

Getting Smarter



Smart Card technology is fast becoming common place in our culture and daily lives. Although the technology was first introduced in Europe over a decade ago, it is only now that the cards are having a significant impact on every day processes. Smart Cards bring benefits with them that are second to none, and are sending shockwaves throughout the technological world.

Smart Cards are being used to store financial information and end user related information such as health histories and account balances. The UK government currently issues Smart Cards to asylum seekers which store their fingerprint data.

Smart Cards provide improved network security through user identification, allowing tamper proof storage of user and account identity. Smart cards also provide vital components of system security for the exchange of data through virtually any type of network – meaning that the card itself carries the intelligence.

Each user is assigned with a pin which is unique to them and the card. Without the pin the card is useless and vice versa. The self containment of the card makes it resistant to attack, as the card does not need to depend upon potentially vulnerable external resources. Because of this, the Smart card is ideal for police forces and organisations which require strong security protection and authentication.



In a recent speech given by Microsoft's Chairman, Bill Gates, he addressed Smart Cards and the emerging factors which he believes will eventually see out dated identity systems such as passwords being replaced with Smart Card technology. The ability to encrypt and secure data held on a card is a significant advantage.

Northamptonshire Police aim to stay up to date with cutting edge technology by implementing new technological solutions as they are developed. In 2002, Northamptonshire Police were amongst the first police forces in the UK to deploy Automatic Number Plate Recognition Technology into their patrol cars. The results from this deployment were staggering, and have led to a dramatic increase in the number of car thieves being caught.

With this in mind, Smart Card Technology within Northamptonshire Police is creating opportunities to transact a wide range of data in complete security, enabling the provision of more accurate service provision with far greater levels of security. The cards authenticate officers accessing vital police files via the internet. The smart card allows officers to prove their identity via Smart card logon while viewing and inputting data. Information is just as safe and secure as it would be if it was inside the office itself. This authentication brings a dramatic new level of security to the police, while at the same time also fully utilising the power of mobility and instant information access.

By having a unique card which contains all of the officers personal information such as username, email address and information relating to the authority, the Smart Card user then undergoes various security checks to determine that they are the owner of the card before access is granted.

If the card becomes lost or is stolen (it would not be functional without the user pin) then revoking it is a simple process which can be done instantly. The great benefit of Smart Cards for organisations such as the police is that they ensure the security of the LAN and extend this to mobile working. Meaning that the user has total security wherever they may be.

The benefits of Smart Card technology doesn't stop at security. The cards capabilities are limitless, and can be used to store digital photo ID, fingerprints, driving licence details and biometric data. Smart Cards are being called for by some politicians, to give every citizen of the UK a unique identification card. By having the chip cards combined with biometric technologies which identify the card holder such as physical characteristics including fingerprints, hand geometry, iris and retina data, the scope for crime and fraud would be greatly reduced.

It has recently been announced, that Police could start using roadside fingerprinting technology with biometric scanners if proposals under the Serious Organised Crime and Police Bill are passed. Scanners will link to the National Automated Fingerprint Identification System, which holds some 5.75 million fingerprint records of people arrested, charged or convicted of imprisonable offences.

Smart Card technology is evolving every day, digital identities are set to replace passwords and outdated login systems, and with them will bring the new age of system security.

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BrandNews

Networking with Brand Communications

Issue 7



Utilising Mobile Data!

United Utilities, the largest multi-utility provider in the UK, supplying electricity, water and wastewater services to millions of people, have recently implemented a mobile data solution to enable their remote workforce to have efficient, instant access to corporate information, resources and business / job applications wherever they are in the field.

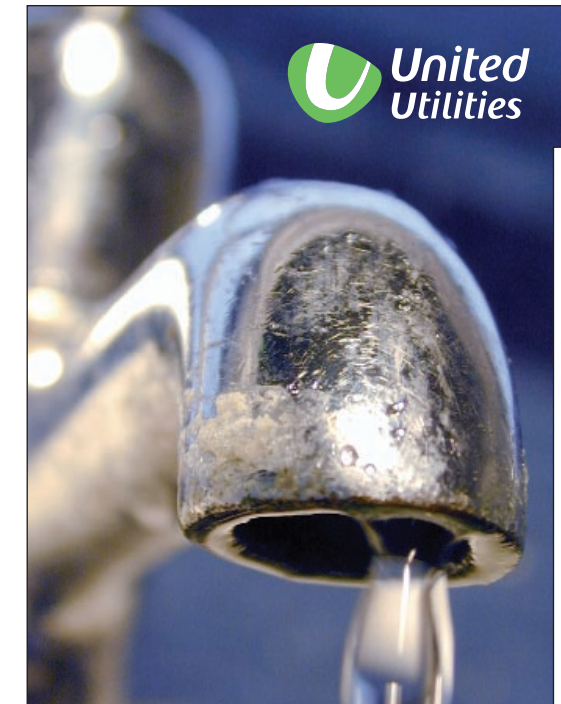
Recognising the need to implement a reliable, secure and user friendly mobile data solution, to further improve their customer service by enhancing productivity and communications, United Utilities selected Brand Communications to help achieve their goal.

"Brand's Technology proved to be the best fit"

United Utilities field workforce, provide an essential service to the company and its customers, working around the clock to provide water and electricity services. By deploying Brand's Apollo solution into the corporate network, the workforce are now provided with fast and reliable access to mission critical applications such as maintenance work records, site plans, graphical maps, customer information, corporate databases, email and internet.

By implementing the Brand's Apollo Anywhere mobile data solution, United Utilities could seamlessly extend its corporate LAN to the remote worker by using the unique combination of session management, resilient call recovery, security and compression.

Using Brand's innovative mobile data client / server solution, it helped remove the uncertainty of using a wireless network to transfer vital information by transparently integrating GSM, GPRS, 3G and WLAN (802.11b) or WiMax (802.16) networking with consumers or Enterprise LAN environments by using Seamless Roaming. Brands technology offered secure dynamic switching across public bearer networks, which meant, a mobile engineer could be using a GPRS connection out in the field, loses the coverage and Brand would automatically roam onto GSM, securely and seamlessly, with no interruption to the applications or reconfiguration from the user.



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Smart Card Technologies
Smart cards are creating many opportunities for secure data.

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Brand helps Krohne Oil and Gas
Brand Communications has been selected as an essential part of Krohne's network/mobile data solution.

The Brand Solution also optimises the TCP/IP traffic to enhance the user experience and at the same time secure the data with a military grade AES encrypted VPN which helps remove some of the concerns about deploying enterprise data over public bearers such as DSL, WLAN or GPRS. Additionally, the Brand solution comes with an integrated GPS capability which was essential to United Utilities for field asset tracking to optimise the remote field force and secondly to comply with health and safety regulations relating to lone worker operation.

"We needed a solution that was flexible, scalable, resilient and manageable and the Brand Solution proved to be the best fit for us!" explains Angela Sadler, Programme Manager, United Utilities. "Brand's technology enabled us to deliver an improved service in a more efficient and effective way".

The Brand Solution is supporting United Utilities in providing a secure, reliable and cost effective mobile data solution, enabling field based workers access to mission critical data anywhere and at anytime.



View point by Martin Kendrick, Managing Director, Brand Communications.

Seamless Integration of Wireless Technologies - including 3G, WiFi and Wireless Broadband

Over the last year it feels like we have been told of new technologies emerging every month that are going to connect us to the internet in a faster way, in a better way, in an easier way, and is it all true? We are told that 3G was under threat from WiFi and then WiMAX, is it true and if so what should I plan for my communications strategy for the future?

Four years ago we saw the introduction of GPRS and despite a faltering start because of reliability concerns, it is now maturing and is the default for new mobile data applications. 3G, often touted as the broadband of the mobile phone world, supporting higher data speeds and live video, has limited coverage serving mainly metropolitan areas. As a result of a lack of full national coverage, many corporate organisations have had to ensure that their applications and systems can be accommodated within the limits of 2.5G as their users may often operate outside of metropolitan areas and so work with the lowest common denominator.

WiFi has started to become part of our home and work life. You may have a wireless LAN (WLAN) in your workplace; you may also be starting to get WiFi in your home with wireless iPODs, home audio and multi-media systems. We are also seeing public wireless LAN (PWLAN) hotspots being deployed in everything from garage forecourts to McDonalds, Starbucks, hotels and many public leisure and entertainment venues. WLAN comes in various formats 802.11b with a maximum speed of 11Mb came first and was quickly followed by 802.11g with a maximum speed of 54Mb. These are the two main formats that will be found in the home and PWLAN hotspots and are fully supported by most new laptops through Intel's Centrino chip set. There is another standard called 802.11n which, whilst it can support speeds up to 108Mb, it has limited application and manufacturer support, and also is not supported by Centrino.

The final new contenders for our data are WiMAX and Wireless Broadband. WiMAX can support speeds up to 70Mb and is very useful for VoIP applications because of the predictable nature of

its radio scheme. In North America, where power rating can be from 5 to 28 watts the coverage and range can be impressive and make it a viable T1 broadband delivery option. In the UK the power levels are limited to 2 watts and the maximum height for a radio mast is 30 metres which means that coverage is very limited and is more likely to be in hundreds of metres rather than kilometres. Additionally WiMAX in the UK is in the 5 Gig spectrum which will not be supported by the new 802.16e chipsets that will start to appear in laptops from the end of this year which at this time only support 3.6Gig. What this means is that WiMAX will be used as a point to point T1/E1 last mile delivery or for larger wireless hotspots as terminal devices become available.

What all this means is that each of the technologies we have looked at will not kill off the other but instead will all exist in a continuum. As we move through different venues and environments we may well use some or all of the bearers. This leads on to the need for seamless mobility. The ability to logon to a system and then move through GPRS, 3G, WiFi and maybe wireless broadband without disrupting the user session and without disrupting any data flow. The need is for seamless handoff from often very dissimilar bearers from a multitude of suppliers from a mainstream GSM carrier to a free WLAN hotspot in shop in an outlet centre. The kind of applications that we will start to see become mainstream will be VoIP. It is essential to have a seamless operation for this kind of technology because anyone trying to call the VoIP phone will not know how to reach the device because of not knowing its current location. It is important that a VoIP call or data transfer starting on 3G could continue without failure or loss of voice communication as the user's phone moved into a WLAN area be it at home or in the community. Brand has been delivering session management for 13 years and pioneered the ability to switch from one bearer to another or to combine bearers as far back as 1994 and it is this evolved technology that now leads the field in seamless mobility and multi-bearer integration. As the adoption of all these bearer mechanisms becomes common place, the usage of data will significantly grow across all the mediums aiding the business case and success of each.

New Look Website

Brand are delighted to announce the launch of their new look website. www.brandcomms.com has undergone an extensive facelift to ensure that it provides the end user with a more informative and useable experience.

Brand has redesigned the website to offer improved navigation and a cleaner brighter image, whilst remaining factual and informative to all users.

New features include

- An in depth product area
- Latest News
- Advanced Support section
- Market solutions section
- User friendly search option

We are continually looking to improve our services, if you have any suggestions or comments about the new site, please email us at info@brandcomms.com



New Product: The Apollo Mobility Server Lite

Brand Communications has recently launched a new product within the 'Apollo' family the 'Apollo Mobility Server Lite'. The Mobility Server Lite is a revolutionary new powerful software product providing mobile workers with seamless network connections, anyplace at anytime.

The Mobility Server Lite is a remote/wireless platform for small enterprises, who wish to improve their mobile experience using GPRS, 3G, Wifi or WiMax. Apollo Mobility Server Lite offers a reliable and secure connection to the company network in a fast, cost effective and efficient manner.

Apollo Mobility Server Lite is a server / client mobile data solution and had been derived from Brand's carrier class product the Apollo 'Anywhere server to offer a more affordable but feature rich solution to the SME market.

A main benefit of this new solution is the seamless roaming capabilities. Moving between different wireless environments can be a challenge to any mobile user. The Brand solution will try and re-establish the connection via the chosen bearer and if not successful, will establish a connection through a alternative bearer, for instance a user who is on Wifi and coverage is lost could automatically have their session re-directed over a GPRS connection whilst maintaining the integrity of the session and no user intervention needed.

Apollo Mobility Lite makes mobile data simple and affordable for the smallest organisation, and is fully supported by Brand's expert pre-sales and post-sales support team. For details on how Apollo Mobility Lite can help your business please call the sales team at Brand on +44 (0)1480 442100.



Brand's Apollo solution helps supply oil and gas

Krohne Oil and Gas is part of the Krohne Group and is an innovative company which specialises in flow and level instrumentation serving key industrial markets worldwide. In 2004, Krohne looked to implement an innovative software solution in line with their company ethics of staying up to date with new technologies by using modern processes and solutions to benefit their working practices.

Krohne's business means that they have a number of staff working from home and out in the field. Krohne wanted a reliable and user friendly solution which would enable their field engineers and home users to access company data in real time and wherever their location may be.



Krohne chose the Brand Communications Solution.

Brand supplied a complete new corporate network and remote access solution to cover all Krohne's requirements. Brand installed the Apollo 'Anywhere' Server in Krohne's main corporate network in the Netherlands. The Apollo 'Anywhere' server is the host end server product developed by Brand for high capacity, resilient and reliable mobile connectivity over many different bearer technologies.

The remote workers use the Apollo Emulator software to seamlessly extend onto Krohne's corporate LAN and they are

now able to check company data, email, internet and specific company applications whilst out in the field and in real time using Brand's technology. They have found immense benefits in being able to capture data on site which in turn has improved data accuracy and supported maintenance programs.

Apollo 'Anywhere' uses Session Management, which ensures that vital information is transferred using wireless technologies and ensures a connection using different bearer technologies such as GPRS, 3G or Wi-Fi is always available to the mobile user. Apollo also provides a dependable and secure solution. The enhanced

security measures ensure that Krohne's data is never compromised or interfered with and offers a military grade level of security which uses high level authentication and encryption.

Brand's reliable mobile data solutions are ensuring that Krohne's network keeps flowing without interruption and enables Krohne to stay in contact with it's employees at all times. From exploration to production and distribution, Brand's wireless data has made a tremendous impact on every aspect of the company. It has revolutionised everyday working practices, allowing Krohne to deal with daily challenges and achieve greater efficiencies with higher safety standards.