AMI Center Replication

This document details how to replicate data from one AMI Center to another AMI Center using it's built in support for data replication. It supports subscription to tables and replication to another AMI Center.

This document provides an example on how to use AMI Center Replication.

Prerequisites:

- Have at least 2 AMI centers running, e.g.
  - host:center_port eg. localhost:3270 & localhost:4270
- Tables to be replicated in the individual centers
  - Table schema in the source center must be identical to replicated table in destination center

Replication Procedures

__ADD_CENTER(CenterName String, Url String, Certfile String, Password String)

- CenterName (Required): Specified name for center (source)
- Url (Required): Url of center (host: ami.center.port)
- Certfile: Path to the certfile (optional)
- Password: Password if a certfile is given (optional)

__REMOVE_CENTER(CenterName String)

__ADD_REPLICATION(Definition String, Name String, Mapping String, Options String)

- Definition (nonull): Target_TableName=Source_CenterName.Source_TableName or Source_CenterName.TableName (if both source and target has same table name)
- Name: Name for the replication
- Mapping: Mappings to be applied for the tables, (key value delimited by comma) ex: "target_col_name=source_col_name" or ex: "(act=account,symbol=symbol,value=(px*qty))"
- Options: options to clear the replication on
  - *"Clear=onConnect" or "Clear=onDisconnect"*
    - *Note: If configured the replicated table will clear when the center connects or disconnects*

__REMOVE_REPLICATION(Name String)

Note: When replicating from the source AMI Center and the source table, ensure the table is a Public table with Broadcast Enabled.

Note2: Configuring the RefreshPeriodMs will allow you to adjust for throughput, performance and how often updates are pushed.
Lower RefreshPeriodMs means updates are pushed more frequently which potentially means lower throughput.
Higher RefreshPeriodMs could mean higher throughput and better performance but fewer updates.

Note3: Removing the replication will clear all the copied entries on the target side's table, regardless of the options.

Replication Sample Guide

To replicate data from one AMI Center to a destination AMI Center, first we need to `add` the source AMI Center in the destination AMI Center. After which we can replicate target tables from the source to the destination.

Example:

call __ADD_CENTER("source", "localhost:3270");

__ADD_CENTER Adds the source center you want to copy from. So if your AMI Center Port is 3270, and you call __*ADD_CENTER* on the destination AMI Center, that means you plan to replicate data from 3270 to 4270.

call __ADD_REPLICATION("dest_table=source.mytable","myReplication"," account=account", "Clear=onConnect");

__*ADD_REPLICATION* specifies which table on the source side the target side wants to replicate. The data travels from source to target, from 3270 to 4270.