Jack Henry's Enterprise Event System

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"A new, middleware service that JHA and non-JHA products will use to securely publish high-volume, event activity from a product to one or more additional products interested in knowing that event took place, as well as details about the event."

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Introducing...

Jack Henry & Associates' Enterprise Event System (EES), a new enterprise event information delivery system. Designed on the 'Pub/Sub" model, the system will take in event information from publishers and deliver it to subscribers. Which events get published and how the event information is used is up to the publisher and subscriber products. Subscribers choose the information they are interested in.

The EES uses a **Push/Pull** delivery method. Depending on how the subscriber is set up, event data will either be automatically 'Pushed' to them, or, need to be 'Pulled' down by the subscriber using the EESEventSrch message. The subscription will identify which delivery method is to be used.

Event information currently being supplied by JHA Broadcast and ESM systems has been incorporated into EES. The Broadcast and ESM messages will be translated and available for subscribers in the **EES format only**. This will be a transparent change for subscribers currently using Broadcast and ESM event information.

The format of the new EES event data supports variations of data elements that the current ESM/Broadcast event data format cannot. EES also self-manages event information that has no subscriptions and/or has timed out.
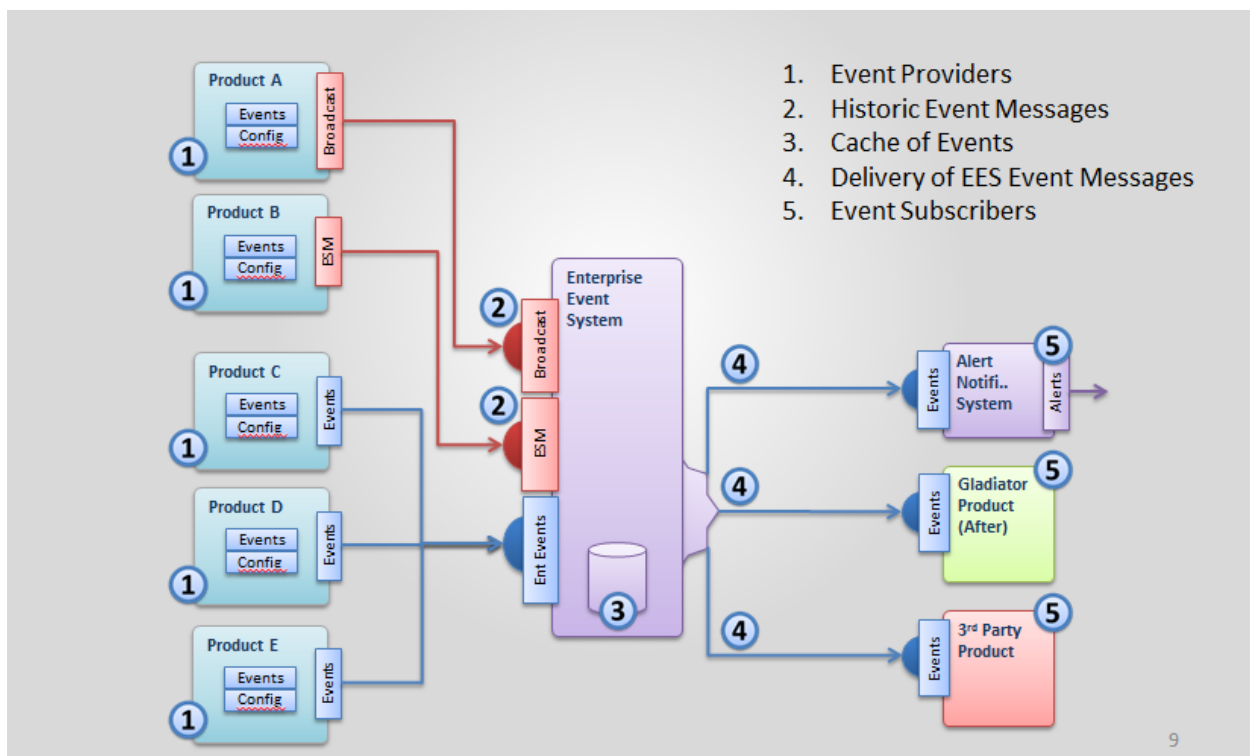
Product Nomenclature

EES – Enterprise Events System, a middleware service that JHA and non-JHA products can use to securely publish high-volume, event activity from a product to one or more additional products interested in knowing that event took place, as well as details about the event.

ESM – Enterprise System Monitoring, an older Event system, now incorporated into EES.

ENS – Enterprise Notification System, an enterprise-class, multi-tenant, hosted service enabling publishers and institutions to send alerts & notifications (via e-mail, text, etc.) to enterprise & consumer users, as well as receive messages from users for supported channels.

Event - any activity, and its details, that occurs in a product or application. It could be literally, any event that another product or application might be interested in

Eventing – a seemingly widely used non-specific term generally referring to systems that process events.

Publisher – *Provider* products will publish their potentially interesting events to EES in real-time. Any product can be both a publisher <u>and</u> subscriber of events

Subscriber – *Subscriber* products will select and receive only the EES events that interest them. Any product can be both a subscriber <u>and</u> publisher of events

Product Details

Potential Event Examples

User logged in after normal hours	*Key rate change*
Backup failure	*ATM job started*
Fraudulent transaction occurred	*Cash management wire created*
Error occurred in processing	*Workflow activity completed*

Literally, any event that another product or application might be interested in!

Think of it as: **"*System-to-system notifications*".**

EES to work in FARM environment

> ➢ EES needs to work in a FARM environment so that it will work in a hosted environment and performance does not suffer
> ➢ Installed both in-house and hosted. In-house EES nodes may share events with hosted EES nodes when the FI uses a mixed product deployment environment.
> ➢ FI's will require only minimal engagement with EES, if any at all. EES is designed to be a "behind the scenes" middleware service to the products and apps that use it.
> ➢ Products that depend on EES events for key features will drive when EES implementation is required for an FI customer.

Messages

jXchange maintains a complete set of messaging services applicable to enterprise events. These messages are the interface between the users and the system that perform the actual work of the application. Typically, these are defined by JHA's Enterprise Architecture Group.

BrdCastAdd Message

Publisher uses this message to add one or more Event entries to the EES in the previous Broadcast format. The BrdCastAdd message is translated to the EESAdd message. The message is exactly the same as being used for Broadcast today and will survive until all sources have converted to the new ESSEventAdd message structure.

EESAddEvent Message

This message is called by the publisher to add one or more entries to the EES. This message is designed to support ESM, Broadcast and EES messages.

EESEventSrch Message

This message provides the Data Subscriber the means to search and retrieve the waiting events from the EES.

ESMAdd Message

This older message is called by the consumer to add one or more event entries to the EES in the previous ESM format. The message is exactly the same as being used for ESM today and will survive until all sources have converted to the new EESEventAdd message structure.

PING Message

This message is use to ensure the EES system is operational (active and running).