

**<Cover Page Headline & Summary Copy>**

## **NNRT Helps Trading Desk Tackles OTC Expansion**

The growing data and business requirements for OTC traders and analysts have given rise to a new OTC trading environment, integrated and implemented by NNRT. The new desk incorporates several systems, including BRASS, and addresses the needs of a growing user base, which now includes Discover, the International desk and eventually Dean Witter.

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## **NNRT Engineering Supports Growing OTC Business**

The National Notation Real-Time (NNRT) Engineering BRASS team has devised and implemented a multi-phased renovation plan to handle the expanding OTC business requirements of the International Equities Division (IED). The plan incorporates the needs of Discover Brokerage Direct and the International desk.

The Brokerage Real Time Applications Support System (BRASS), NNRT's OTC execution management system, is now one of the critical business application systems for OTC trading. BRASS is part of a trading environment that is integrated with the BRASS utilities, called BRUT, which act as an ECN (electronic communications network) for BRASS users. The trading environment also includes the Quote Management System (QMS) for market makers; QMS will be fully deployed by late July 1999. This new trading environment replaces NASDAQ's Workstation II (NW II) and Tools of the Trade.

*<insert graphic 1> QMS Market Maker Window*

The recent deployment of additional T1 lines and the upgrade of the BRASS server sub-net and the Market Data Firewall have increased speed and capacity. System stability

***BRASS FACT***

*The number of BRASS users has increased from 38 initial users to 75 users in 14 months.*

has been achieved through expansion of the initial installation's two-server configuration to the present three-server configuration, with redundancy for each server.

In conjunction with the deployment of QMS, the NASDAQ circuits were converted to the new Enterprise Wide Network II (EWN II). EWN II is designed to meet future technological needs by more than doubling the speed and capacity of the current NASDAQ network and guaranteeing delivery of messages. QMS runs on the newly-built 100-MB switched EWN II environment. NW II and Tools of the Trade will also be moved from their current shared environment to the switched environment.

*<insert graphic 2>*

During the first half of 1999 NNRT performed two BRASS software turnovers: the first for an OATS compliance release in March and the second for installation of the scalability version of BRASS in June. The June release supports the business plans to

further automate the International trading processes, lowering overhead demands and increasing capacity in anticipation of the volume increase from Discover Brokerage Direct (DBD) business.

These and related business demands are being met by NNRT with improvements to the infrastructure designed to ease the Dean Witter integration and future business increases.

For further information on BRASS, BRUT and NNRT's OTC support, contact Jason Smith (JSmith@nnrt.com) or Ken Jones (KJones@nnrt.com).

*1999 NNRT MILESTONES*

*January: System renovation*

*March: 2 Major releases*

*April: Compliance database*

*May: Software interface renovation*

*June: DBD business integration*

*July: QMS roll out*

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**NOTES/OPEN ISSUES:**

- Note to layout people: Obtain graphic 1 and graphic 2 from Ken Jones (KJones@nnrt.com) (2-1799)

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