



## Hong Kong Stock Trading Industry Embarks on a New Era with mBroker Capabilities on Palm OS® Platform

### Secure, Real-time, Wireless Stock Trading Minimises Manpower and Improves Processing Time

Sixteen Hong Kong brokerage firms are improving their productivity and customer satisfaction levels by using the "mBroker" solution from Heracle Technologies Ltd., built on the Palm OS® platform for Palm™ handhelds. This wireless solution offers brokerage firms and individual investors a customised, secure trading platform to remotely access stock information in real time as well as conduct stock trading activities – such as submitting orders, modifying or cancelling orders, and viewing order status – from their handhelds. The solution helps brokerage firms increase their revenue by giving agents more time to proactively contact investors to offer further investment advice.

#### THE CHALLENGE

Historically, investors have relied on desktop computers and their agents to obtain the latest stock quotes or the trading history of any particular stock index, as well as to place an order – a process that is time-consuming and labour-intensive. There also is a higher probability for mistakes when working with an agent – orders can sometimes be overlooked, data-entry errors can be made, or delays due to congested telephone lines can occur.

In the stock trading industry, accuracy and the ability to respond quickly to the ever-changing market indices are of utmost importance. In the next generation of electronic and mobile commerce, speeding up order-processing time without compromising on accuracy will go far in helping brokerages achieve greater customer satisfaction and maintain a competitive edge.

#### THE SOLUTION

Heracle Technologies Ltd., a wireless application solution provider, has now developed mBroker, the first mobile solution that is Mobile e-Cert enabled for conducting secure wireless stock trading in Hong Kong.

Mobile e-Certs are the world's first and only wireless digital certificates for community-wide use. To enable the development of secure electronic commerce in Hong Kong, Hongkong Post established a Public Key Infrastructure (PKI) security system in January 2000 that acts as a trusted third party (Certification Authority) for verifying the identities of e-commerce transactions in Hong Kong, providing a secure and trusted environment for conducting electronic transactions. In October 2001, Hongkong Post launched its Mobile e-Cert digital certificate to enable secure mobile e-commerce transactions to take place.

mBroker is backed by the Mobile e-Cert security of Hongkong Post. The Mobile e-Cert employs Diversinet Corp.'s PKI technology to provide a highly secure, encryption-protected platform to ensure that all transactions are authenticated before being processed. With its user/server authentication capabilities, Mobile e-Certs ensure that every order transacted through mBroker will maintain an audit trail detailing when the transaction occurred, what it was and how much it was worth. As such, this offers the investor or the brokerage firm assurance in the event of any disputed transaction.





With mBroker, brokerage firms can now offer investors in Hong Kong a secure, automated platform for conducting real-time stock trading activities via their Palm™ handhelds. Investors can now place an order remotely via an intuitive touch-screen interface, omitting the need to call an agent. With a tap of an icon and PIN input, the order information is encrypted and sent via Heracle's mBroker system, which is located in the data center of Hong Kong Exchanges and Clearing Limited (HKEx), to Hongkong Post's Certificate Authority server for identity authentication. Upon verification, the order is allowed to pass through the HKEx's Order Routing System gateway to the designated brokerage firms' system for subsequent processing. Once the transaction is completed, a confirmation note with transaction reference number is sent back to the user's mBroker interface.

According to Heracle, with mBroker, it takes an average of less than six seconds to complete an order via a handheld. This compared favourably to placing an order via a phone call to a stock agent, which takes approximately one minute to complete. mBroker also allows investors to enquire about an order status, and whether an order has been successfully traded or not.

"With wireless security features such as user/server authentication and digital signatures, the solution enables investors fast access to stock quotes and automated, speedy order placement in a highly secured wireless environment," said Mr. Terence Chau, vice president, Asia-Pacific at Diversinet Corp.

"Deployment requires minimal investment, as there's no software or hardware requirement for participating brokerage firms. Their customers may enjoy the service simply by subscribing to the mBroker service," said Mr. Angus Tam, business development manager at Heracle Technologies Ltd.

## THE OUTCOME

Deployment began in April 2002 and has been adopted by 16 brokerage firms, including such leading firms as CU Securities Limited, GLS Securities Limited, Grand Onward Securities Ltd, and Hing Wai Allied Securities Ltd.

"Enterprise solutions based on Palm OS® technology, such as Heracle's mBroker, is modernising the way in which the stock trading industry is conducting business, while increasing competitiveness," said Mr. Andy Yeung, operational manager of GLS Securities Limited. "The solution helps improve operational efficiency by reducing the amount of time agents spend re-inputting data for order-processing. It also minimises human errors such as order omissions. Agents can focus on providing value-added personal investment consultation to their customers."



## THE FACTS & FIGURES AT-A-GLANCE

### Enterprise:

- CU Securities Limited
- GLS Securities Limited
- Grand Onward Securities Ltd.
- Hing Wai Allied Securities Ltd.
- KMT Securities Ltd.
- Lawsons Securities Company
- Lei Shing Hong Securities Ltd.
- Lucky Securities Company Limited
- Prime Securities Ltd.
- Soo Pui Chen & Co.
- Stockwell Securities Limited
- Tai Shing Stock Inv. Co. Ltd.
- Tat Lee Securities Co Ltd
- Tsun Chi Yuen Sec Co Ltd
- Victory Securities Co. Ltd.
- Walco Securities Ltd.

### Industry:

- Stock Trading

### Category:

- Automated data-processing

### Application:

- mBroker

### Features:

- Easy-to-use interface
- Enables wireless stock trading activities, such as obtaining stock quotes and placing orders
- First application that supports Hongkong Post's Mobile e-Cert for identity authentication and security
- Supports both Chinese and English

### Benefits:

- Improves stock trading efficiency
- Enhances security to protect users' personal information and transaction data, and provides an audit trail so parties cannot refute transactions
- Allows users to keep up with the current stock market status remotely
- Minimises errors and missing orders
- Provides the tools necessary to increase mobile investors' span of control

### Specifications:

- Palm™ handhelds with Palm OS® 3.5 or higher
- Oracle8i
- Diversinet Passport Certificate Server®
- Jrun3.1 MS Win NT 2000 server

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