

Special Report:

The State of Cloud Computing Security in Asia

By: Dave Asprey

Vice President of Cloud Security



IT leaders in Asia and around the world are working with four new and increasingly important areas innovations today, all of which revolve around cloud computing.

Big Data

CIOs are integrating data and analytics more completely into business decisions means making data accessible in the cloud and then securing it.

Social Networking

Companies are taking advantage of social Internet technologies based on Web 2.0 and social media platforms like Facebook and Twitter to engage in greater conversation with customers. These cloud-based elements are often based on Platform as a Service and API technologies that introduce a new set of data and employee security concerns.

Cloud Platforms

Enterprises are leveraging a variety of cloud platforms, including public and private models and a mix of SaaS, PaaS, and IaaS. This mix of platforms introduces new concerns around data and workload security.

Consumerization

Enterprises are using cloud services to manage consumerization and BYOD initiatives in the workplace, and cloud devices themselves are becoming the dominant way of accessing the cloud. If a mobile device with cloud access is compromised, the cloud itself can be compromised.

These four areas of innovation drive cloud adoption, which itself will drive enormous economic growth worldwide, according to IDC's March 2012 study sponsored by Microsoft. Key findings included

- Public and private IT cloud services will generate nearly 14 million jobs worldwide from 2011 to 2015.
- IT innovation created by cloud computing could produce \$1.1 trillion a year in new business revenues.
- Cloud-related jobs will grow evenly across the spectrum of small, medium, and large companies.
- More than one-third of cloud-enabled jobs will occur in the communications and media, banking, and discrete manufacturing industries.

Given the focus of many governments in APAC on growing employment levels, it's becoming more important than ever for national economies that countries quickly embrace the cloud. The IDC study predicted a surprising difference in growth of cloud jobs in different countries.

- **Japan:** predicted **155%** cloud-related job growth from 2012-2015
- **Australia:** predicted **129%** cloud-related job growth from 2012-2015
- **Singapore:** predicted **109%** cloud-related job growth from 2012-2015
- **Malaysia:** predicted **107%** cloud-related job growth from 2012-2015
- **Indonesia:** predicted **103%** cloud-related job growth from 2012-2015
- **India:** predicted **99%** cloud-related job growth from 2012-2015

One way in which the cloud is helping companies to be more innovative is by freeing up IT managers to work on more mission-critical projects. In addition, many businesses are using the cloud to improve how they work with customers and partners, by engaging with them and sharing information. The cloud speeds up companies on many levels beyond IT.

The cloud is the No. 1 topic among CIOs from around the world. They want to know how they can use it to fuel growth, and they want to be sure they have the right people and skills in place to make it happen.

Slower cloud adoption in APAC

Despite these trends and available technology, businesses across many vertical industries in APAC continue to stay apprehensive and are not taking full advantage of cloud computing. Cloud adoption trends in APAC are lower than expected.

- Results of a recent IDC **Manufacturing** Insights survey¹ (published April 2012) show that ease and speed of deployment, and reduction in IT staff are the top drivers for cloud adoption among manufacturers in Asia/Pacific excluding Japan (APEJ).
- However, only **16%** of the survey respondents acknowledge these top drivers as forces for cloud computing adoption, indicating at best **lukewarm interest in cloud** at present.
- A recent survey of IT decision-makers across Asia/Pacific excluding Japan (APEJ) (published April 2012)² found that 59% of **public sector** respondents are confident in the ability of their internal IT departments to deploy private cloud environments.
- However, IDC **Government** Insights cautions that high levels of private cloud adoption may not bode well for a collaborative and citizen-engaging government and pre-emptive measures should be taken for collaboration to take place across organizational boundaries.
- The **financial services** industry, typically an early adopter of technology, has been uncharacteristically slow to take on cloud. There is still no wide-scale adoption of the technology, despite considerable resources allocated by vendors to ensure that their offerings scale up and become more mature.³
- According to the results of IDC's May 2012 cloud survey⁴, despite considerable resources allocated by IT vendors to scale-up their cloud offerings, only 19% of **retailers** across key markets in Asia/Pacific are evaluating the adoption of some form of cloud computing services.
- According to IDC, the Asia/Pacific region is yet to witness widespread adoption of cloud services in the **healthcare** industry (published April 2012)⁵, though 69% of IT decision makers across the region indicated that they currently have budget assigned to cloud computing.
- Singapore companies are not early adopters of the cloud in comparison to other countries such as India and Australia but research shows that many are planning to look into it in the next 12 months.⁶ In terms of industry verticals within Singapore, manufacturing is showing the least affinity for embracing cloud services overall. Government and financial services are leading the adoption although the overall rate of adoption is still relatively low.

¹ <http://www.idc.com/getdoc.jsp?containerId=prSG23451012>

² <http://www.idc.com/getdoc.jsp?containerId=prSG23431712>

³ <http://www.idc.com/getdoc.jsp?containerId=prSG23474712>

⁴ <http://www.idc.com/getdoc.jsp?containerId=prSG23495312>

⁵ <http://www.idc.com/getdoc.jsp?containerId=prSG23441512>

⁶ <http://business.asiaone.com/Business/SME%2BCentral/Tete-A-Tech/Story/A1Story20120503-343603.html>

So why are businesses still hesitant about the Cloud?

According to PWC's 2012 Global State of Information Security Survey⁷ and PWC's 2011 The Future of IT Outsourcing and Cloud Computing⁸ survey, concerns include:

- **Data Security**
 - 33% of respondents in Asia said they were uncertain about being able to enforce provider site security policies. 13% of respondents said they were worried about control and access at provider sites. 10% said they were worried about being able to recover data. 3% were worried about the financial viability of the service provider.
- **Data Systems Integration and Portability**

Approximately half of respondents in Asia said they faced challenges in integrated systems and the ability to ensure that they were able to port data from their existing systems into new system.
- **IT Governance**
 - 38% of respondents were concerned about meeting their compliance requirements.
- **IT Resource and Manpower Concerns**
 - 22% of respondents were concerned that they wouldn't be able to find and staff their IT appropriately.

With this data as a backdrop, it's interesting note that the percentage of companies that reported a data security lapse or issue with their cloud service increased from 43 percent in 2011 to 46 percent in 2012, according to a recent global cloud security survey conducted by Trend Micro, the global leader in cloud security.

Trend Micro's annual survey of 1400 IT decision makers from the U.S., UK, Germany, India, Canada, Japan and Brazil found significant regional differences in cloud security.

- **India** had the highest incidence (67 percent) of data security lapse or issue, a full 12% higher than the next highest country, Brazil (55 percent.)
- **India** also had the highest – 12 percent -- increase of security lapse or issue from 2011
- **Japan** had a 7 percent increase in security lapse or issue, about the same as Canada at 6 percent
- **Japan** is less likely to adopt cloud computing than all the other countries surveyed.
- **Japan** also has the lowest usage level for VDI, public cloud and private cloud.

⁷ <http://www.pwc.com/gx/en/information-security-survey/giss.html>

⁸ <http://www.pwc.com/gx/en/technology/cloud-computing/index.html>

Given the economic imperatives and job growth potential of the cloud, it is more important than ever that countries in APAC embrace cloud computing. In order to do that, the first step is to help cloud providers in those regions address the top barrier to cloud adoption – security.

Enterprises in APAC have access to technologies to safely secure the cloud, and agentless models like Trend Micro's Deep Security are well-suited to make the cloud even safer than traditional datacenter environments. APAC companies need to face their cloud fears using technology instead of avoiding or slowing cloud adoption.

Cloud service providers in APAC are relatively new to the business so it's natural for businesses to have questions about their viability and commitment. On the flip side, cloud providers in APAC also need to provide clarity in terms of their offerings, policies, technology, service-level agreements and how they manage cloud security, privacy and security incidents.

The Cloud Security Alliance offers free cloud security self-reporting frameworks for cloud providers that can go a long way to addressing enterprise concerns about security in the cloud. Service providers also need to partner with virtualization aware security vendors to create compelling secure cloud service offerings for enterprises. Creating safe clouds in APAC will help regional economies grow quickly, powered by the growth of the cloud.



TREND MICRO™

Trend Micro Incorporated is a pioneer in secure content and threat management. Founded in 1988, Trend Micro provides individuals and organizations of all sizes with award-winning security software, hardware and services. With headquarters in Tokyo and operations in more than 30 countries, Trend Micro solutions are sold through corporate and value-added resellers and service providers worldwide. For additional information and evaluation copies of Trend Micro products and services, visit our Web site: www.trendmicro.com.

TREND MICRO INC.

U.S. toll free: +1 800.228.5651
Phone: +1 408.257.1500
Fax: +1408.257.2003

www.trendmicro.com.

©2012 by Trend Micro Incorporated. All rights reserved. Trend Micro, the Trend Micro t-ball logo, OfficeScan, and Trend Micro Control Manager are trademarks or registered trademarks of Trend Micro Incorporated. All other company and/or product names may be trademarks or registered trademarks of their owners. Information contained in this document is subject to change without notice.