Uniquely positioned to be your partner of choice for China-based technology services

Case Studies

Providing Cloud Computing and Industry Solutions for the Development of Large-scale Smart Park
iSoftStone provided cloud computing and comprehensive industry solutions to establish a service-oriented management platform, which by services as center for manage and support smart industries development.

Developing Intelligent Home Gateway for a Leading Telecom Operator in China
iSoftStone provide Intelligent Home Gateway (IoT) solution for a domestic telecom operators, in order to implement R&D project regarding Intelligent Home Gateway equipment and related business platforms.

Creating a Unified Financial Platform for State Grid
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Industry Commentary

Smart City Market to Top $108 Billion by 2020

Date: June 1, 2011
By: CleanBiz Staff

Events

Look for us at these upcoming events.

2011 Boeing Classic Golf Event
August 22-28
Seattle, USA

2011 Propel Cloud Computing Service Innovation & Development Conference
September 3-4
Beijing, China

World Economic Forum
September 14-16
Dalian, China

News

iSoftStone Participates in the 6th German-Chinese Forum for Economic and Technological Cooperation
June 28, Chairman & CEO TW Liu and Edmundo Ruiz, SVP for Europe business attended the 6th German-Chinese Forum for Economic and Technological Cooperation that took place in Berlin.

iSoftStone Participated in WTIA GoGlobal Event at Seattle
June 9, SVP of iSoftStone Inc. Anders Brown led an IT Outsourcing expertise session on GoGlobal event at Seattle. iSoftStone team interacted with some company executives and potential clients.
iSoftStone Participated in China International Software & Information Service Fair 2011

iSoftStone Wins China’s Leading Service Provider 2011 Award
June 10, iSoftStone was listed as one of China’s Leading Service Providers for 2011. Meanwhile, iSoftStone Chairman & CEO TW Liu was selected as one of China’s Outstanding Contributors for 2011.

June 2, iSoftStone attended the 2011 Financial IT Summit in Beijing. John Peng delivered the speech with the theme of “Upgrading Financial companies’ International Competitiveness through Fully Leveraging Outsourcing Services”.

iSoftStone Held Kirkland New Office Grand Opening
May 25, more than participants attended the official opening of iSoftStone’s new Kirkland office, to hear from the company’s top executives and share the excitement from the ribbon-cutting ceremony.

This iSoftStone newsletter (iNewsletter) shares highlights, information and thoughts about iSoftStone, as well as the industry. For any comments and suggestions, please send an e-mail to: contact@isoftstone.com. If you want to unsubscribe, please reply with the title UNSUBSCRIBE.

Industry Commentary

Smart City Market to Top $108 Billion by 2020
Date: June 1, 2011 By: CleanBiz Staff

For the first time in human history, more people now live in cities than in rural areas and this population shift is changing the face of the world. As urban populations grow even faster, "smart" information and communication technologies will be a vital part of maintaining the efficiency of bursting mega-cities.

A new report from Pike Research forecasts that investment in smart city technology infrastructure will total USD108 billion from 2010 to 2020. By the end of that period, the cleantech market intelligence firm anticipates that annual spending will reach...
nearly USD16 billion.

"Smart city models are at a nascent stage, and smart cities will take many different forms in different parts of the world," says Pike senior analyst Eric Woods. "Pilot projects are under-way that could provide templates for the design of new urban centers in Asia and the Middle East, as well as frameworks for overlaying infrastructure to make older cities smarter in Europe and North America.

"However, today there is still no example of a smart city that is supporting hundreds of thousands, never mind millions, of people and there are many challenges still to be faced by smart city planners."

China, however, is home to some of the world's biggest mega cities and is facing a host of issues related to the uncontrolled growth of its urban populations, arguably has a lot to gain from smart cities, and is taking a keen interest in their development.

The Chinese government has invested billions of dollars toward regional infrastructure, referred to as the Beijing-Tianjin Growth Corridor, in expectation of an anticipated rise of nearly 300 million people from poverty to middle class over the next 20 years. The country now has about 666 million people living in cities.

Australia, meanwhile, appears to be taking a leading position in various smart city initiatives, perhaps because the country is relatively energy-efficient by international standards, well developed and using a mix of alternative and traditional energy sources.

So it was of little surprise when former Australian Prime Minister John Howard unveiled planes for for a new smart city south of Beijing last week.

**China Mega Projects**
The China joint venture, the SunWorth Development Group, project is located Langfang, Hebei province. The 30 square kilometre development will feature a theme park and an exhibition centre, designed to be the world's largest with over 1.3 million square metres. Green space will flow throughout the development and there will be restrictions on gasoline powered vehicles, according to the developers.

Speaking at the China Asia Pacific Economic Co-operation (APEC) meeting, Mr Howard said, "I am very pleased that Langfang is taking a leadership position in developing smart city technology. This is an outstanding opportunity to build a new city from the ground-up with wired and eco-green technology that will pave the way for cities of the future around the world.

It has not been decided which technologies will be used in the SunWorth project, but transportation will be a key factor. A spokesman said the group was exploring options including personal pod vehicles and a monorail system.

Pike Research defines a smart city as the integration of technology into a strategic approach to sustainability, citizen well-being, and economic development. Any adequate model for the smart city must be multi-dimensional, encompassing different aspects of "smartness" and stressing the importance of integration and interaction across multiple domains.

The key industry and service sectors for smart cities include Smart Utilities (a subset of the larger smart grid market), Smart Transport, Smart Building, and Smart Government. Representative technologies that will enhance the intelligence and connectedness of the city include smart meters, sensor networks, fiber optic and wireless communication networks, software to provide data analytics for city services, and myriad other hardware and software components.

SunWorth has engaged a number of international consultants to determine the technologies for the project, including global engineering and planning firm Arup, the United States-based convention centre planning group Conventional Wisdom, New York head-quartered green building architects Kohn Pedersen Fox and the consulting arm of the United Kingdom-based Birmingham Institute of Art and Design.

This is just one of a growing number of smart city developments planned by the Chinese. In February an Italian group was awarded the Eco Nanhe Town project, which will include a science park in addition to commercial and community facilities for 75,000 people in Tianjin.

Smart city skeptics, however, would rather see investments into making China's existing cities more sustainable and reducing their carbon footprints.
One initiative addressing this need is the China Redesign programme. Developed by international non-profit organization The Climate Group, the China Redesign project will work with five cities to design and execute a low-carbon development plan for an initial period of three years. Launched in March, its aim is to help those cities reduce their energy intensity, or energy consumption per unit of GDP, in line with China's national target of 16 percent.

Investment in technology and the corresponding infrastructure is a concern for both old and new cities. A 2010 report by the state think-tank China Development Research Foundation stated that Beijing alone would need to invest up to 3.6 trillion dollars in urban infrastructure by 2020.

**Case Studies**

**Providing Cloud Computing and Industry Solutions for the Development of Large-scale Smart Park**

*iSoftStone provided cloud computing and comprehensive industry solutions to establish a service-oriented management platform, which by services as center for manage and support smart industries development.*

**Situation**

Guangdong WIOT Information Industrial Park faces the challenge of transition from a traditional industrial park to the 3rd generation smart park. It needs to upgrade the existing information system to a new business support platform in order to support the shift from labor-intensive to knowledge-intensive development model. Our client wants to use the advanced information system platform to enhance the quality of services and efficiency in order to provide the guaranteed basic service for the development of park.

Guangdong WIOT plans to establish a set of innovative operation services system through the approach of “government guidance, enterprise hosting, cooperation between the government and enterprises”. It not only aims to promote innovation deliverables which are quickly accepted by the market and improve the added value of products and services, but also provides the investment opportunity for development of the park.

**Solution**

Guangdong WIOT chose iSoftStone as the service provider to establish operation platform. iSoftStone created a service-oriented operation platform, which can manage and support the development of Smart City industry. Generally Smart park's construction can be divided into Cloud Computing Data Center and Smart Application Platform.

The Cloud Computing Data Center that iSoftStone built applied the cloud computing technology to effectively integrate software, hardware and technical resources inside of the Smart Park. By using cloud computing, iSoftStone implemented the integration and information share among the resources of human, material, intellectual, policy and financial. We reduced the cost greatly and achieved a higher benefit for accelerating the rapid flow of information to improve service capabilities both in technology and environment.

In addition, the innovation operation platform leverages iSoftStone’s industry solution from the industry categories that promoting the development of Smart Park. iSoftStone established a solid partnership with world-renowned companies ensuring the leading position in the various applications implementation.

**Benefits**

The Smart Park iSoftStone established is not only environmental friendly and value-adding, but also is improving the software environment and promoting industrial upgrading of Smart Park. After the construction of this Smart Park, the operation platform will provide services and supports to enterprises operating inside. It also will adopt a method to charge a fee through leasing from the enterprises in the Smart Park.

This project is based on the commanding height of Smart Industry. The intelligent applications and services equipped the companies with the necessary environment for their sustainable growth. It will attract more outstanding companies to move into the park which will achieve industrial clustering and upgrading.
Developing Intelligent Home Gateway for a Leading Telecom Operator in China

Relying on the software that iSoftStone has own intellectual property rights, such as: Home Gateway side (Zigbee) wireless network management software/Operation platform side home sensor network services software etc. iSoftStone provide Intelligent Home Gateway (IoT) solution for a domestic telecom operators, to research and development Intelligent Home Gateway equipment and related business platforms.

Situation
As a leading mobile services provider in China, our client boasts the world’s largest mobile network and the world’s largest mobile customer base. In 2010, the company was once again selected as one of the "FT Global 500" by Financial Times.

This client chooses iSoftStone to provide Intelligent Home Gateway (IoT) Solution. They want to apply IoT into home environment and achieve more intelligent family life. Through the elements of “experience life” to provide a thoughtful service for people, its can bridge the gap between production and consumption. Therefore, building the IoT Home Application System is an important part of IoT development strategy for our client.

The goal of Intelligent Home Gateway (IoT) is to connect a variety of communications equipments, household appliances and home security devices to an intelligent system through the family bus technology for management and achieved long-distance monitoring and control.

Solution
iSoftStone provides Intelligent Home Gateway (IoT) Solution in the following areas, and has extensive experiences in technology and application development.

1. Intelligent Home Gateway (IoT) Equipment

   - Core processor module: based on embedded SoC, adopt embedded Linux operating system platform and provide enough device support and opening application development interfaces
   - WAN module: Support xDSL access to the Internet, remote management, TR069 unified network management, to provide DHCP services, NAT, firewall gateway function
   - Femtocell module: can choose support for TD-SCDMA/WCDMA/CDMA2000/LTE, provide the appropriate protocol stack to meet the needs of equipment and mobile core network connection
   - LAN module: Support 4-8 Ethernet port for connecting PC/TV device etc.
   - WLAN module: Provide WLAN Access Point function, support WPA security authentication, MAC address black/white list
   - Wireless sensor interface module: can choose support for Zigbee or BlueTooth interface, infrared interface for controlling lighting, intelligent curtains, alarm and instruments sensors

2. Intelligent Home Gateway (IoT) related business platform

   - Device management: manage all of the home gateway equipments and provides visual management interface
   - User management: manage all home users’ information, subscriptions, authentication, bill information, etc.
   - Accounting management : for users the cost of billing, accounting
   - Sensor information processing: Record, collate, analyze information generated by the family sensor, provide forwarded to third-party application platform interface
   - Information push: allows the user to subscribe certain information generated by families sensor, and push to the user’s mobile device

3. Key technologies used

   - DLNA
   - Secure Home Gateway System
   - WLAN access point security technology
   - Sensor Integration
   - NMS
   - Femtocell
● Short-distance wireless gateway technology
● Embedded Linux software middleware
● Push the information to mobile devices to achieve technology

4. Self-owned intellectual property

● Home Gateway side (Zigbee) Network Node Manager Software (copyrights registered software)
● Operation Platform side Home Sensor Network Services Software (copyrights registered software)
● Mobile Phones and other Mobile Terminal side Sensor Node to View and Control Software

Benefits
iSoftStone Intelligent Home Gateway (IoT) solution supports different types of home networking protocol, with high independence and privacy to meet the requirements of telecom operators, such as network security, remote information sharing and control. It provides a secure, scalable, and cost-effective home gateway product to customers.

● With this product, the client not only provides basic network infrastructure and data services, and fundamentally solves in which the telecom operators data services covers end-user desktop issues
● Unified management and configuration all the home gateway devices, home network will be constructed into a home networking applications for public infrastructure, which can reduce the operating costs and helping business to sustainable develop
● Provides convenient wireless Internet control module to all end users, to manage intelligently the home equipments, and facilitate daily lives
● With femtocell gateway system, it can greatly improve the telecom operators wireless signal coverage problems
● Develops an open, scalable platform that customers can quickly develop a variety of value-added services on this platform

Creating a Unified Financial Platform for State Grid

Using data warehouse system resources and BI applications, iSoftStone created a unified financial management and control application platform, based on the core financial management and control application platform of SGAM.

Situation
The core business of State Grid Corporation of China (SGCC) is to build and operate power grids. Their basic mission is to provide a safe, economical, clean and sustainable electric power supply for social and economic development. SGCC’s services cover 26 provinces and a power supply population of over one billion. It was ranked the 8th in the Fortune Global 500 in 2010 as the largest utility company in the world.

State Grid Asset Management Co., Ltd. (SGAM), part of the SGCC, committed to establish a unified financial platform in order to strengthen better control and monitor financial institutions and to prevent financial risks. SGAM planned to standardize work flows, finance integration, as well as decision-making management. Hence, they needed to establish a platform to support various operational management business applications and analytical applications.

Solution
Using data warehouse system resources and BI applications, iSoftStone created a unified financial management and control application platform, based on SGAM’s core financial management and control application platform. This platform was designed to enhance the overall business decision-making management and risk control capability of SGAM.

● Achieving the business management and analysis of financial assets based on internet and enterprise-level data center
● Creating a financial asset management model for the purpose of integrating of information, operation, risk, decision-making, and accomplishing the full control of intelligent management
● Sharing information in the financial corporation and saving the cost of data collection
● Using uniform management system guidelines to ensure the application of theme analysis can be expanded and ease of use
● Using matured application software products for customers to provide a stable, safe and implementable financial management and control system platform

Benefits

Back
The successful implementation of the financial assets management and control system provides a unified platform and includes such major benefits as followings.

- Improving the basic business processing and data analysis capability
- Building a stable platform that allows the integration of data processing, data collection, data storage, and data leverage, which lays a solid foundation for various financial institutions to share information resources
- Establishing of a full index system to greatly reduce the impact of changes on the whole system, improve the system stability and maintainability

Full filling various complex requirements of the managerial analysis business by adopting mature BI software products according to the State Grid criteria in order to provide a convenient and flexible application operating environment for both managerial and operational staff.