

Supplementary Material: Terminology and Abbreviation

For the purposes of this paper, the following terms and definitions apply. For more details on the definitions specified in this paper, please refer to OGC® CDB Core Standard: CDB Terms and Definitions at https://portal.opengeospatial.org/files/?artifact_id=72714.

Term	Definition
3D	Three Dimensional
API	Application Program Interface
Esri	Environmental Systems Research Institute
CDB	Common Database (OGC standard)
City GML	CityGML is an open standardised data model and exchange format to store digital 3D models of cities and landscapes. For more information please see https://www.citygml.org/
DGIWG	Defense Geographic Information Working Group
DGGS	Discrete Global Grid System: spatial reference system that uses a hierarchical tessellation of cells to partition and address the globe. “cell” aka “tile” or “geocell”
DIGEST	The Digital Geographic Information Exchange Standard
DIS	Distributed Interactive Simulations [IEEE Std 1278TM]
FDD	Feature Data Dictionary. A Feature data dictionary is a collection of descriptions of the Feature objects or items in a Feature data model for the benefit of programmers and others who need to refer to them.
Feature	Abstraction of real world phenomena NOTE A feature may occur as a type or an instance. Feature type or feature instance is used when only one is meant. [adapted from ISO 19101]
FSC	Feature Sub-Code
Geopackage	An OGC GeoPackage (GPKG) is an open, non-proprietary, platform-independent and standards-based data format for geographic information system implemented as a SQLite database container.(OGC standard)
GIS	Geographic Information System
GML	Geography Markup Language (OGC/ISO standard)
GSMoel	A Geospecific model is instanced once and only once within a CDB. Geospecific models usually correspond to unique (in either shape, size, texture, materials or attribution), man-made, real world 3D features.

GTModel	Geotypical model is instanced multiple times within a CDB data store. Geotypical models correspond to representative (in shape, size, texture, materials and attribution) models of real-world manmade or natural 3D features.
HLA	High-Level Architecture Standard [IEEE Std 1516TM]
ISO	International Standardisation Organisation
ISO/IEC	It is a joint technical committee of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).
IT	Information Technology
JPEG	Joint Photographic Experts Group; JPEG: The informal name of the committee which created this Specification. It is a commonly used method of compression for digital images. The degree of compression can be adjusted, allowing a selectable trade-off between storage size and image quality. Please see https://www.w3.org/Graphics/JPEG/itu-t81.pdf
JT	Joint Training
LoD	Level of Details. Representations of the same thing that differ only in the amount of fidelity. An LOD is said to be coarse if it contains little detail or fine if it contains considerable detail.
M&S	Modeling and Simulation
MModel	Moving 3D models such as vehicles
NAS	NSG Application Schema
NATO	North Atlantic Treaty Organization
NGA	National Geospatial-Intelligence Agency
NSG	National System for Geospatial-Intelligence
OGC	Open Geospatial Consortium, Inc.
OpenFlight	OpenFlight (or .flt) is a 3D geometry model file format designed as a non-proprietary format for use by real-time 3D visual simulation image generators. Please see http://www.presagis.com/products_services/standards/openflight
PEO STRI	U.S. Army Program Executive Office for Simulation Training and Instrumentation
RGB	RGB is a file extension for an image file created on a Silicon Graphics workstation. RGB files can contain Run Length Encoding (RLE) compressed or uncompressed images in grayscale or color, and also supports optional transparency.
SE	Synthetic Environment
SEDRIS	Synthetic Environment Data Representation and Interchange Specification

Shapefile	The shapefile format is a popular geospatial vector data format for geographic information system (GIS) software. It is developed and regulated by Esri as a (mostly) open specification for data interoperability among Esri and other GIS software products.
SOS	Sensor Observation Service (OGC standard)
SWG	Standard Working Group
SE	Synthetic Environment
GeoTIFF	Geo Tagged Image File Format. GeoTIFF is a public domain metadata standard which allows geo-referencing information to be embedded within a TIFF file. The potential additional information includes map projection, coordinate systems, ellipsoids, datum, and everything else necessary to establish the exact spatial reference for the file. Please see http://trac.osgeo.org/geotiff/
UAV	Unmanned Aerial Vehicle
UHRB	Ultra-High Resolution Building
UML	Unified Modeling Language (OMG standard)
USSOCOM	US Special Operations Command
WCS	Web Coverage Service (OGC standard)
WFS	Web Feature Service (OGC standard)
WGS-84	WGS 84 is the standard U.S. Department of Defense definition of a global reference system for geospatial information and is the reference system for the Global Positioning System (GPS).
WMS	Web Map Service (OGC standard)
XML	Extensible Markup Language (W3C standard) In computing, Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. Please see https://www.w3.org/TR/REC-xml/
