

Building a Highly Scalable Message Hub

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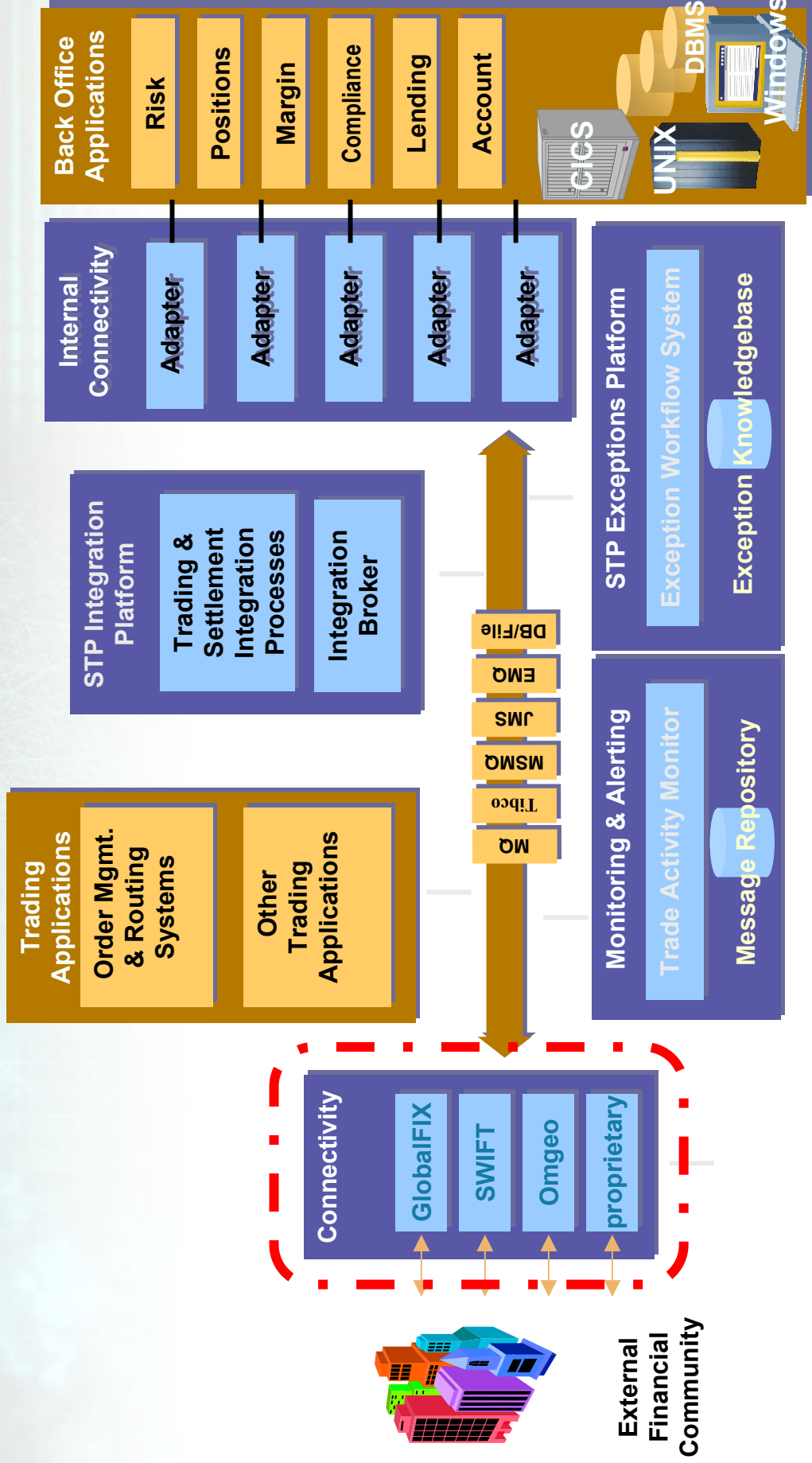
VP, Solutions Development

Financial Fusion, Inc.

STP Tech Requirements

- **Message Processing**
 - Support Standard Messages
 - Seamlessly Transform Internal and External Messages
- **External Connectivity**
 - Centralized Message Hub Handling External Connectivity
 - FIX, SWIFT, Omgeo
- **Trade Process Flow Management**
 - Flexibility to Change
 - Create, Test and Deploy Visually
- **Trade Monitoring/report**
 - Detect and Prevent
- **Exception Management**
 - Repair Failed Message on Time
- **Functionality of Each Individual System**

STP Tech Requirements

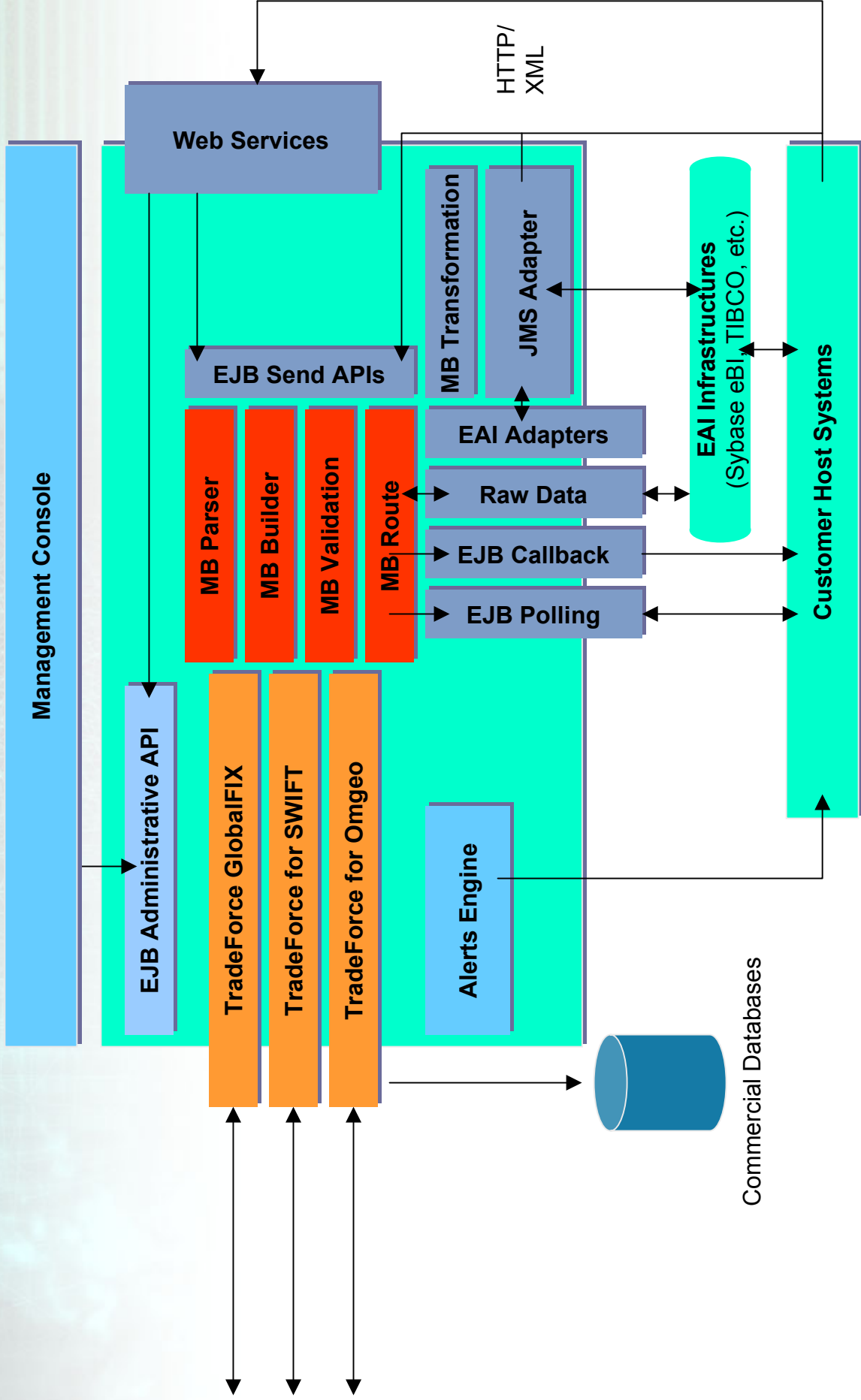


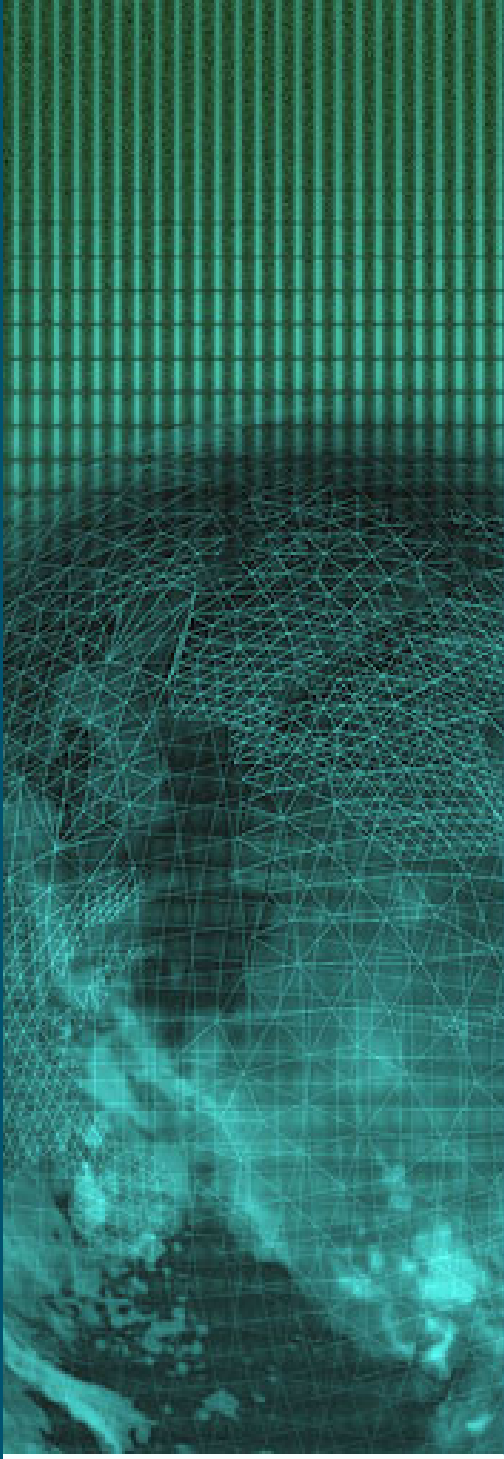
- **Key STP Connectivity**
 - Pre-trade and Trade Initiation
 - FIX
 - Post-trade
 - Omgeo
 - Settlement
 - SWIFT
- **Message Processing**
 - **Message Broker**
 - Parse, Build, Route, Transform
 - Flow Control, Persistence
- **An Unified Architecture Supports Open Standards, Built on Open Standards**
 - J2EE/JMS, XML, IDL
 - FIX, SWIFT, Omgeo
- **Pure Java Implementation**

Key Features

- **Scalability**
 - Multi-threading
 - Application Servers
 - Multi-platforms
- **Availability**
 - FIX Clustering
 - “Symmetric Implementation”
 - Load Balance
 - Database High Availability
- **Manageability**
 - Declarative on Sessions/message Set
- **Extensibility**
 - Multiple STP Protocols Support on Same Platform
 - Easy Customization

TradeForce Architecture

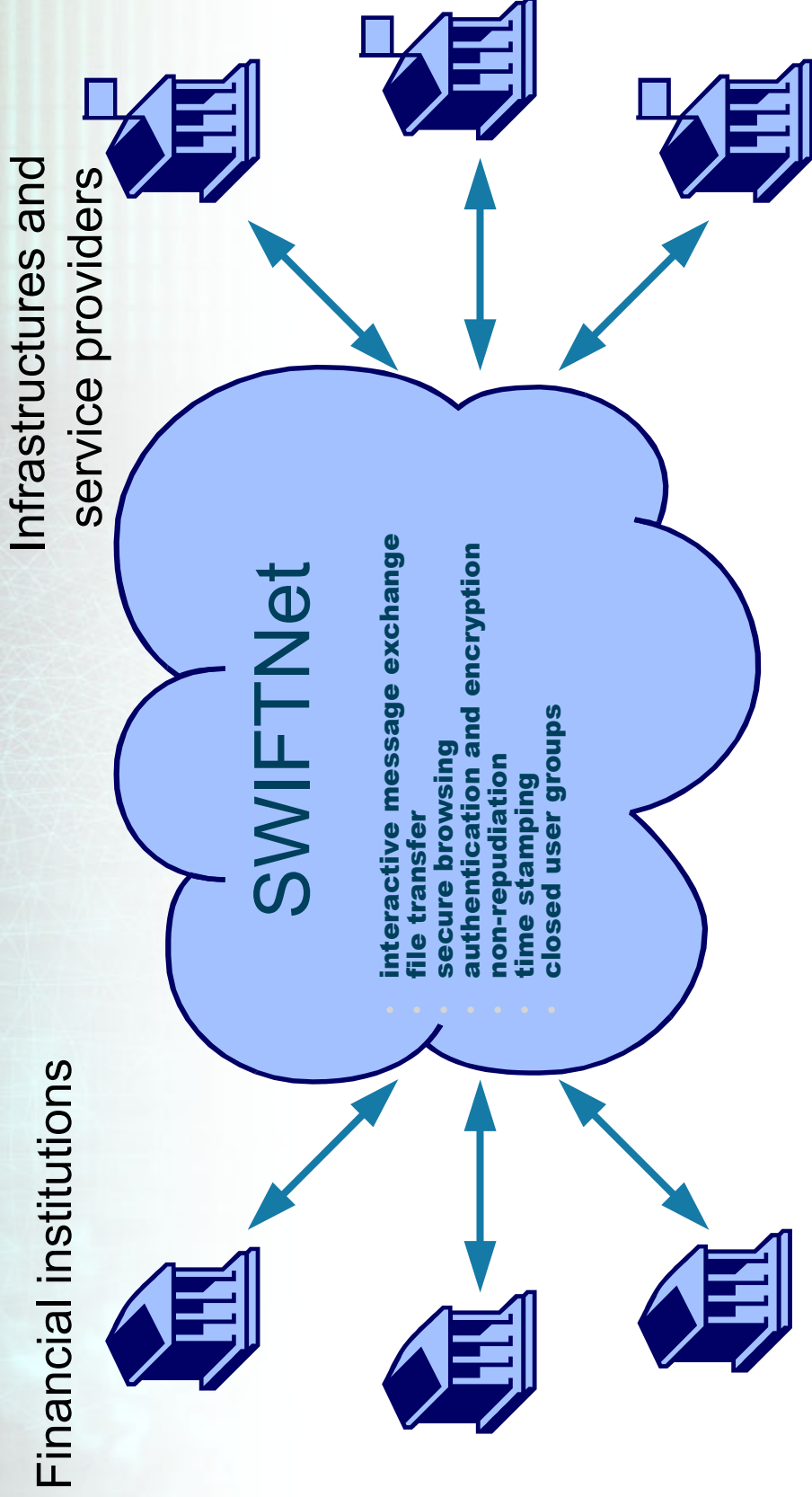




TradeForce Suite

Case Study -- SWIFTNet FIX

The SWIFTNet



SWIFTNet provides the financial services industry with a complete set of managed messaging services

Issues

The **FIX Challenge..**

Multiple networks
Multiple sessions
Multiple versions

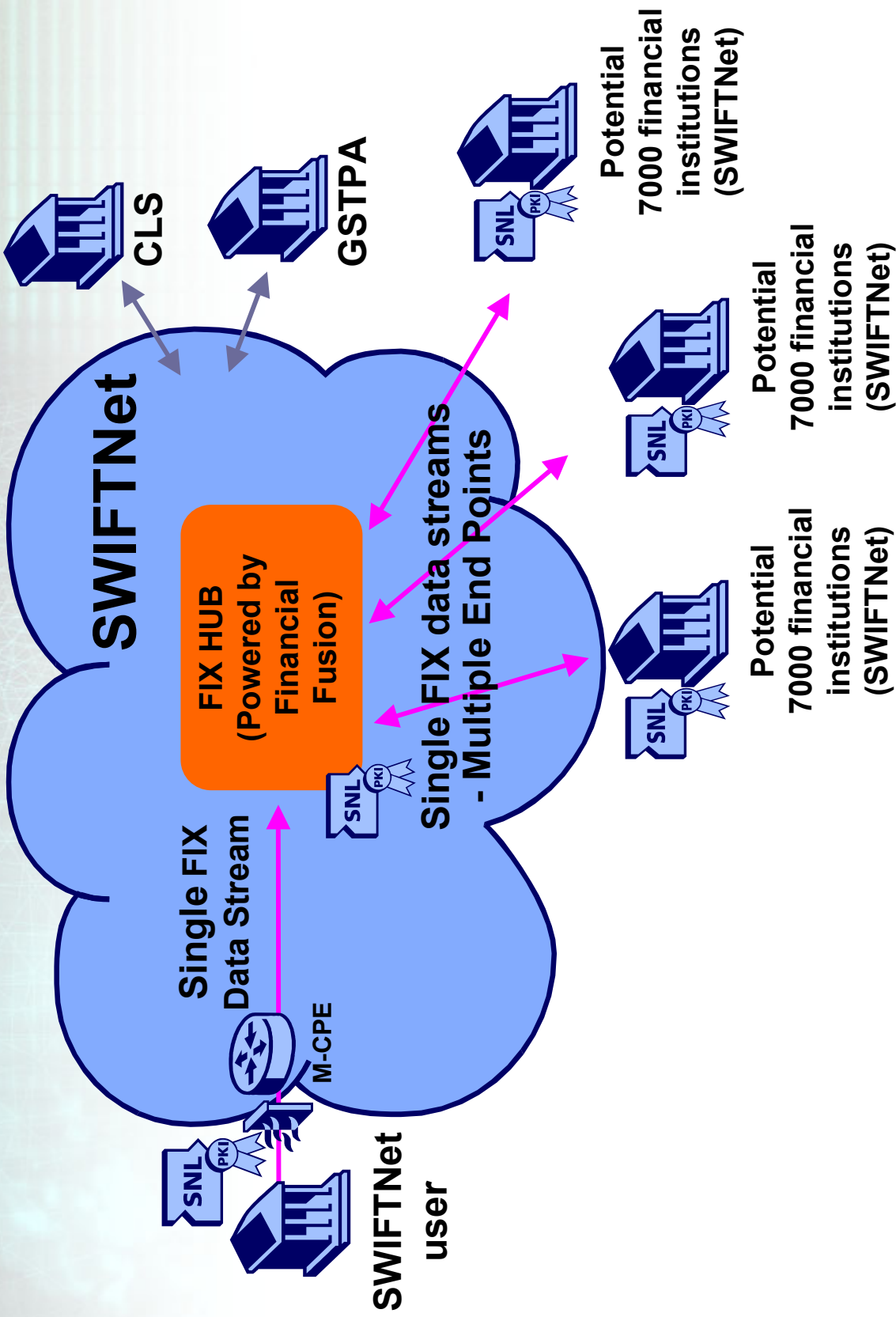


Too much cost
Too much time
Too much risk

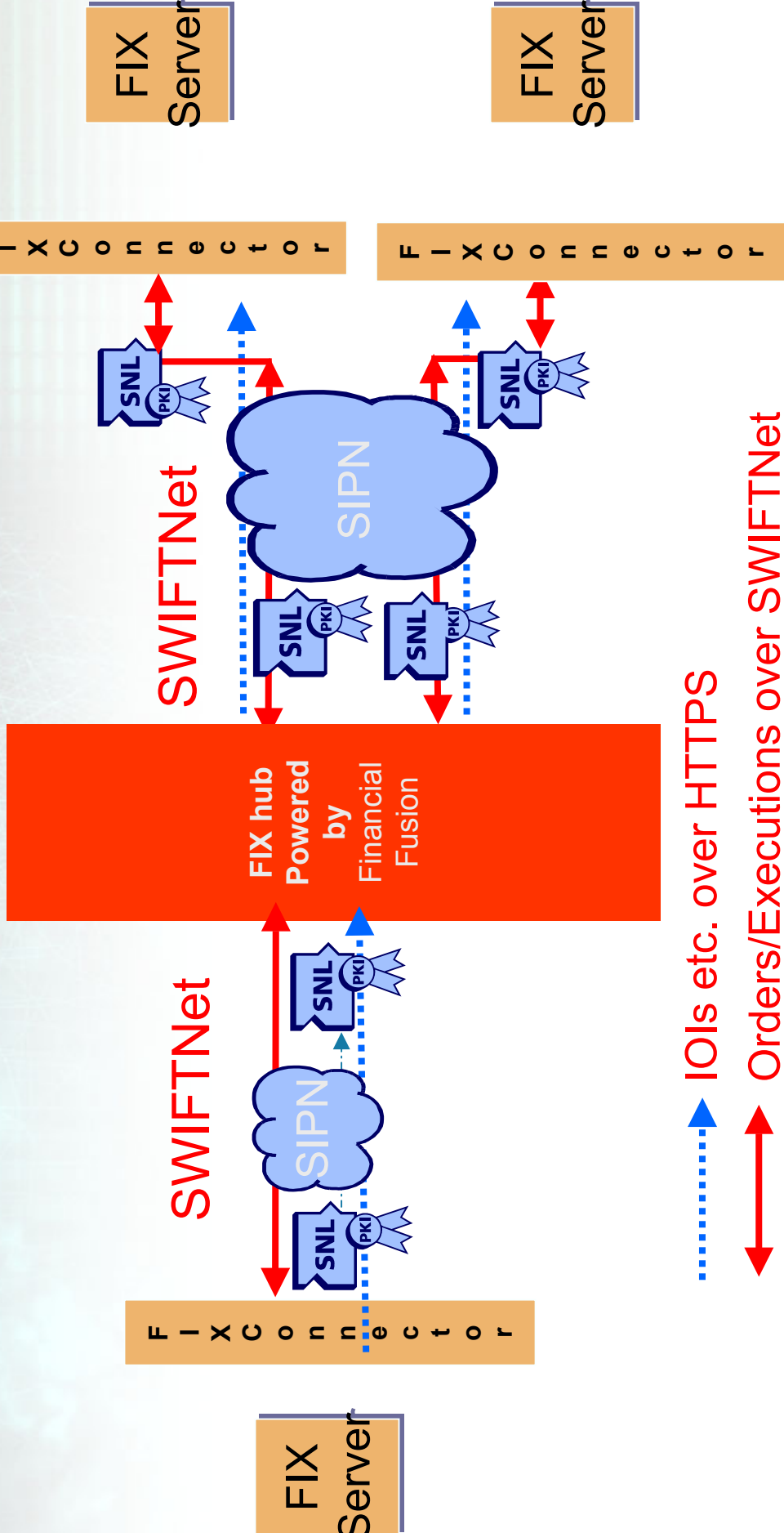
The **SWIFTNet FIX solution...**

SWIFTNet FIX: single FIX connection and session
Access to pre-established FIX trading partners
Standards convergence: increased STP

FIX on SWIFTNet

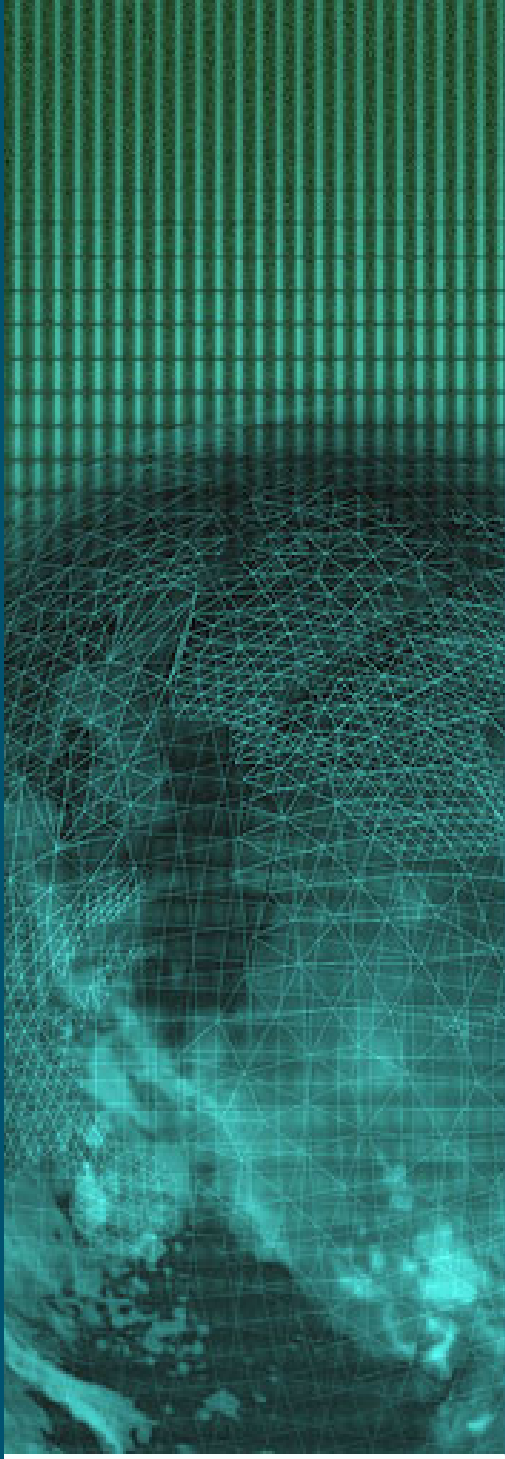


SWIFTNet FIX Hub Architecture



SWIFTNet FIX Hub

- Global FIX Server **Cluster**
- ASE Database **Cluster**
- SWIFTNet FIX Bridge **Cluster**
- IOI Broadcasting
- Subscriber and System Administration Tools
- Trading Partner Management



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