Technical Notes

Release 3.9.7

Abstract

NFX Trades is a Windows-based application that aggregates and ranks FX rates from multiple liquidity providers so you can execute the best trade available. Sophisticated order-matching logic and powerful configuration options give you complete control over your trading activity.

This note gives high-level overviews of the NFX Trades deployment architecture and messaging, and specifies the system requirements and network connectivity options for the NFX Trades client. This document is meant for administrators who deploy and maintain NFX Trades at customer banks.

Deployment Architecture

The deployment architecture of NFX Trades in a real-time trading environment consists of these components:

- FX Grid® client applications in customer banks
- FX Grid®
- Liquidity provider trading systems

Figure 1 on page 2 illustrates the NFX Trades deployment architecture. The sections that follow explain the components in this architecture.

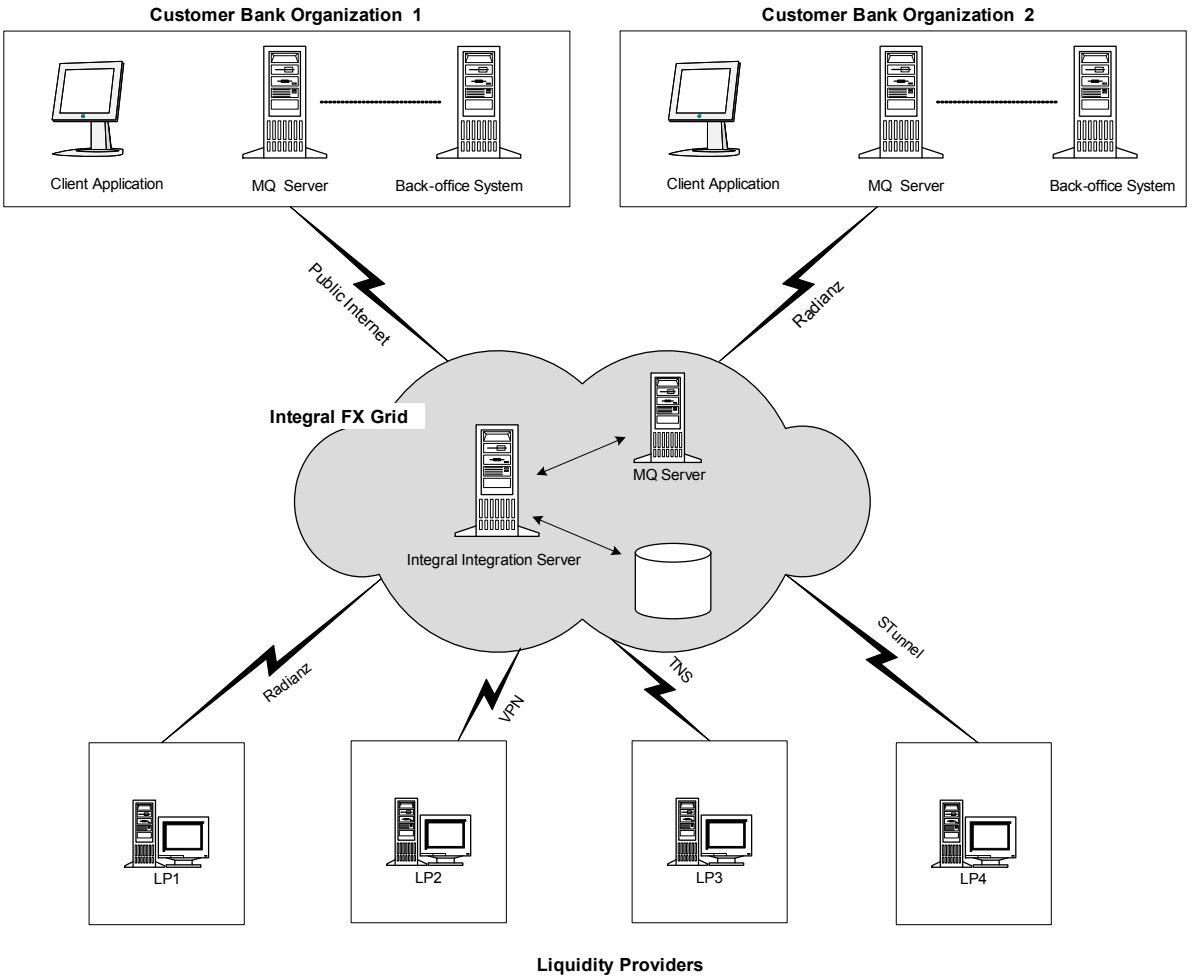

Figure 1 *NFX Trades Deployment Architecture*

NFX Trades Client Application

NFX Trades is deployed as client application on the trader's desktop in the customer bank. Although it is not a self-contained application, it provides an aggregate view of all the underlying trading systems and delegates the trading logic to these systems.

IMPORTANT The NFX Trades client installer creates a Data directory in the NFX Trades installation directory. Users must have write permission on this directory in order to run the NFX Trades client application.

The FX Grid®

The FX Grid® provides a common connectivity solution for customer banks and liquidity providers. A participating institution connects to the FX Grid® using a single API, allowing unprecedented simplicity of interaction with other users of the network. Through the FX Grid®, liquidity providers publish tradable prices to the NFX Trades client trading screens in customer banks. The customer banks and liquidity providers then execute and settle trades, all through the single point of integration provided by the FX Grid®.

Messages and Workflows

The following sections give high-level overviews of the these topics:

Outbound Messages

The NFX Trades client sends these messages to the FX Grid®:

- Log in to NFX Trades
- Tradable rates subscription
- Order submission
- Reference data update
- Reference data query

Inbound Messages

The Integral Integration Server responds to the NFX Trades client asynchronously. These are the responses received from the FX Grid®:

- Tradable rate updates
- Trade verification
- Trade rejection
- Reference data query results

Streaming Rates Workflows

The following diagram shows the steps and messages involved in typical NFX Trades streaming rates workflows:

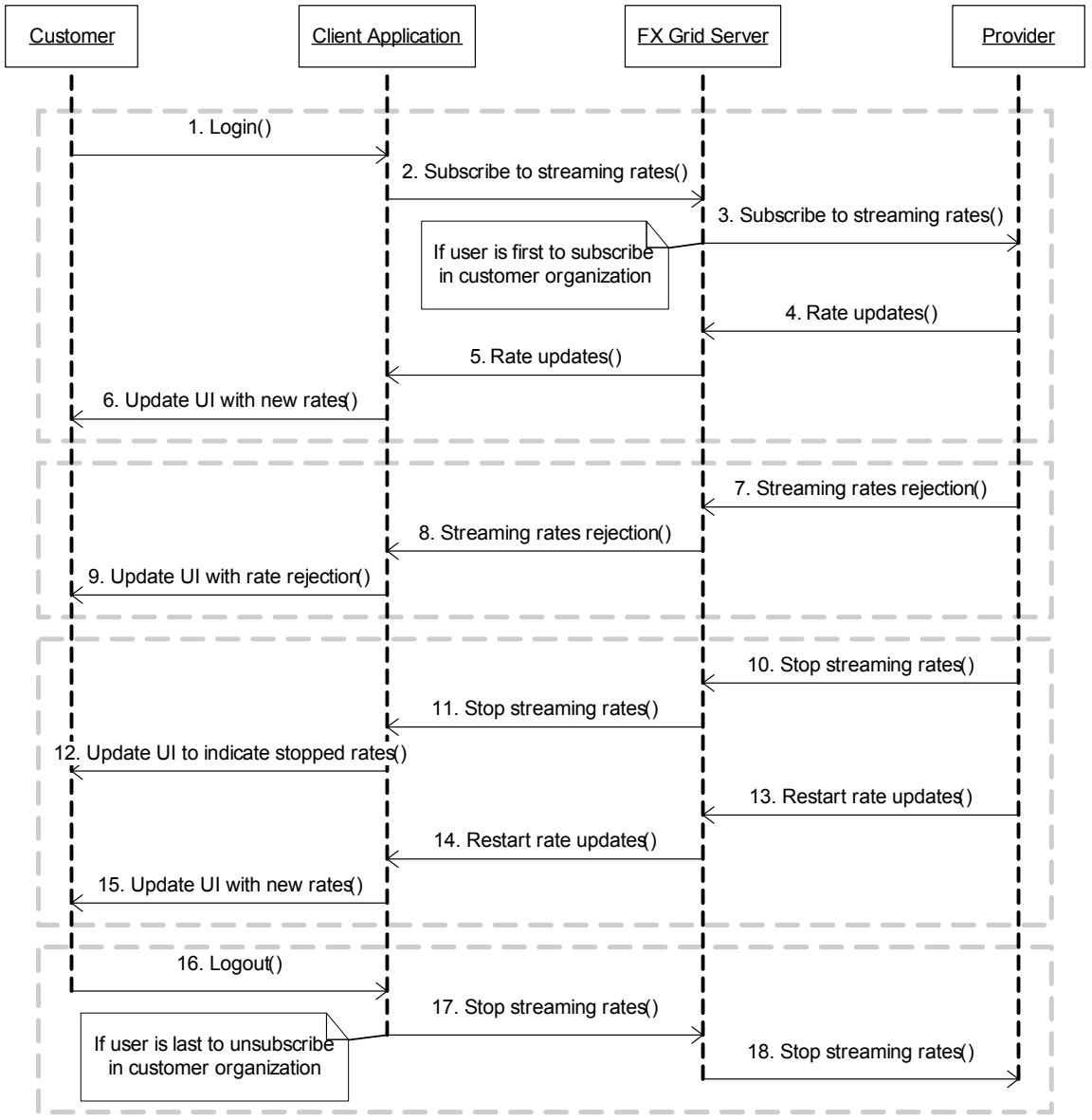

Figure 2 *NFX Trades Streaming Rates Workflows*

Trading Workflows

The following diagram shows the steps and messages involved in typical NFX Trades trading workflows:

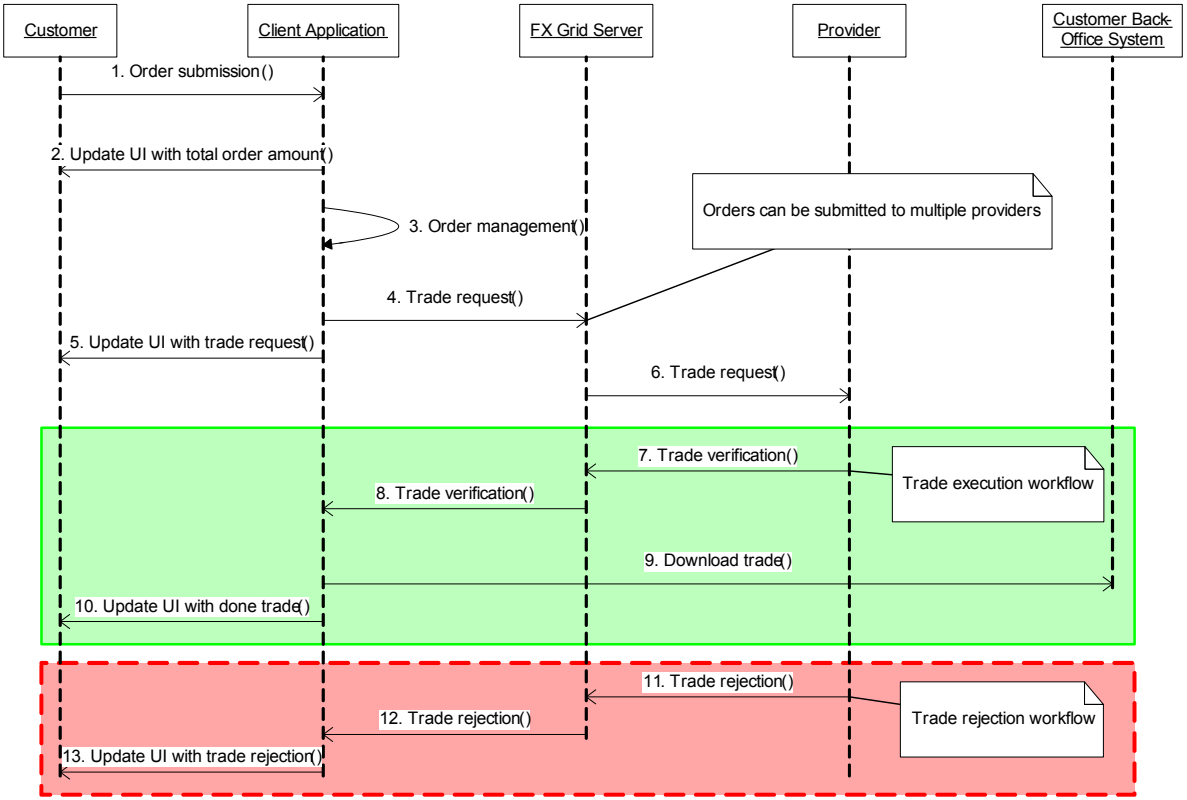

Figure 3 *NFX Trades Trading Workflows*

Client Requirements

Network Connectivity	Minimum	128 Kbps connection
	Recommended	Fractional T1 (512 Kbps)
Hardware	Minimum	Pentium III 600 MHz processor with 256 MB RAM
	Recommended	Pentium III 1.0 GHz processor (or faster) with 512 MB RAM (or higher)
Operating System	Supported	■ Windows 7 ■ Windows Vista ■ Windows XP ■ Windows 2000 (SP3) ■ Windows NT 4.0 (SP 6.0a)
Software	Required	Microsoft .NET Framework 2.0 (Windows administrator privileges are required to install Microsoft .NET Framework 2.0.)

Network Connectivity

The NFX Trades client application communicates with the FX Grid® via the public Internet or Radianz.

In addition to these network connectivity choices, NFX Trades supports the following security schemes and network protocols:

Privacy and Security	■ IPsec VPN with 3DES (168-bit encryption) ■ HTTPS with HTTP over SSL (128-bit encryption)
Protocols: Client	■ HTTP TCP/80 ■ HTTPS TCP/443