



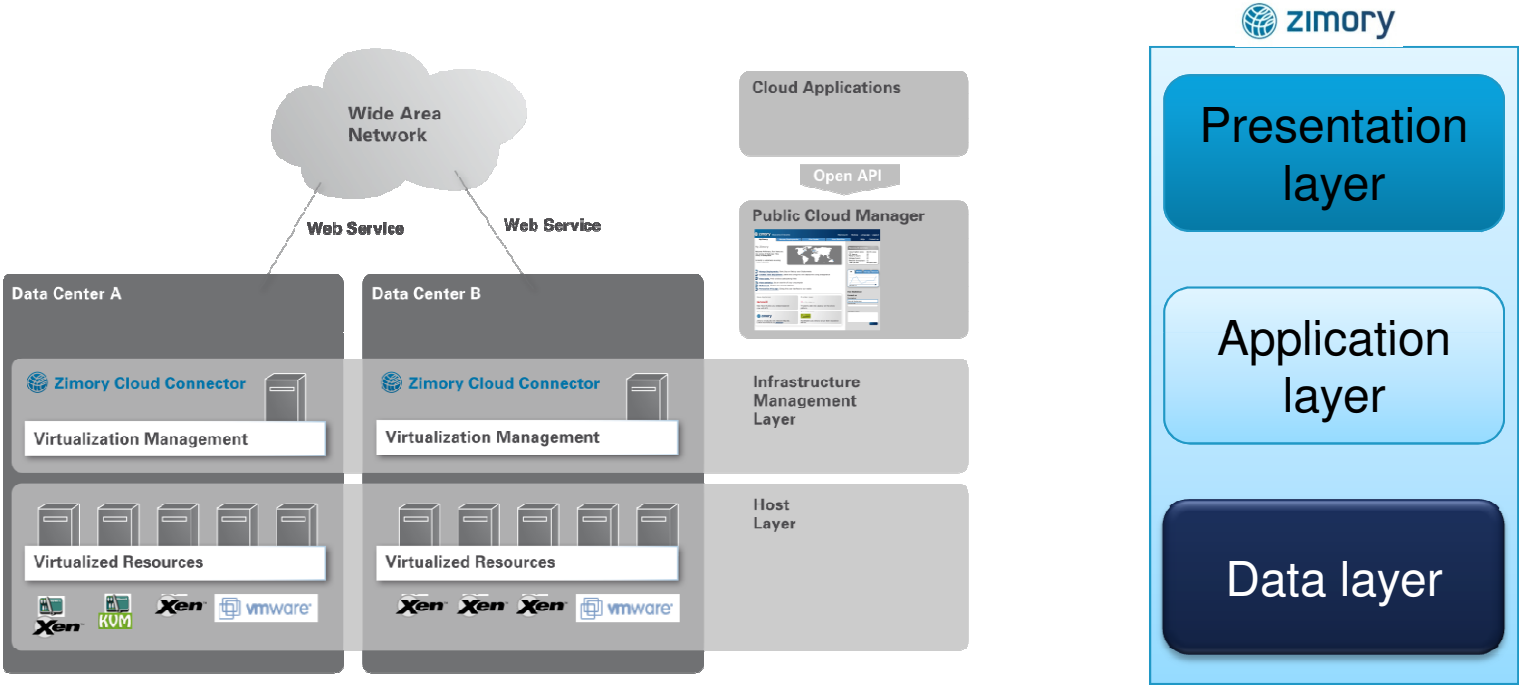
zimory

Enterprise Cloud Computing

Maximilian Ahrens

Zimory Product

Federated enterprise cloud technology for 3 tier applications



Get the most value out of your virtualized environment

Interoperable Infrastructure as a Service (I-aaS)

My Deployments

Please select if you want to:

- [Create a new Deployment](#)

Start, stop or backup deployments or open a virtual client(VNC) - you may do so in the table below. View or configure deployment details - to do so please select your deployments from the list below.

Search deployment by name: [Go!](#)

Name	Created by	Status	Delete	Start	Stop	Backup storage	Console
<input type="checkbox"/> server#1*	Maximilian Ahrens	RUNNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> server_Internet	Maximilian Ahrens	RUNNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> server_Internet-CLONE-1	Maximilian Ahrens	RUNNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> server_Internet-CLONE-2	Maximilian Ahrens	RUNNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> server_Internet-CLONE-3	Maximilian Ahrens	RUNNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> server_Internet-CLONE-4	Maximilian Ahrens	RUNNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Select all [Go!](#)

Legend

- Create deployment
- Start
- Stop
- Backup vm to storage
- Console
- Delete

Recent activities:

Trigger	Stat.	Deployment	Time
		server_Internet-CLONE-4	17:42
		server_Internet-CLONE-4	17:41
		server_Internet-CLONE-3	17:40
		server_Internet-CLONE-3	17:40
		server_Internet-CLONE-2	17:39
		server_Internet-CLONE-2	17:39
		server_Internet-CLONE-1	17:38

Enterprises are moving to the cloud

Challenges on the way are in three areas



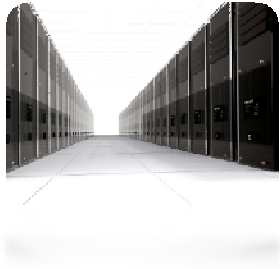
Cloud economies: If there is no single large environment, one needs to source from different pools. How to benefit in this case from the business point of view?



Cloud technology: Enterprise technology architectures include highly complex legacy applications. How to get them scaling horizontally?

Cloud economies

Enterprises do not the same problem



- Compared to the public cloud providers mega infrastructures
 - enterprises have relatively little independent applications
 - enterprises have existing infrastructures
 - Enterprises have more complex requirements from the non-technical view
- **Enterprises also have different needs:**
 - Ways to control the complexity of the management processes
 - Highly differentiated requirements for different use cases and applications
- The solution are federated / hybrid cloud models:
 - These help to mitigate risks – between different providers
 - These help to support the different requirements
 - Reuse existing facilities as well internally as in the outsourcing providers space

The cloud for enterprises is less about the pay as you go – but more about smarter sourcing strategies

Cloud Technology

Horizontal scalability of legacy applications



- Horizontal scalability has been discussed in web applications since a long time
 - Successful implementations scale horizontally
- Enterprises face significant challenges
 - Standard 3 tier apps are not ready to be scalable in the cloud
 - Databases layer creates specific challenges
 - Databases are highly optimized and normally run on specific larger hardware
 - Applications are tightly integrated with the data layer
 - New data layer models like key-value stores required very heavy application changes

Only with the full stack being horizontally scalable enterprises can benefit from the cloud – this is a requirement for successful business cases with production loads.

It's not only about the size... ... it's about the features!



Size and sharing of resources is certainly an important aspect. But for enterprises these are relevant only to limited applications and use cases.

Being able to implement different sourcing processes and horizontal scale on these infrastructures is more important.

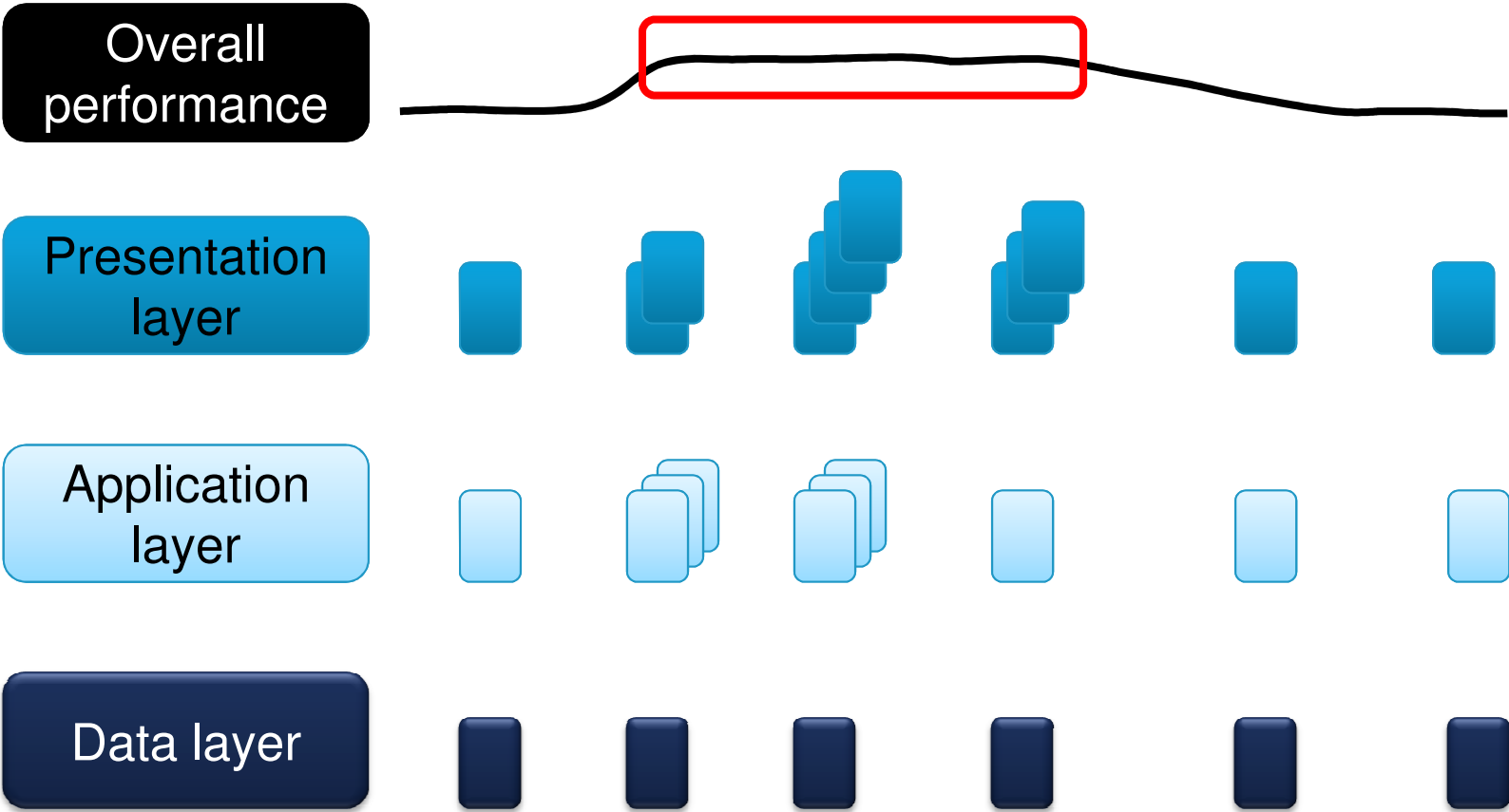




zimory

ahrens@zimory.com

Scalability in 3 tier applications

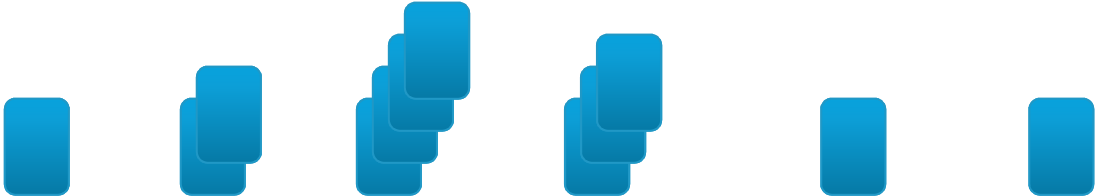


Scalability in 3 tier applications

Overall performance



Presentation layer



Application layer



Data layer

