# Software as a Service in China: Legal Requirements and Solutions for U.S. Software Businesses

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Software as a service ("*SaaS*") or cloud computing is an important software delivery model for many business applications.<sup>3</sup> The software and required data are hosted centrally and accessed with a web browser over the Internet. This delivery model emerged in the United States, led by Salesforce.com ("*SFDC*"), and has become part of the business model of all major software companies. The other software delivery model is on-premise software that is installed on a server on a business' computer network.

Cloud computing has been made possible by the wide-spread availability of greater bandwidth, particularly wireless bandwidth, more powerful processors and inexpensive network storage. In cloud computing, computing resources are made available to the user as needed rather than a business paying for and operating an under-utilized server farm loaded with expensive software. Maintaining on-premise computing resources to meet peak requirements is not cost-effective and can negatively impact financial statements. With SaaS, additional computing power and user software licenses or subscriptions can be activated as needed. SaaS simplifies hardware and software deployment, speeds up application implementation and enables a software business to more easily support its customers.

### The China SaaS Market

China is a very large potential SaaS market for basic business applications such as accounting, HR and manufacturing related applications. The U.S. is the world leader in software and China is an important market with enormous potential revenue. Cloud computing will be an important part of China's next generation information industry. The booming manufacturing sector in China can particularly benefit from this delivery model. Many small and medium businesses in China currently do not use computing at all. They continue to operate using paper-based processes. There are few legacy systems to dislodge. Even in the U.S., there can be resistance in a business to converting from on-premise computing to SaaS because it is different and there is no control over computing resources. As in the U.S., security and privacy of data are a concern in using business applications from the cloud. U.S. software companies have been concerned about entering the China market because of the high rate of software piracy. SaaS can reduce software piracy because of the control over copies of the software. The marketing challenge in China to overcome resistance to change is by demonstrating the economic value of

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<sup>&</sup>lt;sup>3</sup> This delivery model is also used extensively for ecommerce, entertainment and other digital content and services. Amazon, Apple and Google are competing to become the center of our digital lives.

cloud computing, the ease of use and meaningful security. A key factor will be to show Chinese businesses how cloud computing adoption enables them to make more money. The current generation in China will be more likely to make a business decision to adopt cloud computing than older generations of Chinese.

In February, 2011 IBM announced that it is working with the government to build a large cloud computing complex in Hebei Province. The data center portion will be world class and among the largest in the world. So why can't U.S. software companies enter the China SaaS market by using a managed services, distributed server approach in China for their cloud computing applications? Why might they need to start with servers at a data center in Hong Kong, for example?<sup>4</sup> The answer is that SaaS is a value-added telecommunications service that requires a license from the applicable government telecommunications authority if the servers are located in China. Operating the service from Hong Kong may work but is subject to the IP address being blocked by the Chinese government and possible high latency issues.

## **The China Regulatory Environment**

China has established a new regulatory regime for telecommunication businesses since its entry into the World Trade Organization in 2001. Businesses from the U.S. and other countries are gradually being allowed to access the market, especially in the area of Internet information services. The sector continues to be highly regulated. The *Telecommunications Regulations of China (2000) ("Regulations")* are the basic authority governing China's telecommunication industry. The Regulations make a distinction between Basic Telecommunications Services and Value-added Telecommunications Services ("*VAS*") and contains a *Catalog of Telecommunications Business* (2003) ("*Catalog*") which defines each category. For example, a field service application operating on the SFDC platform that provides business information, an Internet videoconferencing meeting service and a basic number crunching accounting application are all VAS under the Catalog. The video conferencing service would require the greatest bandwidth and have the most sensitive content. The accounting application should require the smallest bandwidth and have the least sensitive content.

U.S. and other foreign investors may invest in VAS. To engage in a VAS business in China, a foreign investor must establish a joint venture telecommunication enterprise with a Chinese company in which the foreign investor's equity interest may be not more than 50% according to the Administration of Foreign-funded Telecommunications Enterprises Provisions (2001) ("Foreign-funded Provisions"). The joint venture ("JV") is established under Chinese law and it operates the VAS business in China. The brand of the U.S. shareholder may be used by the JV in China under a trademark and domain name license from the shareholder according to the Notice on Strengthening Management of Foreign Investment in Operation Value-added Telecommunications Business (2006) ("Notice on Strengthening Management").

The Administrative Measures for Permits for the Operation of Telecommunications Business (2009) ("Administrative Measures for Permits") require that the JV obtain a license to operate the VAS business. A domestic company that wants to operate in VAS must also obtain a license. The license must be issued at the central governmental level if the VAS will operate

<sup>&</sup>lt;sup>4</sup> Companies such as Equinox, Fujitsu and NTT offer data center hosting services in Hong Kong.

nationwide or trans-province. The license may be issued at the provincial level if the VAS is offered only within a jurisdiction where the license is to be issued.

Licensing of SaaS applications is regulated by the *Administrative Measures for Internet Information Services (2000) ("ICP Measures")* which define "information" broadly, differentiate between commercial and non-commercial Internet information services and require commercial Internet information providers ("*ICP*") in China to obtain an ICP license for operating the business. The definition of "commercial Internet information services" is general and broad under the ICP Measures. It includes information, the creation of web pages, and other services provided to Internet users for payment. "Non-commercial Internet information" services are those that provide publicly available information that is accessible at no cost to Internet users such as an information or services not falling within non-commercial Internet information services require an ICP license. The three examples above would be treated as commercial Internet information services if the services require payment which means an ICP license must be obtained in order to have servers for the applications in China.

The JV which is to operate the VAS business must meet the following requirements in order to apply for the ICP license under Section 6 of the Administrative Measures for Permits:

- Be incorporated in China;
- Have sufficient operating funds and a professional team to operate the VAS business;
- Have the operational capability to provide users with long term service;
- Have registered capital of no less than RMB10 million for operating nationwide or trans-province (See Section 5 of the Foreign-funded Provisions);
- Have necessary operation venues, facilities and technology; and
- Neither the JV, its major equity holders nor management team may have any violation of telecommunication laws within the three years preceding the application date.

In addition, under Section 10 of the Foreign-funded Provisions, the U.S. investor in the JV must have operational experience in VAS and be in good standing in the state where incorporated. As a practical matter, it may take over 12 months to obtain the ICP license after submitting the application. The license is usually valid for five years.

Given the time it takes to obtain a license, there may be some interim approaches through a Chinese domestic company that provides hosting services for cloud computing. This includes subdomains under the company's primary domain and a "Work from Here" link approach. The Chinese government requires an Internet service provider ("*ISP*") to be certain its customers are properly licensed and intensively monitors Internet use for compliance. Thus, any approach without a proper ICP license should be viewed as risky and unpredictable.

# **Other Approaches**

A U.S. software company may be reluctant to enter the VAS business in China through a JV because of the 50% equity restriction. What is the possible solution? The structure used by most overseas listed companies such as Baidu, Sina and Sohu is to establish a series of control contracts between a Wholly Foreign Owned Enterprise ("*WFOE*") and a Chinese domestic company (the "*Chinese Company*"). The WFOE is a Chinese company in which the foreign investor holds 100% equity interest and controls all intellectual property and technology. The Chinese Company is usually owned by "trusted" Chinese nationals or Chinese entities. The Chinese Company is usually owned by "trusted" Chinese nationals such as major shareholders or directors or officers of the foreign parent of the WFOE. It holds the ICP license and operates the VAS business. This structure is sometimes referred to as the Sina or Variable Interest Entity ("*VIE*") structure.

The foreign company does not have any direct ownership in the Chinese Company but its WFOE has control over the Chinese Company and its VAS business by a series of contracts. These contracts can include loan agreements, equity share pledge agreements, exclusive service agreements, option agreement to purchase the Chinese Company and other operating agreements. The combination of these contracts and the "trusted" shareholders provide the foreign company with effective financial and operational control.

The advantage of the structure is the WFOE has actual control over the VAS business, although the Chinese Company holds the ICP license and directly operates the business. A disadvantage of the structure is that, although a shareholder may license its domain name and trademark to a JV, the U.S. investor is not a direct shareholder in this structure. A foreign investor may not license its domain name or trademark to a domestic VAS company under the Notice on Strengthening Management. The WFOE may, however, receive payment from users in China and promote the business in China using the U.S. companies brand name if the mark is registered in China.

A variation of this structure is for the foreign investor to use the JV approach but to have strong contractual controls over the JV as in the VIE model. In this case, the brand name of the foreign shareholder may be used in China under a trademark and domain name license from the shareholder. The foreign investor can control the operation of the JV if it can implement similar contractual arrangements with its Chinese partner. So a key factor is to select the right Chinese partner to establish the JV.

While the Sina/VIE structure has been used extensively in China, it must be noted that the structure not been approved for use by the Chinese government and has been expressly prohibited from being used in the on-line game industry.

### **Blocking of IP Address**

Another issue in deploying SaaS is the Chinese government's Internet filtering system which may block an application if it contains sensitive information or inappropriate content. There is a higher likelihood that Internet content will be frequently screened for ICPs providing news, other informational publications and education. Screening is not as intensive for Internet services for a business software application. For example, a number crunching accounting application or an application operating on the SFDC platform that provides business information is less likely to be blocked than an Internet videoconferencing meeting service in which content is more variable. The likelihood that a website's IP address might be blocked is lower if the ICP itself has established an internal system to monitor communications so as to comply with Chinese laws.

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Starting with hosting the SaaS application on servers in Hong Kong may be a practical solution at the outset to test the waters in the China market because of the time it takes to obtain the ICP license. Operating the service from outside China may work initially but a U.S. software company should have a strategy to operate within China either through a JV or the Sina/VIE model in order to more effectively serve its subscribers, fully deploy its brand and have predictability as to the continuity of providing services. While the SaaS market in China has significant challenges, it is a huge market opportunity with enormous revenue opportunity which should not be missed.