# EHMS Notification Processing

**General Guidelines**

- These guidelines specifically pertain to the processing of AE and CE messages.  Other message types are not addressed here.
- These guidelines specify that CE messages with a blank SubType are ignored.  Important Note: systems that process these messages will not stay in sync with EHMS following the flows outlined below.
- **STEL** = **S**ame **T**ype, **E**quipment ID, and **L**ocation.  Example:  WILD / ABC 123456 / R03.

1. **Alert Open (AE) Processing:**
   a. EHMS will maintain only one **OPEN** alert per **STEL**.
      i. When opening an alert, all prior open alerts should be closed **STEL**.
      ii. When opening an alert, all prior CE messages should be deleted **STEL**.
      iii. When opening an alert for a higher level alert **STEL** implies a close of any lower level open alerts **STEL**. Therefore, a customer's system will close a lower level open alert **STEL** based on the existence of a higher level alert without a corresponding CE message.
   b. When processing AE messages, each customer must make a decision on how they will build the business process depicted by the "Open Alert" box -- see Alert Open (AE) chart below.
      i. Some companies use the AE message as the "alert" in their internal systems by storing/using the EHMS AE message as received.
      ii. Some companies use the AE message to open an "alert" in their internal systems by mapping the EHMS AE message to some other internal system alert based on their business needs/systems in place.  In this situation, it is up to the customer to maintain synchronization between the EHMS AE status and their internal alert status.
   c. AE messages where AlertState = R are a special case.  R = Re-open.  Re-opens happen when a prior closure is nullified by the reporting party.  This causes alerts that were closed by the nullified closure to be re-opened.
   d. When comparing AE Event Date fields to each other include the date and time values in the comparison (YYYYMMDD HHMMSS).
   e. When comparing **AE** Event Date to **CE** Event Date, use only the date portion, ignoring the time value (YYYYMMDD). Closure times cannot be relied upon and EHMS treats a repair on the same date as an alert as a remediation for that alert.
   f. Ignore CE messages where SubType = blank.
   g. When processing AE messages the first check is to see if an **OPEN** AE/Alert exists **STEL**.  It is important to ignore **CLOSED** AE/Alert records in your system.
   h. When opening an alert, delete existing CE records in the database **STEL**.

2. **Alert Closure (CE) Processing:**

   a. When comparing **AE** Event Date to **CE** Event Date, use only the date portion, ignoring the time value (YYYYMMDD). Closure times cannot be relied upon and EHMS treats a repair on the same date as an alert as a remediation for that alert.

   b. A customer's operational store should only store CE messages as instructed in the chart below. **Note:** If a customer wishes to store all CE messages this should be done outside the operational store as depicted in the charts below.

   c. This document assumes that customer systems will **ignore all CE messages where SubType = blank**. CE messages where SubType = blank are for special cases where an alert is being escalated, superseded, or a closure is being nullified.

   d. When closing an alert, do not store the CE message.

   e. When a CE message is received where there is no OPEN alert **STEL** then the CE message should be stored in an operational store.

   f. When storing CE messages to the database, the CE message with the most recent Event Date **STEL** should be kept. Older CE messages should be deleted when storing new messages. This means that there will be zero to one CE per **STEL** on the database at any given time.