

# Script „Open Cloud Alliance - Trust and Choice for the Cloud“

## 1 Slide 2 Open Cloud Alliance

Thank you very much. Ladies and Gentlemen, this will be a very brief talk about what we at Univention are doing together with our partners to overcome the major obstacles and inhibitors of cloud computing. And about how we together can make cloud computing an even more profitable business for both software vendors and cloud service providers by bringing choice and competition to everyone in the cloud.

Normally, I would call this an elevator pitch, but since we are at WHD, I prefer to call it a roller-coaster pitch.

To give you some background about myself, I am the founder and CEO of Univention. We make Univention Corporate Server, an Open Source server platform to run enterprise apps and manage corporate IT infrastructure and identities, including built-in and powerful Active Directory services. Univention Corporate Server is currently in use in more than 2,000 organizations worldwide, ranging from just a few users to hundreds of thousands of users and clients.

## 2 Slide 3 Todays Cloud Service

If we look at today's best known and most popular SaaS applications like – for example – Google Apps for Work, Microsoft Office 365 or smaller services like Mailchimp or Evernote, they are of course in the first place very smart, well-done applications which most of us use on a daily basis. But they have a couple of more things in common:

1. First, they bundle a lot of things into one offering: the cloud service, storage, the software, service level agreements, contracts and the jurisdiction they fall under. You as a customer cannot choose which part you'd like to use and which not. You can't run Office 365 in a Google Datacenter or Evernote at IBM Softlayer. Also you won't find a provider who can offer you Google Apps with high security storage under your jurisdiction, if Google does not decide to offer it by itself.

2. Second, and this of course is the root cause for the point just made: The software to provide the actual service is just not available. As we can see in the Salesforce logo, this is even sold as an advantage.

### 3 Slide 4 Today's Cloud Service

And without any possibility to license the software separately from the cloud service you – as an end customer – will never be able to run the software on your own premises if this might meet your requirements better in the future.

That's OK, you might say, we are living in the cloud age and why should I even think of running something on-premises. But – even worse – as the software is also not available to other cloud service providers, you will never find a competitor who can offer you the same service, which you can use without changing anything else. There is simply no possibility to migrate the service to another provider.

This of course means, there is no choice and without the possibility to choose, you lose control about your vendors, service providers, and the software you use.

This is what we call a classic vendor lock-in. And as we have just seen, popular cloud services bring vendor lock-in to an unprecedented, never seen level. And as always along with strong vendor lock-in, the pressure on vendors to innovate decreases. So this in fact might seriously slow down the innovation process we saw the last year in cloud computing.

### 4 Slide 5 Powerful Scripting Languages

But – you might say – most services offer possibilities to download my data, I can even synchronize it with my notebook, so I could upload the files to another service and use that service instead, so I can migrate?

True, data often can be downloaded. But most of the time the value for organizations is not just in the data. The value is in the combination of data and processes. And the processes are implemented and supported by powerful scripting languages and proprietary services – and there is just no way to migrate these scripts from one SaaS offering to another – apart from writing everything new from scratch.

It took the city of Munich years to migrate all their documents from Microsoft Office to OpenOffice because of the various scripts contained in their documents. Expect similar efforts for migrations from Google Apps to Microsoft or vice versa.

## 5 Slide 6 Inhibitors of Cloud Computing

Interestingly, if we look at studies researching the inhibitors of cloud adoption, enterprise customers very well understand the risks of popular cloud offerings.

Here, for example, are the results from a study from Techaisle from last year which you might know: Obstacle number one, of course, are security concerns. But already number two clearly touches control over data and processes as well as the integration of cloud services with existing on-premises infrastructure. And number five directly expresses concerns about vendor lock-in. I'll come back to number three and four later.

## 6 Slide 7 Future of Cloud Computing

We see the same picture in all studies. Here is the well-known and very cloud-friendly "Future of Cloud Computing" study by Northbridge Venture Partners which also identifies security as the biggest concern and vendor lock-in as another important obstacle.

Notably, this study comes to the conclusion that the severity of interoperability has decreased. What does that mean? SaaS vendors more and more provide APIs to integrate with, but that does not touch the core problem of unprecedented vendor lock-in. It even fuels this problem as using these APIs means to become more dependent on a specific cloud service.

## 7 Slide 8 Inhibitors of Cloud Computing

And here is the last slide with studies: Also Gigaom (rest in peace) identified security as the first and vendor lock-in as the fourth inhibitor. And, in case you are curious here, the other obstacles found by the Techaisle study, which I have previously omitted: It's about connectivity and accessibility as well as – again – about integration and management.

## 8 Slide 10 The solution?

So now that we have seen this bleak situation, what options do end customers and service providers have? They, of course, should use cloud services, which are based on software that is also available on its own. So very similar services that use the same software can be made available by different providers. Thus, migrations to competitors become much easier. With this kind of software, it is even possible to run the services on-premises, if you prefer.

And in fact, there is a growing number of excellent, high-quality cloud services available on the market which are based on this kind of software, both Open Source and proprietary. Of course, some of these vendors and software providers you can meet here at the WHD.

## 9 Slide 11 - The Opportunity for CSPs

Providing applications like these is also a huge opportunity for cloud service providers, especially for smaller, more locally operating providers. As these providers are local, they often have excellent customer relations, own a high level of trust and operate under local jurisdiction.

But still, these providers must be able to offer trustworthy security and - very important - they need to be able to offer a large choice of integrated applications similar to the range of solutions found in the proprietary silos of the large providers. And they would have a huge advantage if they can integrate these stacks of applications with the on-premises infrastructure of their customers so that, for example, customers can use the identities they maintain in their local Active Directory to access these apps.

## 10 Slide 12 - The Challenge for CSPs

But while smaller and locally oriented cloud service providers are often very good at security, compliance and customer relations, they are faced with huge challenges when they really want to provide dozens of apps, integrated with each other and also with the customer's local infrastructure.

In fact, they have to integrate each single app with their cloud management, provisioning and billing systems on their own. And thus have to acquire a lot of know-how how to implement, maintain and support all these different applications. This is a large roadblock, especially if these providers just see a small number of potential customers for some applications. And also software vendors often can't do a lot about this, since many of the vendors are just too small to justify large implementation and integration projects.

So the result is: It does not happen. Smaller cloud service providers often just offer, for example, hosted Microsoft Exchange and maybe an inventory management system, which they run for a handful of customers. These providers will not grasp the huge opportunity they have, so trust and choice in the cloud will not happen.

## 11 Slide 13 - The Open Cloud Alliance

To overcome this major problem and thus to really bring choice and control to the cloud, is the mission of the Open Cloud Alliance. It brings together cloud service providers and software vendors who have agreed on one open source platform that provides the basic services needed by almost any app such as application and identity management, provisioning, the generation of data needed for billing, and integration with on-premises Active Directory.

This platform enables software vendors to integrate only once and be able to immediately sell via many cloud service providers as well as to on-premises customers. And on the other side of this coin, cloud service providers who implement this platform can offer all available applications immediately. They no longer have to care about the integration of apps with each other or with a management system, because this will be provided by the platform as well as the integration with on-premises infrastructure.

## 12 Slide 14 Applications

The technical foundation of the OCA platform is based on Univention Corporate Server, our infrastructure operating system to manage apps, identities and the IT infrastructure itself. The platform is thus a proven solution, which is already in use at thousands of sites all over the world.

This also has the advantage that there is already a large and growing number of enterprise applications available on the platform. In fact, we started an "App Center" in Univention Corporate Server about two years ago and meanwhile there are more than sixty enterprise applications available like, for example, Open-Xchange, ownCloud, Redmine, Wordpress or Zarafa. These applications can immediately be used by all cloud service providers implementing the OCA stack. And the number of apps is growing each month.

## 13 Slide 15 Screenshot

Just to show you the beautiful management system of the platform, here is a screenshot of the app center.

## 14 Slide 17 The Stack

This chart gives you a little bit of a technical insight into the Open Cloud Alliance stack. It lives above the IaaS layer, where we, at this time, support OpenStack and VMware. At the moment, the apps run in virtual instances provided by the IaaS layer, where each virtual instance can hold many apps. In the near future, this concept will be extended by using container technology based on Docker, so that the apps are encapsulated and can be easier distributed via the available instances. It will also make migration between different providers easier. On top of this, there are the apps integrated with a central identity management system.

## 15 Slide 18 - Charter

We believe that trust and choice for end customers are key to the success, especially for smaller cloud service providers. The OCA stack makes that technically possible, but, of course, CSPs or software vendors using this stack could always make migrations to other providers impossible.

To ensure customers that this will not happen, the members of the OCA agreed on a couple of things: They will not hinder migrations and will support cross-cloud integration. And as we do not want to create new vendor lock-in, they will also support integration with non-OCA cloud offerings.

Software vendors who have signed the OCA charter are not bound to any licensing model, but they have to make their software available so that it can be used by different providers or on-premises. They use the OCA platform, which is open source and governed by Univentio, but do not commit to do this exclusively.



## 16 Slide 19 - Join Us and Stay Tuned

Here you can see some of the current partners of the Open Cloud Alliance. Hardware and software vendors and cloud service providers. We are actively looking for more partners who either want to work with us to make their software offerings available on the platform or to use the platform to build new, exciting and integrated cloud offerings. So join us and stay tuned.

Thank you very much.

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Abstract: Because software used to provide major cloud services is generally unavailable, customers are stuck with huge vendor lock-in. The Open Cloud Alliance (OCA) provides an alternative to vendor lock-in by creating and using a standardized open cloud platform that integrates a rapidly growing number enterprise applications (60 as of January 2015 and growing) into an easy-to-use identity and application management system. A standardized runtime environment is used atop OpenStack and Docker, and enables cloud service providers to use the stack to provide a rich integrated set of SaaS offerings. In addition, by integrating with just one platform, software vendors have instant access to an expanding channel of cloud service providers. This way, customers always have the choice among providers without the need to change the application.

[www.open-cloud-alliance.de](http://www.open-cloud-alliance.de)