**ISO/IEC 19506:2012**

**Information technology - Architecture-Driven Modernization (ADM): Knowledge Discovery Meta-Model (KDM)**

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**Introduction**

This International Standard defines a meta-model for representing existing software assets, their associations, and operational environments, referred to as the Knowledge Discovery Meta-model (KDM). KDM facilitates projects that involve existing software systems by insuring interoperability and exchange of data between tools provided by different vendors.

**Summary**

**-What is KDM**?

KDM specifies a comprehensive set of common concepts required for understanding existing software systems in preparation for software assurance and modernization and provides infrastructure to support specialized definitions of domain-specific, application-specific, or implementation-specifications.

**-Some combinations of common terms used in KDM**

**Abstraction:** A view of an object that focuses on the information relevant to a particular purpose and ignores the remainder of the information.

**­Aggregation:** A derived relationship between two elements that are groups of other elements that represents all individual relationships between the grouped elements of the two groups.

**Architecture-Driven Modernization (ADM):** ADM is the process of understanding and evolving existing software assets of a system of interest. ADM focuses at collecting, sharing, utilizing, transforming, presenting, maintaining and storing models of the architectural aspects of existing systems.

**Build:** An operational version of a system or component that incorporates a specified subset of the capabilities that the final product provides.

**Build process:** a process of transforming of project code base into usable applications.

**-Layers of KDM:**

* Infrastructure layer that includes core, KDM and source.
* Program Elements layer that includes code and action.
* Runtime Resource layer that includes data, UI, events and platform.
* Abstraction layer that includes conceptual model, build and structure.