



Berner Fachhochschule
Haute école spécialisée bernoise
Bern University of Applied Sciences

Linux Group Meeting 2016-1

Tuesday, 2nd February 2016 15:00-16:00

BFH - Conference Room C.O.R.A. (Dammweg 3, 1st. Floor, Bern)

Daniel Baumann <daniel.baumann@bfh.ch>

IT System Engineer, Infrastructure Team

Overview

- ▶ **Current Status**
- ▶ **Future**
- ▶ **Roadmap**
- ▶ **Varia**

- ▶ **„Beer after Work“**

Current Status

Linux@BFH: Current Status

4 Working Areas

4 Working Areas



Hardware

4 Working Areas



Hardware



Software

4 Working Areas



Hardware



Software



Services

4 Working Areas

Hardware

Software

Services

"other"

Linux@BFH: Current Status

Hardware

Software

Services

"other"

Linux@BFH: Current Status

Hardware

Software

Services

"other"

- lxc{,-test}.bfh.ch
- lxc[1-10].its.bfh.ch
- dmzlxc[1-10].its.bfh.ch
- arzlxc[1-5].its.bfh.ch
- lfelxc[1-5].its.bfh.ch
- lfedmzlxc[1-5].its.bfh.ch
- vip VM Servers (10 Bern)

- islxc[1-5].its.bfh.ch
- netlxc[1-2].its.bfh.ch
- hucelxc[1-2].its.bfh.ch
- ntwlxc1.its.bfh.ch

- legacy VM Servers
(17 Bern, 3 ARZ, 8 Biel)
- legacy physical Servers
(1 Bern)

Totals: 75 VM, 11 physical

Linux@BFH: Current Status

Hardware

Software

Services

"other"

- lxc{,-test}.bfh.ch
- lxc[1-10].its.bfh.ch
- dmzlxc[1-10].its.bfh.ch
- arzlxc[1-5].its.bfh.ch
- lfelxc[1-5].its.bfh.ch
- lfedmzlxc[1-5].its.bfh.ch
- vip VM Servers (10 Bern)

- Debian Server
- Debian Container
- Debian Desktop

- islxc[1-5].its.bfh.ch
- netlxc[1-2].its.bfh.ch
- hucelxc[1-2].its.bfh.ch
- ntwlxc1.its.bfh.ch

- legacy VM Servers
(17 Bern, 3 ARZ, 8 Biel)
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Totals: 75 VM, 11 physical

Linux@BFH: Current Status

Hardware

- lxc{,-test}.bfh.ch
- lxc[1-10].its.bfh.ch
- dmzlx[1-10].its.bfh.ch
- arzlxc[1-5].its.bfh.ch
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- lfedmzlx[1-5].its.bfh.ch
- vip VM Servers (10 Bern)

- islx[1-5].its.bfh.ch
- netlx[1-2].its.bfh.ch
- hucelxc[1-2].its.bfh.ch
- ntwlxc1.its.bfh.ch

- legacy VM Servers
(17 Bern, 3 ARZ, 8 Biel)
- legacy physical Servers
(1 Bern)

Software

- Debian Server
- Debian Container
- Debian Desktop

Services

- Daemons
- Applications

"other"

Totals: 75 VM, 11 physical

Linux@BFH: Current Status

Hardware

- lxc{-,test}.bfh.ch
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- legacy VM Servers
(17 Bern, 3 ARZ, 8 Biel)
- legacy physical Servers
(1 Bern)

Software

- Debian Server
- Debian Container
- Debian Desktop

Services

- Daemons
- Applications

"other"

- Support
- Documentation
- Meetings
- Trainings
- Events
- Apprentice

Totals: 75 VM, 11 physical

Linux@BFH: Current Status

Hardware

- physical Servers
- VMware VMs

Software

- Debian Server
- Debian Container
- Debian Desktop

Services

- Daemons
- Applications

"other"

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- Trainings
- Events
- Apprentice

Linux@BFH: Current Status

Hardware

- physical Servers
- VMware VMs

Software

- Debian Server
- Debian Container
- Debian Desktop

Services

- Daemons
- Applications

"other"

- Support
- Documentation
- Meetings
- Trainings
- Events
- Apprentice

10%

Linux@BFH: Current Status

Hardware

- physical Servers
- VMware VMs

10%

Software

- Debian Server
- Debian Container
- Debian Desktop

50%

Services

- Daemons
- Applications

"other"

- Support
- Documentation
- Meetings
- Trainings
- Events
- Apprentice

Linux@BFH: Current Status



- physical Servers
- VMware VMs

10%



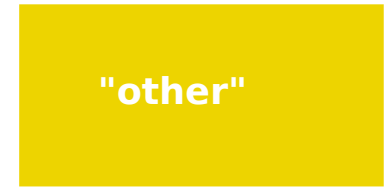
- Debian Server
- Debian Container
- Debian Desktop

50%



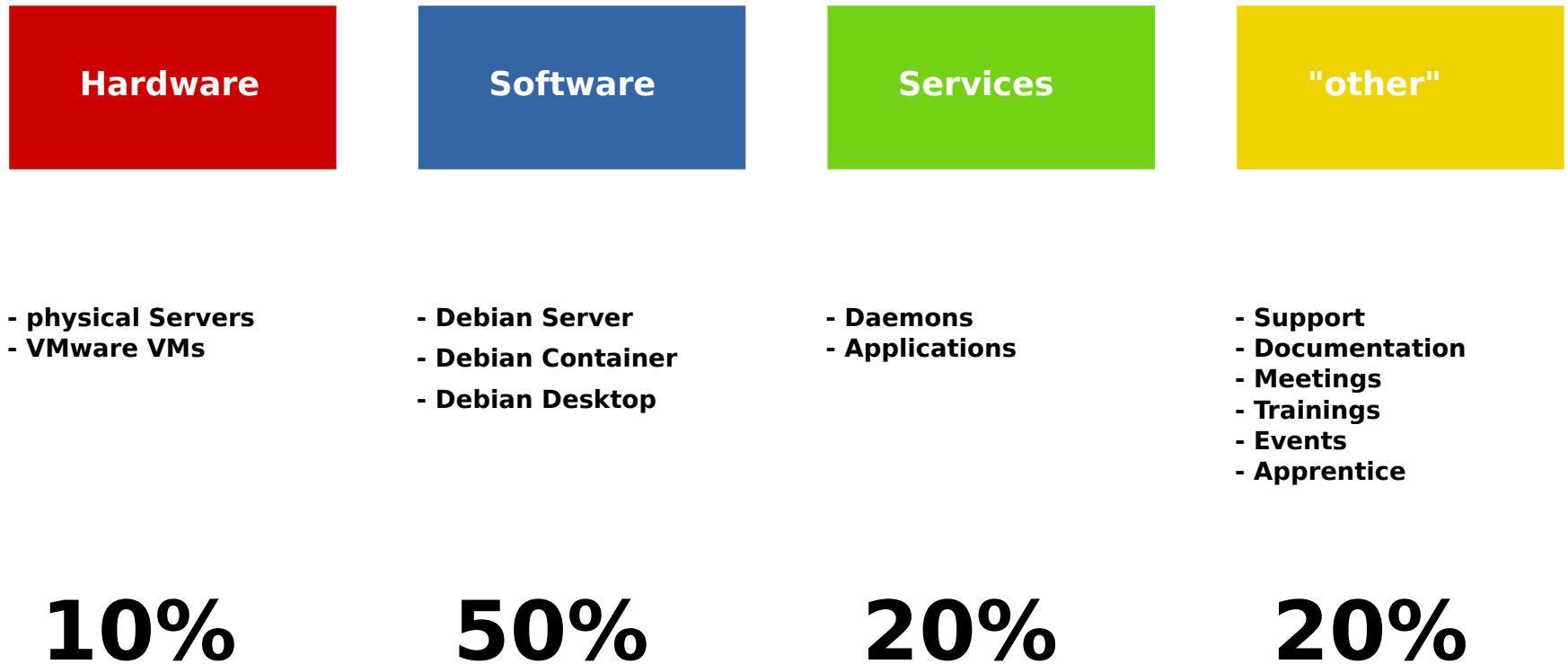
- Daemons
- Applications

20%



- Support
- Documentation
- Meetings
- Trainings
- Events
- Apprentice

Linux@BFH: Current Status



Future

Linux@BFH: Future

4 Expert Areas

4 Expert Areas

Plumbing

4 Expert Areas

Plumbing

Services

4 Expert Areas

Plumbing

Services

Support

4 Expert Areas

Plumbing

Services

Support

Linux@BFH: Future

Plumbing

Services

Support

"other"

Linux@BFH: Future

Plumbing

Services

Support

"other"

- **Hardware**
- **Ceph**
- **OpenStack**

- **Debian**

Linux@BFH: Future

Plumbing

Services

Support

"other"

- Hardware
- Ceph
- OpenStack
- Debian

Network Services:

- DNS
- NTP
- LDAP
- RADIUS

Storage Services:

- RADOS
- NFS
- SMB
- iSCSI

Application Services:

- Monitoring
- Logging

Linux@BFH: Future

Plumbing

- Hardware
- Ceph
- OpenStack
- Debian

Services

Network Services:

- DNS
- NTP
- LDAP
- RADIUS

Storage Services:

- RADOS
- NFS
- SMB
- iSCSI

Application Services:

- Monitoring
- Logging

Support

Templates:

- IaaS
- PaaS
- SaaS

Assistance:

- Self Service
- Consulting
- Engineering
- Packaging

Documentation:

- Stack SLAs
- System "Certificates"

"other"

Linux@BFH: Future

Plumbing

- Hardware
- Ceph
- OpenStack
- Debian

Services

Network Services:

- DNS
- NTP
- LDAP
- RADIUS

Storage Services:

- RADOS
- NFS
- SMB
- iSCSI

Application Services:

- Monitoring
- Logging

Support

Templates:

- IaaS
- PaaS
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Assistance:

- Self Service
- Consulting
- Engineering
- Packaging

Documentation:

- Stack SLAs
- System "Certificates"

"other"

- Meetings
- Trainings
- Events
- Apprentice

Linux@BFH: Future

Plumbing

- Hardware
- Ceph
- OpenStack
- Debian

Services

- Network Services
- Storage Services
- Application Services

Support

- Templates
- Assistance
- Documentation

"other"

- Meetings
- Trainings
- Events
- Apprentice

Linux@BFH: Future

Plumbing

- Hardware
- Ceph
- OpenStack
- Debian

Services

- Network Services
- Storage Services
- Application Services

Support

- Templates
- Assistance
- Documentation

"other"

- Meetings
- Trainings
- Events
- Apprentice

10%

Linux@BFH: Future

Plumbing

- Hardware
- Ceph
- OpenStack
- Debian

10%

Services

- Network Services
- Storage Services
- Application Services

10%

Support

- Templates
- Assistance
- Documentation

"other"

- Meetings
- Trainings
- Events
- Apprentice

Linux@BFH: Future

Plumbing

- Hardware
- Ceph
- OpenStack
- Debian

10%

Services

- Network Services
- Storage Services
- Application Services

10%

Support

- Templates
- Assistance
- Documentation

50%

"other"

- Meetings
- Trainings
- Events
- Apprentice

Linux@BFH: Future

Plumbing

- Hardware
- Ceph
- OpenStack
- Debian

10%

Services

- Network Services
- Storage Services
- Application Services

10%

Support

- Templates
- Assistance
- Documentation

50%

"other"

- Meetings
- Trainings
- Events
- Apprentice

30%

Linux@BFH: Future

Plumbing

Services

Support

"other"

Linux@BFH: Future

Plumbing

Services

Support

"other"

kud3+kza1

bad9+pup1

Linux@BFH: Future

4 Rules of Operation

4 Rules of Operation

1. Automation

4 Rules of Operation

- 1. Automation**
- 2. No Jewelry**

4 Rules of Operation

- 1. Automation**
- 2. No Jewelry**
- 3. Version Control**

4 Rules of Operation

- 1. Automation**
- 2. No Jewelry**
- 3. Version Control**
- 4. Logging, Monitoring, Documentation**

Roadmap

Short Term Roadmap

Hardware

- ▶ Assembling
- ▶ IPMI/BIOS Configuration

Debian

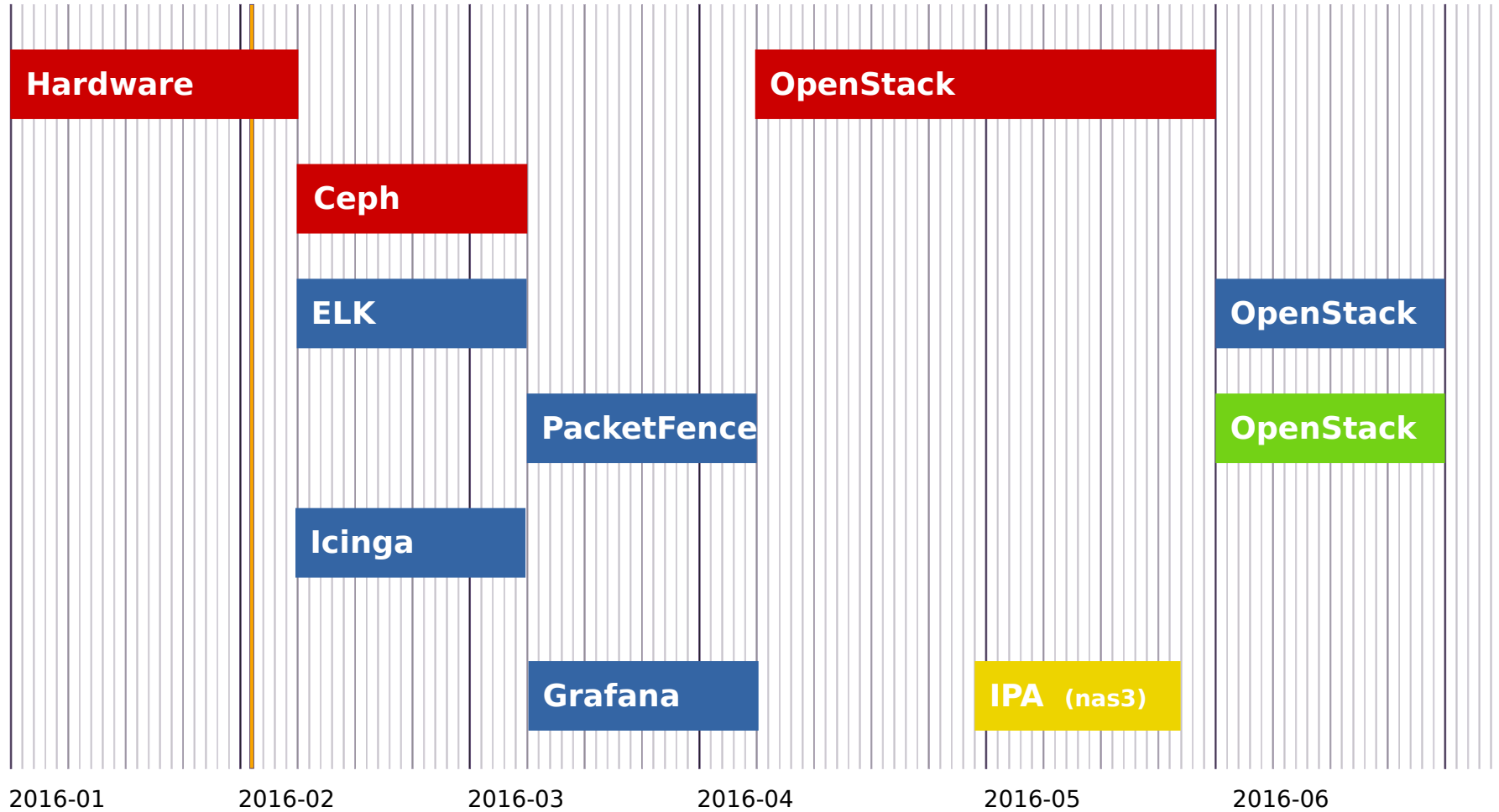
- ▶ container-tools and crypto-tools
- ▶ debian-installer preseeding

Services

- ▶ pxe.bfh.ch
- ▶ crypto.linux.bfh.ch
- ▶ ssh.bfh.ch

Roadmap 2016-1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



Roadmap 2016-2

26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51

Service Migration: OpenStack und Jessie

Ansible

E2E Monitoring

Status Page

2016-07

2016-08

2016-09

2016-10

2016-11

2016-12

Varia

Varia

- ▶ OTRS
- ▶ Work Time wrt/ „other days“

- ▶ „Projects“ on linux.bfh.ch
- ▶ Linux Newsletter

- ▶ ...

Thank You for Your Attention.

♥ Source Code is freely available

```
git clone git://git.bfh.ch/git/staff/bad9/other/talks.git
```