# National Commodity & Derivatives Exchange Limited (NCDEX)
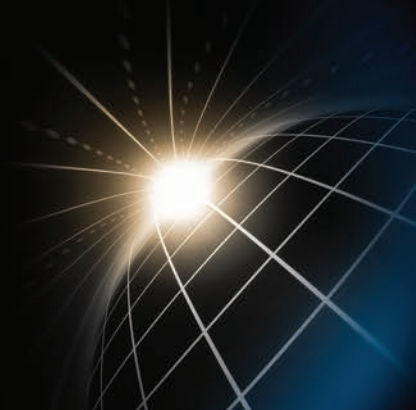
## Growing commodities exchange counts on Stratus servers for reliable online trading

### Business situation

The National Commodity & Derivatives Exchange Limited (NCDEX) is a professionally managed online multi-commodity exchange backed by a group of India's leading financial institutions. Located in Mumbai, the exchange has been instrumental in modernizing how the country's wealth of agricultural products trade on both the spot and futures markets.

Currently trading daily are contracts in some 36 commodities, including cotton, mustard seed, and raw jute, as well as precious metals. And from the day this growing exchange began operating on December 15, 2003, NCDEX has counted on the reliability of Stratus, systems for its mission-critical core trading application.

**With its credibility already proven its in the area of online equity and derivatives trading at the National Stock Exchange, Stratus Technologies has remained the preferred choice for the NCDEX commodities sector.**

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### QUICK FACTS

#### SOLUTION PROFILE

- Online multi-commodity exchange in India
- Driven by fault-tolerant Stratus® servers
- Large trading volumes and time window
- Have relied on Stratus to support their core trading application since their 2003 opening
- Ongoing success of the system has led the exchange to continually increase its investment in new generations of Stratus products and services

#### PRODUCTS

- Stratus Continuum® and V Series systems
- VOS and OpenVOS Operating Systems
- Commodities trading application from OMX Technology

#### SERVICES

- Stratus Support services

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Uptime. **All the time.**

**Stratus®**
Technologies

## Business objectives

The exchange's specifications required a robust, fault-tolerant, tested, and scalable hardware platform to support the core commodities trading application provided by OMX Technology of Stockholm, Sweden. NSE.IT was the systems integrator responsible for the complete solution implementation.

Another of NCDEX's prime requirements was a very large trading window, spanning from 10 a.m. until after midnight because of linkages with international exchanges. Also important to the exchange was that its server provider would relate to them more as a business partner, rather than solely a hardware supplier.

After assessing the possibilities, officials chose fault-tolerant servers from Stratus Technologies based on their market reputation and proven performance across other large exchanges including an NCDEX stakeholder, the National Stock Exchange of India.

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**NCDEX officials described the successful deployment as "a record achievement" because of its speed, which helped inspire the confidence to expand trading capabilities from just a few commodities to nearly 40 in a year's time.**

## Stratus solution

The exchange faced the extra pressure of a short three month schedule for the initial implementation of the trading system. Stratus servers running the VOS operating system were originally installed. NCDEX officials described the successful deployment as "a record achievement" because of its speed, which helped inspire the confidence to expand trading capabilities from just a few commodities to nearly 40 in a year's time.

## Uptime is a valued commodity

The exchange has high expectations of uptime for its online commodities trading application: more than 99.999%. In addition to the need for availability at all times, the online trading application is time- and delay-sensitive as well. A failure or disruption would halt the trading engine, interrupting the entire business operations of the exchange. Credibility and reputation would be at risk in addition to the financial impact of transactions that could not be executed, according to officials.

The Stratus servers have performed according to plan since they were installed. They have maintained uninterrupted operation, scaled up with growth in commodities and transactions, and clocked new peak transaction loads. Today the trading system processes as many as 200,000 transactions per day for 8,000 users from terminals at 500 sites across the nation.
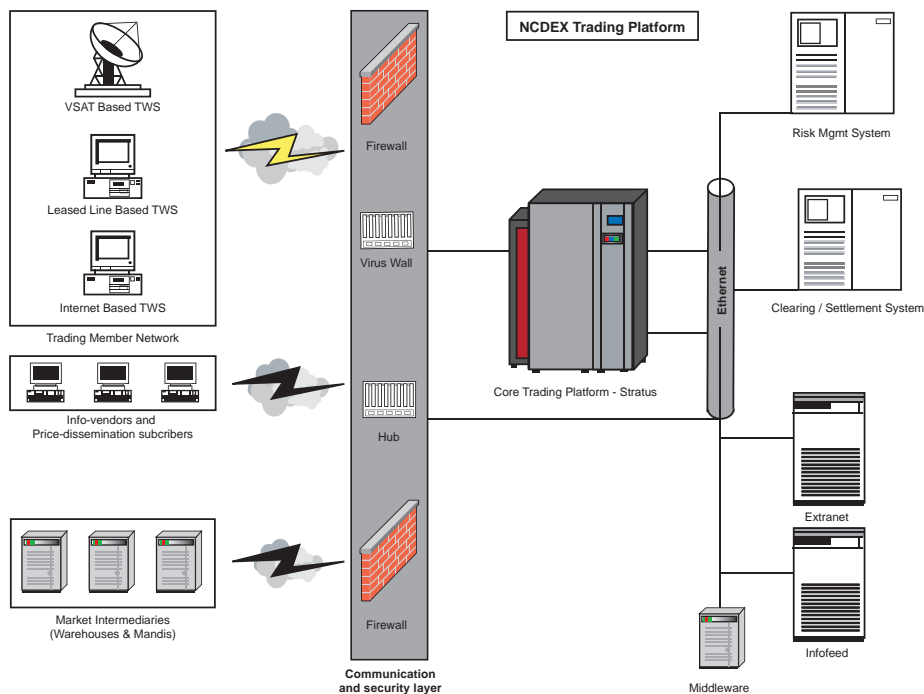
Uptime. **All the time.**

## Fast ROI

The fault-tolerant servers have brought economic advantages as well. Because Stratus servers are specifically engineered to provide 99.999% or greater uptime, return on investment has been quicker because reliability considerations are addressed within the servers themselves. ROI has been comparatively better than competing products, according to NCDEX.

## World-class platform

Users have been pleased with dependable access to online trading. In addition to the reliability record, changes and upgrades to the system have been smooth and nondisruptive to the user community. This has helped to fuel the growth of commodities trading in India, exchange officials note.

Significantly, NCDEX has also been using the online trading system to help support advances in commodities trading. The nation's agricultural markets are spread across some 7,000 local marketplaces, which traditionally did not permit timely spot pricing, which in turn affected traders' decisions on futures. The exchange introduced a method for discovering near real-time spot prices that represent the thousands of dispersed marketplaces; this pricing is then reflected in the online trading system.

**NCDEX Trading Platform**

VSAT Based TWS

Leased Line Based TWS

Internet Based TWS

Trading Member Network

Info-vendors and Price-dissemination subcribers

Market Intermediaries (Warehouses & Mandis)

Firewall

Virus Wall

Hub

Firewall

**Communication and security layer**

Core Trading Platform - Stratus

Middleware

Ethernet

Risk Mgmt System

Clearing / Settlement System

Extranet

Infofeed

**NCDEX**

National Commodity & Derivatives Exchange Ltd.

The future of commodity derivatives

Uptime. **All the time.**

Its accomplishments have led NCDEX to triple its original investment in Stratus systems. The trading application is moving from Continuum servers to Stratus Intel®-based ftServer® V Series models. This enables the exchange to continue using the trusted Stratus VOS environment while upgrading to higher processing performance.

With fault-tolerant Stratus servers to count on, the exchange is well-prepared to sustain its mission "to provide a world-class commodity exchange platform for market participants to trade in a wide spectrum of commodity derivatives driven by best global practices, technology, professionalism, and transparency."

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## About Stratus

Stratus delivers uptime assurance for the applications its customers depend on most for their success. With its resilient software and hardware, backed by proactive availability management services, Stratus products help to save lives and to protect the business and reputations of companies, institutions, and governments the world over.

To learn more about worry-free computing, visit www.stratus.com.

**Stratus**® Technologies

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