

LEVELFOURNEWS

Getting more from your ATM network

Summer 2004, Issue 6



WELCOME TO LEVEL FOUR NEWS



In the summer issue, we focus on Level Four's expansion in the Middle East with an article by Osman Mehta, Level Four's Middle East regional manager. Osman explores the Middle East banking scene and why it is a natural market for the uptake of Level Four's ATM testing and development tools. The article will also discuss how the company intends to use its recent success in Saudi Arabia as a springboard to further success in the Middle East. The newsletter will also look at Level Four's new client wins in Europe and recent product developments such as support for IFX v1.5 and an XFS extension to ATM Channel Development Suite.

Martin Macmillan, CEO, Level Four Software
Email your comments to: enquiries@levelfour.com

RABOBANK SELECTS LEVEL FOUR

Rabobank is Level Four's first customer to licence the new XFS extension of its ATM Channel Development Suite.

The XFS extension will support development projects across Rabobank's open architecture ATMs and will automate the testing of its network of over 3,000



Rabobank

ATMs throughout The Netherlands. It will enable the rapid introduction of new ATM services to Rabobank's customers.

Rabobank are early adopters of XFS, the new open architecture interface standard, which allows the bank to run Wincor Nixdorf's ProTopas ATM software on NCR machines.

"With the rapid changes in ATM technology, end-to-end testing is ever more important," comments Jan Looij, senior project manager, Rabobank. "Level Four's ATM Channel Development Suite enables us to automate complex ATM network testing cycles from our live XFS-based software, peripherals, and hardware, to the connections with the host system."

LEVEL FOUR CELEBRATES 'SUITE' SUCCESS

Samba Financial Group, the largest publicly traded bank in The Kingdom of Saudi Arabia, has licensed all components of the ATM Channel Development Suite. Samba is Level Four's second Middle East customer.

Using Level Four's tools, Samba can customise ATM



screens, rapidly develop new ATM applications and undertake end-to-end testing of its multi-vendor network. Level Four's EMV FastTrack will help Samba migrate its ATM network to EMV standards on the local Saudi Payments Network, SPAN2. Level Four's Network Stress Tester module will also

ensure all the bank's ATMs can cope with peaks in transaction volumes.

Derek Sham, assistant general manager, Samba technology, comments: "Our customers will benefit from a smooth migration to EMV smart cards and, more importantly, faster deployment of new functionality at ATMs."

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LEVEL FOUR AND THE MIDDLE EAST CHIP CARD REVOLUTION



See inside for details



A MIDDLE EAST AFFAIR

BY OSMAN MEHTA, MIDDLE EAST REGIONAL MANAGER

With the acquisition of two leading Saudi banks as new clients in as many months, another scheduled to implement and one in final negotiations, Level Four is expanding its presence in the Middle East. Osman Mehta, Middle East regional manager, Level Four, discusses how the company is exploiting the region's chip card revolution.



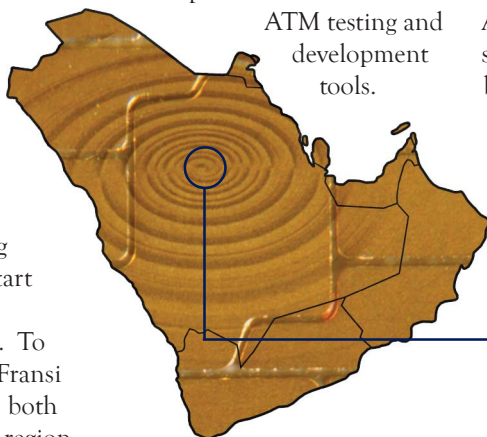
The ripple effect

Saudi Arabia is the dominant country in the Gulf Cooperation Council (GCC)* in terms of debit card issuance and transaction volumes, and is at the forefront of the region's banking revolution. Saudi Arabia sets the precedent that other GCC countries adopt. As such, Level Four believes it has hit bull's eye by targeting Saudi banks at the start of its Middle East expansion campaign. To date, Banque Saudi Fransi and SAMBA Group, both leading banks in the region, have licensed its ATM testing and development tools.

Osman Mehta explains: "The Middle East is based on a

ripple effect. Saudi Arabia is the drop that instigates the ripple which spreads to the other GCC countries. With Saudi Arabia's commitment to EMV, Level Four will actively chase the EMV ripple as it expands." In the next three to six months, Level Four will target leading banks in Kuwait, Qatar and the U.A.E. as its second phase of Middle East expansion.

Mehta also believes that there is a natural reason why Level Four has been so successful so quickly in Saudi Arabia. Unlike banks in the U.A.E, banks in Saudi Arabia currently only drive their ATM terminals; POS terminals are driven by the SPAN National payments switch. Therefore, with the current focus in Saudi Arabia on the ATM channel, it creates a natural market for the uptake of Level Four's ATM testing and development tools.



But Mehta notes that this paradigm is likely to change with the introduction of multi-application EMV chip cards. "New applications such

as loyalty are likely to place control of the POS channel squarely back in the hands of banks. Level Four anticipates this trend with its upcoming POS Simulator module which simplifies the prototyping and testing of multi-applications based on its revolutionary technology already in use within existing ATM products."

Enter EMV

The Saudi Arabian Monetary Agency (SAMA) is Saudi Arabia's central bank which specifies banking and electronic transaction processing standards. In the past 18 months, SAMA has been actively involved in promoting the move of its SPAN debit card scheme from magnetic stripe cards to EMV chip cards, and has made a heavy investment in this effort. The Saudi Arabian banks have followed suit and allocated large budgets to migrate to EMV with testing tools being an integral component in the banks' planning processes.

In the forthcoming months, Level Four will chase the EMV ripple as it hits Kuwait, Qatar and the U.A.E.

Level Four's EMV FastTrack component will assist in the migration of Middle East banks' ATM network to

comply with the EMV chip card standard. The tool enables the creation of EMV compatible ATM downloads and full end to end transaction testing directly from the chip card, through the ATM and up to the host system.

The migration to EMV chip cards in the Middle East is, culturally, a logical progression for a populace that is already well versed in the usage of PIN-based payment cards at both ATM and POS terminals. In the region, the ATM channel is heavily used because there is still an underlying cash-based mind set reflected in the high daily limits on cash withdrawals from ATMs and high transaction volumes. This is especially true in countries like Saudi Arabia that require the banks' host systems to adhere to stringent stress performance standards.

This stress performance requirement has been a strong driver for Level Four's revolutionary ATM Network Stress Tester (NST) product, which is unique in its ability to simulate an entire ATM network. NST applies the full logic of the ATM application and responds intelligently to host commands such as date and time setting, EMV issuer script commands, requests for configuration information, ATM counters, key exchange messages, in and out of service commands, and also

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includes the underlying cryptography and interaction that is inherent between the chip card reader and the chip-card in EMV chip card-based transactions. It will receive and process new configuration loads transmitted by the host just as a real ATM would.

Leading the market

Level Four is also responding to a demand from Middle East banks for more sophisticated transaction sets at the ATM. "Although the Middle East is a smaller market than Europe, it has always had a leading-edge approach to ATM services which is apparent in the rich transaction sets typically on offer," says Mehta. "Recently, we have observed that the Middle East is very open to self service at the ATM." There is an upsurge of interest for Level Four's new Bunch Note Acceptor (BNA) and Cheque Processing modules (CPM) in response to this banking trend in the region.

Level Four's BNA and CPM modules provide a simulation of an ATM network with bunch note acceptance and cheque processing functionality, and test that the service is fully secure and operative. Testing is automated and centralised directly from a desktop PC. All actions are graphically represented as they would appear on a real ATM, so the user can interact with the ATM like a customer.



Beyond the Middle East horizon

Level Four intends to use its success in Saudi Arabia as a springboard to further success in other GCC countries. In the forthcoming months, Level Four will chase the EMV ripple as it hits Kuwait, Qatar and the U.A.E. Along with further Middle East expansion, Level Four will continue to update its product suite to comply with international industry standards such as IFX.

Level Four's target is to become the global market leader of ATM test and development software by 2005. The company's progress in the Middle East has made a significant contribution to its existing customer base. Further expansion beyond Saudi Arabia in the Middle East and plans to penetrate Canada and the US will contribute further to its goal.

Mehta concludes: "To meet our goal, we will continue to enhance our flagship product, the ATM Channel Development Suite, with new features and functions that support demands of specific regions and cultures. Recognising the need for generic technology that can be applied in different ways to meet specific regional demands will be the key to Level Four's global success."

Footnote:

* Politically, the Arabian Peninsula consists of Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates, the Sultanate of Oman, and the Republic of Yemen. Together, these countries (excluding the Republic of Yemen) constitute the Gulf Cooperation Council (GCC). Founded on 26 May 1981, the aim of this collective is to promote coordination between member states in all fields in order to achieve unity.

Level Four extends European outreach

Giro Bankcard Ltd (GBC), Hungary's leading provider of outsourced ATM/POS acquiring and card issuing services for financial institutions, has licensed ATM Channel Development Suite to provide development support and end-to-end testing of its multi-vendor ATM network. GBC also intends to deploy Level Four's EMV FastTrack during 2005 to support migration to the new EMV standard.

Due to pressure to offer more sophisticated multi-lingual screen maintenance and new types of transactions services, such as mobile phone top up, GBC required a solution to support its ATM download image file maintenance.

Dr. György Timár, CEO, Giro Bankcard Ltd, comments: "We currently operate and manage 25% of the country's ATMs so it is critical that the service is modern, reliable and secure."

GBC selected Level Four because of its proven ability in financial services, the advanced capabilities of its technology, and knowledge of European and Hungarian banking. Level Four already supports OTP Bank, the largest retail bank in Hungary.

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LEVEL FOUR TOOLS SUPPORT IFX v1.5

Level Four's ATM Channel Development Suite supports the latest International Financial eXchange (IFX) specification, Version 1.5, released in February 2004. Level Four customers implementing ATM upgrades in line with the industry shift towards an open market for ATM software will benefit from simulated testing conditions in the most current IFX environment.

The new IFX specification extends the ATM, POS, business and consumer banking support provided by earlier releases. Version 1.5 builds on IFX's

multi-channel capabilities to enable it to be used as a core technology for the Electronic Funds Transfer (EFT) industry.

Martin Macmillan, CEO, Level Four, says, "The flexibility of Level Four's technology means that we can provide testing capabilities for future generations of the IFX standard. Work on Version 2.0, designed to support web services standards, is already under way".

Level Four joined the IFX Forum in January 2004.

Open standards drive change in ATM technology

Level Four's new white paper discusses the role open standards will play in the future of the ATM channel. The white paper explores the rapid advancement in ATM technology, in particular the adoption of XFS, IFX messaging protocol and TCP/IP networks, which play an integral part in the new open architecture. It also considers the impact of XFS on the marketplace, as banks are no longer 'locked in' to one ATM vendor thereby creating a highly competitive dynamic.

The move to an open architecture for ATMs is fundamentally changing the market for ATM technology. The white paper highlights the benefits that banks can achieve by embracing open architecture ATMs, including support for new peripherals and services, and ways that compliance with new regulation can be made simpler and more cost effective. The white paper also addresses how further technology developments will influence the make up of the ATM channel.

To receive a copy of Level Four's white paper, please go to www.levelfour.com/OpenStandardsWhitePaper/request.html

For more information or to request a product information pack, please visit us at www.levelfour.com or call +44 (0) 20 7661 9322

WINCOR NIXDORF PARTNERSHIP



Level Four Software has entered an agreement with

Wincor Nixdorf, the world's third largest provider of cash solutions, to share ATM specifications of its ProCash ATM software.

The agreement enables Level Four to provide ATM test and development tools based upon Wincor Nixdorf's ProCash NDC and DDC software. Mutual customers will benefit from faster deployment of ATM upgrades.

Rolf Scheer, director business service - partner management, Wincor Nixdorf, comments: "Collaborating with Level Four is a logical move for us. Level Four's ATM testing tools are already used by a number of our customers and their product offerings are extremely complimentary."

Level Four will automate testing with a desktop "virtual ATM" with Wincor Nixdorf's ATM specifications. Benefits include reduced human error and exposure to fraud, increased certainty before deployment, and assistance in the migration of ATM networks due to changing industry standards.

XFS-BASED PRODUCT SUITE LAUNCH



The XFS extension to Level Four's core product, ATM Channel Development Suite,

is in response to industry adoption of open standards ATM architectures.

XFS is an open architecture interface, a layer that separates the software and hardware of an ATM. Level Four's XFS

extension enables ATM testing with any XFS-based run-time software application, whether it is packaged or developed in-house, regardless of the hardware it runs on.

Banks are particularly interested in XFS as it provides the ability to run any vendor's software on any ATM hardware. Martin Macmillan, CEO, Level Four Software, comments, "XFS introduces a competitive element that is causing fundamental change in the ATM marketplace."