



Colocation – Handy guide

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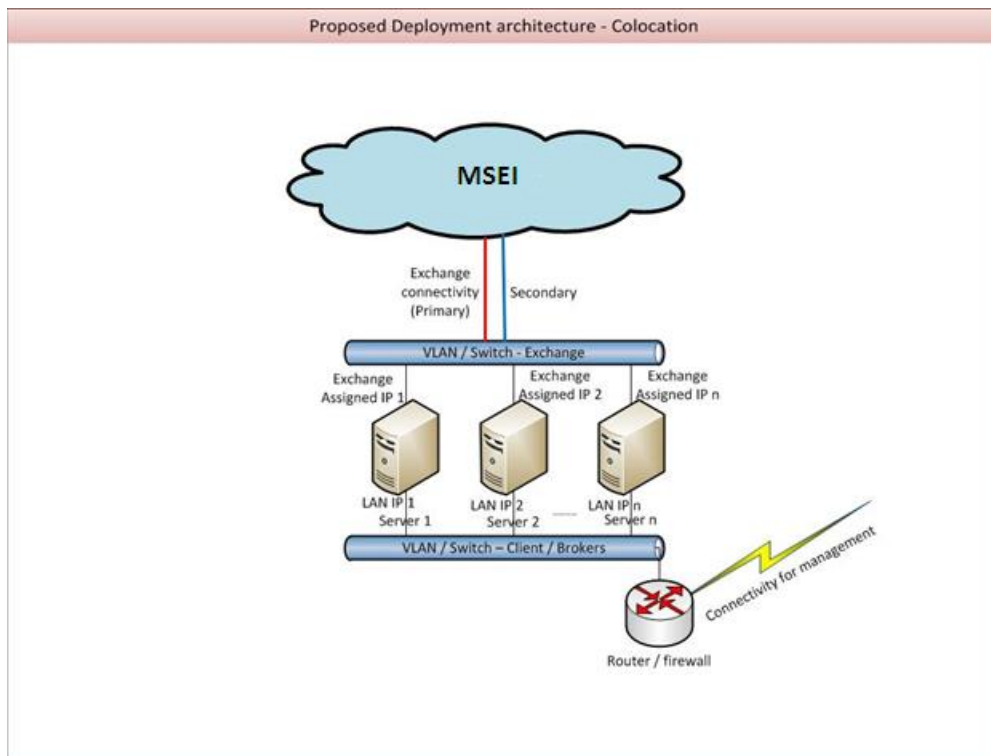


Metropolitan Stock Exchange of India Limited

COLOCATION FACILITY AT MSE

MSE hosted its Trading Systems at Datacenter of Tata Communications Limited and also facilitates Colocation services from the same Datacenter. Trading Systems, Network and Colocation facilities are being managed by MSE.

RECOMMENDED DEPLOYMENT ARCHITECTURE



COLOCATION / PROXIMITY HOSTING FACILITY CATEGORIES

- i. Direct connection between member servers and the MSE Trading system over an internal Local Area Network (LAN)
- ii. Direct connectivity between colocation facilities of MSE and other recognized stock exchanges.
- iii. Direct connectivity between member servers at MSE colocation facility and servers of the same member at other Stock Exchanges colocation facility.

KEY POINTS – DESCRIPTION AND REQUIREMENTS

- Separate VLAN's / switch to be implemented to segregate exchange and broker's LAN segment such that the Broker's LAN traffic does not flow in the Exchange LAN.
- Appropriate routes should be added on the servers to connect to Exchange. The gateway for these routes 10.128.X.X
- Servers default route should be pointed to the Broker's L3 devices (router / firewall)
- Ensure that the trading solution must request for the multicast (market feed) by issuing the IGMP join group request.
- The connectivity provided by the exchange is a 1 Gbps full duplex and configured as access port. Termination must be done on a switch port with similar speed.
- Member to take NOC for Point to point link connecting between MSE and other Exchanges.
- Member to take NOC for connecting its servers in MSE COLO in different Racks(LAN network)

- Exchange has started providing market Xstream feed on CDS. Members may also note that in colocation members need not request for MTBT activation on rack as the same shall be provided as default along with rack allotment.
- Member to obtain market Xstream API from trading department.
- Exchange will provide connectivity on 10G set up only to help colocation participants get more benefit on front of latency and future Technology advancements.
- Exchange has made available access to the Test Market from colocation facility.
- Network performance parameters such as latency figures are published on website on daily basis.
- The Co-location facility at the Exchange comes in 3 variants i.e. Standard 42U Full Rack with 6KVA power and half rack of 21U with 3.5KVA and 10 U rack space with 1.75 KVA rated power. Participant's availing the racks in colocation are required to monitor their power utilization in their respective racks and take steps to ensure that at no point of time they exceed the prescribed limits.
- The breach in the aforesaid limits may lead to overheating of cables and / or damages to the panel and UPS which may in turn cause damage to the colocation facility in general.
- MSE is not responsible for quality or latency or other performance parameters of connectivity provided by telecom service providers to participant.
- MSE reserves the right to inspect any and all incoming and outgoing material in the possession of visitors at any time inside MSE premises.
- MSE reserve the rights to not allow a person to carry any equipment/ cable that in MSE view is likely to be harmful to the colocation facility etc.

- **. Basic L1 IT Services:**
 - MSE shall provide basic L1 IT services to it's participant's via the colocation support staff
 - MSE colocation support staff shall not operate any equipment inside the allocated rack through service request raised by participant's.
 - Colocation support staff shall only perform basic services like hard reboot / cable movement /providing information available on device display.
 - MSE colocation staff shall not be held responsible for any device failure or defect arising because of any activity performed by them on the request of member.
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- MSE for any unavoidable circumstances (Level III/Level IV Disaster/Regulatory compliance) starts exchange operations from its DR site. In that case MSE's Colocation hosting services will not be available for participants. In such a scenario participant's need to ensure that appropriate business continuity plans and procedures are in place. **MSE will not be held responsible for the same.**
 - Level III / Level IV Disaster/Regulatory Scenario.
 - Primary Data Center not available.
 - Colocation Data Center not available.
 - Primary and Colocation Data Center not available.
 - Planned live sessions from DR site as per directives from regulators.
- Members to take NOC from MSE for connecting its server from MSE COLO to any third party Datacenter or its Office.

Description	Microseconds
UDP Latency	15

- Escalation and communication for Rack space
technology@msei.in

Annexure-I**List of Charges for services offered for COLO**

S. No.	Particulars	COLO from STT BKC IDC Datacenter		
		Full Rack	Half Rack	10 U Rack space
1.	Rack Charges (Annual Recurring)	INR 9 Lacs	INR 4.5 Lacs	INR 2.25 Lacs
2.	Initial Setup Charges	INR 1 Lac	INR 50,000	INR 50,000
3.	Support for Data Backup & Re-store per rack*	INR 66,000		
4.	Hands and feet charges	INR 750 per half an hour		

Note:

* Includes insertion/ removal of tapes and handing over the same to the authorized personnel. Backup tapes to be provided by the Member. Backup & Re-store activity will be performed once a day.

Supplies under “Full Rack”

Rack Space	:	Standard 42U
Rated Power	:	6 KVA
Max No. of IPs that will be provided	:	10

Supplies under “Half Rack”

Rack Space	:	Standard 21U
Rated Power	:	3 KVA



Max No. of IPs that will be provided	:	10
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Supplies under “10 U Rack Space”

Rack Space	:	Standard 10U
Rated Power	:	1.5 KVA
Max No. of IPs that will be provided	:	10

Terms & Conditions:-

1. Charges will be applicable from the date of allotment of rack.
2. Data Center Fees paid by Trading Member, shall not be refunded or returned to the Trading Member in any event of Trading Member wish to withdraw or cancel Data Center Service at any time before completion of one year from the date of application/renewal.



Annexure-II
Application Form

(On the letterhead of the Trading Member)

To
The Membership Department
Metropolitan Stock Exchange of India Limited 4th floor,
Building A, Unit 205A, 2nd Floor, Piramal Agastya Corporate Park,
L.B.S Road, Kurla West, Mumbai - 400 070

Dear Sir/Madam,

I / We (Name of the member) hereby apply for COLO facility offered by the Exchange at STT BKC IDC. The details of the infrastructure are as follows:

1.	Address	
	Address line 1	
	Address line 2	
	Address line 3	
	City, State	
	Pin Code	
2.	Contact Details	
	Contact Person Name	
	Designation	
	Telephone No. – Extension	
	Mobile No.	
	Email ID	



3.	Payment Details:	
	Demand Draft No.	
	Date	
	Drawn On Bank	
	Amount (in figure)	
	Amount (in words)	

Services Availed:

No.	Particulars	Charges	Quantity	Total Charges (INR)
1.	Charges Per Full Rack including basic Hands and feet support services as mentioned in the circular MSE/MEM/5658/2017	INR 9,00,000		
2.	Charges Per Half Rack including basic Hands and feet support services as mentioned in the circular MSE/MEM/5658/2017	INR 4,50,000		
3.	Charges Per 10 U Rack space including basic Hands and feet support services as mentioned in the circular MSE/MEM/5658/2017	INR 2,25,000		
4.	Initial Setup Charges per Full Rack - one time charge per rack. [Includes cabling, server mounting, power connectivity, providing network infrastructure within the Data Center]	INR 1,00,000		
5.	Initial Setup Charges per Half Rack - one time charge per half rack. [Includes cabling, server	INR 50,000		

	mounting, power connectivity, providing network infrastructure within the Data Center]			
6.	Initial Setup Charges per 10 U Rack space - one time charge per half rack. [Includes cabling, server mounting, power connectivity, providing network infrastructure within the Data Center]	INR 50,000		
7.	Support for Data Backup & Re-store per rack [Includes insertion/ removal of tapes and handing over the same to the authorized personnel. Backup tapes to be provided by the Member. Backup & Re-store activity will be performed once a day.]	INR 66,000		
8.	Hands and feet charges	INR 750 per half an hour		

Note:

1. The Exchange reserves its right to revise the charges at its discretion.
2. Exchange reserves the right to add / modify / remove any of the services anytime at its discretion.
3. The charges are based on fair usage. The Exchange may levy additional charges in respect of usage which is not in accordance with fair usage, besides taking any other action as it may deem fit.



4. Charges are exclusive of any government taxes, duties and levies if any as applicable and the same are to be paid extra by members.
5. Data Center Fees paid by Trading Member, shall not be refunded or returned to the Trading Member in any event of Trading Member wish to withdraw or cancel Data Center Service at any time before completion of one year from the date of application/renewal
6. This has to be submitted along with duly stamped and signed

The Details of IT Equipment: -

S #	Server Make	Model	U Space	Device Sr. No.	Weight (in kg.)	Power Rating (in kVA)	No. of SMP S	Server OS	Application	Database
1.										
2.										
3.										
4.										

S#	Equipment Make	Model	U Space	Device Sr. No.	Weight (in kg.)	Power Rating (in kVA)	No. of SMPS
1.							
2.							
3.							
4.							

* Total weight of all the equipment's for Full Rack and Half Rack should not exceed 370 Kgs and 185 Kgs respectively.

We agree to comply with the terms and conditions as specified in Exchange Circular _____ as may be amended from time to time.

Thanking you,

**Yours Faithfully,
For <Member Name>**



Authorized Signatory

Date:

Place:

Company Seal:

Annexure-III
Renewal Form

(On the letterhead of the Trading Member)

To

The Membership Department
Metropolitan Stock Exchange of India Limited 4th floor,
Building A, Unit 205A, 2nd Floor, Piramal Agastya Corporate Park,
L.B.S Road, Kurla West, Mumbai - 400 070

Dear Sir,

I / We(Name of the member) hereby apply for co-location facility renewal of rack no. Allotted to us in Co-location facility at STT BKC IDC.

We agree to comply with the terms and conditions as specified in Exchange Circular Ref. No. MCX-SX/MEM/2245/2014 dated September 26, 2014 as may be amended from time to time.

In this regard please find the payment details as follows –

Cheque /Demand draft no. :-

Drawn on Bank:-

Cheque /Demand draft date:-

Payable at: - Mumbai

Total Amount = Rs.....

Date:

Place:

Encl: (Cheque / Demand draft for renewal amount favouring “Metropolitan Stock Exchange of India Limited”).)

Annexure-IV

COLO Data Center Acceptable Usage Policy

The purpose of this policy is to outline the usage of Co-location Data Center Facility at STT datacenter, BKC, Mumbai for business purposes. It is expected that all the customers/ members adhere to the safe-usage practices that do not disrupt the business or interfere with the other customers’ activities. Acceptable Usage policy help “educate users”, “define boundaries of behavior”, and “consequences of violating those boundaries”.

Policy

1. The Co-location Data Center work etiquettes have to be strictly adhered to while working inside the Data Center.
2. All Members shall submit a “Declaration” of authorized representatives that are allowed in the Co-location premises during installation / maintenance or uninstallation of hardware. For this purpose, the “representative” shall mean employee/ temporary staff or third party personnel.
3. Any Member that wishes to grant access to an employee/ vendor personnel not on the permitted declaration must ensure that the employee/ vendor personnel is accompanied by someone on the “Declaration’ at all times. Customers are responsible for all actions of their employees.
4. The personnel visiting the Data Center are required to carry their Identification Proof and produce the same whenever demanded by Security Guards/ Data Center Staff.
5. Exchange will take necessary actions to protect the customer equipment. However, Exchange is not liable nor does it insure the customer equipment in the

- Data Center. Customers are therefore advised to secure the value of their equipment and services by their own insurance.
6. Under no circumstances the member will be allowed to mount the monitors, keyboards, mouse in the racks. Member will be allowed to mount rack mountable monitors if they desire alternatively they may request the DC team.
 7. Under no circumstances is a customer or his authorized representative use this facility to engage in any activity that is illegal under local, state, national and/ or international law while utilizing Data Center resources.
 8. Person visiting Data Center should ensure to be dressed appropriately as per general business etiquettes.
 9. As per the requirements, all the IT equipment installed at COLO services should be dual power supply and rack mountable only. In case if member installs single power supply equipment, the Exchange will not be responsible for any power outage.
 10. As there is no storage facility available for Member's IT equipment in COLO facility, members are requested to ensure that all IT equipment are installed in their respective allocated rack.
 11. One Day prior intimation is required for Work permit request (Monday – Saturday)
 12. Access to Data Center shall not be allowed during Market Hours
 13. All participant's and their representatives are prohibited from operating; touching, opening or accessing any software, hardware or other equipment not belonging to the member or telecom vendor in the colocation facility. This includes, but is not exclusive to colocation cabinets, network hardware and servers, computers and monitors
 14. All waste and unused components must be removed after any work is carried out
 15. Visitors are prohibited from smoking, drinking or eating within the colocation facility, Meet-Me room etc
 16. No hazardous or inflammable materials (including without limitation boxes, paper, and bubble wrap) may be taken into, stored or left within the colocation phase or other areas within colocation facility.

17. The colocation facility must be kept free of packaging and kept in a clean and tidy condition at all times.
18. MSE reserves the right to discard any such materials at its discretion without notice to the visitor/ COLO participant.
19. No equipment shall be placed in front of air conditioning units, electrical panels, fire extinguishers, and fire or exit routes.
20. No cables or other devices shall be permitted to be installed below the raised floor by colocation members.
21. Drilling, sawing, soldering, burning or other similar activities are prohibited in the colocation facility by colocation members.

Do's

1. Display the Visitor's Pass/ access card prominently at all times while in the Co-location data center premises issued while entering the premises.
2. Co-operate with the Security Guards/ Admin staff at all times to abide to Physical Security Policy.
3. Carry a Challan / Delivery Note in duplicate of the equipment's which they intend to bring into the DC. One copy will be given back to member confirming the receipt of materials.
4. Provide necessary information to Security Guards/ Data Center Staff and sign the required registers within Co-location data center premises.
5. Follow the Material Movement Policy for moving your material in and out of the premises. Declare all material at security or whenever asked in the Co-location data center premises.
6. Ensure that equipment is unpacked in the Staging area/ Store Room earmarked for unpacking only. No Packing material will be allowed inside Data Center.

7. Declare and deposit mobile phones with the on-duty Security Personnel at Co-location data center premises .
8. Co-operate with Admin team to ensure cleanliness and overall hygiene within the premises.
9. Ensure that the initial installation or removal of the customer equipment is done in agreement with Data Center Manager in advance before actual activity is being carried out.
10. Notify the on-duty security Guard/ Data Center Manager immediately, if you find anything observed unusual.
11. In case of Fire/Emergency, immediately vacate the building. Follow the instructions of data center personnel for a safe and speedy evacuation.
12. While in data center premises, keep yourself aware about the nearest exit route which are prominently marked for evacuation purpose.
13. Gather at the pre-designated assembly area where the Data Center Manager/ staff will ensure everyone is accounted for.
14. Undertake any Wide Area Network Connectivity subject to Exchange approval.

Don'ts

1. Take any unauthorized person or give your access card to others or Tailgate.
 2. Wander in the office area or anywhere in the Co-location data center premises other than the facility assigned to you.
 3. Bring any hazardous materials and/or dangerous material such as weapons, guns, knives or mace, alcohol; or drugs within the co-location facility or the building.
 4. Bring the mobile phone inside the Data Center facility.
 5. Bring any material like wet cell batteries, explosive, flammable liquids or gases, alcohol, controlled substances, weapons, cameras, tape recorders, etc. inside Data Center premises.
 6. Photograph, videotape or film any areas in the Co-location data center premises or the entrances to the Data Center facility.
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7. Install any batteries in the Data Center facility.
8. Operate equipment specifically designed to emit Radio Frequency (RF) energy within the Co-location data center facility without express written consent of an authorized data center representative.
9. Bring or consume any kind of food, beverages or liquids inside the Data Center.
10. Smoke in the data center premises.
11. Extend power to any rack.
12. Use extension cord or spike guard.
13. Misuse data center owned equipment or infrastructure for conducting unsolicited activities.
14. Touch/ interfere with any other equipment / devices inside the Data Center apart from own infrastructure.
15. Leave any material on the floor or in common areas.
16. Indulge into any activity whether verbal or through physical conduct that harasses, disrupts or interferes with another's work performance or that creates an intimidating, offensive, or hostile environment.
17. Disturb others by talking loudly, playing music, etc.

I have read the policy and agree to abide by Do's, Don'ts and other the terms and conditions.

For <Member Name>

Authorized Signatory

Date:

Place:

Company Seal

ANNEXURE V

NOC FOR POINT TO POINT CONNECTIVITY

To
The Technology Department
Metropolitan Stock Exchange of India Limited 4th floor,
Vibgyor Towers, Plot No C 62,
G Block, Bandra Kurla Complex,
Bandra (E), Mumbai – 400 098.

Dear Sir/Madam,

I / We (Name of the member) hereby apply for NOC for point to point connectivity. The details of the are as follows:

1.	Addresss A	
	Address line 1	
	Address line 2	
	City, State	
	Pin Code	
	Service provider and Bandwidth	
2.	Addresss B	
	Address line 1	
	Address line 2	
	City, State	
	Pin Code	
3.	Contact Details-	
	Contact Person Name	
	Mobile No. and email id	