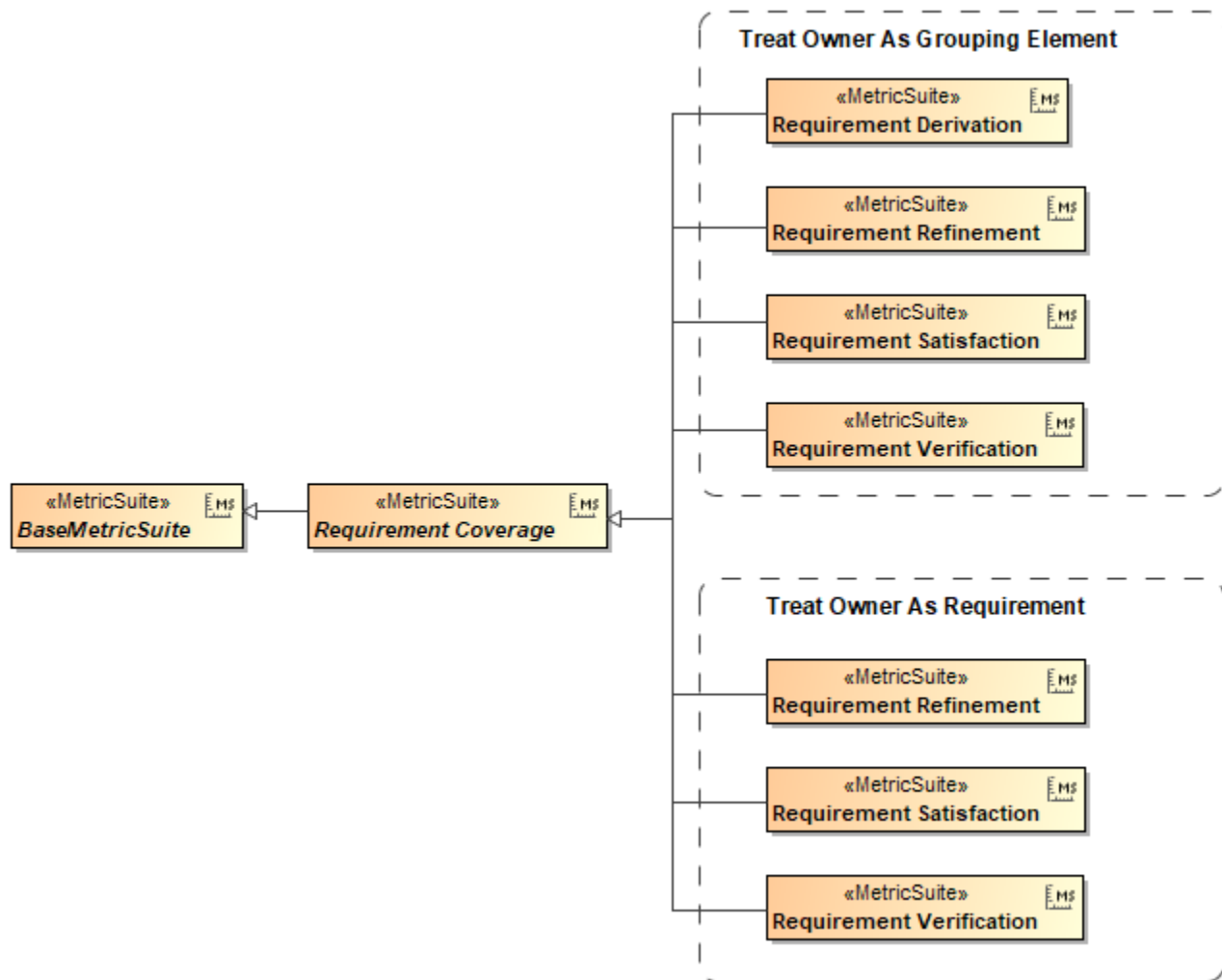# Predefined Metric Suites

A Metric Suite is the collection of parameters and metric definitions used to calculate metrics that evaluate specific aspects of your model. For your convenience, there are seven predefined Metric Suites. The following figure shows predefined Metric Suites and their purposes.

The diagram shows that some Metric Suites treat the owner Requirement as a grouping element, and some treat the owner as a Requirement.

Requirement Derivation (the owner is treated as a grouping element)

This Metric Suite checks the outgoing Derive relationships and tracks whether Requirements are derived or not. The grouping Requirement is not treated as an independent Requirement under the following conditions:

- If the grouping Requirement has an outgoing Derive relationship, the owned Requirements are treated as derived.
- If all the owned Requirements have outgoing Derived relationships, the grouping Requirement is treated as derived.

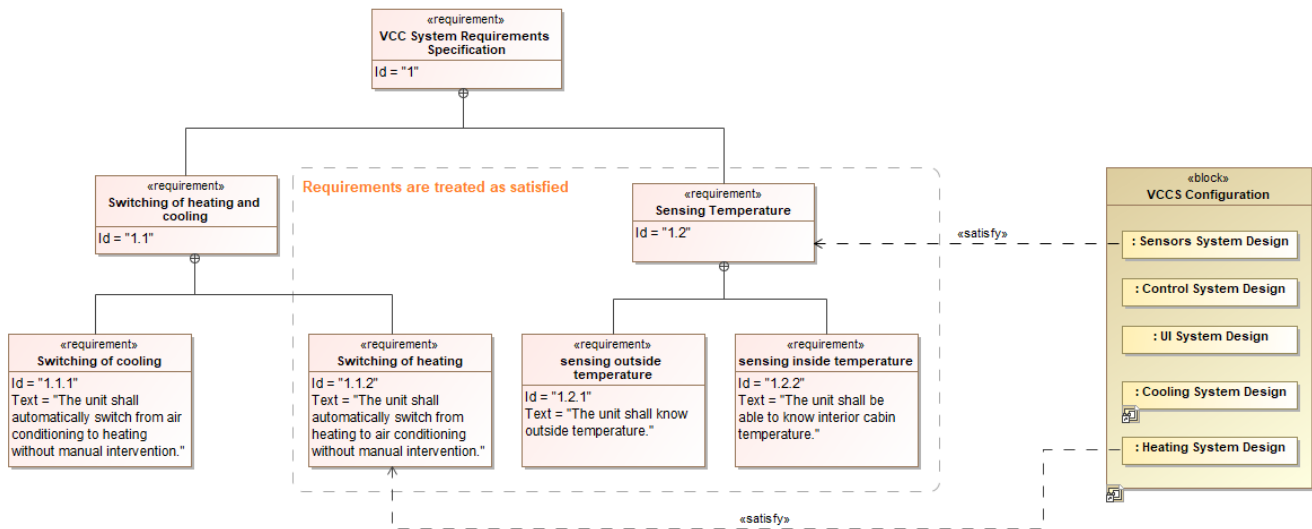**Requirement Refinement (the owner is treated as a grouping element)**

This Metric Suite checks the incoming Refine relationships and tracks whether Requirements are refined or not. The grouping Requirement is not treated as an independent Requirement under the following conditions:

- If the grouping Requirement has an incoming Refine relationship, the owned Requirements are treated as refined.
- If all the owned Requirements have incoming Refined relationships, the grouping Requirement is treated as refined.

Requirement Satisfaction (the owner is treated as a grouping element)

This Metric Suite checks the incoming Satisfy relationships and tracks whether Requirements are satisfied or not. The grouping Requirement is not treated as an independent Requirement under the following conditions:

- If the grouping Requirement has an incoming Satisfy relationship, the owned Requirements are treated as satisfied.
- If all the owned Requirements have incoming Satisfy relationships, the grouping Requirement is treated as satisfied.

The diagram illustrates what Requirements are satisfied if you use the **Requirement Satisfaction** Metric Suite when the owner is treated as a grouping element.

Requirement Verification (the owner is treated as a grouping element)

This Metric Suite checks the incoming Verify relationships and tracks whether Requirements are verified or not. The grouping Requirement is not treated as an independent Requirement under the following conditions:

- If the grouping Requirement has an incoming Verify relationship, the owned Requirements are treated as verified.
- If all the owned Requirements have incoming Verify relationships, the grouping Requirement is treated as verified.

Requirement Refinement (the owner is treated as a Requirement)

This Metric Suite checks the incoming Refine relationships and tracks whether Requirements are refined or not. All Requirements are treated as independent under the following conditions:

- If the grouping Requirement has an incoming Refine relationship, the owned Requirements are not treated as refined unless they have incoming refine relationships.
- If all the owned Requirements have incoming Refined relationships, the grouping Requirement is not treated as refined unless it has an incoming Refine relationship.

Requirement Verification (the owner is treated as a Requirement)
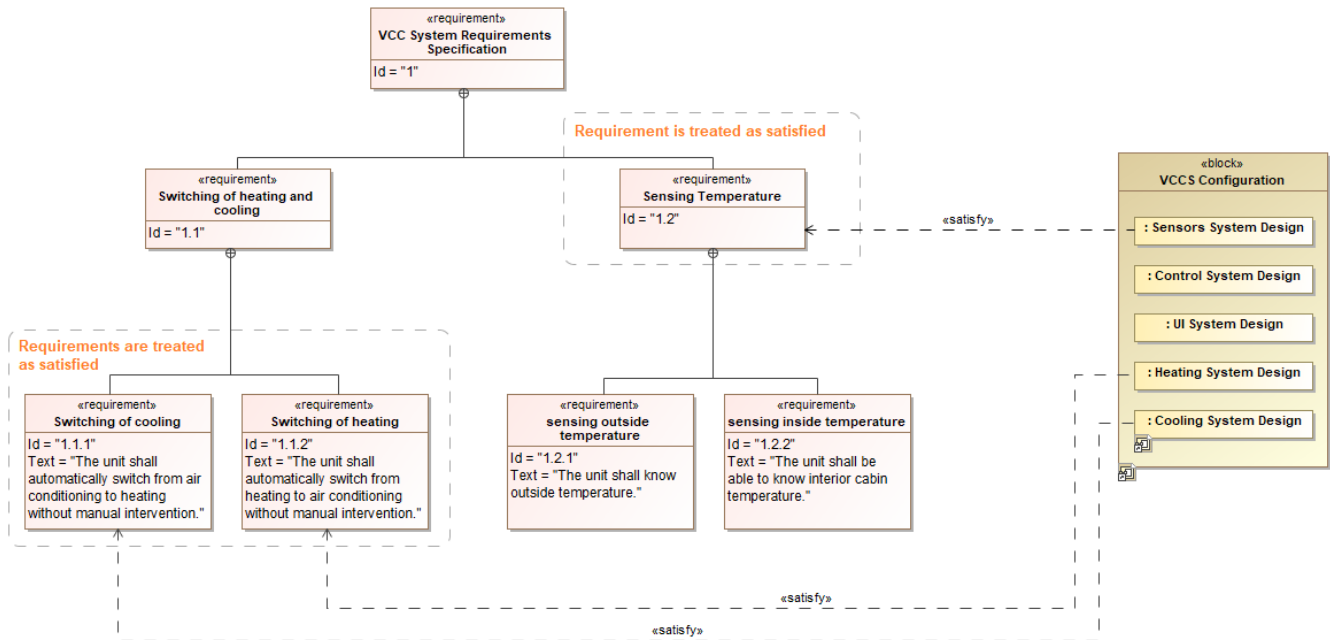
This Metric Suite checks the incoming Verify relationships and tracks whether Requirements are verified or not. All Requirements are treated as independent under the following conditions:

- If the grouping Requirement has an incoming Verify relationship, the owned Requirements are not treated as verified unless they have incoming Verify relationships.
- If all the owned Requirements have incoming Verify relationships, the grouping Requirement is not treated as verified unless it has an incoming Verify relationship.

Requirement Satisfaction (the owner is treated as a Requirement)

This Metric Suite checks the incoming Satisfy relationships and tracks whether Requirements are satisfied or not. All Requirements are treated as independent under the following conditions:

- If the grouping Requirement has an incoming Satisfy relationship, the owned Requirements are not treated as satisfied unless they have incoming Satisfy relationships.
- If all the owned Requirements have incoming Satisfy relationships, the grouping Requirement is not treated as satisfied unless it has an incoming Satisfy relationship.

The diagram illustrates which Requirements are satisfied if you use the **Requirement Satisfaction** Metric Suite when the owner is treated as a Requirement.

Related pages

- Requirement coverage analysis
- Predefined Metric Suites for MagicGrid