

Resilience Provisions

Introduction

This document describes the resilience aspects of ktsMarketTerminal.

ktsMarketTerminal is a powerful real-time interactive market information system. It offers high levels of availability and resilience due to its ASP (Application Service Provision) architecture and the service infrastructure employed.

Summary

- 24/7 service availability, 365 days a year
- No specific client-side hardware, software or infrastructure required
- Fully resilient server configuration with no single points of failure
- Dual-Location hosting with totally independent data infrastructures
- Fully automated secure data backup systems
- Data monitoring facility with automated data integrity alerts

Application Service Provision (ASP)

ktsMarketTerminal is based on our next-generation Application Service Provision platform. By design it has been optimised as a lightweight, thin-client solution which places minimum requirements on client side resources, including network bandwidth.

Users access ktsMarketTerminal via a standard Internet Explorer browser, typically through their existing Internet connection, although a direct (fixed or dialup) connection is possible. There is no requirement for any software download, installation, upgrade, or any other infrastructure or hardware. This removes all resilience considerations normally associated with client-side installed hardware or software required to access a market data service. Assuming the Internet Explorer browser application has access to the Internet or direct access to the ktsMarketTerminal servers, there are no additional components affecting reliability at the client end.

In the event of failure all service and data recovery processes are carried out at the server end, as no data is stored on the client PC or network.

Server and Hosting Configuration

The ktsMarketTerminal service runs on clustered servers with resilience provisions in the server hardware configuration, network and communications infrastructure, database systems, Internet connectivity via independent ISPs and power failure devices. All single points of failure have been eliminated.



ktsMarketTerminal is a powerful cost-effective real-time market information service with international coverage.

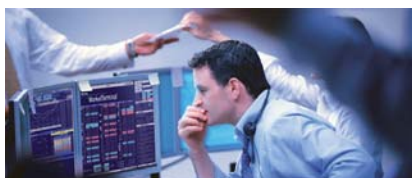
It is unique because of its proprietary next-generation ASP (Application Service Provision) technology. This enables users to connect to ktsMarketTerminal instantly from any PC or laptop via the Internet, with no need for new hardware, software or communications infrastructure.

ktsMarketTerminal is designed for market professionals who want flexible access to accurate market data. It offers a fast, continuous stream of premium market information, analytics, news, market commentary and research, seamlessly integrated into a single, complete package. Yet an intuitive structure and comprehensive help system make ktsMarketTerminal easy to use.

Have the financial world at your fingertips. Connect to ktsMarketTerminal wherever and whenever you connect to the Internet – at work, on the road, at home – and use the same affordable, reliable service wherever you are.

**For more information
contact our sales team on
+44 (0)20 7256 2300**

**www.marketterminal.com
www.ktsplc.com**





ktsMarketTerminal is a powerful cost-effective real-time market information service with international coverage.

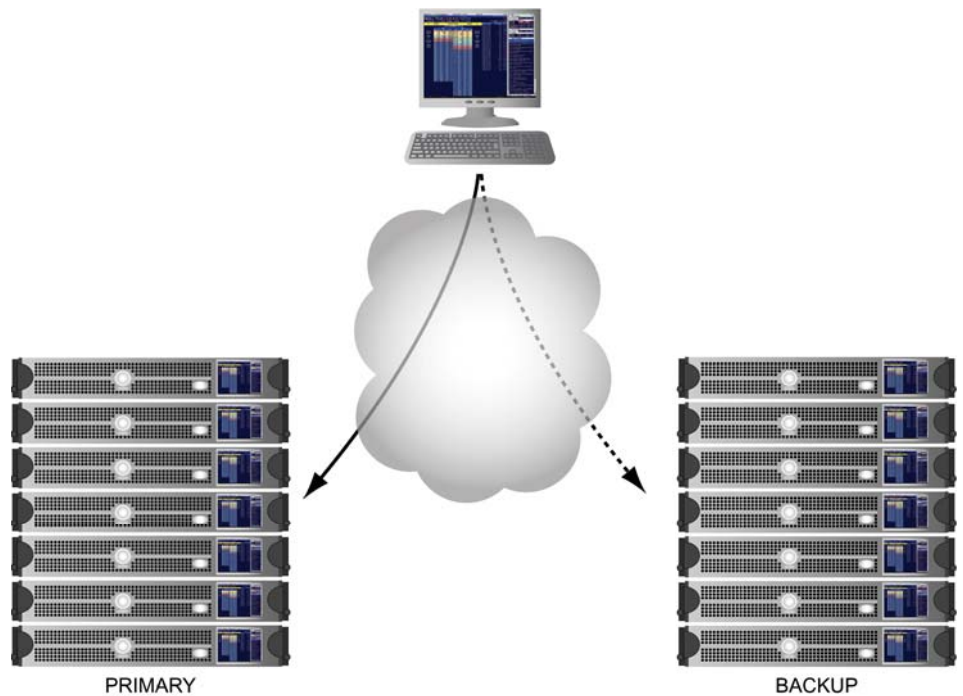
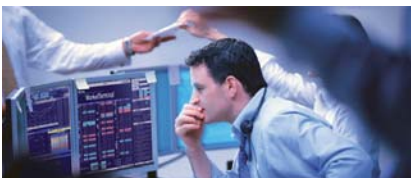
It is unique because of its proprietary next-generation ASP (Application Service Provision) technology. This enables users to connect to ktsMarketTerminal instantly from any PC or laptop via the Internet, with no need for new hardware, software or communications infrastructure.

ktsMarketTerminal is designed for market professionals who want flexible access to accurate market data. It offers a fast, continuous stream of premium market information, analytics, news, market commentary and research, seamlessly integrated into a single, complete package. Yet an intuitive structure and comprehensive help system make ktsMarketTerminal easy to use.

Have the financial world at your fingertips. Connect to ktsMarketTerminal wherever and whenever you connect to the Internet – at work, on the road, at home – and use the same affordable, reliable service wherever you are.

**For more information
contact our sales team on
+44 (0)20 7256 2300**

**www.marketterminal.com
www.ktsplc.com**



In addition, the ktsMarketTerminal service is provided from a secondary, backup location in Middlesex which offers a fully independent application and data infrastructure. In the unlikely event of loss of service operated via the primary hosting location, users may access a fully operational backup service from the secondary location. This is intended to provide 100% service availability and uptime.

In the event of client-side connection failure (such as Internet service disruption) the user is alerted within 8 seconds as part of our network health-monitoring system integrated with ktsMarketTerminal. Should the network communication not be restored within 30 seconds the application will try and re-establish its network connection for a few minutes. If successful, all market data updates will flush through automatically, guaranteeing a seamless continuation of the ktsMarketTerminal user session.

Data Backup and Disaster Recovery

All market data such as prices and news are continuously and automatically backed up and available for immediate restoration in the event of database failure. In addition a backup of all feed data is stored in raw feed format which can be used for disaster recovery. All user data such as account details, preferences and user portfolios are independently backed up and synchronised between the primary and secondary hosting locations. In general, data backups are stored using different backup frequencies on different media:

- Continuous, automated backup on secure intranet locations.
Archived for 5 days, data recovery time: 1 minute
- Daily automated backup on secure intranet locations, mirrored on specific backup storage servers.
Archived for 10 market days, data recovery time: 5-10 minutes
- Overnight backup on tape.
Archived for 6 months, data recovery time: 30 minutes to 3 hours.

System and Data Monitoring

Our system and data monitoring software continuously monitors a range of system, network and market data parameters against threshold levels. In the event of system or market data failure our operations team is alerted within 0.5 seconds.