it complexifies security updates, when new dependencies on packages already available in main repository are needed in update packages. With new xml format for package repository, adding all sources by default should not require too much bandwidth for users. MandrivaUpdate will need to be modified to search for packages in both updates and main packages when resolving dependencies for package updates.

## 2.3.7. rpm rebuild bot

Implementor	tvignaud@mandriva.com
Priority	2
Status	0%

### 2.3.7.1. RPM rebuild bot

Due to many changes in cooker distribution, rpm packages might become unbuildable without people noticing. This problem could be mitigated by setting up a rpm rebuild server which would periodically rebuild distributions (a full rebuild take about 2 days) and post results automatically on web pages, with logs and so on. rpm-rebuilder script can handle things. This doesn't ensure 100% of build dependencies are correct.

Another orthogonal problem is being able to rebuild and submit a set of packages automatically. This would imply using iurt and would ensure build dependencies are correct. Such build would be much more slower than using rpm-rebuilder.

## 2.3.8. urpmi backend for PackageKit

Implementor	alefevre@mandriva.com
Priority	2
Status	70%

### 2.3.8.1. urpmi backend for PackageKit

## 2.4. Switch to gcc 4.3

---

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec103
Team	Core
Implementor	pixel@mandriva.com
Priority	3
Status	0%

### 2.4.1. Abstract

switch to gcc 4.3

### 2.4.2. Benefit

better performance, faster compile time, less compilation bugs

### 2.4.3. Switch to gcc 4.3

All major distributions have switched (or are switching) gcc 4.3. It allows better performance for generated code, faster compile time (specially on C++) and fixes some compilations bugs.

Not all packages will rebuild cleanly with gcc 4.3. A lot of patches fixing those problems are available in Fedora / SUSE / Debian / Gentoo. We need to rebuild completely the distribution (using rpm-rebuilder or iurt) to detect those failure in advance.

## 2.5. GDB update

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec104
Team	Core
Implementor	herton@mandriva.com
Priority	3

Status	0%
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### 2.5.1. Abstract

gdb update

### 2.5.2. Benefit

resync with upstream, easier maintainance

### 2.5.3. gdb update

Currently, our gdb package contains a lot of patches which might not be relevant, compared to last upstream gdb release and prevent upgrading gdb to latest upstream version.

Patches should be reviewed, forwarded upstream (if needed) and package should be upgraded to latest upstream version.

## 2.6. Security framework

Author	Anne NICOLAS
Version	0.1
Id	spec105
Team	core
Implementor	kernel team, vdanen@mandriva.com
Priority	3
Status	0%

### 2.6.1. Abstract

Define security framework to be used in Mandriva distributions. Then provide GUI for users so that it can be a useful functionality.

### 2.6.2. Benefit

Make final choice on a maintained project providing also real usable GUI for end users and make it really part of 2009 functionalities

### 2.6.3. General specifications

This will be done in 2 steps

- Review and test existing solutions. For now it's AppArmor versus Smack. Luiz, Herton and Vincent will have a look on it.
- Implement chosen framework and provide GUI either upstream project or Mandriva tool

## 2.7. Password hardening

Author	Anne NICOLAS
Version	0.1
Id	spec106
Team	core
Implementor	vdanen@mandriva.com
Priority	3
Status	90%

### 2.7.1. Abstract

Switch to TCB PAM module, replacing shadow password

## 2.7.2. Benefit

Better password security

## 2.7.3. Password hardening

TCB PAM module allows to separate each user password in a different file, only accessible by this user. Moreover, TCB PAM module is backward compatible with old shadow password.

## 2.8. Xorg 7.4 ?

Author	Anne NICOLAS
Version	0.1
Id	spec107
Team	core
Implementor	ander@mandriva.com.br
Priority	3
Status	0%

### 2.8.1. Abstract

Decide if we switch to Xorg 7.4 or keep 7.3

### 2.8.2. Benefit

### 2.8.3. Xorg 7.4

We need to decide if we switch Mandriva 2009.0 to Xorg 7.4 or not. It will depend on availability of Nvidia and ATI closed-source drivers in the timeframe of 2009.0 release.

# Chapter 3. Mandriva Tools

## 3.1. Windows migration tool

Author	Anne NICOLAS
Version	0.1
Id	spec200
Team	Tools
Implementor	oblin@mandriva.com, salem@mandriva.com
Priority	3
Status	0%

### 3.1.1. Abstract

Complete set of fonctionnalities of Transfugake, adding mail migration and dual boot management in term of data.

### 3.1.2. Benefit

Provide a complete tool to help beginners migrating to Mandriva Linux

### 3.1.3. General specifications

2 main fonctionnalities need to be implemented to complete existing one:

mails migration: Transfugdrake should be able to propose migration of main mail clients, Outlook and Mozilla Thunderbird. This can be done using existing backend tool included in Mozilla Thunderbird migration tool. Salem can help on that point

dual boot management: provide a way to manage user data using symbolic link and keep synchronised data between Windows and Linux systems.

## 3.2. Printerdrake future

Author	Anne NICOLAS
Version	0.1
Id	spec201
Team	Tools
Implementor	salem@mandriva.com
Priority	3
Status	5%

### 3.2.1. Abstract

Compare pinterdrake and system-config-printer to check if Printerdrake could be replaced as printer management tool.

### 3.2.2. Benefit

### 3.2.3. General specifications

Upload new package for system-config-printer in Cooker to test fonctionnalities scope and integration in distibution. Take finale decision before beginning of July. Check integration in Mandiva Contol Center to keep centralization of administration tools.

Manage contact with upstream developper for coming maintainance.

## 3.3. drakguard improvements

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec202
Team	Tools

Implementor	oblin@mandriva.com
Priority	3
Status	0%

### 3.3.1. Abstract

add applications launch restriction, time based connection restriction

### 3.3.2. Benefit

More control for anxious parents

### 3.3.3. drakguard improvements

Drakguard is missing the following features :

- Prevent launching specific applications
- block / allow network connection based on system time

## 3.4. network tools memory footprint reduction

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec203
Team	Tools
Implementor	oblin@mandriva.com
Priority	3
Status	0%

### 3.4.1. Abstract

Reduce memory footprint of Mandriva network tools

### 3.4.2. Benefit

Useful for OEM / small systems

### 3.4.3. drakguard improvements

Mandriva network tools (netapplet / network center) should be improved regarding their memory usage.

## 3.5. Draksnapshot restore tools

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec204
Team	Tools
Implementor	fcrozat@mandriva.com boiko@mandriva.com
Priority	3
Status	0%

### 3.5.1. Abstract

Integrated UI in nautilus and Dolphin (or konqueror) should be created to access / restore draksnapshot backups

### 3.5.2. Benefit

Easier file restoration

### 3.5.3. GNOME and KDE UI for draksnapshot restore

Draksnapshot backup are currently not easily restorable. A native UI, integrating in Nautilus and Dolphin should be written. To prevent code duplication, a D-Bus service doing most of the work should be written and two UI frontend (one for nautilus and one for dolphin) would take care of plugging backups to file managers

## 3.6. 3G features request

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec205
Team	Core
Implementor	oblin@mandriva.com
Priority	3
Status	0%

### 3.6.1. Abstract

good 3G support imply : download (and upload) quotas, PIN/PUK code management, operator selection

### 3.6.2. Benefit

Better hardware support for USB 3G keys

### 3.6.3. 3G/3G+ features request

With 3G/3G+ subscriptions becoming broadly available, some features are missing from drakxtools / netcenter / netapplet :

- quota support
- PIN/PUK code management
- operator selection

## 3.7. kiosk mode for MCC

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec206
Team	Core
Implementor	tvignaud@mandriva.com
Priority	3
Status	0%

### 3.7.1. Abstract

some OEM want to prevent starting some tools from MCC

### 3.7.2. Benefit

Better adaptability with OEM or big deployment, could be used for parental control too

### 3.7.3. MCC should support hiding some icons

A configuration file should allow administrator to hide some parts of MCC, preventing startup of some tools.

## 3.8. Live upgrade

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec207
Team	Core
Implementor	tvignaud@mandriva.com dlallement@mandriva.com
Priority	3
Status	0%

### 3.8.1. Abstract

Mandriva Online should notify user a new version of the distribution is available and should propose to upgrade it without using installer

### 3.8.2. Benefit

Stay competitive compared to Ubuntu, show urpmi power to handle this

### 3.8.3. Live upgrade

urpmi has been able to upgrade distributions for years but this feature has always been flagged as "not supported". Moreover, we have no way to notify users a new version of their distribution is available (it is specially problematic when a distribution is EOL). We need to do the following :

- Notify user, through mdvapplet a new distribution is available
- check no post configuration is done when upgrading using drakX installer (this mean package upgrade is enough for all upgades)
- check if X will be able to restart (reconfigure it if needed)
- setup older distribution installation (with maximum packages installed), create image for them in QA for upgrade test and run upgrade

## 3.9. PolicyKit integration in Mandriva Tools

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec208
Team	Core
Implementor	tvignaud@mandriva.com
Priority	3
Status	0%

### 3.9.1. Abstract

Some of our tools requires root privilege, which is achieved through usermode. PolicyKit would allow easier management for this and would ensure UI is never run as root

### 3.9.2. Benefit

Better security, fine grain configuration, MCC running as user

### 3.9.3. PolicyKit integration

usermode is slowly being deprecated (and has always been painful to setup), in favor of PolicyKit, which is cross distribution and cross desktop (KDE port in progress). This would allow MCC to be started as user and drakxtools would require privilege only when committing changes to configuration. It would also simplify fine grain configuration for those ACL.

## 3.10. Mandriva One improvements

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec209
Team	Core
Implementor	oblin@mandriva.com
Priority	3
Status	0%

### 3.10.1. Abstract

One should be improved for boot speed, ISO size, setting languages based on timezone (from installer new work), removing unneeded packages at install time and install packages needed

### 3.10.2. Benefit

Better user experience for One users

### 3.10.3. One improvements

One should be improve on the following aspects:

- boot speed (with file reordering when generating ISO)
- ISO image size (better package selection)
- improved language selection (based on timezone and new work from isntaller)
- install / uninstall packages after initial ISO dump on disk, based on hardware configuration

## 3.11. New design for installer

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec210
Team	Core
Implementor	pixel@mandriva.com tvignaud@mandriva.com
Priority	3
Status	0%

### 3.11.1. Abstract

Update installer with new design from LN

### 3.11.2. Benefit

Better user experience for install

### 3.11.3. New design for installer

Installer design is quite old now (still ok) and need to be refreshed to stay ahead of competition.

## 3.12. libparted port of diskdrake

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec211
Team	Core
Implementor	pixel@mandriva.com
Priority	3
Status	0%

### 3.12.1. Abstract

diskdrake is currently have its own code to handle partitioning. It should be ported to libparted

### 3.12.2. Benefit

Less development for Mandriva, add support for GPT partitions

### 3.12.3. port diskdrake to libparted

Disks above TB capacity are become available to average consumer and we are hitting 2 or 4TB limit from DOS partition format. We need to switch to GPT (or any other relevant format) and to get this support, it would be easier to port diskdrake to use libparted.

## 3.13. improve installer profiles based on hardware

Author	Frederic Crozat <fcrozat@mandriva.com>
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Version	0.1
Id	spec212
Team	Core
Implementor	pixel@mandriva.com
Priority	3
Status	0%

### 3.13.1. Abstract

hardware profiles in installer are not and might not be relevant to current hardware available now.

### 3.13.2. Benefit

Better tuned distributions for heterogenous hardware configuration

### 3.13.3. Improve installer hardware profile

Hardware related package install profile is no longer up to date with current hardware. It should be updated with current hardware available, ensuring not too many packages are installed on systems.

## 3.14. Drakxtools UI review

Author	Anne Nicolas<anicolas@mandriva.com>
Version	0.1
Id	spec213
Team	Core
Implementor	anicolas@mandriva.com
Priority	3
Status	0%

### 3.14.1. Abstract

Review UI of various drakxtools (based on community reviews and internal review) and try to improve UI

### 3.14.2. Benefit

Continue to ship best configuration tools across Linux distributions

### 3.14.3. Review and improve Drakxtools UI

Several community members have started reviewing drakxtools UI and we plan to improve those reviews when needed and fix our tools, whenever it is possible.

## 3.15. Provide popularity attribute for packages

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec214
Team	Tools
Implementor	tvignaud@mandriva.com
Priority	2
Status	0%

### 3.15.1. Abstract

Add popularity parameter for packages in rpmdrake.

### 3.15.2. Benefit

Help people to choose application to be installed

### 3.15.3. Provide popularity attribute for packages

rpmstats is existing now for years and not used at all. This could provide helpfull information both for distribution components choice and end users.

Use rpmstats database to provide needed information. Add rpmstats in a more visible way in general tools

## 3.16. Provide options on updates frequency

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec215
Team	Tools
Implementor	tvignaud@mandriva.com
Priority	3
Status	0%

### 3.16.1. Abstract

Add option to allow user to plan updates

### 3.16.2. Benefit

### 3.16.3. Provide options on updates frequency

Use cron or anacron to provide personnalized options on mdvonline

## 3.17. Show type of update in mandrivaupdate

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec216
Team	Tools
Implementor	tvignaud@mandriva.com
Priority	3
Status	0%

### 3.17.1. Abstract

Show type of update in mandrivaupdate: fix, security, etc..

### 3.17.2. Benefit

improve Mandriva tools UI

### 3.17.3. Show type of update in mandrivaupdate

Show type of update in mandrivaupdate

## 3.18. Improve user information in rpmdrake

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec217
Team	Tools
Implementor	tvignaud@mandriva.com
Priority	3
Status	0%

### 3.18.1. Abstract

Improve kind of user feedback to help in better comprehension of what happens in rpmdrake

### 3.18.2. Benefit

### 3.18.3. Improve user information in rpmdrake

Move general messages from bottom of rpmdrake and find proper way to provide it. Ex: if nothing has been found in search, it must be more visible.

## 3.19. Urpmi media auto configuration in all products

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec218
Team	Tools
Implementor	pixel@mandriva.com
Priority	3
Status	0%

### 3.19.1. Abstract

Allow installer to auto configure installation media to make user life easier

### 3.19.2. Benefit

Increase simplicity of general use of distribution

### 3.19.3. Urpmi media auto configuration in all products

Auto configure media at the end of installation using same way as in One. Set of media should take into account range of product. Ex: do not add non-free media in Free installation

## 3.20. Help user in partitioning his disks

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec219
Team	Tools
Implementor	pixel@mandriva.com
Priority	3
Status	0%

### 3.20.1. Abstract

When user reaches partition step, he frequently do not even recall what is exactly on each of these existing partitions. Installer will allow him to browse at least content for root of each partition

### 3.20.2. Benefit

Increase simplicity of general use of distribution

### 3.20.3. Help user in partitioning his disks

Provide a pop-up window when clicking on partition and gives required information

# Chapter 4. Desktop environments

## 4.1. Icons theme choice

Author	Anne NICOLAS
Version	0.1
Id	spec300
Team	Design
Implementor	KDE and GNOME teams
Priority	3
Status	0%

### 4.1.1. Abstract

We need a common choice for coming release on icons theme, GNOME, KDE3 and KDE4.

### 4.1.2. Benefit

Participate to general design of distribution and provide renewed look'n feel.

### 4.1.3. General specifications

We need to define some changes in icons theme: Tango, Oxygen could be one of the possible choice. Should we switch GNOME and maybe KDE3 to Tango, now that KDE4 has Oxygen ? Need to evaluate which icon theme are better with Oxygen.

## 4.2. Reduce dictionaries proliferation

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec301

Team	Interface
Implementor	fcrozat@mandriva.com, KDE team
Priority	3
Status	0%

### 4.2.1. Abstract

Reduce dictionaries proliferation

### 4.2.2. Benefit

Better language coverage, less disk space

### 4.2.3. Reduce dictionaries proliferation

ensure all spell checkers (evolution, gtkspell, KDE) are migrated to enchant (allow using OOo spell dictionaries)

## 4.3. OpenOffice.Org 3

Author	Anne NICOLAS
Version	0.1
Id	spec302
Team	Office tools
Implementor	salem@mandriva.com
Priority	3
Status	0%

### 4.3.1. Abstract

Provide OpenOffice.Org 3 in 2009 release

### 4.3.2. Benefit

Provide last stable major release for 2009

### 4.3.3. General specifications

## 4.4. KDE

Author	Anne NICOLAS
Version	0.1
Id	spec303
Team	Desktop Environments
Implementor	
Priority	3
Status	

### 4.4.1. Implementing Ia\_Ora in KDE4

Implementor	boiko@mandriva.com
Priority	3
Status	20%

#### 4.4.1.1. General specifications

Implement style and windows decorator using existing Ia\_Ora themes: Arctic, Blue, Gray, Orange,

Smooth. This will take into account all modifications planned for 2009 theme.

## 4.4.2. Screensaver management

Implementor	boiko@mandriva.com
Priority	3
Status	0%

### 4.4.2.1. General specifications

Integrate Spring screensavers management in KDE4: effects management, adding also tools for creating personalized theme based on personal pictures, using same official effects

We may add also Digikam integration to be able to manage personalized screensavers

## 4.4.3. Background management depending on hours in day

Implementor	KDE team
Priority	3
Status	0%

### 4.4.3.1. General specifications

Implement hourly management of background using xml configuration file.

## 4.4.4. Moodin integration in KDE4

Implementor	boiko@mandriva.com
Priority	3

Status	0%
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#### 4.4.4.1. General specifications

Use existing project to help, provide technical specs for needed images.

#### 4.4.5. Ark improvement

Implementor	KDE team
Priority	3
Status	0%

#### 4.4.5.1. General specifications

Ark needs to be reviewed, especially KDE4 integration before taking any decision of working more on improving it

#### 4.4.6. Kpanels for Plasma

Implementor	boiko@mandriva.com
Priority	2
Status	0%

#### 4.4.6.1. General specifications

Provide graphical tool to simplify user environment for upstream distribution and OEM versions.

### 4.4.7. KDE upgrade policy

Implementor	heliocastro@mandriva.com
Priority	3
Status	0%

#### 4.4.7.1. General specifications

Write precise policy to upgrade between 2 versions of Mandriva:

- Describe KDE3 and KDE4 trees
- List all use cases interm of upgrade
- Provide test case for QA tests

### 4.4.8. krandr improvements

Implementor	boiko@mandriva.com
Priority	3
Status	0%

#### 4.4.8.1. General specifications

Make krandr more integrated into KDE4.

### 4.4.9. Kopete plugin for MSN

Implementor	salem@mandriva.com
Priority	2
Status	0%

#### 4.4.9.1. General specifications

## 4.5. GNOME

Author	Frederic Crozat <fcrozat@mandriva.com>
Version	0.1
Id	spec304
Team	Interface
Implementor	
Priority	3
Status	

#### 4.5.1. GNOME 2.24

Implementor	fcrozat@mandriva.com
Priority	3
Status	0%

##### 4.5.1.1. GNOME 2.24

Integrate latest version of GNOME : 2.24, which will be released on September 24 2008.

#### 4.5.2. Port la-Ora to Cairo

Implementor	fcrozat@mandriva.com
Priority	3

Status	0%
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#### 4.5.2.1. Port Ia-Ora to cairo

Current GTK2 version of Ia-Ora theme is using gdk for drawing. Porting to Cairo would simplify code and rendering could be hardware acceleration on some systems.

### 4.5.3. Bluetooth cleanup (GNOME)

Implementor	frozat@mandriva.com
Priority	3
Status	0%

#### 4.5.3.1. Improve Bluetooth support in GNOME

Bastien Nocera (from Fedora) has worked a lot on improving Bluetooth support in GNOME (and Fedora). Part of his work has been merged in Mdv 2008.1, we should resync with his progress.

### 4.5.4. LIRC support for GNOME

Implementor	frozat@mandriva.com
Priority	3
Status	0%

#### 4.5.4.1. Improve LIRC support in GNOME

There is no easy autoconfiguration tool for LIRC in Mandriva GNOME. We should integrate gnome-lirc-properties in Mandriva GNOME to fix this.

### 4.5.5. Add theme support to GDM 2.22

Implementor	frozat@mandriva.com
Priority	3
Status	0%

#### 4.5.5.1. Add theme support for GDM 2.22

GDM 2.22 is a full rewrite of GDM, which no longer supports themes, which was used for graphical login when using GDM. This is a regression, compared to Mdv 2008.1 and should be fixed.

### 4.5.6. Improve color management in GNOME

Implementor	frozat@mandriva.com
Priority	3
Status	0%

#### 4.5.6.1. Improve color management in GNOME

GNOME doesn't support setting a color profile (using XICC specification) for screens and nautilus doesn't support color profile for background rendering. Those easy tasks would lead the path to improving color management in GNOME.

### 4.5.7. UI improvement in Mandriva GNOME

Implementor	frozat@mandriva.com
Priority	3
Status	0%

### 4.5.7.1. UI improvements in Mandriva GNOME

- add unmount / eject right click menu for removable entries in Places (in gnome-panel). Could be merged upstream
- add "About Mandriva(Linux)" in GNOME panel, opening manual describing the distribution

## 4.6. Firefox 3

Author	Anne NICOLAS
Version	0.1
Id	spec302
Team	Office tools
Implementor	salem@mandriva.com
Priority	3
Status	%

### 4.6.1. Abstract

Provide Firefox 3 in 2009 release

### 4.6.2. Benefit

Provide last stable major release for 2009

### 4.6.3. General specifications

Ship Firefox 3.0 in 2009.0 and ship all gecko based applications from Firefox to xulrunner

# Chapter 5. Infrastructure

## 5.1. SVN migration

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec401
Team	infrastructure
Implementor	Blino, Spuk
Priority	3
Status	0%

### 5.1.1. Abstract

Provide a new kind of data storage in svn to avoid disk problem

### 5.1.2. Benefit

Easier server administration

### 5.1.3. SVN migration

Part of prapration work was done by mrl. Needs to read detailed specs written by him Blino and Spuk need to speak about final specifications before starting tests. Bogdano already modified repsys for this migration. More tests needed also before migration

## 5.2. rpmlint improvements

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec402

Team	infrastructure
Implementor	oblin@mandriva.com, spuk@mandriva.com
Priority	3
Status	0%

### 5.2.1. Abstract

Improve rpmlint to reflect Mandriva packaging policy.

### 5.2.2. Benefit

Makes life easier for maintainers

### 5.2.3. rpmlint improvements

Implement our policies in rpmlint checks. List of these modifications has to be done: check opened enhancement bugs (for what I can see: 28215, 29543, 30627, 34482, ...), mail to maintainers mailing-list to complete it. Bogdano will add it, as soon as there is one opened bug by proposal with a tracker

## 5.3. youri upgrade

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec403
Team	infrastructure
Implementor	Blino, Spuk, Pixel, Guillaume Rousse
Priority	3
Status	0%

### 5.3.1. Abstract

Get upstream version of youri in build system as current one is outdated

### 5.3.2. Benefit

Update build system components

### 5.3.3. youri upgrade

Needs some discussion with upstream team (Guillaume ROusse) and Blino, Spuk, Pixel. The point is to get upstream version of youri, integrating needed features for Mandriva build system. This list must be done before starting work

## 5.4. Monitoring build system

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec404
Team	infrastructure
Implementor	nvigier@mandriva.com
Priority	3
Status	0%

### 5.4.1. Abstract

Set up common monitoring tools on build system

### 5.4.2. Benefit

Improve build system administration

### 5.4.3. Monitoring build system

Define final solution for all nodes so that we have complete monitoring and use same tools everywhere. Nicolas will make some proposals for tools to be used

## 5.5. Improve build dependancies in build system

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec405
Team	infrastructure
Implementor	bogdano@mandriva.com
Priority	3
Status	0%

### 5.5.1. Abstract

Provide a way to manage dependancies when building new version of one package

### 5.5.2. Benefit

Makes life easier for maintainers

### 5.5.3. Improve build dependancies in build system

Lots of maintainers complain on difficulties when they have to wait for dependancies build before submitting final package. Here is a solution that was discussed: allow multiple packages handling in repsys (we wait for Bogdano signal), provide and manage list of dependancies for such cases. This list will be provided by maintener and modify only by bs admins.

## 5.6. Reduce nodes number

Author	Anne Nicolas <anicolas@mandriva.com>
Version	0.1
Id	spec406
Team	infrastructure
Implementor	Blino, Spuk
Priority	3
Status	0%

### 5.6.1. Abstract

Reduce nodes number to get more efficient build cluster

### 5.6.2. Benefit

Reduce nodes number to get more efficient build cluster

### 5.6.3. Reduce nodes number

Allow official packages to be built only in Klodia and Tulsa (a new node as powerful as Klodia, to be added in bs). Keep other nodes for home directories and tests. Check with rtp we can use Tulsa (needs some cleaning)