



## CONNECTIVITY GUIDE

### **HKEx Orion Market Data Platform Securities Market & Index Datafeed Products**

Version 1.0

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## DOCUMENT HISTORY

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## 1. Introduction

This document provides the IP addresses of the channels assigned for each of the OMD datafeed products in section 1.1 below under the following environments of HKEx Orion Market Data Platform for Securities Market and Index data:

- i) Production environment (Section 2); and
- ii) Open/Certification Test environment (Section 3).

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### 1.1 OMD Datafeed Products

Full suite of OMD datafeed products for Securities Market data are as follows:

Product	Description
<b>OMD Securities Standard ("SS")</b>	Securities Market - Level 2 market by price feed (conflated)
<b>OMD Securities Premium ("SP")</b>	Securities Market - Level 2 market by price feed (streaming)
<b>OMD Securities FullTick ("SF")</b>	Securities Market - Full Book market by order feed(streaming)
<b>OMD Index ("Index")</b>	Index Feed (streaming)
<b>Conflated Broker Queue ("CBQ")</b>	Securities Market – Broker Q (conflated)
<b>Odd Lot Order (OLO)</b>	Securities Market – Odd Lot Full Book (streaming)

## 2. Production Environment Connectivity Details

### 2.1 OMD Securities Standard (conflated)

		Realtime Market Data Services		Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Static Data Channel</b>	Market Definition (10) Currency Rate (14) Security Definition (11) Liquidity Provider (13)	1	A: 239.1.1.1:51000 B: 239.1.127.1:51000	501	A: 239.1.1.11:51000 B: 239.1.127.11:51000
<b>Securities Status Channel</b>	Trading Session Status (20) Security Status (21)	2	A: 239.1.1.1:51001 B: 239.1.127.1:51001	502	A: 239.1.1.11:51001 B: 239.1.127.11:51001
<b>Securities Value Add Data Channel</b>	Market Turnover (61)	3	A: 239.1.1.1:51002 B: 239.1.127.1:51002	503	A: 239.1.1.11:51002 B: 239.1.127.11:51002
<b>Securities News Channel</b>	News (22)	4	A: 239.1.1.1:51003 B: 239.1.127.1:51003	504	A: 239.1.1.11:51003 B: 239.1.127.11:51003
<b>Securities Level 2 Conflated Channels</b>	Trade Ticker (52)  Nominal Price (40) Indicative Equilibrium Price (41) Closing Price (62) Aggregate Order Book Update (53)  Statistics (60) Yield (44)	10	A: 239.1.1.2:51000 B: 239.1.127.2:51000	510	A: 239.1.1.12:51000 B: 239.1.127.12:51000

## 2.2 OMD Securities Premium (streaming)

		Realtime Market Data Services		Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Static Data Channel</b>	Market Definition (10) Currency Rate (14) Security Definition (11) Liquidity Provider (13)	1	A: 239.1.1.1:51000 B: 239.1.127.1:51000	501	A: 239.1.1.11:51000 B: 239.1.127.11:51000
<b>Securities Status Channel</b>	Trading Session Status (20) Security Status (21) News (22)	2	A: 239.1.1.1: 51001 B: 239.1.127.1:51001	502	A: 239.1.1.11:51001 B: 239.1.127.11:51001
<b>Securities Value Add Data Channel</b>	Market Turnover (61)	3	A: 239.1.1.1:51002 B: 239.1.127.1:51002	503	A: 239.1.1.11:51002 B: 239.1.127.11:51002
<b>Securities News Channel</b>	News (22)	4	A: 239.1.1.1:51003 B: 239.1.127.1:51003	504	A: 239.1.1.11:51003 B: 239.1.127.11:51003
<b>Securities Level 2 Streaming Channels</b>	Trade (50)	20	A: 239.1.1.3:51000 B: 239.1.127.3:51000	520	A: 239.1.1.13:51000 B: 239.1.127.13:51000
	Trade Cancel (51)				
	Nominal Price (40)				
	Indicative Equilibrium Price (41)	21	A: 239.1.1.3:51001 B: 239.1.127.3:51001	521	A: 239.1.1.13:51001 B: 239.1.127.13:51001
	Closing Price (62)	22	A: 239.1.1.3:51002 B: 239.1.127.3:51002	522	A: 239.1.1.13:51002 B: 239.1.127.13:51002
	Aggregate Order Book Update (53)				
		23	A: 239.1.1.3:51003 B: 239.1.127.3:51003	523	A: 239.1.1.13:51003 B: 239.1.127.13:51003
	Statistics (60)				
	Yield (44)				
		24	A: 239.1.1.3:51004 B: 239.1.127.3:51004	524	A: 239.1.1.13:51004 B: 239.1.127.13:51004
		25	A: 239.1.1.3:51005 B: 239.1.127.3:51005	525	A: 239.1.1.13:51005 B: 239.1.127.13:51005
		26	A: 239.1.1.3:51006 B: 239.1.127.3:51006	526	A: 239.1.1.13:51006 B: 239.1.127.13:51006
		27	A: 239.1.1.3:51007 B: 239.1.127.3:51007	527	A: 239.1.1.13:51007 B: 239.1.127.13:51007
		28	A: 239.1.1.3:51008 B: 239.1.127.3:51008	528	A: 239.1.1.13:51008 B: 239.1.127.13:51008

## 2.3 OMD Securities FullTick (streaming)

		Realtime Market Data Services		Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Static Data Channel</b>	Market Definition (10)	1	A: 239.1.1.1:51000	501	A: 239.1.1.11:51000
	Currency Rate (14)		B: 239.1.127.1:51000		B: 239.1.127.11:51000
	Security Definition (11)				
	Liquidity Provider (13)				
<b>Securities Status Channel</b>	Trading Session Status (20)	2	A: 239.1.1.1:51001	502	A: 239.1.1.11:51001
	Security Status (21)		B: 239.1.127.1:51001		B: 239.1.127.11:51001
<b>Securities Full Order Book Channels</b>	Trade (50)	30	A: 239.1.1.4:51000	530	A: 239.1.1.14:51000
	Trade Cancel (51)		B: 239.1.127.4:51000		B: 239.1.127.14:51000
	Add Order (30)	31	A: 239.1.1.4:51001	531	A: 239.1.1.14:51001
	Modify Order (31)		B: 239.1.127.4:51001		B: 239.1.127.14:51001
	Delete Order (32)	32	A: 239.1.1.4:51002	532	A: 239.1.1.14:51002
	Indicative		B: 239.1.127.4:51002		B: 239.1.127.14:51002
	Equilibrium Price (41)	33	A: 239.1.1.4:51003	533	A: 239.1.1.14:51003
			B: 239.1.127.4:51003		B: 239.1.127.14:51003
		34	A: 239.1.1.4:51004	534	A: 239.1.1.14:51004
			B: 239.1.127.4:51004		B: 239.1.127.14:51004
		35	A: 239.1.1.4:51005	535	A: 239.1.1.14:51005
			B: 239.1.127.4:51005		B: 239.1.127.14:51005
		36	A: 239.1.1.4:51006	536	A: 239.1.1.14:51006
			B: 239.1.127.4:51006		B: 239.1.127.14:51006
		37	A: 239.1.1.4:51007	537	A: 239.1.1.14:51007
			B: 239.1.127.4:51007		B: 239.1.127.14:51007
		38	A: 239.1.1.4:51008	538	A: 239.1.1.14:51008
			B: 239.1.127.4:51008		B: 239.1.127.14:51008



## 2.4 OMD Index (Streaming)

Realtime Market Data Services				Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Hang Seng Index Channel</b>	Index Definition (70) Index Data (71)	41	A: 239.1.1.5:51000 B: 239.1.127.5:51000	541	A: 239.1.1.15:51000 B: 239.1.127.15:51000
<b>CSIC Index Channel</b>	Index Definition (70) Index Data (71)	42	A: 239.1.1.6:51000 B: 239.1.127.6:51000	542	A: 239.1.1.16:51000 B: 239.1.127.16:51000
<b>S&amp;P Index Channel</b>	Index Definition (70) Index Data (71)	43	A: 239.1.1.7:51000 B: 239.1.127.7:51000	543	A: 239.1.1.17:51000 B: 239.1.127.17:51000

## 2.5 Conflated Broker Queue

Realtime Market Data Services				Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Market Broker Queue Channel</b>	Broker Queue (54)	60	A: 239.1.1.8:51000 B: 239.1.127.8:51000	560	A: 239.1.1.18:51000 B: 239.1.127.18:51000

## 2.6 Odd Lot Order (Streaming)

Realtime Market Data Services				Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Market Odd Lot Order Channel</b>	Add Odd Lot Oder (33) Delete Odd Lot Order (34)	70	A: 239.1.1.9:51000 B: 239.1.127.9:51000	570	A: 239.1.1.19:51000 B: 239.1.127.19:51000
		71	A: 239.1.1.9:51001 B: 239.1.127.9:51001	571	A: 239.1.1.19:51001 B: 239.1.127.19:51001
		72	A: 239.1.1.9:51002 B: 239.1.127.9:51002	572	A: 239.1.1.19:51002 B: 239.1.127.19:51002
		73	A: 239.1.1.9:51003 B: 239.1.127.9:51003	573	A: 239.1.1.19:51003 B: 239.1.127.19:51003
		74	A: 239.1.1.9:51004 B: 239.1.127.9:51004	574	A: 239.1.1.19:51004 B: 239.1.127.19:51004
		75	A: 239.1.1.9:51005 B: 239.1.127.9:51005	575	A: 239.1.1.19:51005 B: 239.1.127.19:51005
		76	A: 239.1.1.9:51006	576	A: 239.1.1.19:51006

	B: 239.1.127.9:51006		B: 239.1.127.19:51006
77	A: 239.1.1.9:51007 B: 239.1.127.9:51007	577	A: 239.1.1.19:51007 B: 239.1.127.19:51007
78	A: 239.1.1.9:51008 B: 239.1.127.9:51008	578	A: 239.1.1.19:51008 B: 239.1.127.19:51008

## 2.7 HKEx OMD Retransmission Unicast Connectivity

HKEx provides a Retransmission Service to its OMD Clients to arbitrate against multicast packet loss. Functional details of the Retransmission Service are provided in the Interface Specification. Find below the Unicast Addresses to connect to the OMD Retransmission Servers in production environment.

Retransmission Server	IP Unicast Address
Primary server in primary site	10.1.90.82:55455
Secondary server in primary site	10.1.90.83:55455
Primary server in DR site	10.2.90.82:55455
Secondary server in DR site	10.2.90.83:55455

### 3. Open/Certification Test Environment Connectivity Details

#### 3.1 OMD Securities Standard (conflated)

Multicast Service	Contents	Realtime Market Data Services		Refresh Snapshot Data Services	
		Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Static Data Channel</b>	Market Definition (10) Currency Rate (14) Security Definition (11) Liquidity Provider (13)	1	A: 239.1.1.21:51000 B: 239.1.127.21:51000	501	A: 239.1.1.31:51000 B: 239.1.127.31:51000
<b>Securities Status Channel</b>	Trading Session Status (20) Security Status (21)	2	A: 239.1.21.1:51001 B: 239.1.127.21:51001	502	A: 239.1.1.31:51001 B: 239.1.127.31:51001
<b>Securities Value Add Data Channel</b>	Market Turnover (61)	3	A: 239.1.1.21:51002 B: 239.1.127.21:51002	503	A: 239.1.1.31:51002 B: 239.1.127.31:51002
<b>Securities News Channel</b>	News (22)	4	A: 239.1.1.21:51003 B: 239.1.127.21:51003	504	A: 239.1.1.31:51003 B: 239.1.127.31:51003
<b>Securities Level 2 Conflated Channels</b>	Trade Ticker (52)  Nominal Price (40) Indicative Equilibrium Price (41) Closing Price (62) Aggregate Order Book Update (53)  Statistics (60) Yield (44)	10	A: 239.1.1.22:51000 B: 239.1.127.22:51000	510	A: 239.1.1.32:51000 B: 239.1.127.32:51000

### 3.2 OMD Securities Premium (streaming)

		Realtime Market Data Services		Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Static Data Channel</b>	Market Definition (10) Currency Rate (14) Security Definition (11) Liquidity Provider (13)	1	A: 239.1.1.21:51000 B: 239.1.127.21:51000	501	A: 239.1.1.31:51000 B: 239.1.127.31:51000
<b>Securities Status Channel</b>	Trading Session Status (20) Security Status (21) News (22)	2	A: 239.1.1.21: 51001 B: 239.1.127.21:51001	502	A: 239.1.1.31:51001 B: 239.1.127.31:51001
<b>Securities Value Add Data Channel</b>	Market Turnover (61)	3	A: 239.1.1.21:51002 B: 239.1.127.21:51002	503	A: 239.1.1.31:51002 B: 239.1.127.31:51002
<b>Securities News Channel</b>	News (22)	4	A: 239.1.1.21:51003 B: 239.1.127.21:51003	504	A: 239.1.1.31:51003 B: 239.1.127.31:51003
<b>Securities Level 2 Streaming Channels</b>	Trade (50)	20	A: 239.1.1.23:51000 B: 239.1.127.23:51000	520	A: 239.1.1.33:51000 B: 239.1.127.33:51000
	Trade Cancel (51)				
	Nominal Price (40)				
	Indicative Equilibrium Price (41)	21	A: 239.1.1.23:51001 B: 239.1.127.23:51001	521	A: 239.1.1.33:51001 B: 239.1.127.33:51001
	Closing Price (62)	22	A: 239.1.1.23:51002 B: 239.1.127.23:51002	522	A: 239.1.1.33:51002 B: 239.1.127.33:51002
	Aggregate Order Book Update (53)				
	Statistics (60)	23	A: 239.1.1.23:51003 B: 239.1.127.23:51003	523	A: 239.1.1.33:51003 B: 239.1.127.33:51003
	Yield (44)				
		24	A: 239.1.1.23:51004 B: 239.1.127.23:51004	524	A: 239.1.1.33:51004 B: 239.1.127.33:51004
		25	A: 239.1.1.23:51005 B: 239.1.127.23:51005	525	A: 239.1.1.33:51005 B: 239.1.127.33:51005
		26	A: 239.1.1.23:51006 B: 239.1.127.23:51006	526	A: 239.1.1.33:51006 B: 239.1.127.33:51006
		27	A: 239.1.1.23:51007 B: 239.1.127.23:51007	527	A: 239.1.1.33:51007 B: 239.1.127.33:51007
		28	A: 239.1.1.23:51008 B: 239.1.127.23:51008	528	A: 239.1.1.33:51008 B: 239.1.127.33:51008

### 3.3 OMD Securities FullTick (streaming)

		Realtime Market Data Services		Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Static Data Channel</b>	Market Definition (10)	1	A: 239.1.1.21:51000	501	A: 239.1.1.31:51000
	Currency Rate (14)		B: 239.1.127.21:51000		B: 239.1.127.31:51000
	Security Definition (11)				
	Liquidity Provider (13)				
<b>Securities Status Channel</b>	Trading Session Status (20)	2	A: 239.1.1.21:51001	502	A: 239.1.1.31:51001
	Security Status (21)		B: 239.1.127.21:51001		B: 239.1.127.31:51001
<b>Securities Full Order Book Channels</b>	Trade (50)	30	A: 239.1.1.24:51000	530	A: 239.1.1.34:51000
	Trade Cancel (51)		B: 239.1.127.24:51000		B: 239.1.127.34:51000
	Add Order (30)	31	A: 239.1.1.24:51001	531	A: 239.1.1.34:51001
	Modify Order (31)		B: 239.1.127.24:51001		B: 239.1.127.34:51001
	Delete Order (32)	32	A: 239.1.1.24:51002	532	A: 239.1.1.34:51002
	Indicative		B: 239.1.127.24:51002		B: 239.1.127.34:51002
	Equilibrium Price (41)	33	A: 239.1.1.24:51003	533	A: 239.1.1.34:51003
			B: 239.1.127.24:51003		B: 239.1.127.34:51003
		34	A: 239.1.1.24:51004	534	A: 239.1.1.34:51004
			B: 239.1.127.24:51004		B: 239.1.127.34:51004
		35	A: 239.1.1.24:51005	535	A: 239.1.1.34:51005
			B: 239.1.127.24:51005		B: 239.1.127.34:51005
		36	A: 239.1.1.24:51006	536	A: 239.1.1.34:51006
			B: 239.1.127.24:51006		B: 239.1.127.34:51006
		37	A: 239.1.1.24:51007	537	A: 239.1.1.34:51007
			B: 239.1.127.24:51007		B: 239.1.127.34:51007
		38	A: 239.1.1.24:51008	538	A: 239.1.1.34:51008
			B: 239.1.127.24:51008		B: 239.1.127.34:51008

### 3.4 OMD Index (Streaming)

Realtime Market Data Services				Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Hang Seng Index Channel</b>	Index Definition (70) Index Data (71)	41	A: 239.1.1.25:51000 B: 239.1.127.25:51000	541	A: 239.1.1.35:51000 B: 239.1.127.35:51000
<b>CSIC Index Channel</b>	Index Definition (70) Index Data (71)	42	A: 239.1.1.26:51000 B: 239.1.127.26:51000	542	A: 239.1.1.36:51000 B: 239.1.127.36:51000
<b>S&amp;P Index Channel</b>	Index Definition (70) Index Data (71)	43	A: 239.1.1.27:51000 B: 239.1.127.27:51000	543	A: 239.1.1.37:51000 B: 239.1.127.37:51000

### 3.5 Conflated Broker Queue

Realtime Market Data Services				Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Market Broker Queue Channel</b>	Broker Queue (54)	60	A: 239.1.1.28:51000 B: 239.1.127.28:51000	560	A: 239.1.1.38:51000 B: 239.1.127.38:51000

### 3.6 Odd Lot Order (Streaming)

Realtime Market Data Services				Refresh Snapshot Data Services	
Multicast Service	Contents	Channel ID	Multicast Channel Subscriptions	Channel ID	Multicast Channel Subscriptions
<b>Securities Market Odd Lot Order Channel</b>	Add Odd Lot Oder (33) Delete Odd Lot Order (34)	70	A: 239.1.1.29:51000 B: 239.1.127.29:51000	570	A: 239.1.1.39:51000 B: 239.1.127.39:51000
		71	A: 239.1.1.29:51001 B: 239.1.127.29:51001	571	A: 239.1.1.39:51001 B: 239.1.127.39:51001
		72	A: 239.1.1.29:51002 B: 239.1.127.29:51002	572	A: 239.1.1.39:51002 B: 239.1.127.39:51002
		73	A: 239.1.1.29:51003 B: 239.1.127.29:51003	573	A: 239.1.1.39:51003 B: 239.1.127.39:51003
		74	A: 239.1.1.29:51004 B: 239.1.127.29:51004	574	A: 239.1.1.39:51004 B: 239.1.127.39:51004
		75	A: 239.1.1.29:51005 B: 239.1.127.29:51005	575	A: 239.1.1.39:51005 B: 239.1.127.39:51005
		76	A: 239.1.1.29:51006	576	A: 239.1.1.39:51006

	B: 239.1.127.29:51006		B: 239.1.127.39:51006
77	A: 239.1.1.29:51007 B: 239.1.127.29:51007	577	A: 239.1.1.39:51007 B: 239.1.127.39:51007
78	A: 239.1.1.29:51008 B: 239.1.127.29:51008	578	A: 239.1.1.39:51008 B: 239.1.127.39:51008

### 3.7 HKEx OMD Retransmission Unicast Connectivity

HKEx provides a Retransmission Service to its OMD Clients to arbitrate against multicast packet loss. Functional details of the Retransmission Service are provided in the Interface Specification. Find below the Unicast Addresses to connect to the OMD Retransmission Servers in test environment.

Retransmission Server	IP Unicast Address
Primary server in primary site	10.1.90.40:55455
Secondary server in primary site	10.1.90.41:55455
Primary server in DR site	10.1.90.42:55455
Secondary server in DR site	10.1.90.43:55455