



SMALL EXCHANGE

Connectivity Guide

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1. Introduction

1.1 SMFE Environments

The Exchange operates the following customer facing environments:

- Production
- Disaster Recovery
- Certification

1.2 SMFE Backbone - ASN 33016

Customers may peer with ASN 33016 at any of our points of presence (POPs). All POPs offer access to all SMFE Environments.

Connected parties have the ability to route traffic to the SMFE Environments in a way that makes sense for their network/infrastructure and business needs. A BGP peering policy that provides preferred routing during normal operations and predictable routing in a failure scenario can be easily developed.

2. Connecting to the SMFE Backbone

2.1 SMFE POP and Environment Locations

The Exchange maintains Backbone POPs in the following locations:

SMFE POP CODE	Environment	Facility Operator / Name	Location
AB2	Production	CyrusOne / Bldg 2	2805 Diehl Rd - Aurora, IL
NY2	DR, Certification	Equinix / NY2	275 Hartz Way, Secaucus, NJ
CH1		Equinix / CH1	350 E. Cermak, Chicago, IL

2.2 Colo Cross Connects

In each location, 10G-LR optics over single-mode fiber cross connects is the standard way to connect to the Exchange. Please contact the Exchange to plan all physical and logical connectivity.

2.3 Connect via an extranet provider

The SMFE has partnered with the following extranet providers to offer access to the SMFE Backbone:

- ICE Global Network (SFTI)
- Options IT

2.4 Direct Peering Policy

The following high level peering policy applies for all direct peering relationships with the Exchange:

Peers must:

- Support BGP peering
- Support PIM Sparse-mode peering (if receiving multicast market data)

Peers should:

- Peer with a public BGP ASN
- Advertise registered IP addresses to the Exchange

Peers may:

- Request a private ASN with which to peer with the Exchange
- Request RFC1918 allocation from the Exchange

3. SMFE Market Data Feed and FIX Order Entry

3.1 SMFE Market Data Feed

The Small Exchange Market Data Feed (MDF) provides a “Market by Order” view of market activity and is delivered via industry standard methods:

- PIM Sparse-Mode UDP Multicast
- Redundant and Diverse A/B channels
- SBE based proprietary protocol

There are two Exchange Edge switches in Aurora, and each can supply the A and B feeds as the consumer desires. Edge switches are directly connected to the A and B rendezvous points/SPT devices.

Channel definitions and network information follow in Section 4.

3.2 FIX Order Entry and Drop Copy

Orders are entered using a FIX 4.4 based order management API. Order sessions are requested via the Exchange’s external ticketing system (account required):

<https://smallx.atlassian.net/servicedesk/customer/portal/5/group/22/create/62>

FIX Drop Copy sessions are available on request. Drop Copy sessions can be requested via the Exchange’s external ticketing system (account required):

<https://smallx.atlassian.net/servicedesk/customer/portal/5/group/22/create/63>

Link to Small Exchange JIRA Ticketing portal (account required):

<https://smallx.atlassian.net/servicedesk/customer/portal/5>

3.3 Download Latest Market Data and FIX Protocol Specs

Download from the Small Exchange Info Hub section of our website:

<https://www.smallexchange.com/hub>