

Open World Forum 2011

Open Cloud in Europe: When Interoperability Matters

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# OpenNebula Interoperability and Portability

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## Acknowledgments



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## *OpenNebula Interoperability and Portability*

- What is the OpenNebula Toolkit?
- What is the OpenNebula Project?
- Who Use OpenNebula?
- Challenges for Portability and Interoperability?
- Our Approach for Interoperability and Portability
- Interoperability Points

# What is the OpenNebula Toolkit?

*IaaS Cloud Computing Tool for Managing a Data Center's Virtual Infrastructure*

## Adaptable

- Customizable and Extensible

## Proven

- Many Massive Scale Production Deployments

## Powerful and Innovative

- Advanced Enterprise-class Functionality

## No Lock-in

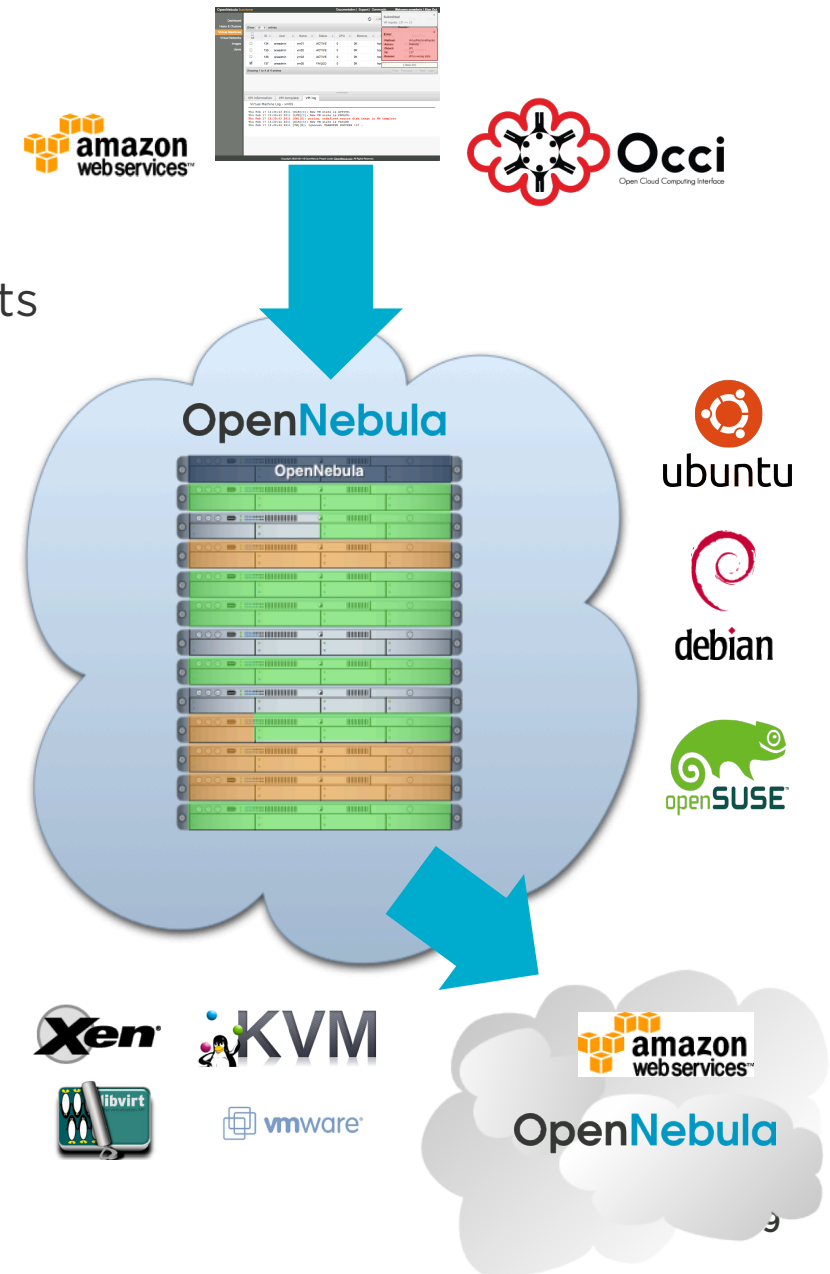
- Platform Independent and Interoperable

## Interoperable

- Popular cloud APIs and standard based

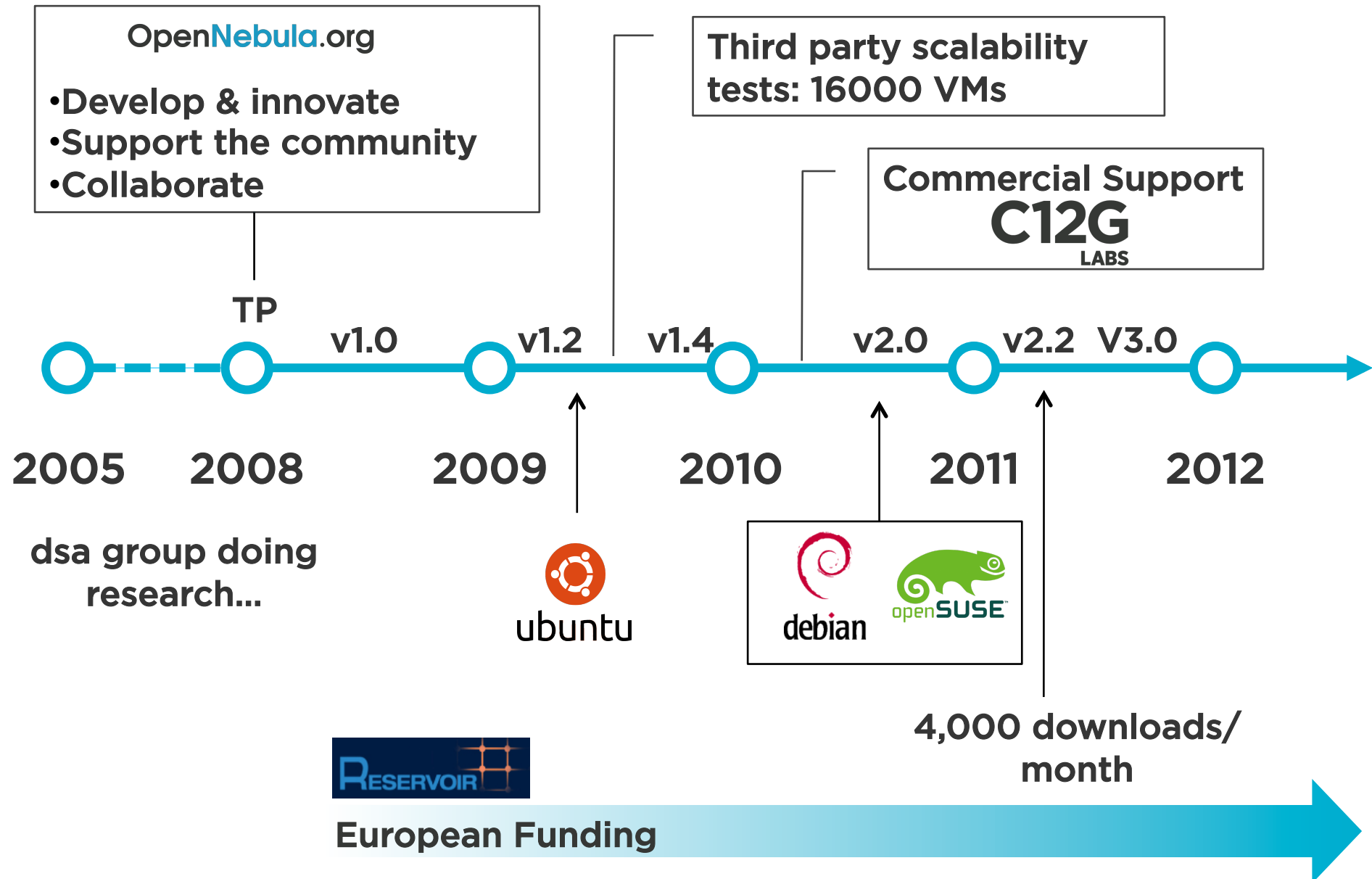
## Openness

- Fully open-source
- Apache license



# What is the OpenNebula Project?

*Building the Industry Standard Open Source Cloud Computing Tool*



## Organizations Building Clouds and Innovative Projects

### Organizations Building Clouds for Development, Testing and Production



### Projects Building an Open Cloud Ecosystem Around OpenNebula

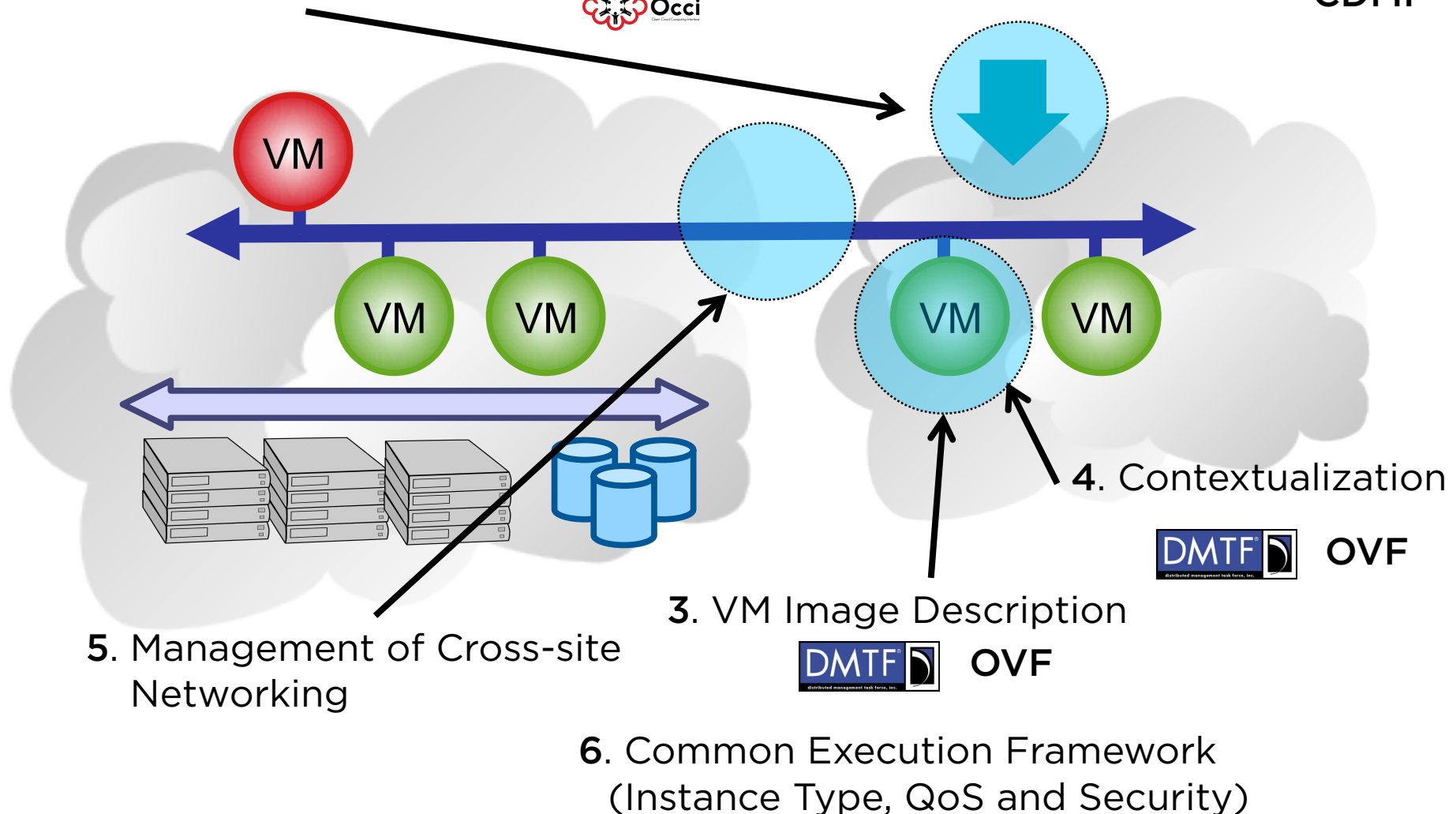


*Transparent Combination of Local Resources with Cloud Resources with No Changes*

1. Management Interfaces for Virtual Workloads



2. Management Interfaces for Data Elements



## Leveraging Existing Standards and Implementing Interoperation

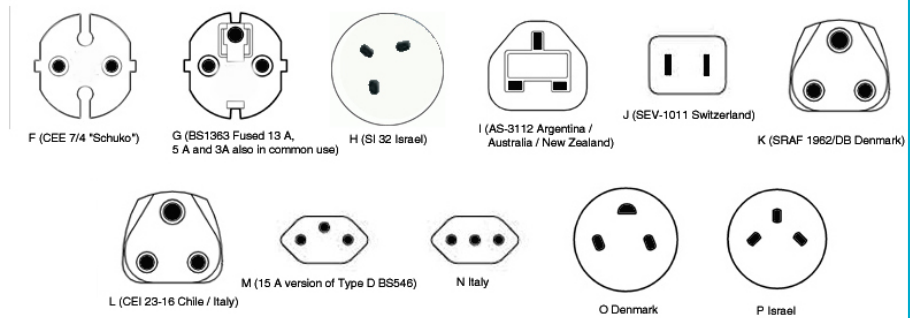
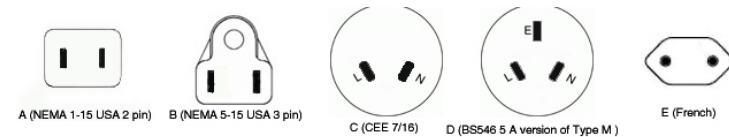
### Standardization

- Implement standards
- Integrate with standards



### Which Standard?

- Different *de jure* standards
- Several *de facto* standards



### Interoperation

- Implement adaptors
- Use transformers



*A Quickly Growing Ecosystem for Interoperability and Portability*



## New OpenNebula Working Group!

OpenNebula Interoperability and Portability



*We Will Be Happy to Answer Any Question*



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