

Research Brief

Virtualization Evolution in China Market

By Kim Wang, General Manager and Chief Analyst of Sino-Bridges Mary Ma, Sino-Bridges Research Analyst April, 2013

Abstract: Compared with U.S. and European markets, the Chinese virtualization market is still in a transition from "accepting" to "popularizing." Virtualization evolution can be divided into three stages. Virtual value to enterprise business and requirements to IT architecture, technology performance, functionality and management are also different in the various stages.

The survey results of Sino-Bridges indicated that the Chinese virtualization market was in a rapid evolution from "accepting" to "popularizing." 40.8% of the 683 end users who participated in the survey as interviewees said they had implemented virtualization, which still showed a large gap as compared with the enterprises in U.S. and European markets, nearly 80% of which have deployed virtualization. However, the Chinese virtualization market will show a strong growth in the next 24 months. But the majority of the enterprises participating in the Sino-Bridges' survey are no longer satisfied with the deployment of virtualization for test and development environments, an increasing number of which have deployed them in office management software, IT services, production applications, and even business-critical loads. Meanwhile, the ratio of virtualized servers to total servers and virtual machine density will increase year by year.

Virtualization evolution can be divided into three stages. Virtual value to enterprise business and requirements to IT architecture, technology performance, functionality and management are also different in the various stages. In the first stage of virtualization, virtualization is mainly used for test and development environments. Users integrate resources through virtualization and reduce IT expenses as well as reduce the resource requirements for disaster recovery and business continuity through virtualization. In the second stage of virtualization, users virtualizes more and more production applications, including business-critical loads to improve the level of IT automation and the response speed to IT business in order to gradually standardize data centers. In the third stage of virtualization, users integrate and optimize existing IT resources and cloud computing resources in the data center to provide end users with near real-time and real-time delivery of IT services (denominated in performance), so that the progressive change from IT infrastructure management to IT services management is realized.

Evolution Process of Virtualization

There are three stages in the evolution of virtualization.

Virtualization 1.0

Objective: Resources consolidation

Value: Reduce CapEx

Virtualization 2.0

Objective: Application virtualization

• Value: Reduce OpEx and standardize data center

Virtualization 3.0

• Objective: Efficient IT services

Value: Efficient IT services for agility

The survey shows that compared to the U.S. and European markets, Chinese enterprise users are developing in leaps and bounds in the evolution process of virtualization, rather than a progressive development. In recent years, some industry enterprises have had an exploratory mode with the Virtualization 1.0, 2.0, 3.0 three stages being deployed at the same time. It is common that virtualization is used for test and development environments (Virtualization 1.0), office applications and IT services (Virtualization 2.0), and selecting individual business applications to deploy "small cloud" (Virtualization 3.0). And each project is relatively independent without unified planning or standards. During the Virtualization 1.0, 2.0, 3.0 stages, users mainly used virtualization to improve resource utilization rates and reduce costs to meet requirements of certain projects, and then to establish and refine the process for the virtualization of production applications and cloud computing. Therefore, Chinese users are well advised to develop the strategies for each stage of virtualization in the evolution process of virtualization to protect long term investment, and to minimize potential risk of business continuity, security, processing capability, expansion capability and management efficiency during IT evolution.

In the process of virtualization from as IT tactic to IT strategy, technology is not the bottleneck. Instead, the key lies in the culture of IT innovation, the system of rewarding innovation, and management structure with combined loads as the core (converged structure), as well as the use and management experience in high virtual levels.

Appendix:

The Distribution of Survey Participators

Figure 1. Interviewees' Survey, by Enterprise Size

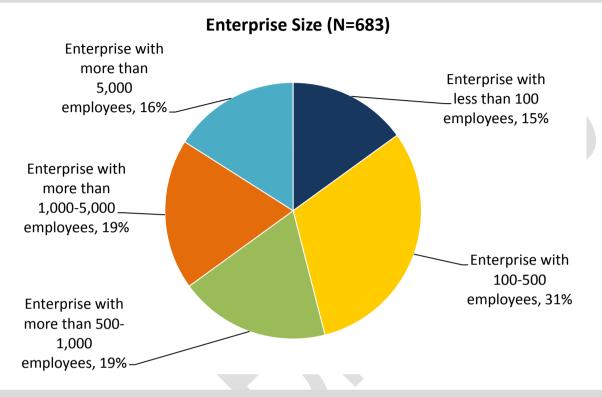
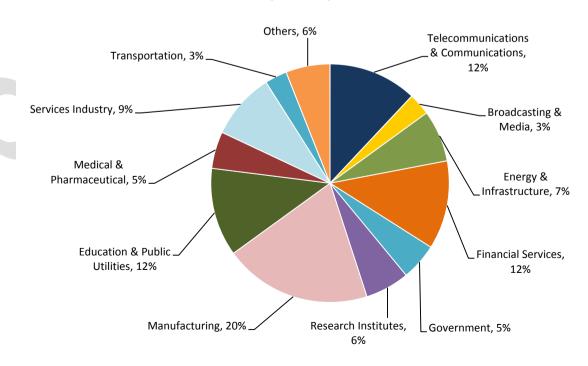


Figure 2. Interviewees' Survey, by Industry

The Industry of Enterprise (N=683)



About Research

The Sino-Bridges Research and Consulting Meeting complete the following three main reports according to the research data:

- Chinese Virtualization Market and Technology Trends (Page 52)
- The Virtualization Value and Challenge for SMEs (Page 30)
- The Evolution Trends of IT Structure and Management (Page 30)

The 2013 Research Projects of Sino-Bridges Research and Consulting Ltd.

- First Quarter: Virtualization Market and Technology Trends
- Second Quarter: The Market and Technology Trends of IT Structure
- Third Quarter: The Market and Technology Trends of Cloud Computing
- Fourth Quarter: The Market and Technology Trends of Big Data

Combined with the survey reports above-mentioned, Sino-Bridges Research and Consulting Ltd. will release a series of Webinars in www.webinars-china.com platform. Please keep your focus and interest.

About Sino-Bridges Research and Consulting Ltd.

The Sino-Bridges Research and Consulting Ltd., established in 2006, is a company focusing on consulting and research in the field of data center, committed to provide forward-looking, reliable market and technology trends references, as well as an online learning and improving platform for IT manufacturers and IT professionals from a global perspective combined with survey data and market technology (www.webinars-china.com). Its main services and research fields are focused on data center-related technology, such as storage, server, network, client facilities, business intelligence and structure management software of data centers, etc. And its main research subjects include: virtualization, cloud, big data, data protection, IT structure and application trends, etc.

The analysts at Sino-Bridges Research and Consulting Ltd. Possess many years of accumulation of research and consultation of data center technology and markets in U.S. and Europeans well as in China. In addition, Sino-Bridges has tens of thousands of end-user data and research members, who can help thoroughly understand Chinese users' needs, challenges and problems by enhancing interaction with end users. The main service forms of Sino-Bridges Research and Consulting Ltd. include research reports, evaluations of products and usage, analysis reports and technology white papers, etc. During 2008~2012, the joint brand ESG-Sino (combining Sino-Bridges and ESG), one of the world's ten largest consulting companies, has provided technology and market consulting services in China. With offices in Seattle, U.S., Beijing, Wuhan, and other places, Sino-Bridges retains customers, such as IBM, Dell, HP, EMC, NetApp, etc., and domestic manufacturers like Huawei, Lenovo, Inspur, and UIT, etc.

For a main report of the survey results, please contact: contact@sino-bridges.com.

Analysts

Kim Wang is the founder of Sino-Bridges Research and Consulting Ltd. and a senior analyst. She has 23 years of international management and consulting experience in Europe, South Asia and North America, including 13 years of experience in data center. Kim has in-depth knowledge of storage, server, networking, clients and data center management software. In 2012, Kim gave more than 60 lectures on data center technology and market © 2013 Sino-Bridges, Inc. All rights reserved.

trends(www.webinars-china.com, online and onsite) as the most influential analyst in the field of China providing credible reference for users in China from a global perspective to hasten the assessment and acceptance of new technologies in the Chinese market.

Mary Ma is a Sino-Bridges analyst. She joined Sino-Bridges Research and Consulting Ltd. in 2006 and began to perform investigations of data center, and evaluations of the planning and execution of various projects. Mary has led the completion of project planning of a number of surveys, the designing of surveys and in-depth interviews, evaluation of white papers, and the writing of survey reports. She has a good understanding of the data center technology segments.

