## **List of Acronyms**

## > Concepts

ADT Abstract data type

AIDA Amdocs Intelligent Decision Automation
AKT Advanced Knowledge Technologies

AM Access Methods

ANSI SQL American National Standards Institute standardized Structured Query

Language

API Application Programming Interface
ArM Archive Manager based on MDIM

ArM32 32-bit realization of Archive Manager based on MDIM
ASCII American Standard Code for Information Interchange

BSBM Berlin SPARQL Benchmark
BSBM Berlin SPARQL Bench Mark

BST Binary Search Trees
BTC Billion Triple Challenge

CI-BER Cyber-infrastructure for a Billion Electronic Records

DAML+OIL DARPA Agent Markup Language + Ontology Inference Layer

DB DataBase

DB-models Models for organization of the data in the DataBases

DBMS Data Base Management System

DOD Department of Defense

DVD Dissociated Vertical Deviation

ebXML Electronic Business using eXtensible Markup Language

EC Electronic Collections
ER-model Entity – Relationship model
GIS Geographic Information Systems

GUI Graphical User Interface
HTML HyperText Markup Language
HTTP Hypertext Transfer Protocol

ID IDentificator
IS Information space

KIF Knowledge Interchange Format
LDIF Linked Data Integration Framework
MDAM Multi-Dimensional Access Method

MDIM Multi-Dimensional Information Model

MPGN Multi-layer Pyramidal Growing Networks of information spaces

NARA National Archives & Records Administration

NDM Network Data Model

NLA Natural Language Addressing

NL-access Using Natural Language Addressing

NL-Addressing Natural Language Addressing

NL-archives Data Base based on Natural Language Addressing

NLARead Function of the module WordArM for accessing the information by Natural

Language Addressing

NL-ArM NL-addressing Archive Manager

NLAWrite Function of the module WordArM for storing the information by Natural

Language Addressing

NL-index Index of Natural Language Addresses

NL-path A path defined by natural language word or phrase
NL-storing Storing based on Natural Language Addressing
NL-version Realization based on Natural Language Addressing

NL-words Natural Language Words

N-Quads RDF quadruples

NSF National Science Foundation

N-triples RDF triples

ODBMS Object DataBase Management Systems
OKBC Open Knowledge Base Connectivity
OLAP OnLine Analytical Processing

ORDBMS Object-Relational DataBase Management Systems

OWL Web Ontology Language
PC Personal Computer
PHT Perfect Hash Tables

RAM Random Access Memory (main memory of the computer)

RDBMS Relational DataBase Management Systems

RDF Resource Description Framework

rdfDB RDF Database

RDF-Read Function of the module RDFArM for accessing the information by Natural

Language Addressing

RDFS RDF schema

RDF-Write Function of the module RDFArM for accessing the information by Natural

Language Addressing

RSO model Relation-Subject-Object model

SD cards Secure Digital cards

SGML Standard Generalized Markup Language
SPARQL SPARQL Protocol and RDF Query Language

SRO model

UML

Unified Modeling Language

UNICODE

Universal encoding standard

UNL model

URI

Uniform Resource Identifier

URLs Uniform Resource Locators

USB Universal Serial Bus

W3C World Wide Web Consortium XML Extensible Markup Language

## > Program tools

AllegroGraph High-performance persistent graph database
Apollo Class system is modeled according to the OKBC

ArMSpeed Specialized tool for NL-addressing of a document data base

Berkeley DB A tool for storing RDF information

Chimaera Software system that supports users in creating and maintaining distributed

ontologies on the web

DOE Differential Ontology Editor; simple ontology editor which allows the user

to build ontologies according to the methodology

DOLCE Descriptive Ontology for Linguistic and Cognitive Engineering; the first

module of the WonderWeb Foundational Ontologies Library (WFOL)

Firebird A relational database that runs on Windows, Linux, and a variety of UNIX

platforms

FrameNet Lexical resource for English, based on frame semantics

GDM Graph Data Model

GGL Graph Database System for Genomics
GMOD Graph-oriented Object Manipulation

GOAL Graph-based Object and Association Language

GOOD Graph Object Oriented Data Model
Gram Graph Data Model and Query Language

Grinder WordNet compiler for converting lexicographic format in to internal DB

format

GROOVY Graphically Represented Object-Oriented data model with Values

HyM Hypernode Model

ICOM Intelligent Conceptual Modeling

ICON Instrumental Complex for Ontology designatioN

INFOS INtelligence FOrmation System

KAON Karlsruhe ontology - open-source ontology management system targeted

for business applications

K-Infinity Knowledge editor broad support for object-oriented knowledge modeling

LDM Logical Data Model

LinkFactory Workbench Originally designed for very large medical ontologies

Medius Visual Ontology Modeller UML-based ontology modeling tool

Mikrokosmos Part of the Mikrokosmos knowledge-based machine translation system

currently under development at the Computer Research Laboratory, New

Mexico State University

OEM Object Exchange Model

OilEd Simple editor that allows the user to create and edit OIL ontologies

Omega Terminological ontology constructed at USC ISI as the reorganization and

synthesis of WordNet

OntoArM Experimental module for storing ontologies (small RDF triple sets) using

NL-addressing

OntoEdit Built on top of a powerful internal ontology model

Onto-linguistic research integrated environment for NLP using complicated

structured ontological models

OntoLingua Oriented toward the authoring of ontologies by assembling and extending

ontologies obtained from the library

OSTP Office of Science and Technology Policy
PaMaL Object Oriented Pattern Matching Language

PROMT Based on an extremely general knowledge model and therefore can be

applied across various platforms

PropBank Proposition Bank - focuses on the argument structure of verbs, and provides

a complete corpus annotated with semantic roles, including roles

traditionally viewed as arguments and as adjuncts

Protégé Free, open source ontology editor and knowledge-base framework

RDFArM Experimental module for storing large RDF triple or quadruple datasets

RDFArM-MP Multi processor simulation of RDFArM work

RDFedt Freeware module for creating complex Resource Description Framework

(RDF) files

Sensus Terminology taxonomy, as a framework into which additional knowledge

can be placed

Sesame An open-source framework for querying and analyzing RDF data

SMART Self-Monitoring, Analysis and Reporting Technology; Based on an

extremely general knowledge model and, therefore, can be applied across

various platforms

SUMO Suggested Upper Merged Ontology

WebODE Extensible ontology-engineering suite based on an application server,

whose development started in 1999 and whose support was discontinued in

2006

WebOnto Java applet coupled with a customized web server which allows users to

browse and edit knowledge models over the web

WordArM Experimental module for storing thesauruses using NL-addressing

WordNet Large lexical database of English

YARS Yet Another RDF Store