Managing Complex Machinery Specifications Using MIMOSA CCOM V3.2.3

MIMOSA CCOM V3.2.3 supports the definition of parameters for an equipment class templates, product models, and serialized assets (generically called "equipment items") -- providing a refinery-standardized mnemonic identifier for each parameter. Each parameter can also contain "meta-data", such as the type of parameter (constant, monitored variable, performance characteristic, calculated, etc.), associated unit of measure (UoM), valid min/max range, valid enumerated values, default value, monitored frequency rate, etc. This entire set of parameter groups for an equipment items is called an **O&M Data Sheet** and is illustrated in Figure 1 below:

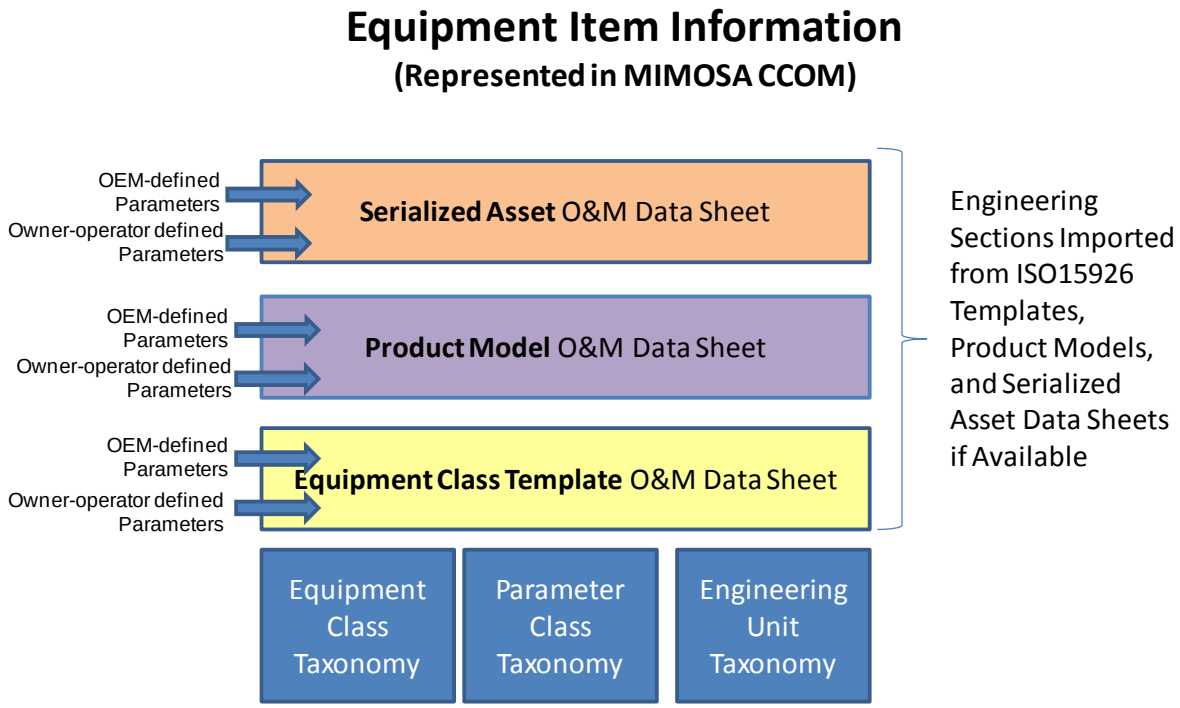

Figure 1. Equipment Item Information Managed by MIMOSA CCOM V3.2.3

MIMOSA CCOM V3.2.3 supports the definition of groups of parameters for equipment items -- providing a refinery-standardized mnemonic identifier for each parameter. Each parameter will also contain "meta-data" as shown in Figure 4, such as the type of parameter. These parameter types include:

PARAMETER TYPES

OEM-Defined Constant Parameters

- Technical Attributes Relevant to O&M from Spec. Sheet
- As-Designed/As-Refurbished Base Performance Characteristics
- As-Built OEM Calibration Settings
- As-Built OEM Configuration Settings

Operator-Defined Constant Parameters

- "Discovered" Technical Attributes Relevant to O&M
- "Discovered" Performance Characteristics
- MRO Purchasing Features
- Default Operating Max/Min Parameters (Hi, HiHi, Lo, LoLo)

Variable Parameters

- Actual Condition Monitoring (Vibration Amplitude/Signature, etc.) Present Value (PV), etc.
- Actual Operation Tag Present Value (PV), etc.
- Calculated Performance Characteristic, KPI, etc. Present Value (PV), etc. (Algorithm-derived value) with Algorithms / Computations
- Calculated KPI's

MIMOSA CCOM V3.2.3 supports the definition of Equipment Class Template O&M Data Sheets which contain these parameters as shown in Figure 2.

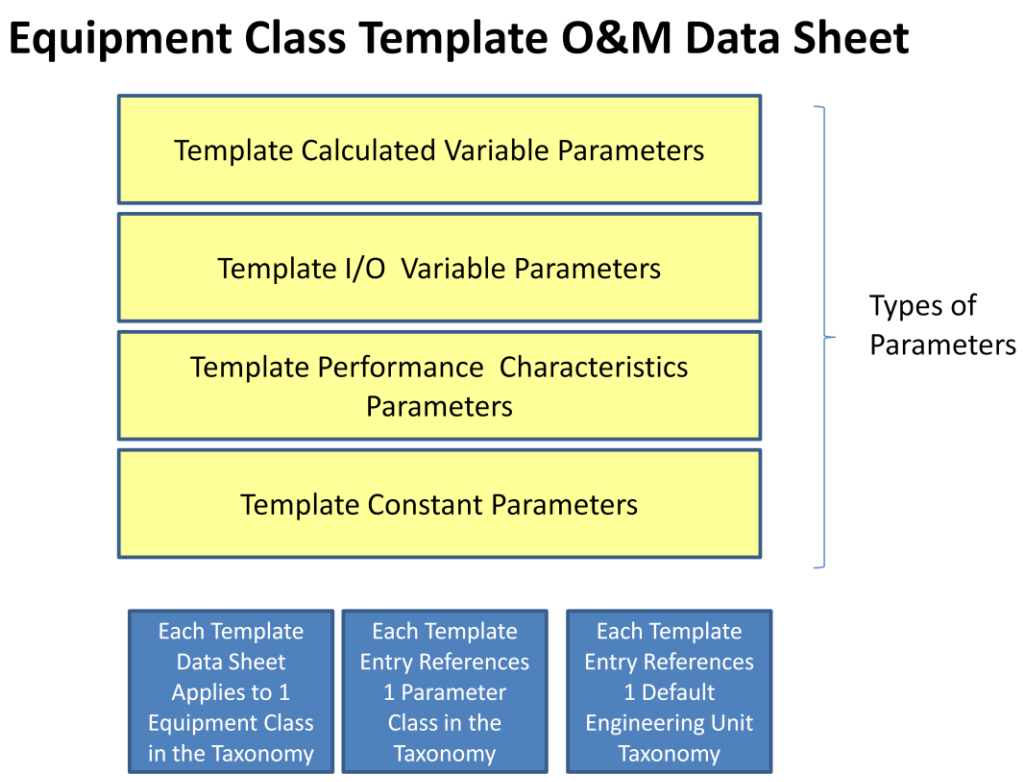

Figure 2. Equipment Class Template O&M Data Sheet Information

MIMOSA CCOM V3.2.3 will then allow these templates to be used as the source basis for Product Model O&M Data Sheets, which can build upon these templates as shown in Figure 3.

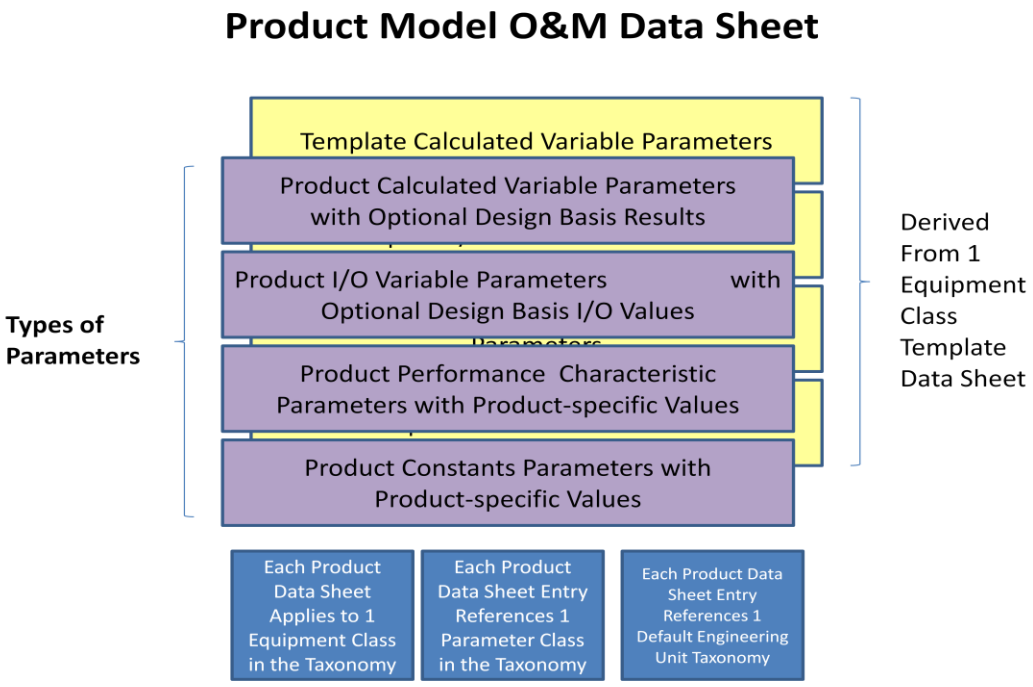

Figure 3. Product Model O&M Data Sheet Information

MIMOSA CCOM V3.2.3 allows users to use a defined Product Model O&M Data Sheet or an Equipment Class Template to create a Serialized Asset O&M Data Sheet as shown in Figure 4.

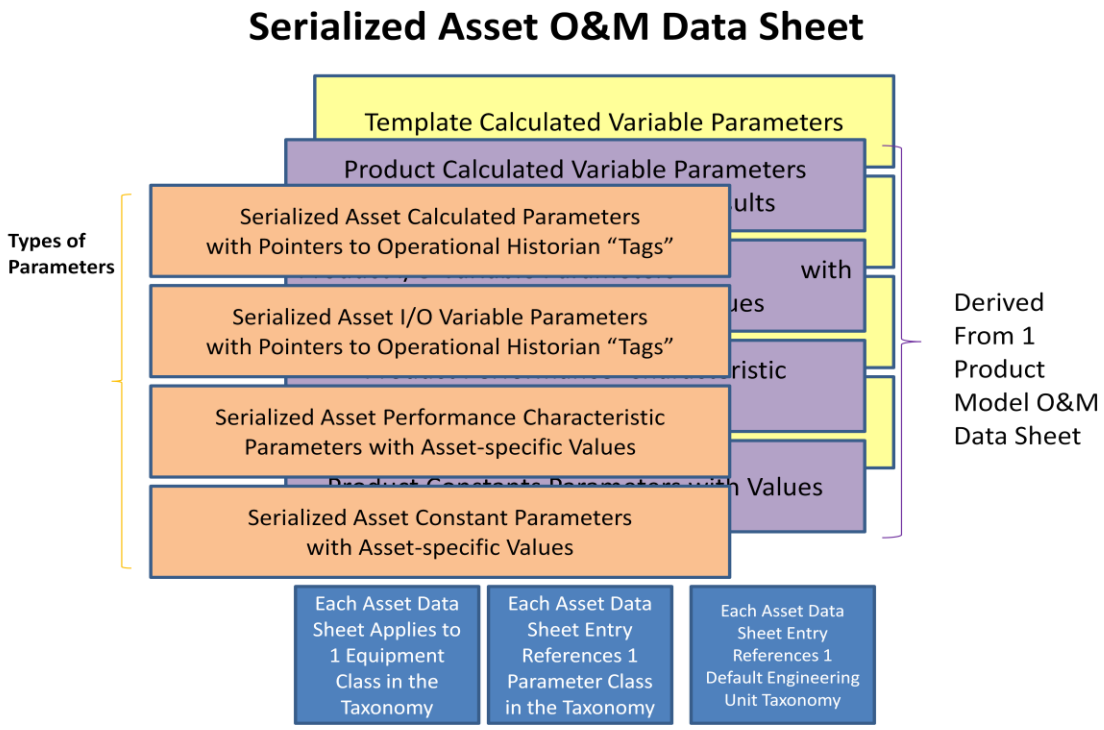

Figure 4. Serialized Asset O&M Data Sheet Information

MIMOSA CCOM V3.2.3 also supports the concept of a functional "segment" instances -- providing a enterprise-standardized mnemonic identifier "tag" for each parameter. Each parameter also can contain virtually unlimited "meta-data", such as the type of parameter (constant, monitored variable, performance characteristic, calculated, etc.), associated unit of measure (UoM), valid min/max range, valid enumerated values, default value, monitored frequency rate, etc.