

# IDA joins forces with tech firms and institutions for research

## Six facilities to form cloud computing research test bed

By **ONG BOON KIAT**

THE Infocomm Development Authority of Singapore (IDA) has joined hands with three tech giants and three other prominent institutions to set up a research initiative to study one of today's hottest technologies: cloud computing.

The deal, which was announced yesterday, will see IDA work with Hewlett-Packard (HP), Intel, Yahoo, the University of Illinois at Urbana-Champaign, the Karlsruhe Institute of Technology in Germany and the US government agency National Science Foundation.

Six facilities – dubbed Centres of Excellence – will form this cloud computing research test bed. Expected to go online later this year, these centres are located in Singapore, Germany and the US. Each facility will host a cloud computing infrastructure, largely based on HP hardware and Intel processors, and will have 1,000 to 4,000 processor cores.

The Singapore Centre of Excellence is located in a data centre compound operated by local IT service provider Singapore Computer Systems (SCS).

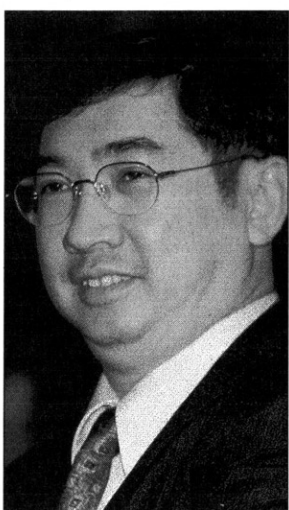
Located in Bedok, this HP-equipped facility was unveiled last month during the CommunicAsia show as the new data centre that will power HP's and SCS's joint National Grid service offering – which is expected to be ready by year-end.

Cloud computing is shaping up to be the next big thing and this research initiative will put Singapore in a better position to exploit this computing paradigm when it takes hold, said Khoong Hock Yun, IDA's assistant chief executive of the Infrastructure Development Group.

"This initiative is really to help get the whole industry, not just the ICT industry, to move along this track and increase the comfort level of using (cloud computing)," he said.

Cloud computing is a concept where applications are delivered as services over a wide-scale network like the Internet. The "cloud" refers to the network of servers and network connections that contain the applications.

With the use of a shared infrastructure and subscription-based paying models, cloud computing can dramatically reduce businesses' IT budgets. It also allows smaller businesses to afford expensive enter-



**Mr Khoong:** Says cloud computing is shaping up to be the next big thing

prise software, such as customer relationship management (CRM). Cloud computing also makes collaboration between far-flung users easier and cheaper.

As part of the initiative, IDA will work with Yahoo to train up to 60 local domain analysts from tertiary institutions and the industry. These trainers will in turn impart their expertise to their students and interested industry parties, hence helping to build up a body of cloud computing expertise in Singapore.

IDA said it will facilitate some 45 research projects here, with 15 of them global collaboration projects. Singapore researchers will chart the research direction in conjunction with researchers from HP Labs, Intel and Yahoo Research.

This initiative is expected to dovetail with Singapore's drive to become a grid computing hub. Grid computing is a set of technologies that enable the use of shared IT resources. A grid computing system can underpin cloud computing services.

Grid computing is a major initiative under Singapore's Intelligent Nation 2015 (iN2015) infocomm masterplan.

Last month, IDA announced the award of Singapore's first commercial grid computing project to three consortia – led by SCS with HP, New Media Express and PTC System.

At the announcement, IDA said the public sector will buy up 40 per cent of capacity of the three new grid computing platforms when they are launched by year-end.

With this initiative, Singapore's grid computing realm could get larger. Tan Yen Yen, vice-president and managing director of HP Singapore, said the Bedok data centre could potentially link up with HP Labs in Palo Alto to enable larger-scale cloud computing research in future.