For protocols where only subnet is specified, the specific IP address will be included in each member's account details

Protocol / Service	Subnets and IP addresses Primary	Subnets and IP addresses Secondary/Failover	Port / Port Range
FIX Order Entry (OE)	159.79.86.0/23	159.79.86.0/23	10140-10299
FIX OE Drop (incl. Algo Child Order Drop)	159.79.86.0/23	159.79.86.0/23	10300-10399
FIX Trade Entry (TE)	159.79.86.0/23	159.79.86.0/23	11140-11299 10000-10099
FIX TE Drop	159.79.86.0/23	159.79.86.0/23	11300-11399
OUCH	159.79.86.0/23	159.79.86.0/23	9120-9399
FIX Drop for OUCH traffic	159.79.86.0/23	159.79.86.0/23	8800-8999
PRM API	159.79.86.0/23	159.79.86.0/23	9400-9499
ITCH TCP - All Nordic/Baltic INET Markets	159.79.86.0/23	159.79.86.0/23	9701
ITCH TCP - Nordic Equities	159.79.86.0/23	159.79.86.0/23	9702
ITCH TCP - Stockholm Equities	159.79.86.0/23	159.79.86.0/23	9704
ITCH TCP - Stockholm Warrants	159.79.86.0/23	159.79.86.0/23	9703
ITCH TCP - Copenhagen Equities & Warrants	159.79.86.0/23	159.79.86.0/23	9705
ITCH TCP - Helsinki Equities & Warrants	159.79.86.0/23	159.79.86.0/23	9706
ITCH TCP - GLIMPSE for Equities & Warrants	159.79.86.0/23	159.79.86.0/23	9722
ITCH TCP - GLIMPSE for Equities only	159.79.86.0/23	159.79.86.0/23	9723
ITCH TCP - GLIMPSE for Warrants only	159.79.86.0/23	159.79.86.0/23	9724
ITCH TCP - NLS (Nordic Last Sale)	159.79.86.0/23	159.79.86.0/23	9801
TIP	159.79.68.96/28 For details, please see "Genium Consolidated Feed Connectivity & Access" at https://business.nasdaq.com/trade/trade-management/technical-information/gcf.html	159.79.68.96/28 For details, please see "Genium Consolidated Feed Connectivity & Access" at https://business.nasdaq.com/trade/trade-management/technical-information/gcf.html	29000-29300
FDS	192.176.3.96/27 IP address: 192.176.3.101	Same as site A. (Transparant failover through load balancer)	8080

Multicast services VASBY - Extranet, Direct Connect, NODE and Colo 1G Access

ITCH Multicast Equities & Warrants (1G)[1]	Primary - A Flow	Secondary/Failover - B Flow	
ITCH Multicast[1]	Source IP address: 159.79.85.91 (within subnet 159.79.85.80/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.48 UDP port: 31048	Source IP address: 159.79.85.123 (within subnet 159.79.85.112/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.49 UDP port: 31049	
Re-request of lost ITCH Multicast messages[1]	159.79.86.0/23 IP address: 159.79.86.240 UDP port: 31548	159.79.86.0/23 IP address: 159.79.87.240 UDP port: 31549	
Rendezvous Point (RP) - PIM-SM join message (Direct Connect, NODE and Colo only)	RP-A: 159.79.85.254/32	RP-B: 159.79.85.255/32	
ITCH Multicast Equities only (1G)[1]	Primary - A Flow	Secondary/Failover - B Flow	
ITCH Multicast[1]	Source IP address: 159.79.85.88 (within subnet 159.79.85.80/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.16 UDP port: 31016	Source IP address: 159.79.85.120 (within subnet 159.79.85.112/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.17 UDP port: 31017	
Re-request of lost ITCH Multicast messages[1]	159.79.86.0/23 IP address: 159.79.86.237 UDP port: 31516	159.79.86.0/23 IP address: 159.79.87.237 UDP port: 31517	
Rendezvous Point (RP) - PIM-SM join message (Direct Connect, NODE and Colo only)	RP-A: 159.79.85.254/32	RP-B: 159.79.85.255/32	
ITCH Multicast Warrants only (1G)[1]	Primary - A Flow	Secondary/Failover - B Flow	
ITCH Multicast Warrants only[1]	Source IP address: 159.79.85.89 (within subnet 159.79.85.80/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.46 UDP port: 31046	Source IP address: 159.79.85.121 (within subnet 159.79.85.112/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.47 UDP port: 31047	
Re-request of lost ITCH Multicast messages[1]	159.79.86.0/23 IP address: 159.79.86.238 UDP port: 31546	159.79.86.0/23 IP address: 159.79.87.238 UDP port: 31547	
Rendezvous Point (RP) - PIM-SM join message (Direct Connect, NODE and Colo only)	RP-A: 159.79.85.254/32	RP-B: 159.79.85.255/32	
INET NLS Multicast (1G)[2]	Primary - A Flow	Secondary/Failover - B Flow	
Nordic Equity Last Sale (NLS) Multicast[2]	Source IP address: 159.79.85.90 (within subnet 159.79.85.80/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.50 UDP port: 31050	Source IP address: 159.79.85.122 (within subnet 159.79.85.112/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.51 UDP port: 31051	
Re-request of lost NLS Multicast messages[2]	159.79.86.0/23 IP address: 159.79.86.239 UDP port: 31550	159.79.86.0/23 IP address: 159.79.87.239 UDP port: 31551	
Rendezvous Point (RP) - PIM-SM join message (Direct Connect, NODE and Colo only)	RP-A: 159.79.85.254/32	RP-B: 159.79.85.255/32	

Multicast services - Co-location 10G Ultra Access

ITCH Multicast Equities & Warrants (10G)[1]	Primary - A Flow	Secondary/Failover - B Flow	
ITCH Multicast[1]	Source IP address: 159.79.85.219 (within subnet 159.79.85.208/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.18 UDP port: 31018	Source IP address: 159.79.85.235 (within subnet 159.79.85.224/28) Destination IP address and port in direction to client: IP Multicast group address: 233.74.125.19 UDP port: 31019	
Re-request of lost ITCH Multicast messages[1]	159.79.86.0/23 IP address: 159.79.86.236 UDP port: 31518	159.79.86.0/23 IP address: 159.79.87.236 UDP port: 31519	
Rendezvous Point (RP) - PIM-SM join message	RP-A: 159.79.85.254/32	RP-B: 159.79.85.255/32	

Last updated 2024-05-20

[1] For details on ITCH Multicast setup, please consult the INET ITCH UDP Multicast presentation at **https://www.nasdaq.com/solutions/european-market-connectivity**

[2] For details on NLS Multicast setup, please consult the INET NLS UDP Multicast presentation at **https://www.nasdaq.com/solutions/european-market-connectivity**