Base Language - Feature #4285

extend cross-session pub/sub to allow subscriptions/notifications between multiple FWD servers

09/04/2019 09:31 AM - Greg Shah

Status:	New	**Start date:**	
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:			
billable:	No	**vendor_id:**	GCD

Description

History

#1 - 09/04/2019 09:51 AM - Greg Shah

Today, the cross-session pub/sub only works within a single FWD server. It does not matter if there are multiple applications running within the server, but if the applications (or instances of the same application) are in separate FWD servers then the facility cannot be used.

This task is meant to explore (and possibly implement) the idea of cross-server pub/sub. To implement it:

- remote subscriptions must be made and managed
- remote notifications must be made when needed
- a security plugin will be needed
- we don't need routing unless we enable multi-node hops

#2 - 09/05/2019 07:32 AM - Igor Skornyakov

In my practice, this kind of cross-server communication was typically implemented on the top of JMS (with a standalone MQ server or an embedded one). For example, the open-source Apache ActiveMQ (https://activemq.apache.org/) provides out-of-the-box solutions for many problems regarding scalability and reliability which may arise in this kind of communication.

#3 - 09/05/2019 07:43 AM - Greg Shah

We should definitely consider this idea. The internal communication protocol is message based and we have both queueing and routing built in. The ApacheMQ will have scalability facilities that we don't have.

Another idea is to expose the internal messaging protocol of FWD by implementing the JMS interface. The advantage of this would be a simpler implementation rather than layering a separate MQ solution into FWD (with extra ports, separate FWD security setup, more firewall rules....).

Anyway, it is worth considering.