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Ports testen mit redports.org

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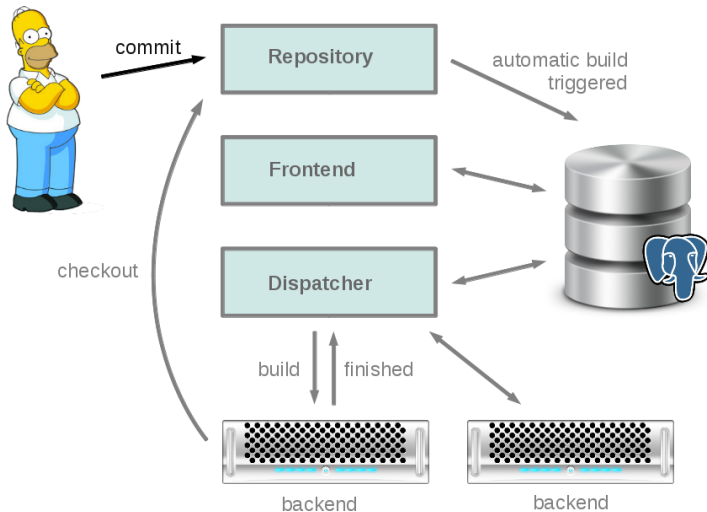
Wozu braucht die Welt das?

Probleme:

- ▶ Fehler in einem Port update verursachen Verzögerungen im Ablauf
- ▶ Port Maintainer können ihren Port auf allen unterstützten Plattformen testen
- ▶ Keine dezidierte Hardware mehr nötig
- ▶ Bessere Auslastung der vorhandenen Hardware

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Aufbau



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Repository

- ▶ Eigener Subtree pro User
(Bsp: <http://svn.redports.org/decke/multimedia/mythtv>)
- ▶ Automatische Joberstellung bei Commit

Frontend

The screenshot shows the RedParts website interface in a Mozilla Firefox browser. The page title is "Redparts:Buildgroups - redparts - Mozilla Firefox". The URL is "https://redparts.org/buildgroups". The page features a navigation bar with "HOME", "GUIDE", and "QUEUE" buttons. Below the navigation bar, there is a search bar and a "logged in as *deckle* Logout Preferences" link. The main content area is titled "Buildgroups" and contains a table with columns: Status, Priority, Name, Backends, Queued, and Description. The table lists several buildgroups for FreeBSD, including "10-CURRENT/amd64", "9.0-RELEASE/amd64", and "QATty". To the right of the table is a "JOIN BUILDGROUP:" form with a dropdown menu for "Buildgroup:" (set to "10-CURRENT/amd64") and a "Priority:" dropdown (set to "normal"). Below the form is a "JOIN" button. Below the "Buildgroups" table is a "Buildqueue" section with a table showing the status of builds, including "finance/R-cran-PerformanceAnalytics 1.0.4.4" which is currently "building".

Status	Priority	Name	Backends	Queued	Description
		10-CURRENT/amd64	1	7	FreeBSD 10-CURRENT/amd64
		10-CURRENT/i386	1	5	FreeBSD 10-CURRENT/i386
LEAVE	normal	9.0-RELEASE/amd64	1	5	FreeBSD 9.0-RELEASE/amd64
LEAVE	normal	9.0-RELEASE/i386	1	3	FreeBSD 9.0-RELEASE/i386
		8.2-RELEASE/amd64	1	2	FreeBSD 8.2-RELEASE/amd64
		8.2-RELEASE/i386	1	2	FreeBSD 8.2-RELEASE/i386
		7.4-RELEASE/amd64	1	1	FreeBSD 7.4-RELEASE/amd64
		QATty	1	1	Custom LOCALBASE and PREFIX

Port	Buildgroup	Status	Buildtime	Priority	User	Links
finance/R-cran-PerformanceAnalytics 1.0.4.4	10-CURRENT/i386	building	4 hours	highest	tota	
finance/R-cran-PerformanceAnalytics 1.0.4.4	10-CURRENT/amd64	building	3 hours	highest	tota	

- ▶ Trac als Basis (Repository browser, Bugtracker, User management, ...)
- ▶ Eigenes Plugin für zusätzliche Funktionalität

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Dispatcher

- ▶ Kommunikation mit backends
- ▶ Jobs an Build-Maschinen verteilen
- ▶ Fehlertolerant
- ▶ Logfiles/Packages übertragen

Technik:

- ▶ Daemon forkt childprozesse
- ▶ Statusmaschine (1 Step = 1 Child Prozess = 1 Transaktion)
- ▶ Datenbank locks für synchronisation
- ▶ ANSI C
- ▶ libpq (PostgreSQL C API)
- ▶ libcurl (https)

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Backend

- ▶ Marcuscom's Ports Tinderbox als Basis
- ▶ auschecken des Portstree
- ▶ kompiliert Ports
- ▶ Buildumgebungen (FreeBSD 7.4/8.2/9.0/10-CURRENT auf i386/amd64, CLANG, ...)

Technik:

- ▶ CGI shellscripts für automatische Abläufe
- ▶ ZFS snapshot/rollback für Portstree
- ▶ tmpfs für Performance

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Zukunft

- ▶ Buildbot für automatische Portupdates
- ▶ Ports PR Buildbot
- ▶ QAT support
- ▶ Patch support
- ▶ OPTIONS support
- ▶ pouddriere basiertes Backend
- ▶ mehr Power!

Vielen Dank für eure Aufmerksamkeit!
Gibt es Fragen?

Thanks to:

- ▶ Freundin
- ▶ Baptiste Daroussin (poudriere)
- ▶ Mark Linimon (Hardware)
- ▶ George Neville-Neil (Hardware)

[http://people.freebsd.org/~decke/talks/
201204_glt12-bsdbootcamp_redports.pdf](http://people.freebsd.org/~decke/talks/201204_glt12-bsdbootcamp_redports.pdf)

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