



Crown Castle International Mobile Asset Management Case Study

Crown Castle International



Crown Castle is headquartered in Houston, Texas, with operating companies in the United States, UK and Australia. With more than 75 years of experience in engineering and operating broadcast transmission networks, and over 20 years of experience in the ownership, leasing, design and deployment of wireless communications sites and systems, Crown Castle is recognised as the technology leader in their sector.

Crown Castle is the leading provider of independent wireless communications infrastructure and services in Australia. Crown Castle entered the Australian market in March 2000 with the acquisition of approximately 700 wireless communications towers from Cable & Wireless Optus. In April 2001 they acquired an additional 700 towers from Vodafone. These will now be used as shared sites for multiple operators and are capable of delivering vast communications and cellular coverage to more than 92% of Australians.

For Australia's telecommunications operators, Crown Castle's shared sites enable rapid market entry and growth, with all of the major benefits that flow from infrastructure sharing.

The Challenge

In 2003 Crown Castle reviewed their in-field asset and property management processes with the view to enhancing service delivery to their customers. Inspired by the potential benefits mobility solutions offered for enhancing field-processing of business data, they undertook extensive research into available solutions that would meet their requirements.

At the time of this review, Crown Castle's field auditors were using an Excel spreadsheet on a Windows notebook to capture asset inspection information for their nearly 1500 mobile base stations. An individual spreadsheet was prepared for each site and loaded daily onto notebooks which were then taken to site.

After capturing the inspection information initially on paper, the field engineer then entered the data into the spreadsheet and upon their return from the field the spreadsheet data for each job was uploaded, processed and then imported into an Oracle database that was linked to Crown Castle's parent company in the United States of America.

This process was *repeated* for each site inspection assigned to each field engineer.

In addition to this being a tedious and time-consuming task for the field auditors, Crown Castle were also burdened by having to employ a part-time contractor to administer adds, moves and changes to their increasingly complex database. This added further frustration to this cumbersome process when Crown Castle's customers began to request that real-time site and asset information be made available online, Crown Castle were forced to look at ways to improve the process of capturing and sharing this business critical data.



Following their extensive review of various vendors and solutions provider's offerings, Crown Castle selected Bright Software as their preferred mobility partner, having been introduced to them by their incumbent hardware supplier, IBM Australia.

The Solution

Crown Castle selected the Bright Mobility Suite as their preferred mobility vehicle because of the power and flexibility offered by the Bright Software mobility platform. Comprising the BrightBuilder™ Mobile Application Designer, BrightForms™ Mobile Device Engines and BrightServer™ Mobility Data Gateway, the Bright Mobility Suite offered Crown Castle an end-to-end platform to enable them to build, deploy and manage mobile applications as their business requirements and processes dictated.

Set the objective of developing a system that would increase flexibility, improve productivity, reduce costs and increase customer satisfaction levels by enhancing service delivery, Bright Software replaced the bulky notebooks currently in use, with Hewlett Packard IPAQ and Dell PDA's running Windows Pocket PC operating systems. A BrightForms™ Mobile Device Engine was installed onto each of the PDA to run the Bright Software mobile application.

The BrightBuilder™ Mobile Application Designer was then employed to design and build a tailored PDA application that could efficiently capture all required asset information whilst performing site audits. This application, which was run by the BrightForms™ Mobile Device Engine on the PDA, utilized the SQL CE database client in the Windows Pocket PC operating system to enable storage of large amounts of field asset data on an SD (Secure Digital) memory card.

In addition to the mobile PDA application, a back-office application was built using BrightBuilder™ to enable Crown Castle office staff to schedule service jobs for each field auditor, rather than relying on their current manual process. The BrightServer™ Mobility Data Gateway now manages the flow of information to the mobile devices and the main Crown Castle Oracle database, to enable import and export of asset data, thereby enabling Crown Castle to automate the processing of their field asset data into their Oracle database completely.

Following completion of the PDA and desktop applications, Crown Castle ran a pilot project with a select group of users to test the real-life capability of the technology. The developed solution performed seamlessly during the pilot and was quickly given authorisation to be implemented to all field auditors in Australia.

The solution provided now empowered Crown Castle's field auditors to remotely receive scheduled service job information and to rapidly capture site audit information. By being able to synchronise this job information directly back to their Oracle database via a GPRS connection or by cradle sync at the end of the day, the field auditors eliminated the need to return to the office at the end of the day and were able to perform more inspections.

In conjunction with the roll-out to the rest of the field auditors, Bright Software implemented user training sessions for all staff involved so that they would be comfortable with the technology from day one. Further to this, select Crown Castle IT personnel also undertook

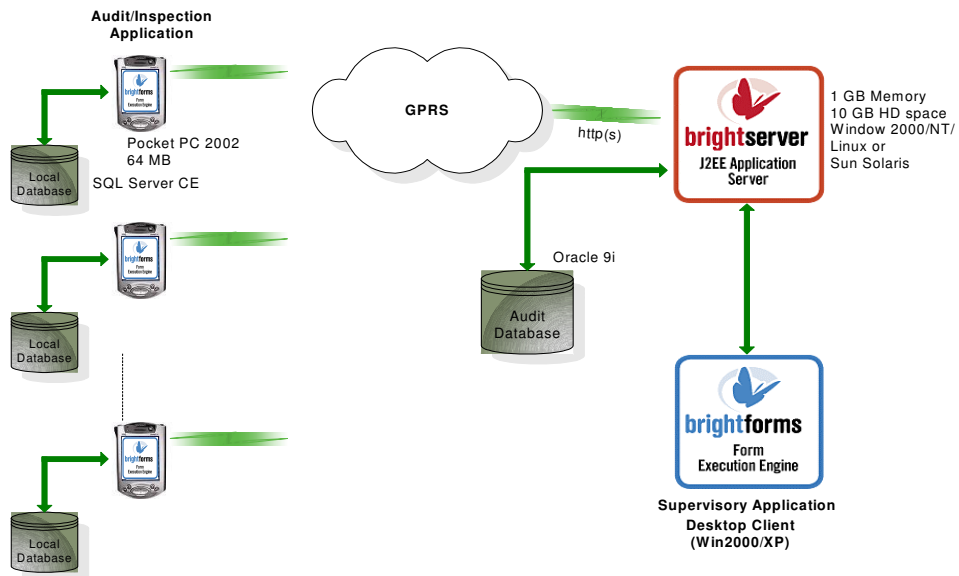




www.brightsoft.com.au

developer training on the Bright Mobility Suite so that they could build new mobile applications or adapt their existing ones, in-house if required. This extra training now allows Crown Castle to manage their mobility environment internally and to adapt and evolve their mobile application(s) as their business requirements dictate.

Solution Architecture



The Result

Crown Castle's field auditors now have a more efficient process for capturing field asset data. This new process allows them to capture large amounts of data rapidly and accurately and as the solution provides them with the information they need, when they need it, the field auditors are able to spend more time in the field, rather than managing tedious manual processes.

The increase in quantity, quality and speed of data captured now allows Crown Castle and their customers to view detailed up-to-date asset information as required, thereby addressing their requirement to increase the level and accuracy of information available to their customers.

Further benefits have been realized in the back-office, where the automation of manual processing tasks has enabled Crown Castle to redeploy administrative staff to other areas of the business. Crown Castle's head office in the USA is also pleased as they are also beneficiaries of the timely and accurate reporting information that the new system now provides.



About Bright Software

Bright Software Pty Ltd, a 100% Australian specialist mobility software vendor began operations in 2002 with the defined vision to help business organisations, globally, to achieve true efficiency for their mobile workforce. To achieve this vision, Bright Software developed the “Bright Mobility Suite”, an end-to-end mobility middleware platform that empowers businesses to mobilise their business data so that mobile workers can access their relevant information, on-demand. Headquartered in Sydney Australia, Bright Software continues to set the benchmark for true business application mobility.

Contact details

Bright Software Pty Ltd

Address: **106 Derby Street, Silverwater NSW 2128**

Ph: **+61 2 9647 1800**

Fax: **+61 2 9647 2400**

Email: sales@brightsoft.com.au

Web: <http://www.brightsoft.com.au>