Broadridge Trade Transmission Process Flow

1- Trades From Gresham and FTP

- Step 1: Trade data from Gresham or FTP feeds into the tradeloadstaging.dbo.messageinbound table.

- Step 2: The trigger kicks off in the tradeloadstaging.dbo.messageinbound table and loads the trade data into the db.trade table in the Trade Transformation/IREP Staging DB Server 10.1.10.15.

- Step 3: The trigger kicks off in the db.trade table to transform trades into FIX message, puts them in the MSMQ and sends them to GEMS FIX Server 10.1.10.6.

- Step 4: During the transformation process, the system generates status logs for all FIX trade messages and save them in the messageinbound\_audit table. The logs show if the trade successfully transformed into an FIX message or failed.

- Step 5: Once the trades are in the GEMS FIX Server 10.1.10.6, Raisul’s FIX Consumer process picks the messages and sends them to Broadridge GEMS and APPIA. This process runs in every 1 minute.

2- Trades From Client Portal

- Step 1: Trade data from the Client Portal feeds into the tradeloadstaging.dbo.trade\_gui table.

- Step 2: The trigger kicks off in the tradeloadstaging.dbo.trade\_gui table and loads the trade data into the db.trade table in the Trade Transformation/IREP Staging DB Server 10.1.10.15.

- Step 3: Same steps 3 through 5 in section 1

3- GEMS ACK/NACK Process

- Step 1: Once GEMS receives trade message from GEMS FIX Server 10.1.10.6, it returns ACK or NACK message as a confirmation. The ACK message indicates that the trade is booked successfully and the NACK message indicates that an error occurred when booking the trade.

- Step 2: Raisul’s FIX session puts the ACK/NACK message in the MSMQ and the SQL Agent Job load\_gems acknackmessage usingSSISpackage in server 10.1.10.15 loads the data into the tradeloadstaging.dbo.gems\_acknack table.

4- Data Load into DW Database and Display on Client Portal

The SQL Job Load Trade Feed in DW Database (server 10.1.10.13) runs every 1 minute to load trade and ACK/NACK data from the Staging Database (server 10.1.10.15) into the DW Database as described below.

For the trades, the job takes centralized data from the dbo.trade and dbo.trade\_gui tables and loads it into the DW.tradefeed.fixedincome table.

For the ACK/NACK, the job takes the data from the tradeloadstaging.dbo.gemsacknack table and loads it into the DW.tradefeed.gemsacknack

The Trade Processing Queue function in the portal takes the data from the DW.tradefeed.fixedincome and DW.tradefeed.gemsacknack tables and displays it on the portal GUI.

All trades in the portal Trade Processing Queue can be cancel or rebill.