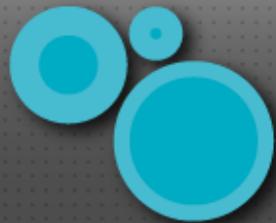


ScaleUp Technologies

OpenStack PHP Usergroup Berlin, April 2011





Company Overview

History → Cloud Provider

ScaleUp is a spin-out of 12-year old German MSP internet4YOU

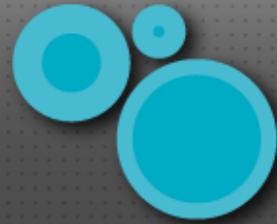
In 2009, ScaleUp launched the first public cloud in Germany (3Tera AppLogic as cloud OS)

Pain Point → Needed a Cloud Business Platform with a self-service solution to user management, provisioning, automation and **everything else needed to offer a public or private cloud service**

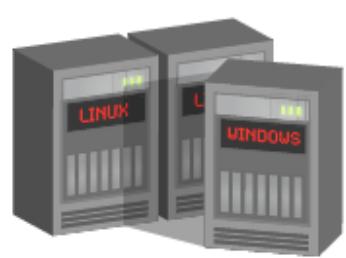
Today → Offer the ScaleUp *Cloud Management Platform*

ScaleUp has transformed into a cloud business software company

Our focus is the cloud “point of purchase” — the magical spot where the provider and consumer meet.



What is OpenStack?



OpenStack **Compute**

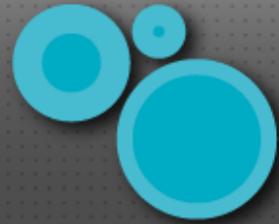
- ▶ Software to **provision virtual machines** on standard hardware at massive scale

A community creating open source software to build public and private clouds



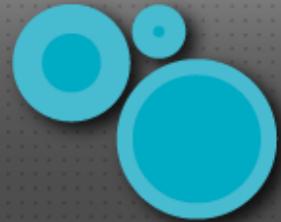
OpenStack
Object Storage

- ▶ Software to reliably **store billions of objects** distributed across standard hardware



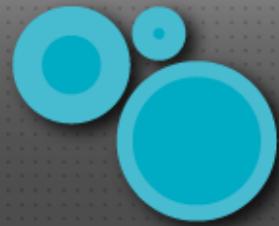
OpenStack Mission

“To produce the **ubiquitous** open source cloud computing platform that will meet the needs of public and private cloud providers regardless of size, by being **simple to implement** and **massively scalable**.”



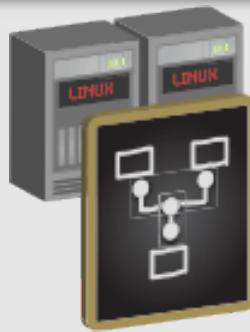
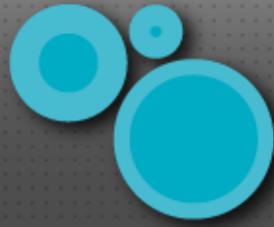
Why is it important?

- **Open** eliminates vendor lock-in
- Working **together**, we all go faster
- **Freedom** to federate, or move between clouds



Founding principles

- Apache 2.0 license (OSI), no paid ‘enterprise’ version
- Open design process, 2x year public Design Summits
- Publicly available source code repository
- All community processes documented and transparent
- Commitment to drive and adopt open standards
- Modular design for deployment flexibility via APIs



Architect for in-house



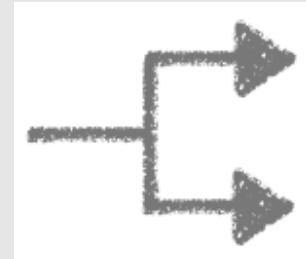
Re-Architect for service provider

Today's Reality

Future with OpenStack

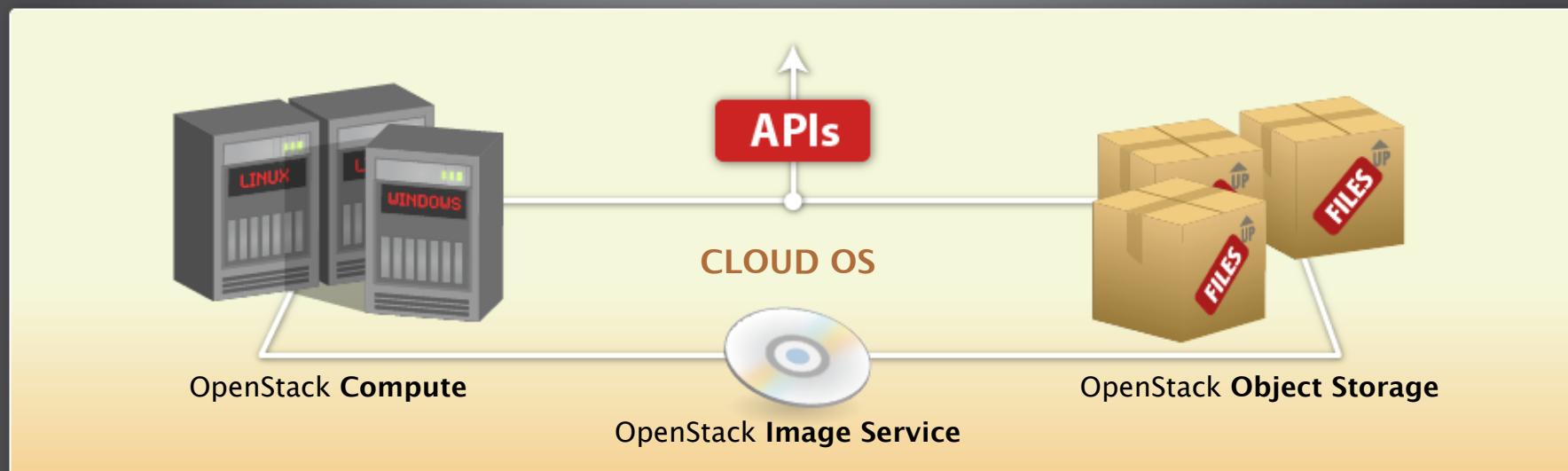


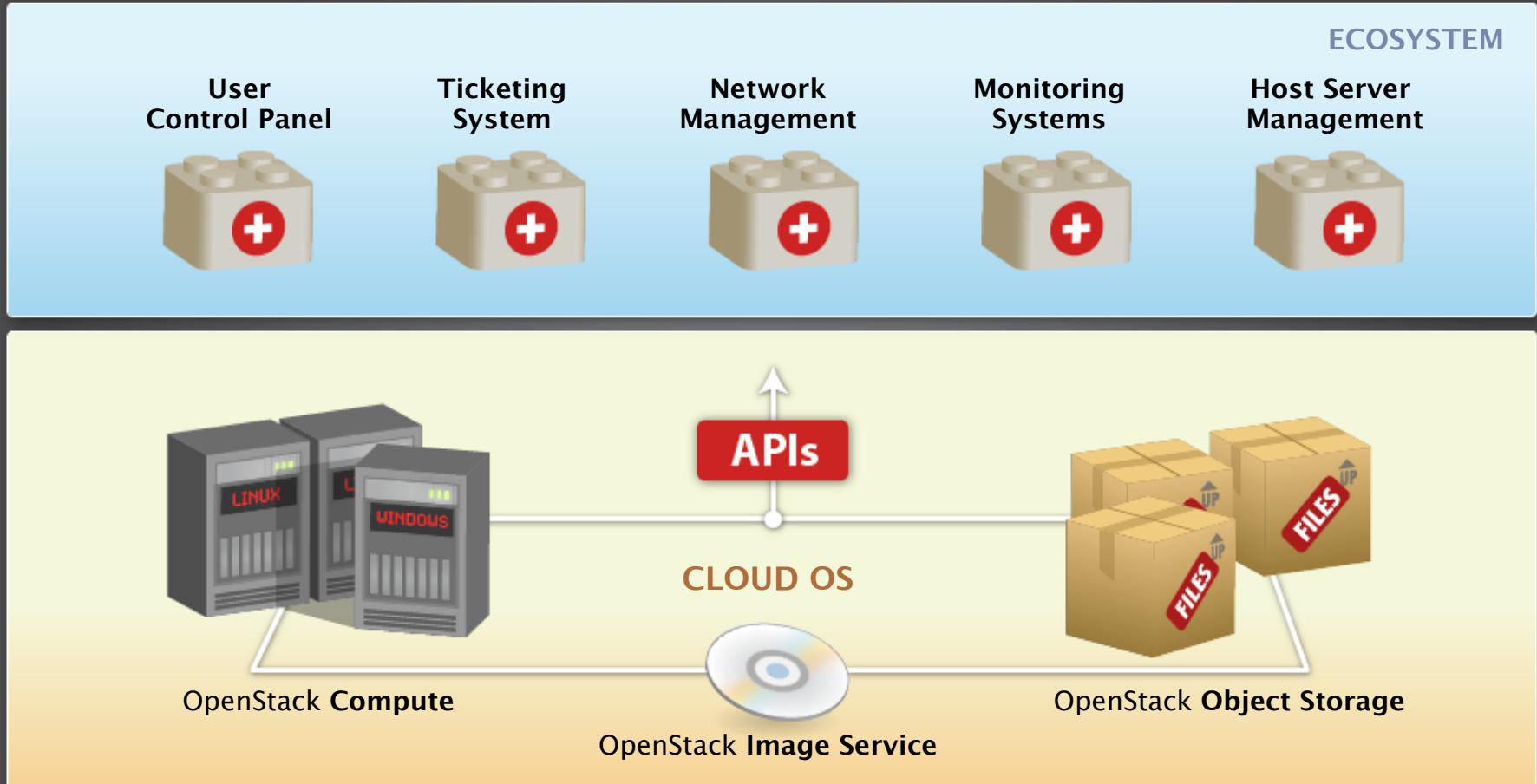
Architect once



Deploy anywhere

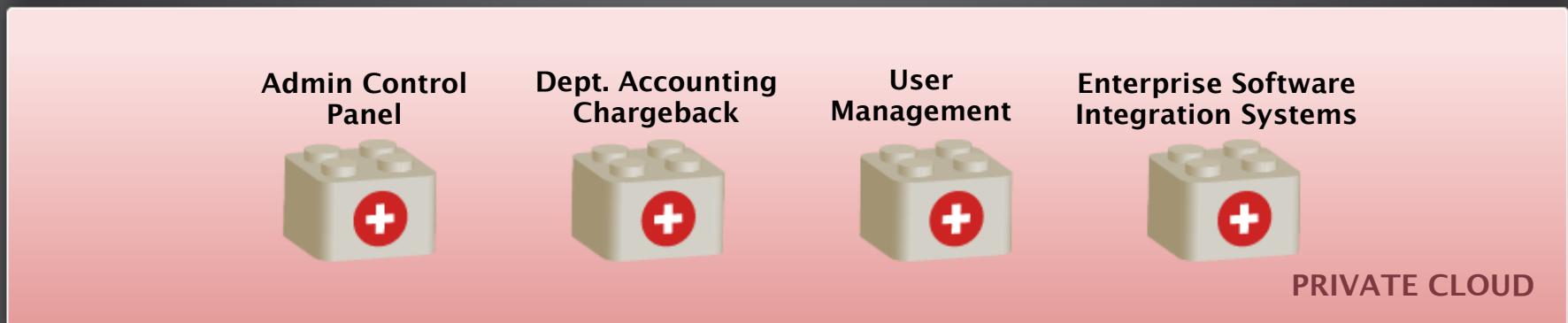
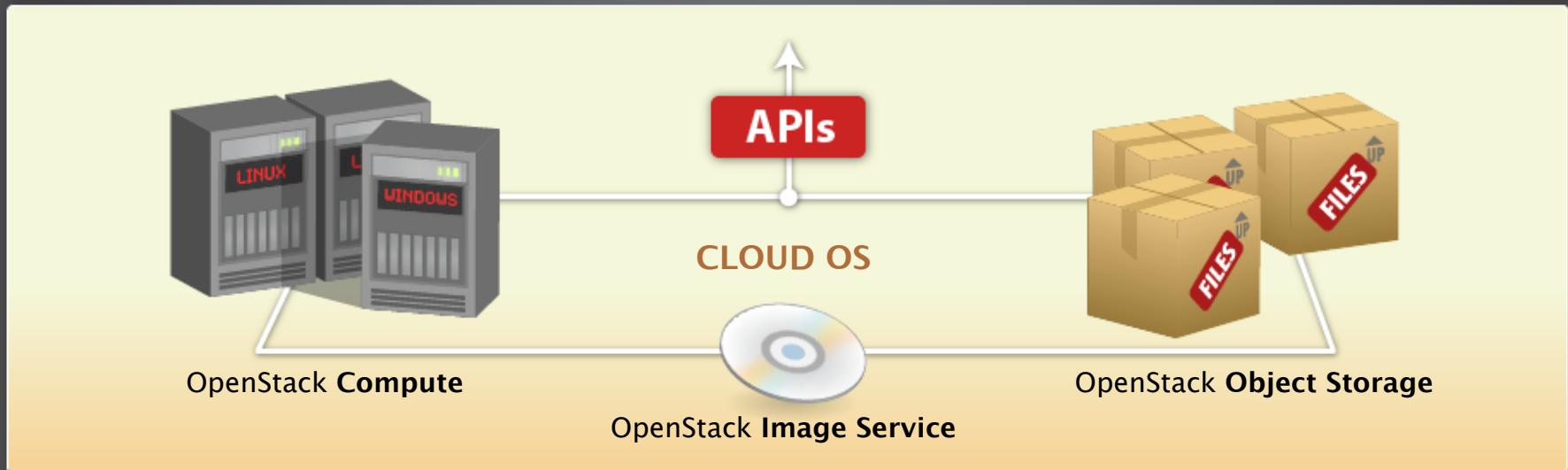
Start with an open, scalable platform



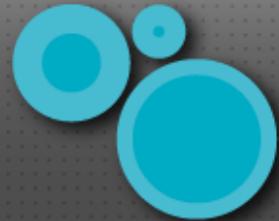


Add 3rd party tools from the ecosystem

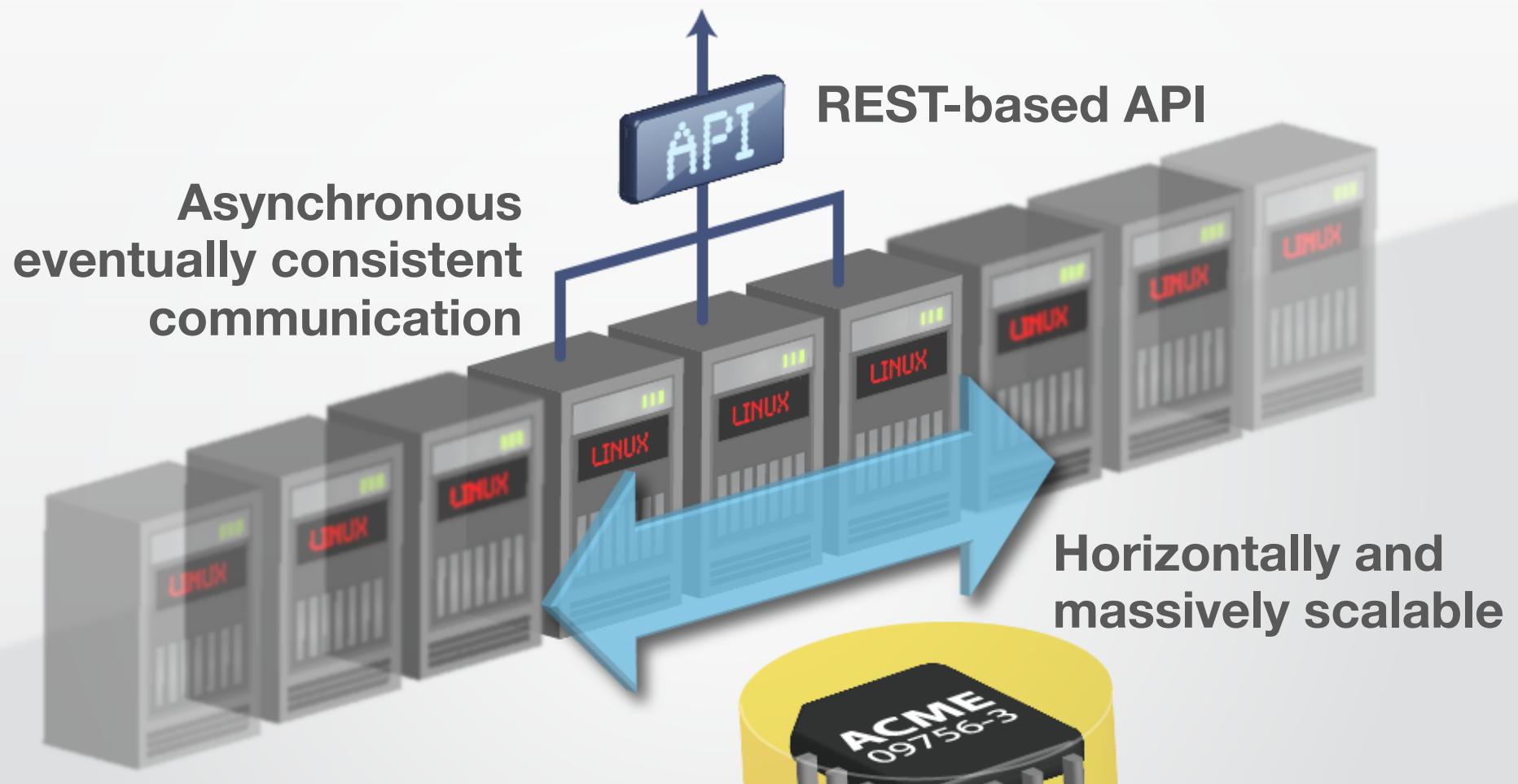


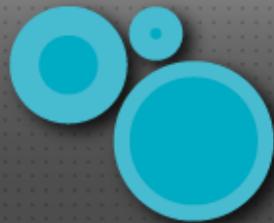


Integrate with existing enterprise systems

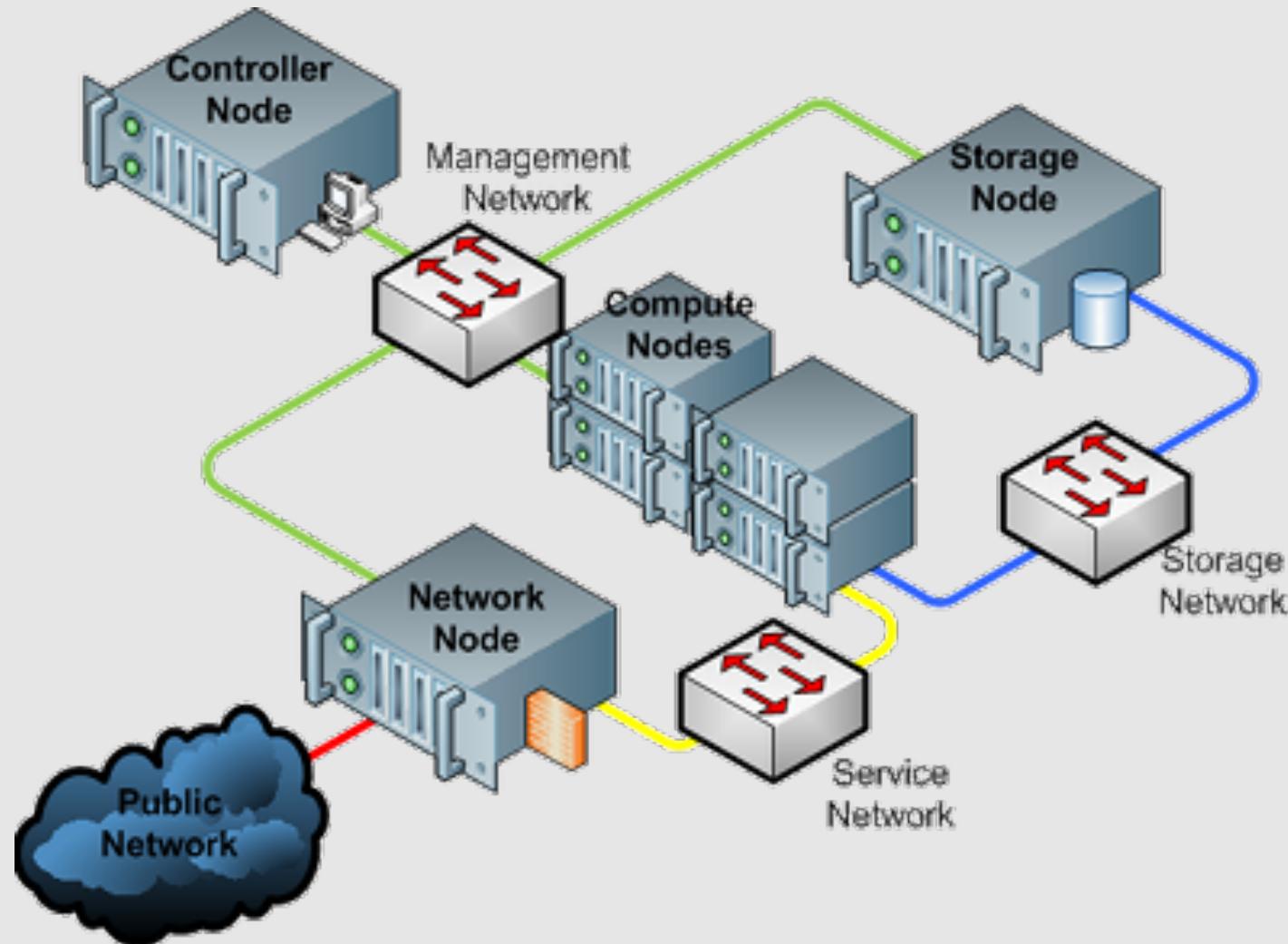


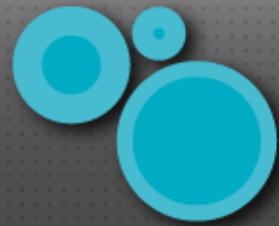
Compute Details





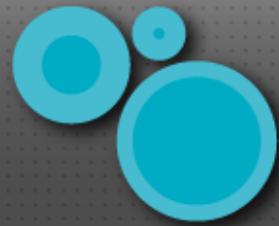
Compute Details (2)





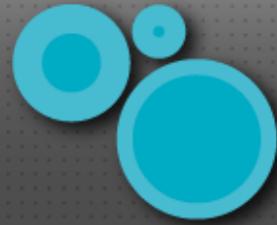
What did we learn

- We only worked with Nova (Compute)
- Some Releases are not as stable as they should be
 - More than 30 files missing in Bexar release
- If using current branches, watch out for changes several times a day, breaking things
- Get involved with the community, you will need their help!



How we integrated it

- There is an OpenStack dashboard for Admins
- We enhanced our own Cloud Management Platform to support OpenStack Compute (nova)
- Abstracting the technical underlyings of OpenStack and making its power available to business users
 - No business user can talk to an API



The Technology Stack

ScaleUp User Interface

ScaleUp API's and Logic Engine

Cloud Management Platform ↑

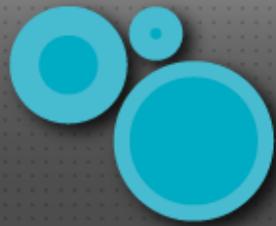
↓ Provider or Enterprise Infrastructure



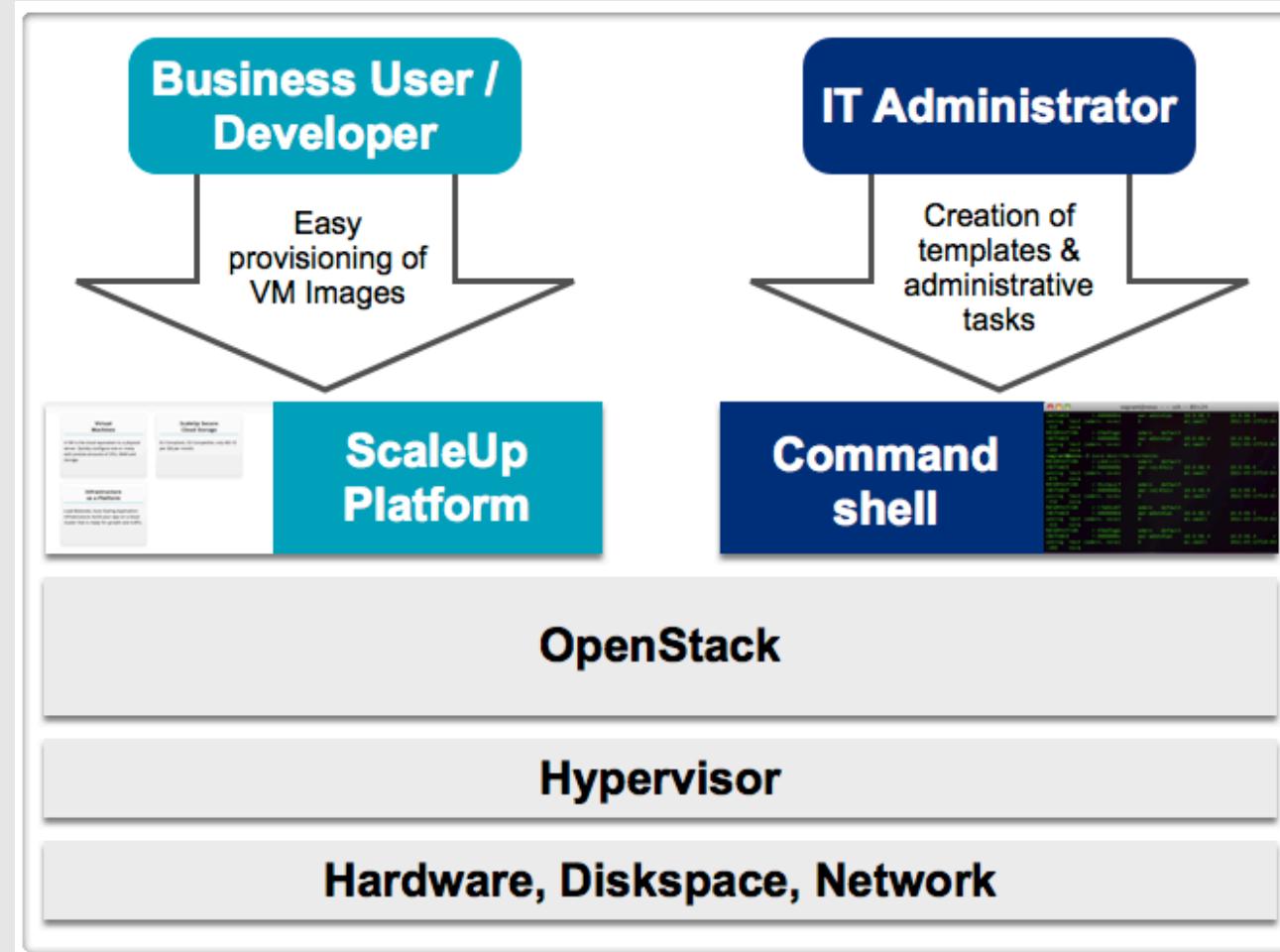
Cloud Stack

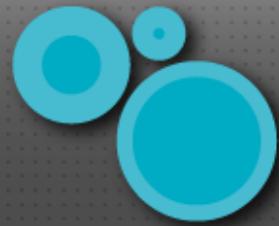


Hypervisor & Hardware



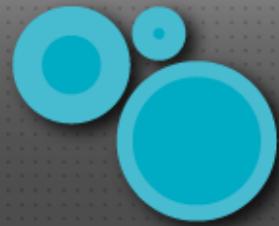
OpenStack with ScaleUp





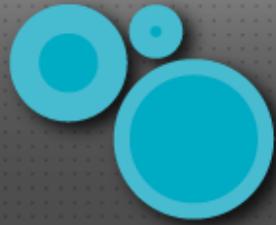
Get started

- Our recommendation:
Use StackOps distribution >> <http://stackops.org>
- You can install it within Virtualbox (if you have enough resources)
- Alternatively: Use a vagrant package from AnsoLabs
<http://ansolabs.com/deploy>
- If you have more budget: Start a real PoC with an Integrator or Rackspace



Contribute

- OpenStack is driven by the community
 - You can be part of the community
 - The community needs good developers
- Get involved at: <http://openstack.org>



Thanks for your attention!

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