Application of ISO/IEC 11179-5 Based Naming Principles Assist Implementation of Big Data Use Cases

Use Case: Multiple users performing interactive queries and updates on databases with basic availability

Use Case: Move data from external data sources into a horizontally scalable data store, transform it using horizontally scalable processing and return it to the horizontally scalable data store (ELT)

Use Case: Extract, process, and move data from a horizontally scalable data store into other target data stores (e.g Enterprise Data Warehouse or archival data store)

Use Case: Run multiple Big Data Processing (e.g. batch analytics, interactive queries, stream processing, network analysis) on top of shared horizontally scalable distributive processing and data store resources

Use Case: Combine data from heterogeneous Cloud databases and non-Cloud data stores for analytics and data mining

…ETC. Each Use Case exhibits the need for contextualization among heterogeneous data sets from multiple sources

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- The problem: Integration of heterogeneous data to synthesize useful information. This illustrates the third principle of Big Data: *Variety in the range of data types and sources.*

- (Part of) The Solution: Standardized name components are a means to discovery of matches of similar information from disparate sources. Examples: Object Class Terms derived from taxonomies; Representation Terms characterizing the typing rules.