

# BOC Credit Card (International) Ltd. raises the great wall of cyber security.

BOC Credit Card (International) Ltd. (BOCI) is working to make it easy for Hong Kong merchants to do business online, by implementing the SET Secure Electronic Transaction™ security protocol as part of Hong Kong's first encrypted payment gateway for credit card transactions. SET™ uses encryption technology that helps to protect the transfer of payment information over open networks, such as the Internet. The solution protects consumers with high levels of identification, authentication and confidentiality while providing merchants with realtime credit card approvals.

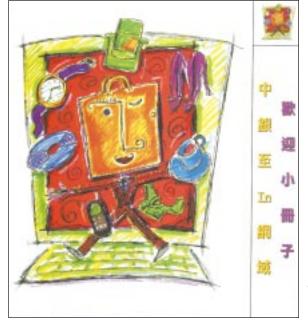
## It's about business, not just technology.

Because BOCI had quite a lot of inquiries for secure and reliable online payment services over the Web, it chose SET. SET allows it to offer an innovative solution to its customers while helping online merchants to expand their businesses.

#### A smooth integration

BOCI began its move to enable a more secure level of e-business by piloting its service among ten online merchants and approximately 1,000 BOC Group Credit cardholders. SET was easily integrated with BOCI's existing IBM RS/6000 server without modifications to existing code, which could have slowed the roll-out. After the two-month pilot, BOCI extended the benefits of SET to all 600,000 cardholders. The number of transactions is

Application	Payment gateway for credit card transactions
Business Benefits	Expects to complete 100,000 transactions within a year; sustain and enlarge card and merchant base
Software	IBM® Payment Suite™ IBM Consumer Wallet™ IBM Payment Gateway™ IBM Net.Commerce IBM DB2®
Hardware	IBM RS/6000®
Services	IBM Global Services



BOC Credit Card (International) Ltd. is making it easy for Hong Kong merchants to provide more secure online purchasing with innovative payment products from IBM.



still modest, but BOCI anticipates handling about 100,000 transactions within a year.

Cardholders use the IBM Consumer Wallet which has been certified to comply with the SET specification to store credit card information within a digital authentication certificate on their Web browser. When items are purchased, this information is encrypted and sent to the merchant's Web server which implements the SET protocol. The same information is relayed to the merchant's bank, which authorizes the transaction. The entire process can be as quick as ten seconds.

The SET protocol safeguards Internet purchases using techniques such as the 1,024-bit encryption (currently the most secure encryption technology available). These products allow consumers to easily place, track and manage purchases and serve as a gateway between the Internet and non-Internet credit card processing systems. For example, using IBM Payment Gateway, BOCI directly links to its own credit card system. In addition to assisting BOCI, IBM is working with more than 50 other financial institutions in 23 countries to provide payment solutions that implement the SET protocol.

#### A secure future

BOCI is also using IBM Net.Commerce in conjunction with the IBM Payment Suite products. Net.Commerce provides the tools necessary to host BOCI's Internet home page, with plans to sell its products over the Web in the near future. BOCI merchants are currently using Net.Commerce as a testing site as well.

The success of the SET protocol depends not only on its hacker-proof security, but also on educating the marketplace. BOCI is currently informing Internet service providers (ISPs) in Hong Kong and other markets about the differentiating benefits of SET, hoping the ISPs will begin offering SET capabilities to the online merchants they host. BOCI refers all potential merchants to IBM.

BOCI is also working hard to recruit additional online merchants, not only in Hong Kong but also in neighboring Macau and the People's Republic of China. It is also educating its customers that SET is the best way to purchase goods online. BOCI hopes that it can leverage the advantages of SET to expand its market share among younger cardholders, who are more cyber savvy and likely to shop online than older generations.

Future e-business growth will depend on eliminating consumers' security concerns about using credit cards over the Internet. It will also depend on automating credit card and other transactions to eliminate an extra process and provide authorization assurance before an order is processed. By adopting SET as a standard and relying on the IBM Payment Suite products, BOCI is taking the lead in forging a path for merchants to reach new customers and allowing card members to cyber-shop without worry.

### For more information, please contact your

IBM marketing representative or IBM Business Partner.

Visit us at: www.ibm.com/e-business

For more information on BOCI, visit: www.boci.com.hk



©International Business Machines Corporation 1999

IBM Corporation Internet Division Route 100 Somers, New York 10589

Produced in the United States of America

4-99 All Rights Reserved

The e-business logo, IBM, IBM Consumer Wallet, IBM Payment Gateway, IBM Payment Suite and RS/6000 are trademarks of International Business Machines Corporation in the United States, other countries or both.

SET Secure Electronic Transaction, SET and the SET logo are trademarks owned by SET Secure Electronic Transaction LLC.

Other company, product and service names may be trademarks or service marks of others.

This case study illustrates how one customer uses IBM products. Many factors have contributed to the results and benefits described. IBM does not guarantee comparable results. All information contained herein was provided by the featured customer and IBM Business Partners. IBM does not attest to its accuracy.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.



Printed in the United States on recycled paper containing 10% recovered post-consumer fiber.



C325\_1322\_00