



# Relax and Recover (ReaR): The Open Source Project

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HEY, STUFF THIS!

STEINFELD











Gratien was already working and promoting Open Source projects since the 90s for the Belgium Unix Users Group (renamed to Open Technology Assembly).

### B.U.U.G.

#### Linux 95

DEFENSE.

DINA BENEFIT

recon 3. s. a trick in our BAGILE.

My first big Open Source project was "Make CD-ROM Recovery", the predecessor of

"Relax-and-Recover".



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Daily activities: Linux SE, kubernetes management, and SCM using Chef, ansible,

python, and bash scripting.

This CD-RCM contains a complete mirror of the Unux archive of sunste uncleduit is a free service for 8.U.U.G. members. Contents is copyrighted by the respective owners.

Electronic mail mus @ub4b.cupet be

A personal selection (587 Mb) of the best Unux software ovaliable today including: Unux 1.2.1, Mosaic 2.5, Samba 1.9, X1186, Slackware 2.1, Xfree66.3.1, HTML







25 years of Linux & Open Source experience

Wrote multiple Open Source projects around Business Continuity, ReaR is most important one.

Focus: IT strategy, IT governance, technology and architecture management, security and compliance automation, related organisational changes, business continuity, open source and cloud technologies

Associate Partner / Principal Engineer at Tektit Consulting, Berlin.

schapiro.org Blog, Talks & DevOps Principles

We are not consultants.

We are Partners, Coaches, Humans, Enablers, Catalysts, Sparring Partners, Experts

... and sometimes a little annoying.

<u>tektitconsulting.com</u>





### Open Source project Relax-and-Recover (ReaR)

### **Linux Bare Metal Restore**

### **Linux Disaster Recovery**



#### 7 ReaR maintainers:

- Schlomo Schapiro
- Gratien D'haese
- Johannes Meixner
- Vladimir Gozora
- Sébastien Chabrolles
- Renaud Métrich
- Pavel Cahyna



**193** other contributors

### Intro ReaR



**De-facto standard tool** within Linux community

Easy to use and adjustable for sysadmins (Bash)

100% Open Source code (GPL v3)

Create bootable rescue media: ISO, USB, eSATA, PXE, OBDR

Has plenty of backup plug-ins:
TAR, RSYNC, Micro Focus Data Protector,
FDR/Upstream, CommVault Galaxy 5,7,10,11,
Symantec NetBackup, IBM Tivoli Storage Manager,
EMC NetWorker (Legato), Dell PowerProtect Data
Manager, EMC Avamar, SEP Sesam, NovaStor DC,
Rubrik Cloud Data Management, Rsync Backup
Made Easy, BAREOS, BACULA, DUPLICITY,
BorgBackup

#### Business Value for ReaR Users:

- Pay 20 k€ for ReaR integration instead of 100.000€ / year for commercial BMR tool
- Supports most commercial backup tools
- Complete end-2-end automation
- Easy configuration management

#### Ecosystem Integration based on ReaR:

- System Recovery on Red Hat Enterprise Linux
- <u>Disaster Recovery</u> on SUSE LINUX Enterprise
- <u>DRLM</u> Disaster Recovery Linux Manager
- SEP SESAM uses ReaR for BMR

### ReaR History

#### Make CD-ROM Recovery (mkcdrec)

Started 2000 - ended 2012

Predecessor of ReaR

#### Relax-and-Recover (ReaR)

Started 2006

In 2010 Suse added it to their HA portfolio

In 2015 RedHat added it in their main repository

2026 - 20 years ReaR 🎉 🎉 🎉



### What goes actually well?



User Support (via GitHub issues)

End-users submitting issues and smaller contributions on GitHub

Interaction with major Linux vendors (SUSE, RedHat)

Code cleanup and bug fixes

Mature code base

Deprecating ancient legacy, e.g. Bash 3 for new releases



### What doesn't go well?



Documentation in general

ReaR User Guide

Not enough capacity needed to add new features

Not enough capacity of developers to assist end-user support

Cross-architecture support & testing: i386, x86\_64, ia64, ppc64, s390, (arm)

Automated testing of new releases of ReaR on different distros and platforms







https://gdha.github.io/rear-automated-testing/ or https://github.com/gdha/rear-automated-testing/

- Sponsored project
- Project on pause due lack of sponsoring
- RedHat tries to bring some live into <a href="https://github.com/rear/rear-integration-tests">https://github.com/rear/rear-integration-tests</a>
- Low activity (and limited to RedHat's testing platform)

SUSE does manual testing



### Issues we maintainers are facing



Keeping contributors active and engaged

Lack of sponsoring to add new features

Lack of ReaR service contracts to pay for regular maintenance

Release management





REAR

- Point to Snapshots as "rolling release"
- Getting the "ReaR User Guide" on rails
- Find sponsoring
- More workshops?



Talks on-going with DRLM project





# What would you suggest?

## relax-and-recover.org

schapiro.org tektitconsulting.com it3.be