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Taxonomy

What is Taxonomy and Its Effects?

Taxonomy is a science of describing, organizing, classifying, and naming items based on similar properties. Many companies today face data integrity issues that stem from data inconsistencies due to the lack of: a common Master Data Management “MDM” system, consistent data standards and data governance model/team across their enterprise.

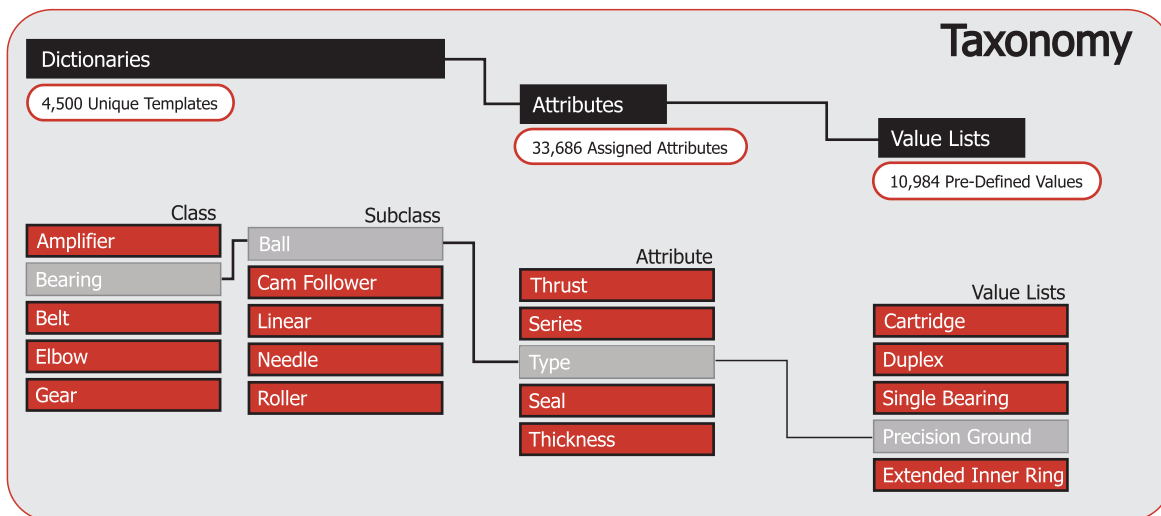
MRG’s taxonomy is the fundamental dictionary for organizing and structuring data sets so that they can be turned into meaningful information that can be reported consistently across the plant, business unit and/or enterprise.

MRG’s Taxonomy has been developed over the last 20 years from Implementing EAM and Inventory Standardization Solutions which act as the foundational base for describing, organizing, and classifying your equipment thus creating the foundation for consistent, standardized, and cleansed master data that can be utilized to make smart business decisions.

Our pre-defined structure and terminology allow us to tailor EAM and Inventory data uniquely to each client. Our software tools give us the flexibility to structure your information so that it makes the most sense to you. We have developed software tools to allow us to effectively clean, standardize and enhance client data to manufacturer specifications.

Taxonomy and Enterprise Asset Management (EAM)

The MRG taxonomy is integral to organizing your EAM system and accelerating reliability implementations. This development of data consistency is integral to our Catapult® software and is the basis of MRG’s extensive content libraries. Catapult® augments any CMMS or EAM system by enabling standardization of master data and optimization of reliability strategies in an independent modeling environment (a.k.a. a sandbox) before they are loaded into the work management system. It also creates a platform for launching and maintaining reliability standards that can be applied to standardized master data from an asset to an enterprise.





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This example details the relationship between Dictionaries (Class/Subclass), Attributes and Value Lists. If you need to build an item description for a Bearing, there are built-in structures for a variety of Bearings.

The Class “Bearing” has several Subclasses: Ball, Cam Follower, Linear, Needle and Roller. The Subclass “Ball” has several Attributes which may be needed to accurately describe it: i.e., Thrust, Series, Seal, Thickness and Type. The Value Lists consist of pre-defined values for each Attribute. The example on the right details some of the Values available for the Attribute “Type.” The result is a standardized, reliable record.

ISO 14224

Our taxonomy fully supports the development and maintenance of ISO 14224 compliant data structures. Adoption of taxonomy within an EAM system vastly increases the power of the system to measure and compare performance across the fleet. Consistent with the objectives of ISO 14224, when properly deployed, taxonomy provides the ability to drill down to the sources of performance variance at the equipment level and to take the findings from that analysis and extend them to all similar assets across the enterprise.

Data Dictionaries

MRG’s Taxonomy contains dictionaries that consist of engineered specifications that list characteristic information related to the item or equipment type. MRG has developed a Class/Sub-Class (Noun/Modifier) dictionary for items and equipment that can be customized to meet our individual client’s needs. Our base dictionary has over 4,500 Class/Sub-Class (noun/modifier) pairs to help structure and standardize your data, each with an average of 7 or more standard attributes. The dictionary averages 13 selection pull down values per attribute and is totally customizable to each client’s needs. The dictionary tool establishes the foundation that helps build item or equipment descriptions consisting of the characteristics that uniquely identify the part or equipment.

Item/Equipment Attributes

Attributes are fields of information unique to an individual item or piece of equipment that help describe or classify the object. Each item or piece of equipment has specific attributes associated to the class/subclass of items and equipment. MRG averages seven attributes per Class/Sub-Class in there libraries. The attributes are also utilized to build consistent descriptions for items and equipment based on the class/subclass assigned.