

# Structured Metrics Metamodel (SMM)



Structured Metrics Metamodel™

If you have a model, the Structured Metrics Metamodel™ (SMM™) standard allows you to measure it. SMM is an Object Management Group® (OMG®) specification. It specifies a metamodel for defining, representing and exchanging both measures and measurement information related to any structured information model, such as the OMG Meta Object Facility (MOF™) standard.

The SMM standard includes elements representing the concepts to express a wide range of diversified measures. Measures denote the re-usable definitions of how measurements are calculated. Measurements are the results of applying *measures*, via *observations*. *Libraries* maintain measures and their related information, such as *characteristics* and *units-of-measure*, providing re-use in different contexts.

SMM specifies the representation of measures without detailing the representation of the entities measured. SMM defines representations for:

- Direct measures that are taken directly against a measurand. Examples include counts and named measures such as McCabe's cyclomatic complexity or Gross Domestic Product. Values may be imported or queried via SMM *operations*.
- Aggregate measures that are calculated from base measurements on features of a measurand. SMM *operations* specify the feature retrieval. Vote totals, volumes, and net profits can be defined as aggregate measures.
- Transmuting measures that rescale, grade or rank base measurements of a measurand. Fahrenheit to Celsius is a rescaling; clothes sizes of small, medium and large are grades; and customer satisfaction units derived from delivery time is a ranking.

SMM applies in many domains, wherever measurement and modeling applies (e.g., business processes, finance, government and software).

## Want to learn more?

Interested in contributing to the SMM standard? Contact our Business Development team at [bd-team@omg.org](mailto:bd-team@omg.org) to learn more about becoming an OMG member!

## About OMG

The Object Management Group® (OMG®) is an international, open membership, not-for-profit computer industry standards consortium. OMG Task Forces develop enterprise integration standards for a wide range of technologies and an even wider range of industries. OMG's modeling standards enable powerful visual design, execution and maintenance of software and other processes. Visit [www.omg.org](http://www.omg.org) for more information.

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