

# 2015 Xen Project Community Plan for Advisory Board

Draft

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# FY15 Goal, Strategy & Initiatives

Secure the long term success of the Xen Project eco-system

Drive momentum of Xen Project and its sub-projects  
[Hypervisor, XAPI, Mirage OS, Automotive, Windows PV Drivers]



Leverage Xen Project Awareness and drive narrative as Innovation Platform

Remove barriers to Xen Project user adoption

Improve Xen support within the OpenStack community

Remove Barriers to contribution and create better collaboration between sub-projects

Improve Xen Project Quality and Security

# AR & PR

## Retrospective:

- We had incredible growth in terms of media & social coverage
- We had pro-active participation from ARM, Cavium Systems, Citrix & Intel (and GlobalLogic, OnApp & Horizon Digital Economy as part of subproject launches)
- We have an evolving narrative around Innovation
- We did not hold the Analyst meeting as planned (we did meet RedMonk only)
- We are struggling with getting user endorsements

## The Opportunity:

- It would be good if more AB members would participate in activities
- We have a good narrative as starting point: Xen Project as Innovation Platform

# AR & PR : Goals, Deliverables & Metrics

## Goal:

- Leverage Xen Project Awareness and drive narrative as Innovation Platform
- Ideally, more diverse participation in media activities

## Deliverables:

- **ACTION:** Sarah to flesh out

## Success Metrics:

- **ACTION:** Sarah to provide reasonable measurable success metrics
  - Should have a growth related metric
  - Should have a qualitative metric
  - Should have a metric related to AB vendor participation

# User Community

## Retrospective:

- We had some successes within the user community, such as
  - Increased social media and community engagement – as well as increased web visits
  - The traffic on the Q&A system on the website has grown several 100%
- BUT:
  - New users are struggling to learn Xen compared to other competing technologies. In particular issues with integrations are extremely poorly documented.
  - We still don't have good channels to our users
  - Our approach to user focussed events has not worked : proposal - no more User Summits.

## The Opportunity:

- On-ramp content targeting new users via on-line channels
- An increasing number of VMWare users seems to be looking for FOSS alternatives

# User Community: Goals, Deliverables & Metrics

## Goal:

- Remove barriers to Xen Project user adoption through targeted on-line material using on-line channels for maximum reach, re-use and cost efficiency

## Deliverables:

- On-line video and text tutorials initially targeting xl, libvirt, VMWare users and OpenStack
- Move to online User Events, with the option of organizing a face-2-face local user meeting if we can find local hosts
- Organize a user survey to get information on user's needs

## Success Metrics:

- Launch user survey and deliver analysis for further planning
- One major video tutorial per quarter, with associated text material
- Two on-line events : stretch goal – one local user event

# Xen in OpenStack

## Retrospective:

- Xen dropped from #2 in the Hypervisor league table to #5
- This was mainly due to two factors
  - Threat of deprecation of Hypervisors in Quality Group in 2014
  - Lack of leadership by Xen Community members within OpenStack

## The Threat:

- In the long run, we must fix this, otherwise the Xen Project's position will become increasingly difficult
- The project is already significantly behind in market segments that are OpenStack centric (e.g. NFV)
- Some of the users are struggling: see <http://superuser.openstack.org/articles/pass-the-mic-user-spotlight-alvaro-lopez-garcia-ifca>

# Xen in OpenStack: Goals, Deliverables & Metrics

## Goal:

- Improve Xen support within the OpenStack community

## Deliverables:

- Set up a Working Group of Interested AB members
- Resourcing to improve pass rates (the Citrix FOSS team is volunteering 1)
- Leadership within the OpenStack community (if no-one else steps up, I and/or Stefano Stabellini can do this)
- Infrastructure: 20-25 8GB RAM & 4vCPU VMs for running the OpenStack CI loop for group B. We need a second different cloud/hosting instance to get into group A.

## Success Metrics:

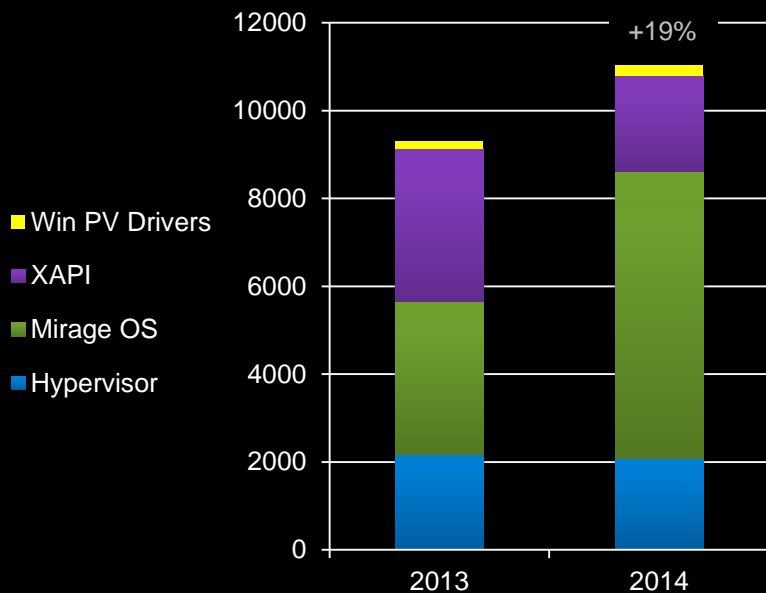
- Xen+LIBVIRT becomes part of Compute Driver Group B (alongside Hyper-V, VMWare, XenServer)
- Xen+LIBVIRT becomes part of Compute Driver Group A (alongside qemu/KVM on x86)



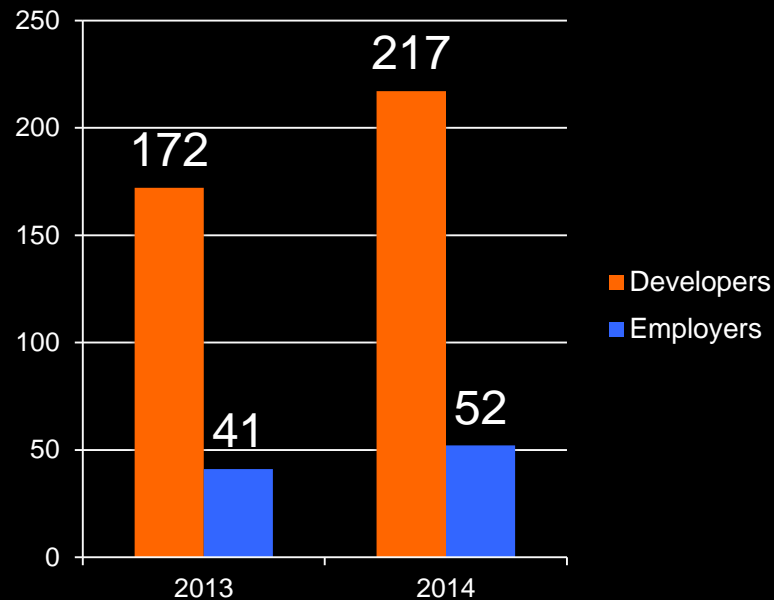
# Development Velocity Overview

(all subprojects of Xen Project)

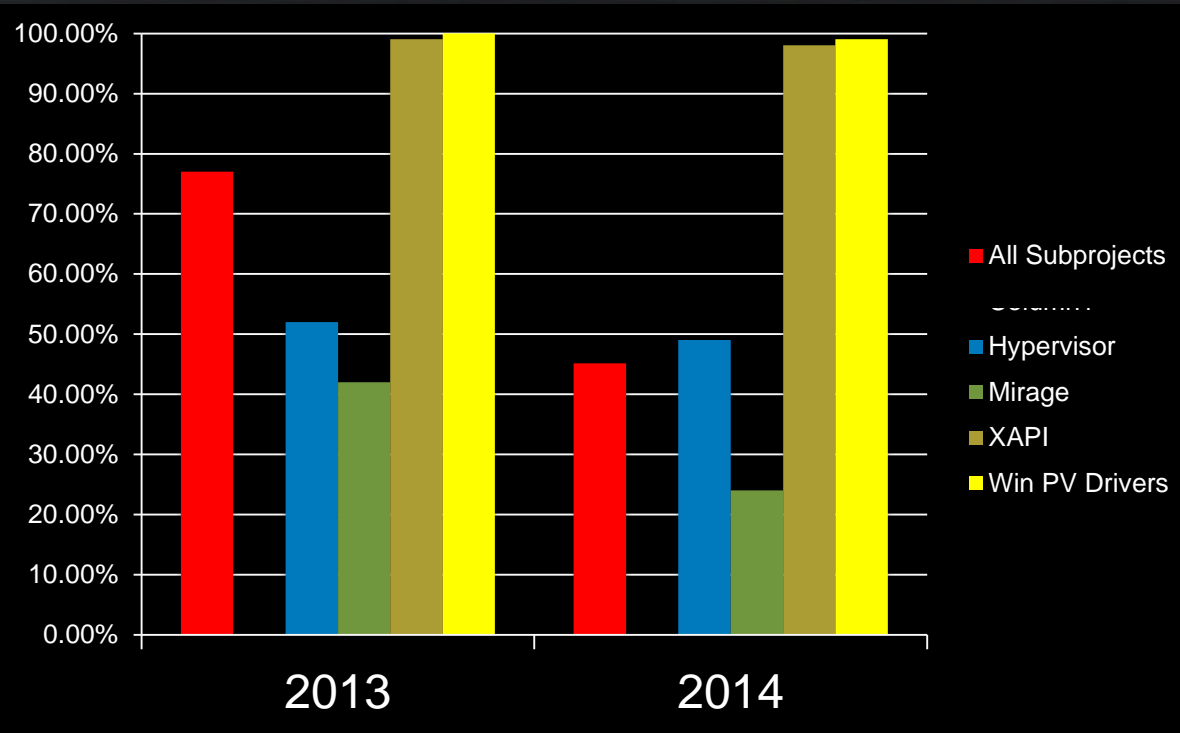
## New Features & Bug Fixes



## Unique Developers & Orgs



# Citrix Code Contributions in % to Xen Project



XAPI is only used in XenServer

Win PV Drivers were only recently contributed to the Xen Project

# Developer Community

## Retrospective:

- Overall we achieved the goal of 10% growth
- However, that growth was driven largely by Mirage OS
- Hypervisor growth was flat in terms of numbers. There are a number of observations
  - Review capacity has remained flat => Newcomers take up more review bandwidth and take longer to get their code accepted; code waiting for review is increasing
  - Yet, there has been a doubling in new features every major release since Xen 4.3
  - The core developers have become more effective => More focus on design, better code more collaboration
  - Core developers are focussing on integrations and distros (e.g. libvirt, OpenStack, CentOS, Test Framework)
  - Too many features are stuck in experimental state, e.g. Credit2, Nested Virt, etc.
- GSoC and OPW were successful in terms of participation
  - **BUT**: is this actually translating into employment opportunities (quick survey amongst members)

# Developer Community

## The Goal:

- Remove Barriers to contribution and create better collaboration between sub-projects

## Deliverables:

- Provide regular training for developers (translate existing material and extend)
- Build a repository of design information to make it easier for newcomers to join
- Improve tooling and processes (in particular around reviews, maintainers, ...)
- Work with AB members to increase active maintainership of existing or newly contributed code
- **Operational:** Hackathon, Developer Summit, Automotive Summit, OPW, travel stipends, etc.

## Success Metrics:

- > 10% Contribution to the Hypervisor from subproject participants
- > 10% total community growth (as well as 10% growth in the hypervisor)
- Ensure that Mirage, Automotive, Win PV Drivers grow by 10% while Citrix contribution in terms of percentage shrinks

# Quality and Security

## Retrospective:

- Test Infrastructure took a long time to get off the ground; ETA February
- Working with AllNet has been problematic at times (lack of Linux knowledge, which is outsourced to a 3<sup>rd</sup> party). Owner is sometimes unreliable and conflict of interest.
- Security in Xen as well as Xen web infrastructure is increasingly becoming an issue
  - Sysadmin and maintenance is provided by a combination of volunteers (Xen developers), Citrix IT, AllNet and .
  - We had a number of outages (e.g. blog, main site, ...) and spam attacks (wiki, forums, ...)
- Security process update (see <http://bugs.xenproject.org/xen/bug/44>)

# Quality and Security: Goals, Deliverables & Metrics

## Goal:

- Improve Xen Project Quality and Security
- Include sysadmin of Xen web real estate (wiki, lists, etc.) through a 3<sup>rd</sup> party supplier

## Deliverables:

- Complete migration to new Test Infrastructure (end of february)
- Extend the Test Infrastructure with new Hardware as approved by the board
- Establish a software strategy for the Test infrastructure going forward
- Consolidate sysadmin support for Xen Project to minimize overheads
- Review new updated security process in Q3 (almost ready to roll out the new version for voting)

## Success Metrics:

- Do we need another quality related and security related metric? **This is rather hard**
- **One that makes sense is maybe looking at test contributions from the community, uptime, pass rates**

# Allocation of Resources

Goal	Ask from AB members	Spending: \$365K + \$55K GA
#1: Leverage Xen Project Awareness and drive narrative as Innovation Platform	More participation and input when it comes to media activities	\$105K per year
#2: Develop more on-line material focused at end-users	Guide the objective Help disseminate content where appropriate	\$15K in 2015
#3: Improve Xen support within the OpenStack community	Engagement and support from those members that care about OpenStack. <b>Who?</b> Citrix is willing to lead, if necessary	20-25 8GB RAM & 4vCPU VMs for running the CI loop (two separate cloud providers, one initially)  <b>Cost? \$15K per year</b>
#4: Remove Barriers to contribution	Plan for maintainership of existing or newly contributed code	Training, OPW, GSoC, ...: \$35K Developer event slush fund: \$30K
#5: Improve Xen Project Quality and Security		New COLO HW: \$80K Hosting (2 racks): \$50k with set-up Infrastructure maintenance: \$30K
Operational		\$5K for face-2-face meetings