Current Status of OFED in SUSE Linux Enterprise Server

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λAbout SUSE

λAbout SUSE Linux Enterprise Server

λOFED Integration into SLES

λFuture Direction of OFED in SLES

SUSE and the Attachmate Group

λ**SUSE**, headquartered in Nürnberg / Germany,
λis an independently operating business unit of
λThe Attachmate Group, Inc.

λThe Attachmate Group is a privately held
λ1 billion+ $ revenue software company
λwith four brands:

Cloud Infrastructure

Enterprise Computing   Integrated Systems
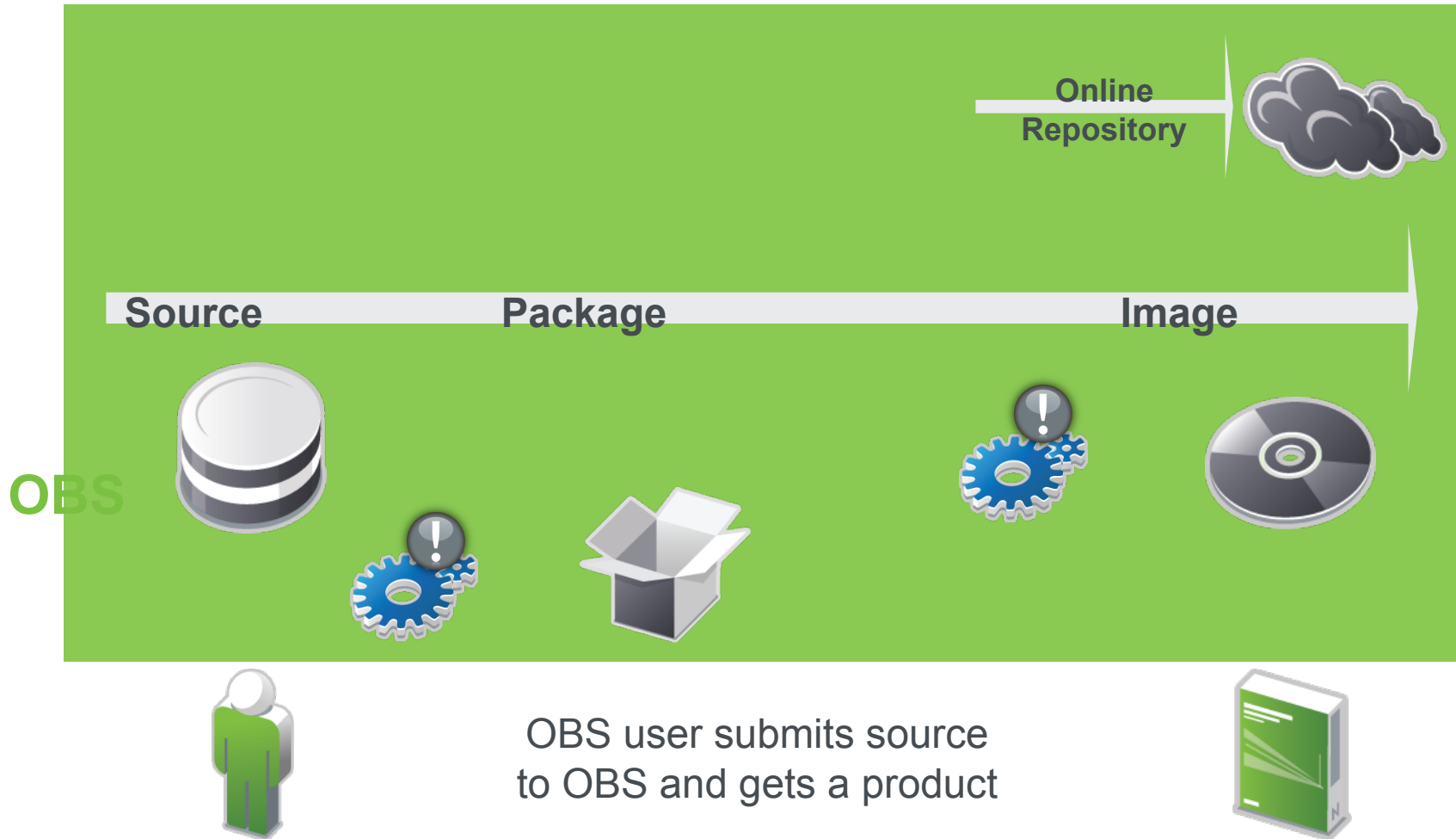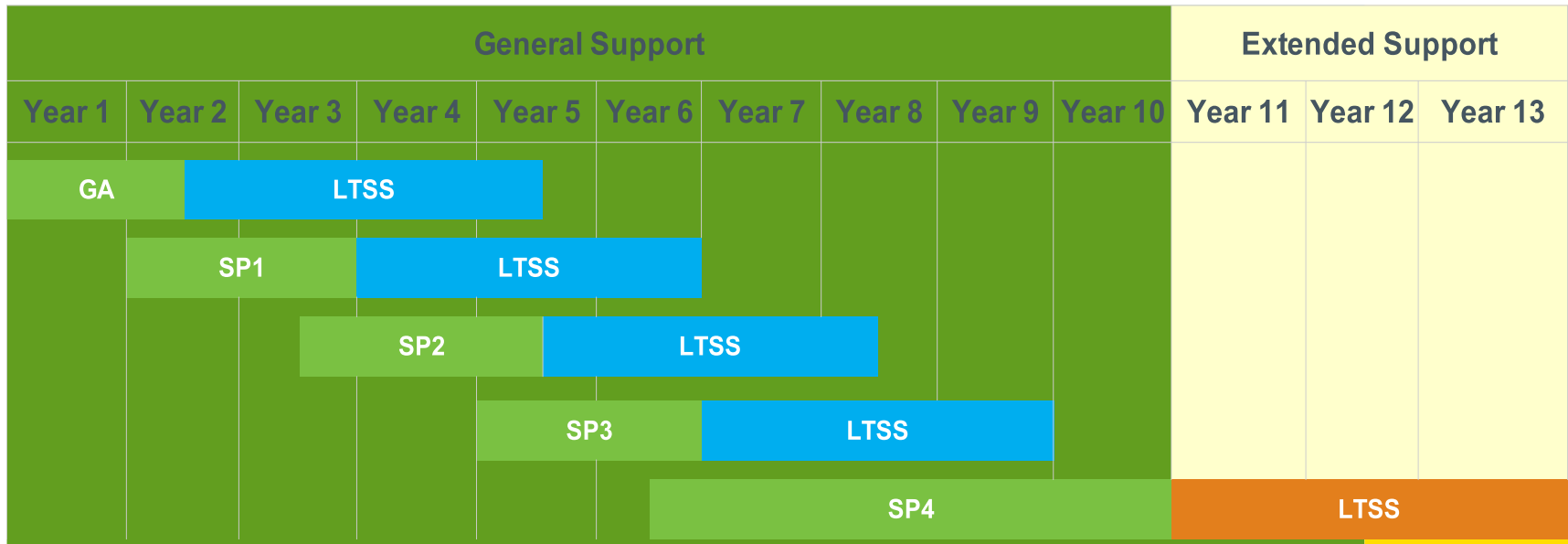
OPENFABRICS
A L L I A N C E

Online Repository

OBS

Source

Package

Image

OBS user submits source
to OBS and gets a product

SUSE® Linux Enterprise Server 12
Lifecyle Model

General Support										Extended Support		
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13

GA	LTSS											
	SP1		LTSS									
		SP2		LTSS								
			SP3		LTSS							
				SP4						LTSS		

- **13-year lifecycle** (10 years general support, 3 years extended support)
- **5-year lifecycle per Service Pack** (2 years general + 3 years extended support)
- Long Term Service Pack Support (LTSS) available for all versions, including GA

http://www.suse.com/lifecycle/

AppArmor Security Framework
  - Application confinement
Free High Availability Extension
  - Cluster Framework, Cluster FS, DRBD, GEO-cluster*
YaST2 systems management
  - Install, deploy, and configure every aspect of the server
Subscription Management Tool
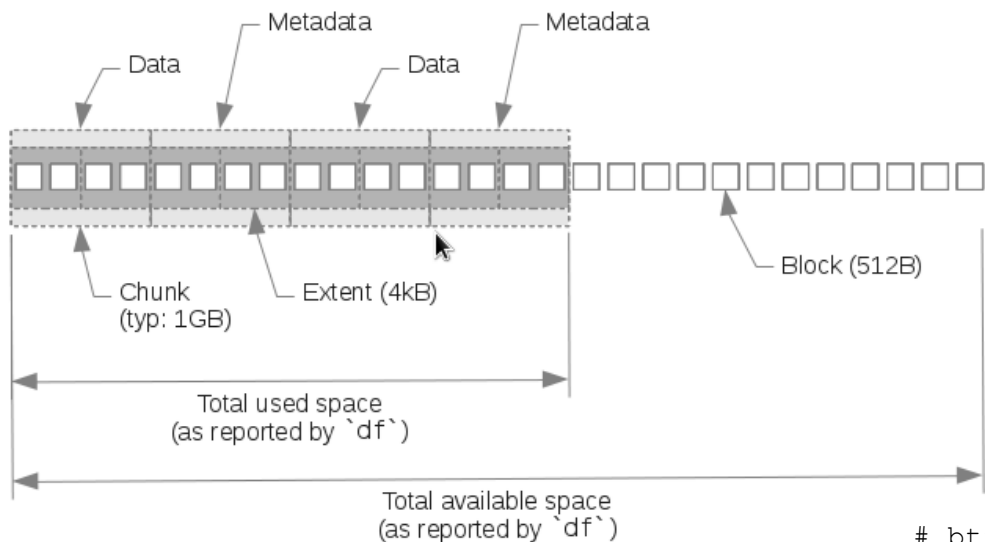 - Subscription and patch management, proxy/mirroring/staging
Starter System for System z
  - A pre-built installation server, deployable with z/VM tools

Features of SLES 12

λ Linux Kernel 3.12

λ Only 64-bit kernel

    λ Support of 32-bit application through execution environment

λ YaST modules written in Ruby

λ OFED 3.12

    λ Significant backport assistance from HCA vendors (Intel, Mellanox, etc.)

λ Installation default to btrfs

    λ Provides snapshots, copy-on-write, subvolumes, scalable to 16EiB

Btrfs Disk Space And Extents

Data

Metadata

Data

Metadata

Chunk
(typ: 1GB)

Extent (4kB)

Block (512B)

Total used space
(as reported by `df`)

Total available space
(as reported by `df`)

In case of a Btrfs filesystem on a single underlying block device

```
# btrfs filesystem df /
Data: total=14.50GB, used=12.20GB
System, DUP: total=8.00MB, used=12.00KB
System: total=4.00MB, used=0.00

Metadata, DUP: total=1.75GB, used=904.11MB


# df -h /
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda7        20G   14G  4.3G  77% /

#
```

Disk utilization

12,2GB + 2x 0,9GB + = 14 GB

YaST2 Management

OFED 3.12

λ Official Open-Source Distribution from The Openfabrics Alliance
λ Up-to-date as of OFED 3.12-rc1
  - Initialization scripts package renamed to rdma
  - Library packages postfixed with -rdmav2
  - infinipath-psm v3.2
  - opensm v3.3.17

How you can help

λ Report bugs
    http://bugzilla.novell.com

λ Participate in feature submission
    http://fate.suse.com

λ Use the Open Build Service
    https://build.opensuse.org
    SLES 10 and 11, openSUSE, Fedora, RHEL, Debian, Ubuntu
    x86 and x86_64, powerpc, ppc64, armv5el, armv7l, armv7hl
    Install and manage your own build service

Thank you!