

Opening up the federated Cloud in Asia

by Ditlev Bredahl, CEO, OnApp

A Forrester's survey shows that three times as many APAC companies as there were in 2009 are planning to deploy some Cloud-based service. With such mass adoption, many new Cloud service providers appear in the region. They can offer better usability, lower prices, local knowledge and local support, but they can't compete on scalability and reachability against giants like Amazon. The disruptive Cloud Federation can change that. Small Cloud providers across multiple geographies can now pool together their 'idle' headroom capacity (for demand spikes or disasters) that can amount to 20 to 40 per cent of their infrastructure. This gives them global coverage but still allows them to differentiate and price independently, thus forming a credible alternative to IT global players.



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Cloud adoption is growing in the Asia-Pacific region, and the federated Cloud is making it easier and more cost-effective than ever. In an increasingly connected world, organisations need to make any online offering available to everyone, not just to their own region. It's not enough for websites, blogs, shopping carts, media apps, social networks, gaming, even internal systems like CRM, to be targeted solely at their region of origin - they need to be able to reach out around the world, to wherever their potential users might be.

The Cloud is enabling that move towards global reach, and as businesses across the Asia-Pacific region step up their adoption of Cloud services, the potential for Cloud hosting organisations is huge.

A survey by VMware of 7000 businesses and IT professionals in Asia-Pacific showed that 91 per cent consider the Cloud relevant to their operations, with India and China leading the region in terms of adoption plans. At a survey by technology analyst Forrester, more than half (54 per cent) of the organisations the company surveyed in the Asia-Pacific region (excluding Japan) were either currently using or actively planning Cloud initiatives - three times as many as there were in 2009.

The vast majority of businesses in Asia-Pacific need to ensure that their services are available across all markets - locally, across the region and beyond. The Cloud makes it possible, and there is a growing market for Cloud service providers in this region. However, there are still issues of scale and cost to overcome.

The Asia-Pacific Cloud hosting market today

The global public Cloud market is dominated by a handful of global providers, with the lion's share belonging to Amazon Web Services (AWS). While many Cloud hosting companies in the Asia-Pacific offer localised services, with a presence in one or two countries, it's much rarer to find a provider with anything like the scale offered by Amazon. With the exception of one or two large providers, such as GMO, local Cloud companies simply don't have the capital required to build a significant regional presence, let alone a global Cloud.

There are other problems with Amazon. Its services are seen by many as expensive and non-user-friendly, with limited support options,

especially in Asia-Pacific, where it has a less significant presence than in other regions. The relatively high level of technical expertise required to use their offerings means that much of the real uptake of Cloud has been for short-term development and test activities by large organisations which are suited to such arrangements, rather than with smaller organisations with fewer resources. Smaller providers can offer superior ease of use, lower prices, local knowledge and solid SLAs (*Service Level Agreements*) with local support, but they can't offer the same level of scalability.

Businesses can elect to go with several different Cloud providers, which in theory should offer local support and expertise with greater scale, but in practice it's a strategy that's fraught with further problems. There can be issues with compatibility between smaller Cloud hosts, not to mention the administrative headache and financial burden of dealing with multiple providers, which can often negate the economies of scale that the Cloud is supposed to deliver.

With so few competitors offering Cloud services with genuine global reach, costs stay high because there's no incentive to bring them down, and businesses are effectively held to ransom by a lack of choice, often locked into year-long service contracts - even longer if they've managed to negotiate a lower price. Smaller providers simply can't compete - unless they work together. For the market to develop, there needs to be disruption.

Taking on the Cloud giants - the federated Cloud

Traditional hosting companies are well-established in the Asia-Pacific, but setting up an Amazon-scale offering can't be achieved overnight. It takes time and requires large capital expenditure, which then has the effect of detracting from development in other areas of the hosting business. The alternative is a 'federated Cloud approach' where different providers club together to provide seamless Cloud infrastructure to end-users and organisations, across multiple geographies. It combines global reach with local expertise and accessibility which can be switched on quickly and accessed as required. It allows hosting companies to greatly expand their offering and capabilities at a stroke, and take a step up to compete against much bigger competitors.

This is how it works. In any hosting set-up, around 20 per cent of the available servers sit idle at any given time so that they can be

available for failover or to cope with spikes in usage. In some Clouds there can be as much as 40 per cent sitting idle. Resources and cost are expended for essentially doing nothing. By making that space available, for a fee, firms can maximise their investment while losing none of the scalability and security that they need. Hosting providers make the space available, and this can be used as and when it's needed, by providers around the world. Each Cloud provider can still set their own prices, and users can choose which providers they would prefer.

The federated Cloud offers other benefits for businesses in the Pacific Rim, such as disaster recovery. The havoc caused by last year's earthquake and subsequent tsunami in Japan illustrated all too starkly the vulnerability of traditional IT infrastructure, with tens of billions of dollars' worth of damage caused in a matter of minutes. It makes sound business sense in all sectors to follow the lead of the big financial institutions with failover infrastructure-based in a range of locations around the globe. Until now, the high cost of setting up that sort of infrastructure has been prohibitive for all but the largest organisations.

The resources for the federated Cloud have been there for some time, but only recently have they begun to be tapped into in a secure, reliable and scalable way. That's now happening across the highly diverse Asia-Pacific region and throughout the globe. It's now possible for one provider to offer a range of PoPs in over 300 locations around the world via the federated Cloud, offering locally-based services wherever they're required. A specialist delivery system determines which servers in the federation are best-suited to deliver content to end-users, based on the status of those servers and their location. The result is an extremely cost-effective and flexible offering that can be used by organisations that previously wouldn't have been able to afford it.

Benefits of the federated Cloud

For hosting providers it means the creation of a global Cloud infrastructure that virtually everyone can afford, bringing Cloud hosting within reach of the world's 33,000 mass-market hosts. Smaller providers which are already differentiating themselves on service, specialist applications and bespoke integrations can now capitalise on those strengths by joining together to compete against the big boys in terms of scale and

global reach - the holy grail of hosting. Even relatively small hosting providers can increase their offering extremely quickly, and only pay for the services they need, as they need them. They can also create an additional revenue stream by making their own spare capacity available.

With the federated Cloud, a business only needs to have one supplier, which understands their market and has the specific local knowledge they need, whether it is the technology, language, culture or specialist markets. At the same time, it also has global resources when it needs them, through seamless integration with other members of the federation and access to their Cloud infrastructure, all over the world.

So users get better service and prices, and hosting companies get to compete on the quality of their offering, not just their investment muscle. The knock-on effect of this means greater competition in the marketplace, driving down prices and improving service offerings across the board. With a federated Cloud, good service and global reach is no longer an either/or situation, and users can get all the advantages of using smaller, locally-based hosting providers, with global back-up and services.

The federated Cloud is here

The federated Cloud isn't just a clever concept. It's happening now, and challenging the closed-shop way that global Cloud services have traditionally been delivered. Smaller hosting providers are beginning to come together, leveraging their combined capabilities to compete with much larger providers such as Amazon. At least one model is already emerging which unites more than 300 service providers in 25 countries, all running on the same federated Cloud platform - and it's growing.

The federated Cloud offers particularly strong incentives in Asia-Pacific, where Amazon has less traction than in other territories. With the take-up of Cloud services in the region accelerating, the federated Cloud will enable virtually any hosting provider to compete on the same level with much bigger rivals, so both their business, and their customers, will benefit. With providers pooling their resources, the federated Cloud offers a vision for the development of Cloud services in Asia-Pacific, a vision that, at last, everyone can share. ●