

# MIMOSA OSA-EAI Terminology Dictionary

## Version 3.0

**Actual Event** – see *Event*

**Agent** – An animate object (person, group, organization, or intelligent agent software) that makes various types of assessments.

**Agent Role** - Defines the agents relationship to the business enterprise (i.e. equipment operator, maintenance supervisor, etc.)

**Alarm Severity** - Defined severity of an alarm on a scale of 1-10.

**Asset** – An instantiated entity which can be physically tagged with an asset identifier and/or depreciated by an accounting system. May be assigned to a segment by means of a utilization table when placed in service. Assets may be systems, subsystems, or components. Assets may be hierarchically related by parent/child tables, to show a parts breakdown structure). The asset when “born” is permanently “christened” with the originating enterprise site code (asset\_org\_site) and a unique integer (asset\_id). These attributes form a unique GUID (Globally Unique IDentifier) which uniquely identifies the asset for its entire lifetime. This allow cross-platform integration. These attributes may come from the original equipment manufacturer (OEM) or the first site the asset begins to be electronically tracked. Ideally, in the future, each asset will have an electronic “button” which stores this unique GUID. The user\_tag\_ident attribute is the user identification tag which follows the naming nomenclature of the end-user site and may change over time.

**Change Pattern** - Qualifies an operational state as stable, unstable, improving, or degrading, at several levels.

**Database / Site Database** – A repository of data or information located at a site. The database when “born” is a unique db\_id to exist for each database. This allows for databases to be merged.

**Data Quality** - Defines if a particular data element is good data, bad data, unknown, or on-hold.

**Data Source** - Defines the assets used for data acquisition, has an associated data source type (type of data acquisition system).

**Enterprise** – An enterprise is the corporate level of an organization, or the top organizational structure of a non-profit or military body. An enterprise is composed of many sites. The enterprise uniquely identifies the sites it manages. The enterprise GUID is a 4-byte, non-negative integer assigned by MIMOSA. Normally, MIMOSA will issue one enterprise GUID per corporation/organization. For some organizations, multiple enterprise GUIDs may be requested. In addition, MIMOSA will also assign the enterprise with a globally-unique, alphanumeric user\_tag\_id value. This can be used in conjunction with the USER\_TAG\_IDENT column in the site table to form a globally unique text string.

A representative from the registration authority for an organization should e-mail the MIMOSA Enterprise Registrar at [info@mimosa.org](mailto:info@mimosa.org) with the name of the enterprise, requested enterprise USER\_TAG\_IDENT identifier, point of contact name, title, phone number, and e-mail address. The MIMOSA Enterprise Registrar will then assign the enterprise GUID and enterprise USER\_TAG\_IDENT and return these values to the point of contact. MIMOSA is the enterprise with a GUID of 0 and user\_tag\_id value of "MIMOSA".

**Enterprise Zero Reference Data Library** - MIMOSA maintained databases containing all pre-defined information types

**Entity** – Inanimate objects of interest related to the design of a facility (service segment) or the actual objects at a facility (asset).

**Event** - An event which has occurred, and has recorded data associated with it.

**Health Grade** - Defines state of health on a scale of 0 (imminent failure) to 10 (excellent).

**Hypothetical Event** - FMECA and RCM failure modes and effects are considered as hypothetical events. Hypothetical events have an associated agent and severity code.

**Measurement Event** - A measurement record which has an associated time, location, location type (type of measurement), transducer ID, data records, and percent confidence.

**Measurement Event Numeric Alarm** - Tracks the alarm history associated with a particular measurement location.

**Measurement Location** - Defines the measurement locations associated with a monitoring site which relates to either an asset or a segment and has an associated location type (type of measurement).

**Model** - Defines a class of assets as defined by a manufacturer, normally called a "model" of an asset.

**Network** - Defines connectivity relationships between segments or assets, and allows segments or assets to be mapped into process flow chains.

**Numeric Alarm Regions** - Defines alarm parameters associated with a particular measurement location.

**Ordered List** – Defines an ordered sequence of measurement locations or engineering units at measurement locations.

**Parent/Child** - Defines a hierarchical relationship between MIMOSA data elements, applicable to many MIMOSA data types.

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**Proposed Event** - An event which is proposed: to have occurred in the past (root cause assessment), to be occurring in the present (current health assessment), or to occur in the future (prognostic prediction). The proposed event has the

following information associated with it: severity level, time it is proposed to occur, proposing agent, a likelihood of occurrence, an audit assessment of the proposal, and associated auditing agent.

**Request** – An agent's requisition for work, materials, tools, and/or labor. CCOM V3.0 and CRIS V3.0 support requests for work for segment, assets, and ordered lists. Future enhancements will support requests for materials, tools, and labor.

**Segment (Service Segment) –**

A logical entity which is designed to perform a function at a site. A segment can be monitored, be associated with work, be decomposed into smaller segments, and be the utilization "container" for a physical asset. A segment includes an enterprise, a site, a facility, production processes, their inputs and outputs, physical structures, systems, mechanical devices, and mechanical device areas. Many of these segments appear on the engineering blueprints of the site. A segment can be a component which performs a function (Turbine-driven Pump 1A, Motor outboard bearing, etc.) but is NOT the particular asset tracked by manufacturer, model number, & serial number in the database. This asset is defined in the asset table. A segment in a plant/process which is a repository for assets, may represent a system or subsystem. Segments may be hierarchically related by parent/child tables, and placed in process flow systems by means of network tables. CRIS Table #44 ( ASSET\_ON\_SEGMENT) stores the utilization of a particular asset on a given segment with the time it was installed and removed. The Segment\_Child Table shows the parent-child relationships of segments to each other. For example, segment "Steam Turbine" at site "ABC" is the child of segment "Turbine Generator #1" which is the child of segment "Power Generation Line #1 ". The model allows for more than one segment to be the child of more than one segment. The segment\_group\_yn field when set to "Y" means that this segment is really a segment composed of 2 or more segments of the same type. If a count of total segments is made from the database, these group segments should be ignored.

**Segment Event Associated with Segment Health** - Defines linkage between the health assessment and actual events which corroborate the assessment.

**Segment/Asset Event** - The definition of an actual logged event associated with a segment or asset. General classes of events include: changes in operational state, failure root cause assessments, failure effects, alarms, abnormal conditions, etc. Associated tables maintain the event history.

**Segment/Asset Event Cause and Effect** - Defines cause and effect linkages between events in a causal network. May be used to define linkages between actual, proposed, or hypothetical events. Cause and effect linkages for proposed and hypothetical events have an associated probability.

**Segment/Asset Event to Function Link** - Links actual events to the functions that were effected, and maintains the historical record

**Segment/Asset Function** - Defines the function(s) which are associated with a segment.

**Segment/Asset Health** - An assessment of health that can be made for past condition, current condition, or future condition. Health assessment has an associated assessment agent, health grade, and likelihood probability.

**Segment/Asset Remaining Life** - An assessment of the remaining life of the segment assuming that the equipment continues in the present operational environment without intervention. The assessment has an associated assessing agent, a likelihood probability, and an error estimate (+/- X hrs).

**Site** – An enterprise-defined entity which can be decomposed into segments and which generates new assets, agents, databases, and measurement locations. A given enterprise can contain many sites. A site can contain many segments. For facility applications, the “site” normally represents a building. For industrial applications, this entity normally represents a physical plant. For fleet applications, this entity normally represents a “mobile platform”, which could be an aircraft carrier or a tank. Each enterprise must uniquely identify its sites by a 4-byte, non-negative site\_id integer to allow multiple sites to utilize the MIMOSA standards without fear of duplication when combining information at the enterprise level. The site\_id is a 4-byte, non-negative integer.

**Segment/Asset/Ordered List Request for Work** – An agent’s requisition to a work management system for work. This is always associated with the segment, asset or ordered list requiring the attention.

**Solution Package** – A pre-defined set of work which can include materials, tools, and labor required to complete the job. Sometimes called a “job pre-plan”.

**Utilization** - Defines the segment in which an asset is being placed into service, tracks asset service history.

**Work {Request/Order/Order Step} Audit** - Defines the status of the work, i.e., started, waiting for parts, scheduled, closed, etc.

**Work Request** – Created and tracked by a work management system, once a request for work has been transmitted and successfully received.

**Work Order** – A collection of one or more work requests or solution packages which are broken into steps, scheduled, and completed over time.

**Work Order Step** – An ordered sequence of smaller tasks on a work order.

**Work Management Type** - Defines general types of work management work requests and work orders (maintenance and operations)

**Work Task Type** - Defines specific types of maintenance or operational adjustments to be made.