



aktuell

Special Edition CeBIT 2006

CeBIT 2006 Edition

March 9th, 2006

**The experts for multi-vendor
ATM software**

**CeBIT '06
March 9 - 15, 2006
Hall 17 · Booth D47**

<p>Our strenghts</p> <ul style="list-style-type: none"> cash-out, cash-in, cash-recycling, statement printing and EMV security with video surveillance centralized ATM management 	<p>Our software is running on</p> <ul style="list-style-type: none"> 40 % of all ATMs in Austria 10 % of all ATMs in Germany 0.5 % of all ATMs worldwide
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Dear Readers,

We are proud to be able to present to you a special edition of our informative SBS newsletter as a welcome addition to our attendance at CeBIT 2006, the world's largest computer trade show. From the 9th to the 15th of March, leading IT companies from around the world will be introducing their newest products to the marketplace, including Salzburger Banken Software. We invite you to visit us in Hall 17, booth D47, where we promise you will be fascinated by our innovative products, and warmly welcomed by our friendly staff!

Please come by our booth to view a schematic diagram which graphically depicts how the SBS product pallet is integrated into the agree SB solution of the FIDUCIA IT AG. See how the new WindowsXP based software solution for Austrian ATMs is built, or get a first sneak preview of KI/XFS Operator Version 3.0, the acclaimed systems management solution for self-service terminals that can be installed internationally. Learn how transaction snapshots from over 3000 ATMs

can instantly be retrieved and managed!

We are looking forward to seeing you at our booth!

Friendly Regards,

Wolfgang Braunwieser

As representative of Salzburger Banken Software Team



FIDUCIA IT AG runs more than 12,000 self-service terminals with *agree SB*

FIDUCIA IT AG is a full service operating company providing banking services in the area of South Germany. The company supplies more than 800 banks with IT services from back office and teller's counter to the operation of 23,000 self-service terminals.

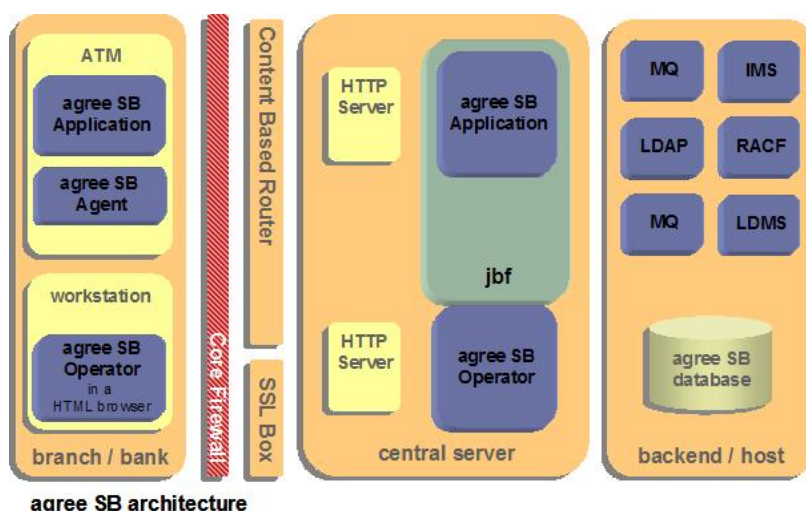
Working jointly with several partners, FIDUCIA IT AG developed an independent multivendor platform for operating statement printers (KAD), automated teller machines (GAA) and service terminals (ST). The result was named *agree SB* and is an integrated component of the FIDUCIA product range.

agree SB fits seamlessly into the *agree®* product line and uses the most modern Java technologies, in order to offer secure, highly available and flexible services on self-service terminals.

types from the manufacturers Diebold, NCR and Wincor Nixdorf. In order to support all the terminal types with the *agree SB Application* the software product *KI/XFS Terminal Control* is installed in the self-service terminal.

For the direct services at the terminal FIDUCIA IT AG uses *KI/XFS Local Services*, which are identical in look-and-feel on each self-service terminal and are available during interventions such as cassette change, etc.

KI/XFS Terminal Control, *KI/XFS Local Services* and *KI/XFS Operator* are products of Salzburger Banken Software. Furthermore, the architects and the developers from Salzburger Banken Software support FIDUCIA IT AG during the development and improvement of the *agree SB* solution.



A detailed examination of *agree SB* shows, that the platform, which consists of different modules, forms a coordinated and integrated entity. The main part is the *agree SB Application* - a Java application which, partially runs on the terminal and partially on central application servers. It builds a frame for the different banking transaction use cases (for instance: statement print or cash dispense). The banking part is supported by the system management component - *agree SB Operator* - that can be used with a Web browser interface. As a result, the bank's and the technical staff are able to perform various operations on the self-service terminals (configuration change, restart, and lots more). *agree SB Operator* is an extended version of *KI/XFS Operator* for special requirements of FIDUCIA IT AG.

agree SB supports more than 130 different terminal

In spring of 2004 version 1.0 of *agree SB* was released for the general use. Within the shortest time many banks, with a total of 1000 terminals, migrated from the old system into the *agree SB* world. This was a logistic challenge, because the terminals had to be completely reinstalled. For this purpose, a bank employee or a technician at the terminal was needed. Additional workload caused by new *agree SB* terminals and new users of *agree SB Operator* had been compensated by means of horizontal scaling (installing further server capacity).

This is just one of the advantages of a modern "Three-Tier-Architecture" (self-service terminal - central server - backend) compared with the former decentralized system, with hundreds of servers distributed in banks and their branches.

As it is often with first versions, there was room for improvement, and in spring of 2005 *agree SB* version 1.1 was deployed. This resulted in the improvement of the recovery system and better stability of the release.

Subsequently, the massive rollout of *agree SB* could begin. Since than 200 terminals were integrated every week. Parallel to that, the work on *agree SB* Release 2.0 began. This release will support cash-in und cash-recycling systems (CRS). In addition, numerous upgrades were integrated into *agree SB Operator*, and in this way many customer's wishes were satisfied.

Meanwhile, about 400 banks operate more than 12,000 self service terminals with *agree SB*, which shows, that this modern solution is appreciated by the banks. With this new sales channel the financial institutions are now able to transport their services directly to the customer – with a twenty-four-seven availability that emphasizes the proximity to customers.

FIDUCIA IT AG with its *agree SB* solution created worldwide one of the most modern and efficient self-service platforms. By doing so, FIDUCIA accomplished a technological step that lie ahead of many other German computing centers. Salzburger Banken Software is proud of its contribution to the success of *agree SB*.

Interview with Klaus-Peter Bruns (FIDUCIA IT AG)

In November of 2005 we interviewed Mr. Klaus-Peter Bruns, managing director of the application development division at FIDUCIA IT AG, about *agree SB*.



Here is the interview:

Salzburger Banken Software: When did you come up with the idea of developing a FIDUCIA independent self-service platform?

Bruns: At the end of 2001 we came up with the idea of developing an independent self service solution using jbf (Java Banking Framework of FIDUCIA). Prior to that, we analyzed in detail a number of existent solutions under development. We decided to develop our own self-service solution based on the FIDUCIA jbf platform because the existing solutions did not sufficiently meet the requirements. In addition, at that time FIDUCIA had at its disposal a huge amount of existing architectural elements. -The goal of the project was an integrated solution for all self-service terminals, which allows FIDUCIA to offer flexible services on the terminal and to incorporate them in standards on the market such as J2EE, application server, etc. During the project all decentralized BNM servers will be replaced by a cluster of central application servers. This means that only the self-service terminals will be installed in the bank, all other parts of the self-service solutions run in the computing center of FIDUCIA.

Salzburger Banken Software: What are the advantages for the banks associated with FIDUCIA through *agree SB*?

Bruns: On the one hand, by replacing decentralized BNM servers with central application servers we save on costs. On the other hand, the architecture of *agree SB* provides a simple mechanism to configure and upgrade transactions, which enables us to offer each customer his own transaction flow.

This functionality is not fully used in existing releases, because the replacement of the older system based on OS/2 took priority. However, in the future releases of *agree SB* various products can be integrated in self-service transactions by simple means.

A further big step is the complete integration of the terminal management and the monitoring in *agree SB Operator*. Apart from the order of a terminal by the bank, additional initialization and configuration of the terminal is done automatically. After the installation new terminals log themselves on the central servers and receive the required configuration data and software updates. The bank can define which transactions should be offered on particular terminals, whereas automatically is checked, whether the terminal meets the technical requirements for the particular transaction. The addition of new transactions to *agree SB Operator* is done at the end of the transaction's development by passing a XML file to *agree SB Operator*. The file describes the transaction's hardware requirements and the parameters that can be configured by the central system management and the employees at the bank. So a new transaction can be offered to the customer; at the best with the next customer transaction.

Salzburger Banken Software: How do the banks respond to *agree SB* solutions?

Bruns: The first presentation of the project plan and the piloting of the first terminals were greatly supported by the banks. But as soon as the first thousand terminals were in the production process and some problems occurred, the banks were not as euphoric as at the beginning. Nevertheless, with the input of different experts from particular departments we realized the needed improvements and carried on with the planed rollout. At the end of October of 2005 more than 10.000 self service terminals were already running under *agree SB*. We are aware of the fact that, with the first releases of *agree SB* we can offer a very extensive, but well known spectrum of self-service transactions. The *agree SB* solution provides us with the basic requirements that enable us to cope with new challenges of the self-service distribution channel.

Salzburger Banken Software: How would you characterize the role of Salzburger Banken Software (SBS) in the project?

Bruns: At the beginning of the project we decided in favour of the *KI/XFS* platform products from SBS because they convinced us of their capabilities to develop an independent multivendor solution. The fact that *agree SB* supports more than 130 different terminal models from three different

leading manufacturers supplies evidence for their capability. As in *agree SB* the most modern technologies were applied, we as well as SBS gained a lot of experience from the current project. Under these circumstances it is very important to have flexible partners and to consistently strive for a common goal.

Salzburger Banken Software: What are the future plans for *agree SB*?

Bruns: *agree SB* Release 2.0 will also support the cash in and cash-recycling systems (CRS). As a result all the important transactions are then

available for the customers. At the same time, forward-looking innovations are on the agenda such as a direct interconnection with the extensive FIDUCIA CRM systems and a personalized interaction with the customer. At the end of the next year a new, important milestone will be achieved by the final extension of about 23.000 *agree SB* self-service terminals. In such a way, FIDUCIA can present a forward-looking solution that brings us a remarkable technological advantage on the market.

Salzburger Banken Software: Thank you for the interview, Mr. Bruns!

The KI/XFS Platform

Our new Cash Recycling System has enabled us to fully integrate the last frontier of the SB appliance product pallet into the KI/XFS product platform.

An amazing array of OEM products running the SB KI/XFS system solution, including DIEBOLD, NCR and WINCOR-NIXDORF, as well as individual SB systems from GUNNEBO, KEBA and REINER are now fully supported by the single, overwhelmingly stable KI/XFS platform. Over 100 machines of various types - from cash recycling systems, payment kiosks and ATMs, to balance statement printers and service terminals – are supported by the simple, easy-to-learn and maintain KI/XFS platform.

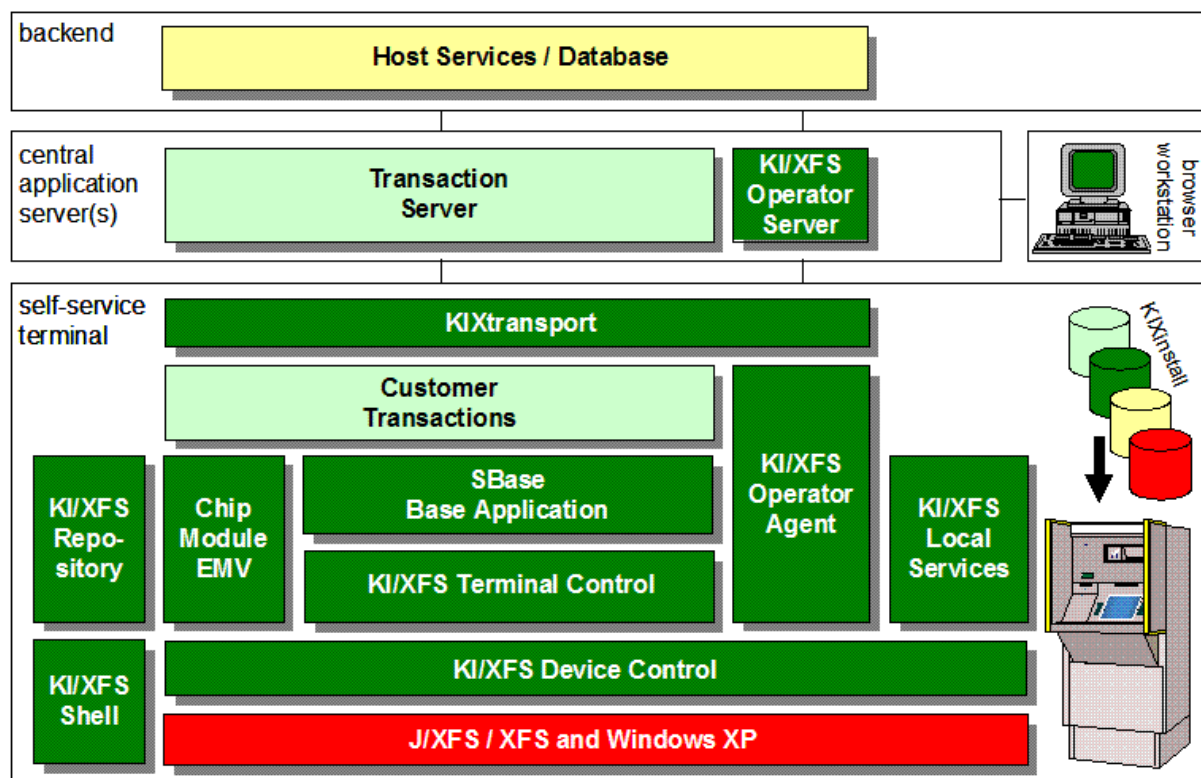
Because individual models from OEMs may each have their own hardware and software configurations, we don't want to make any general statements about their product releases. However, we would happy to answer any of your detailed technical questions if you e-mail us at info@sbs.co.at.

SB product releases are conducted according to very specified criteria. In the first place, the exact technical specifications of each of the SB appliance components (EPP, card readers, etc.) to be assembled into the system must be clearly designated. Additionally, the individual drivers (XFS, J/XFS) for the appliance and for its

associated operating system must also be clearly determined, as well as the actual functions and functionality desired by the customer. After all this information is collected, system tests are devised to insure quality and stability. Only when our experts are completely satisfied that the appliance and the KI/XFS

platform function together well, do they authorize a release of the SB appliance in accordance to the quality standards of the KI/XFS product platform. Gerd Klima, the SBS Product Manager responsible for testing and insuring SB appliance compatibility, is looking forward to the challenges of our next step: cooperating even more closely with OEMs to optimize test development to allow the fastest possible product release time, thereby drastically accelerating time-to-market. The advantages for our customers are clear: with a single application, many different models of SB appliances can be effectively managed. If you need support for an SB appliance that we are not familiar with, then we are always ready to integrate it into the international standard KI/XFS platform.





Components of the SBS self-service-architecture

KI/XFS Local Services

service functions for the local operator like „refill the money boxes“

KI/XFS Terminal Control incl. Device Control

comfortable and vendor independent communication with the hardware components of a self-service terminal

KI/XFS Repository

saves transaction data for a successful restart caused by a break down of the self-service terminal

KI/XFS Shell

protects the operating system against unauthorized user access and manages the different processes running on the self-service terminal

KI/XFS Operator

monitoring of self-service terminals using a Web application server

KIXtransport

simplified transport of messages in TCP/IP or X.25 environments

SBase

base application for a high level self-service solution including flow control defined in XML documents, GUI engine, print journal and electronic journal

Chip Module EMV

(joint development with First Data Austria) Plugin component supporting austrian (Paychip) und international (EMV) smartcard transactions

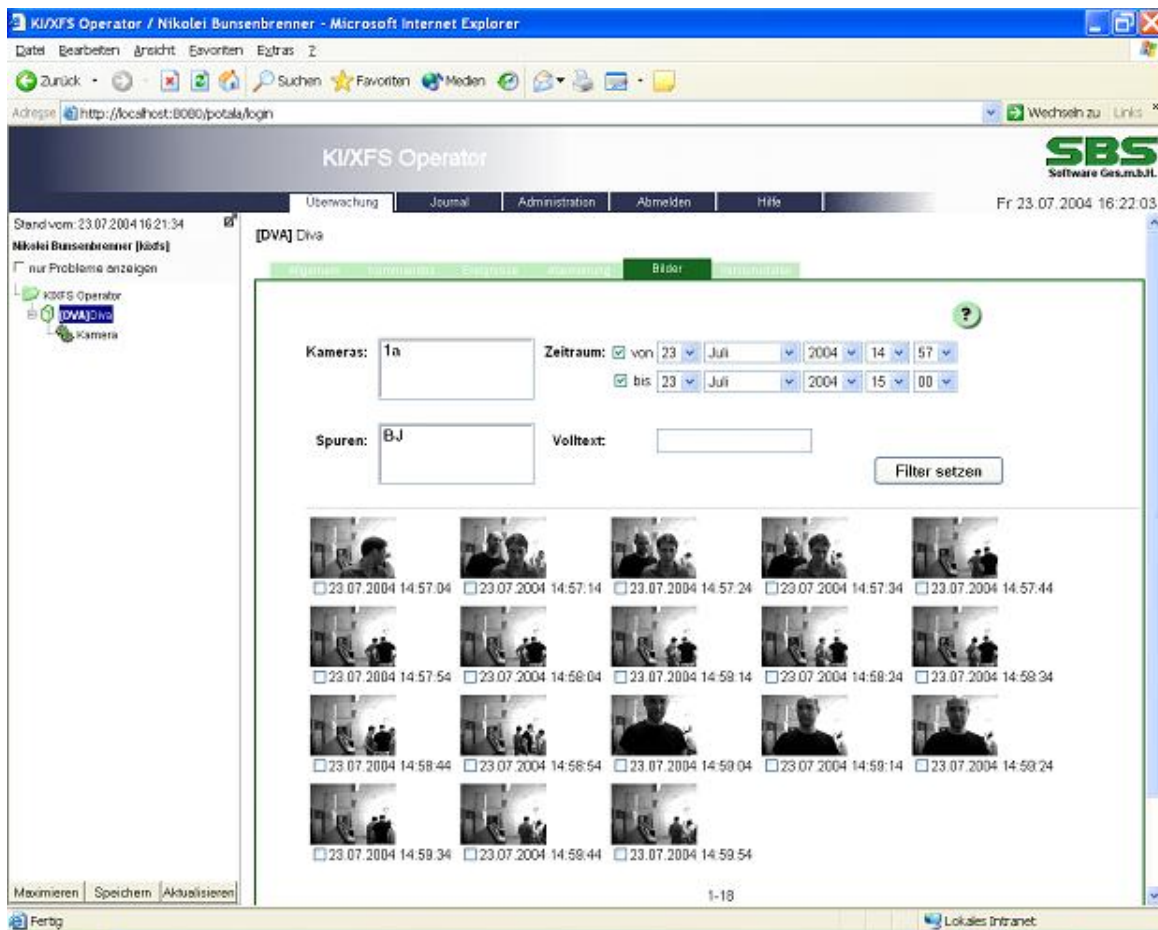
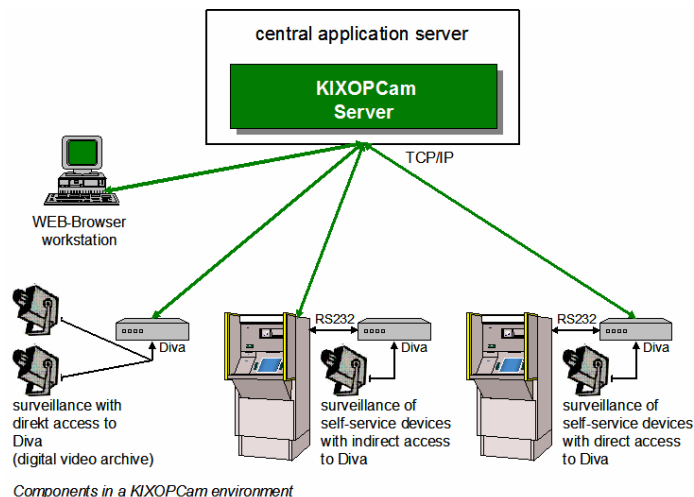
Video Surveillance in the self-service Environment

Video surveillance of self-service terminals is becoming ever more popular and necessary due to an increasing number of fraudulent attacks. The SBS product KIXOPCam allows the centralized monitoring, storing and management of digital images retrieved from decentralized cameras.

KIXOPCam is best suited for environments where many decentralized video archives, as well as cameras, are either needed or are in some way already networked. KIXOPCam supports digital video archives which are connected to SB appliances.

The KIXOPCam performs the following functions:

- Definition and configuration of digital video archives
- Configuration and connection of cameras to an self-service terminal
- Image search based on user-defined criteria
- Printing of images
- Downloading of images
- Archiving previously searched digital images
- Searching and managing archived images
- User management
- Definition of access rights
- Grouping of digital video archives



The user interface has been implemented as a web browser interface. A special KIXOPCam plug-in allows the KIXOPCam functions to be completely integrated in the KIXoperator environment.

KIXOPCam supports digital video archives from Maku. For more information about the company Maku and its products, please visit <http://www.maku.de>.

The SBS Chip Module

Certified java EMV kernel for ATM transactions

The initial situation

The integration of chip cards and the EPPs within the banking solutions leads to a higher level of security during banking transactions. Nevertheless, the communication with the chip of the customer's card is still complex, especially because of the physical restrictions of the chip card (available memory, available processor), which leads to a machine-level programming (shifting bits, etc.) even in modern software engineering. Contrary to the features of the chip cards and of the EPPs, the task of the application designer and the software developer is to implement the defined business processes functionally and as simply as possible for the application.

The idea

It is reasonable, to encapsulate the functionality provided by the chip cards and the EPPs in software modules, in order to give the application developer an appropriate appliance to implement business process models. This allows the application developer to access the financial technical features of the chip card without dealing with the details. After inserting the card into the card reader, the chip module contacts the chip card. From this time, the features of the customer's chip are available to the application through the chip module's interface. The application of the chip module results in the following advantages for the self-service applications:

- Simpler handling of the business processes, which require a chip card
- Standardized chip sequences according to national and international committees
- Simplified acceptance procedure through the use of standardized modules
- Separation of the chip card logic from the application logic

The implementation

Both companies APSS (a subsidiary of First Data International, <http://www.apss.at>) and SBS decided to develop and distribute the chip module together because the implementation of the chip module requires extensive knowledge in both controlling of the self-service terminals and the chip operations.

The chip module itself is subdivided into a core and functional self-contained modules, the so-called plug-ins. The chip module's core includes the control logic of the functions as well as the control of different devices. In addition, the core includes the so-called "local plug-in", which implements country-specific characteristics (for instance, the difference in generating the encrypted PIN Block in Austria and Germany).

Additional modules are available for different tasks depending on the desired scope of the service. The presently offered modules include the processing of the Austrian pay chip cards and the Austrian electronic purse as well as the processing of EMV transactions with the national adaptations for Austria and Germany.

The chip module itself was developed in Java, however, it can be used in different other systems (for instance .NET) and is available for the operating systems Windows NT 4.0, Windows 2000 and Windows XP.

References

At present, three Austrian bank associations as well as the ATM operating company Europay Austria decided to use of the chip module on their ATMs all over the country. In Germany FIDUCIA IT AG decided to use the chip module to implement their EMV chip card support.

SBS Homepage

If you are interested in more information about SBS and our products visit us at <http://www.sbs.co.at> and register for the SBS newsletter.

SBS *aktuell*

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Please contact me:

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You request information about:

- KI/XFS Operator* – the application server solution for monitoring and management of self-service terminals
- KI/XFS Terminal Control* – the multivendor platform for self-service terminals
- KI/XFS Local Services* – local management functions for self-service terminals
- SCin – Cash-in solution for banking terminals
- Chip Module – certified java EMV kernel for ATM transactions

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