# Technical Specifications

Abu Dhabi Commercial Bank PJSC ("ADCB") GO TRADE trading system is an internet based trading system which does not require software installations and can be accessed by a java-enabled browser. When accessing ADCB GO TRADE, the system will be provided as a securely downloaded applet delivered via a secure session within a standard Web browser. From the trading applet, customers will be able to log on to the system.

**Data Communication**

Communication between customers and ADCB GO TRADE trading infrastructure are protected using Secure Socket Layer (SSL) technology which encrypts the data flow and authentication of the system. Currently it is enabled with latest SSLV3/TLS for the trading system communication will protect any external attack on the system.

**Back-end servers**

Messages between the secured communication server (SCS) and our infrastructure with external and internal firewalls are encrypted by SCS using solution provider's encryption technology.

The SCS provides a gateway between our customers who access the system via the Java applets and the ADCB back-end servers. The communication mechanism between the client applet and the SCS is done through a solution provider's secured messaging protocol. The protocol allows clients behind their firewalls to connect to ADCB without the need to relax firewall security configurations. Regular encrypted heartbeat messages are sent and authenticated between the client and backend servers periodically. This allows early detection of stale communication streams, as well as interpreted and replayed attacks. The Java applet is contained within a Java Virtual Machine sandbox and requires no specialized privileges.

# Hardware and Software Requirements

## Hardware

| Item | Minimum | Recommended |
|------|---------|-------------|
| Pentium Processor | 600MHz | 1.70 GHz Intel Premium & above |
| Temporary Internet Files Folder | 50MB | 50MB & above |

**Warning:** A significantly higher specification may be required if you are simultaneously running any other 'resource heavy' applications on your computer.

## Operating System

| Windows Version | Minimum/ Recommended/ Supported |
|-----------------|---------------------------------|
| XP SP1+ (32bit) | Supported |
| 7 SP1+ (32bit) | Supported |
| 7 SP1+ (64bit) | Supported |
| 8 (32 bit) | Supported |

## Browsers

ADCB Go Trade system has been qualified for Internet Explorer, Firefox and chrome (limited support) with the below supported IE versions.

| MSIE Version | Minimum/ Recommended/ Supported |
|--------------|---------------------------------|
| 7 | Supported |
| 8 | Supported |
| 9 | Supported |
| 10 | Supported |

**Note:** Google Chrome had withdrawn the support for Java but they might go with limited support till late 2015.  As an alternative ADCB recommend to use Firefox.

## Java Virtual Machine

ADCB GO TRADE system will be supported by the following JVM versions

**JVM** – 1.7, 1.8

For more details please contact ADCB GO TRADE support team.

**Note:**

- Popup blockers are detrimental to some ADCB GO TRADE functionality; therefore it is important that such software is either disabled, or configured to allow popup from the domain used to host the ADCB GO TRADE system.

- The Sun Java plug-in is not supported where more than one monitor is used, and different resolutions are set on those monitors.

## Access Controls

All users connecting to ADCB GO TRADE system required to have their own user ID and password. When the user logs on to the client applet, they will be challenged for a password which will be encrypted by using one-way encryption technology. The password is then sent within a logon message via SSL to the ADCB back-end servers, where the password will be validated for accuracy. Having logged on for the first time, the new user will be required to change their password.

**Password policy**

- No of Passwords to remember – 12
- Minimum password length – 8
- Minimum number of letters – 2
- Minimum number of Digits – 1
- Number of days to expiry – 45
- No of bad login allowed – 5
- Mixed case required
- No special characters allowed

**IP Validation**

As an additional control to further manage client access to the ADCB GO TRADE system, a user or a group of users can be configured to only be able to log on from a pre-defined fixed Internet protocol (IP) address or a range of IP addresses. To enable this feature, please contact ADCB GO TRADE Support team for more information.

**Resilience**

To guard against any hardware failure, a leading edge solution enables the ADCB GO TRADE trading servers as well as the system database servers to form a cluster and to automatically failover to an available node in the event of failure. All the hardware disks are mirrored to avoid any failure within the cluster.

Software processes with built-in load-balancing capabilities are installed on the application servers in pairs. The configuration eliminates single point of failure to the software even if a server becomes out of service.

Site contingency is always available with a mirror image of production servers in different location to ensure the continuation of services.