Member Connectivity and Enablement Information
July 2017

Summary

This presentation aims to provoke thought for clients regarding connectivity enablement and setup for the ITaC 1B Trading system.

Questions to consider include:

- Connectivity to the JSE including Primary, Secondary and DR Sites?

- Number of software applications/systems?

- Enablement process including member codes and trader groups?

- How many CompIDs are needed?

- Order rates per CompIDs?

- Colocation connectivity changes if applicable?

- Update and signing of JSA SIP schedule?

Connectivity Principles

- As per the Client Connectivity Standards and Requirements document Primary connection and Backup connection to the JSE
- Sufficient Bandwidth to cover Market Data A and B Feeds
- Connectivity to JSE Remote DR Site
- Client Site failover solutions
- Colocation Connectivity

- Please refer to the Client Connectivity Standards and Requirements_V3.0 document available here: *Connectivity Document*

Direct Connectivity and Own Solution Management

Direct connectivity involves the member managing their lines and connectivity to the JSE themselves and/or through a Network Service Provider (NSP). Refer to *NSP List here*

- It will generally require clients to manage their own software applications and how these connect and interface to the JSE
- Clients have technical staff who are equipped to provide necessary support
- In essence, the client will run an end to end solution between connectivity, software applications and in-house business support
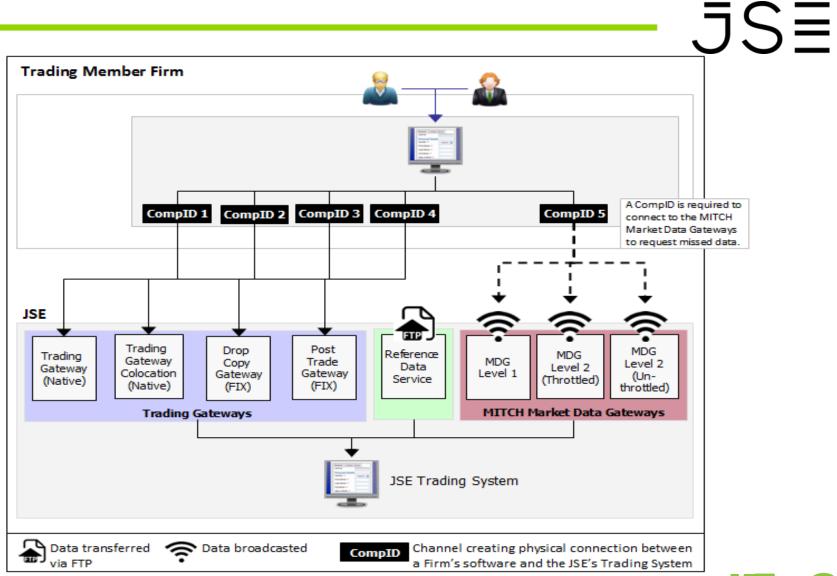
SIP and Hosted Solutions

- Shared Infrastructure Providers (SIPs) allow clients to "outsource" various services of connecting to the JSE
- Services may include:
    - Managed connectivity solutions
    - Hosting of infrastructure needed to perform trading activities
    - Potential management of infrastructure
    - Hosted trading application solutions and the management/support of these
- In essence, the SIP creates a "buffer" between the JSE and clients regarding technical setup, connectivity and application enablements
- This allows clients to enjoy the same usability and access to the JSE Trading System by utilising specialist skills/services these SIPs provide
    - SIPs will advise firms of the required trading member structure and setup
    - However trading members will still provide final input and sign off on enablements
- Various SIPs with different service offerings exist

    Please refer to the registered list of _SIPs here_

Trading Member Connectivity to the JSE

Trading Member Firm

CompID 1 | CompID 2 | CompID 3 | CompID 4 | CompID 5

A CompID is required to connect to the MITCH Market Data Gateways to request missed data.

JSE

FTP

| Trading Gateway (Native) | Trading Gateway Colocation (Native) | Drop Copy Gateway (FIX) | Post Trade Gateway (FIX) | Reference Data Service | MDG Level 1 | MDG Level 2 (Throttled) | MDG Level 2 (Un-throttled) |

Trading Gateways

MITCH Market Data Gateways

JSE Trading System

Data transferred via FTP | Data broadcasted | CompID Channel creating physical connection between a Firm's software and the JSE's Trading System
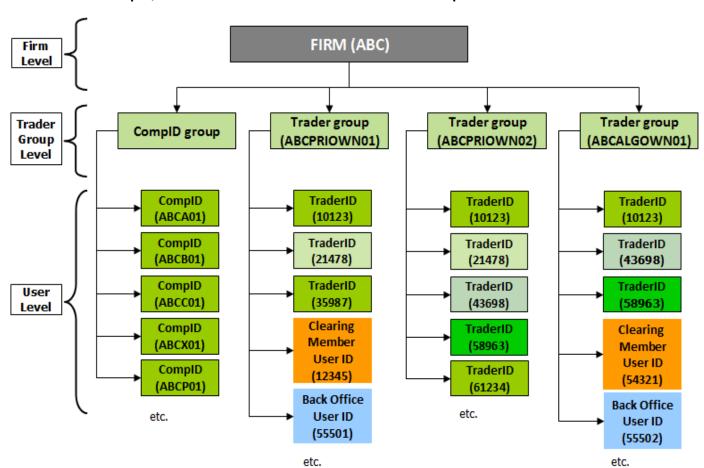
Trading Member Structure

A Trading Member is logically structured on the JSE Trading System through a Firm, Trader Groups, and Users. Users include CompIDs and Trader IDs.

Trading Enablement Naming Convention

The naming conventions below apply to clients directly connecting to the JSE.

Alpha Code

- Firm PIC Code: ABC**XXX**TM001

Type   Software

- Trader Group: ABC**AL**DO**WN**01

  ABC**RS**DS**WP**01

- Public Trader Group*:   ABCXXXPBL01

- CompID: ABCN51

  ABCD51

  ABCP51 | ABCP91*

Please refer to Public Trader Group and On-behalf-of CompID slide

Public Trader Group and On-behalf-of CompIDs

Public Trader Groups

- A minimum of one Public Trader Group is required for every firm for reported trading activities (required field for counterparty firm)

- This Trader Group is identified by the letters 'PBL' as per the example Trader Group below - ABCXXXPBL01

- The Public Trader Groups of all firms will be made available to all market participants

On-behalf-of CompIDs

- This CompID is given to the relevant clearing member of the member firm to allow any trade reporting or trade cancellations on behalf of a trading member

- By connecting through this CompID the clearing member is further able to receive trading activity real time

- The CompID belongs to the trading member, but is given to the clearing member to login with

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CompID Information

A CompID is an interface user, allowing users to create a physical connection between the Firm's software application and the JSE Trading System.

For a member firm to perform all trading functionality, a minimum set of CompIDs is required:

- Native Trading CompID – used for order entry/management
- Post Trade CompID – used for Off Book Trade reporting and trade recovery
- Drop Copy CompID – used for recovery purposes of orders
- Market Data CompIDs – used for recovery of market data

CompID Principles

- CompIDs are allocated per Software Application
- CompIDs are Market independent – do not require a CompID per Market
- CompIDs are site independent – use of the same CompID for Primary, Secondary and DR Sites is possible
- CompIDs are assigned on a Gateway level for trading and market data separately
- CompIDs can be used to facilitate numerous flows of data e.g. Prop Trading, Retail Trading. Hence there is no need to split these data flows across CompIDs
- CompIDs can have different inbound order rates per second (o/s)
  - Maximum order rate of 400 o/s

CompID Naming Convention

Firm Alpha Code (3) + Gateway/Type Identifier (1) + Number (2)

Example: ABCP01

ABC (Trading Firm) + **P** (Post Trade Gateway) + **incremental number** (between 01 and 99)

ABC (Trading Firm) + **N** (Native Trading Gateway) + **incremental number** (between 01 and 99)

The incremental number at the end of the CompID is used to uniquely identify a specific Firm Type or Market.

- Equities Market (01 to 49) - ABCP**01**, ABCP**02**, ABCP**03**, …ABCP**49**

- Derivative Markets (50 to 79) - ABCP**50**, ABCP**51**, ABCP**52**, …ABCP**79**

- Clearing Member CompIDs (80 to 99) - ABCP**80**, ABCP**81**, ABCP**82**, …ABCP**99**

Questions

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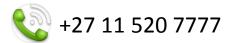
Please contact the JSE Client Services Centre should you have questions or would like to engage in further discussions.

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