

About This Standard

Mandated

Standard Identifier BPCGM01.00

Title of Standard

BIIF Profile for Computer Graphics Metafile, Version 01.00, 30 June 2004

Standards History

Introduced to Registry	Date Emerging	Date Mandated	Last Status Update	Last Status Review	Inactive/Retired
2006-10-25	n/a	2006-10-25	2006-10-25	2006-10-25	n/a

Standards Body [DoD](#)

[Broken Link?](#)

URL to Access or Acquire <http://jitc.fhu.disa.mil> or <http://gwq.nga.mil/ntb/baseline/docs/bpcgm/index.html>

Working Group

Primary Owner Geospatial Intelligence TWG (GWG)

Secondary Interest Application / Messaging TWG

Service Area GEOINT: Still Imagery

KIPs No KIP Found

Standard Applicability

2006-10-25

This BPCGM01.00 profile defines a subset of CGM elements, sets limits for generation and interpretation behavior according to the rules for profile definition defined in ISO/IEC 8632. The BPCGM profile defines a version 1 CGM suitable for use in annotation of digital imagery such as that defined by BIIF ISO/IEC 12087-5: 1998. The Basic Image Interchange Format (BIIF) provides a file format that is suitable for the interchange, storage, and retrieval of map and imagery information. The file format consists of a file header and associated image(s), symbol(s), text and/or associated data in a way that is compatible between systems of different architectures and devices of differing capabilities and design. Symbols within a BIIF file may consist of ISO/IEC 8632-based Computer Graphics Metafiles (CGMs). The CGM provides a metafile format suitable for the storage and retrieval of symbolic information. The CGM format consists of a set of elements that can be used to describe graphical and textual symbols in a way that is compatible between systems of different architectures and devices of differing capabilities and design.

Standard Abstract

2006-10-25

Computer Graphics Metafile (CGM) is a graphics data interchange standard which defines a neutral computer interpretable representation of 2D graphical (pictorial) information in a manner that is independent from any particular application or system. The purpose of the standard is to facilitate the storage and retrieval of graphical information between applications, software systems, and/or devices. A CGM can contain: vector graphics, raster graphics, and text. This

BPCGM01.00 profile defines a subset of CGM elements, sets limits for generation and interpretation behavior according to the rules for profile definition defined in ISO/IEC 8632. The CGM structure is explained fully in the ISO/IEC 8632 document. The BPCGM is functionally equivalent to, and replaces Mil-Std-2301A, Computer Graphics Metafile (CGM) Implementation Standard for National Imagery Transmission Format Standard.

Profiling Questions

GEOINT: Still Imagery • Does your system exchange graphically annotated still imagery, raster or gridded data with external systems?

Products Incorporating This Standard

Companies with commercially available implementations/products include: BAE Systems, Harris Corporation, ITT Industries, Leica Geosystems, PAR Government Systems, Paragon Imaging, PhotoTelesis, Raytheon, Recon Optical, Research Systems, Inc. (RSI), Sensor Systems, Inc., and Technology Services Corporation.

Relevant Information

This standard supersedes Mil-Std-2301A. The BPCGM is functionally equivalent to, and replaces Mil-Std-2301A, Computer Graphics Metafile (CGM) Implementation Standard for National Imagery Transmission Format Standard.

Implementation Guidance

See STDI-0005, Implementation Practices of the NITFS, available at: <http://www.gwg.nga.mil/ntb/baseline/docs/ipon/index.html> The STDI-0005 document is a compilation of common practices, conventions, and guidelines for implementing the National Imagery Transmission Format Standard (NITFS). The objective is to help promote common specification and application of the NITFS suite of standards by all fielded and developmental digital imagery-related systems. It describes common conventions for implementing the suite of NITFS standards that promote and sustain NITFS compliance and interoperability for the production, storage, cataloging, discovery, selection, exploitation, and dissemination of digital imagery, raster map, and other related raster products.

Standard Selection Criteria

Net-Centric Interoperability

The BIIF Profile for Computer Graphics Metafile (BPCGM) tailors the ISO/IEC 8632-1 and ISO/8632-3 Computer Graphics Metafile (CGM) standards for use with ISO/IEC 12087-5, Basic Image Interchange Format (BIIF). The BPCGM is used with the National Imagery Transmission Format (NITF) and the NATO Secondary Imagery Format (NSIF), both of which are implementation profiles of BIIF that are intended to promote interoperability for the exchange of imagery among military Command, Control, Communications, and Intelligence (C3I) systems. CGM is a graphics data interchange standard which defines a neutral computer interpretable representation of 2D graphical (pictorial) information which is independent from any particular application or system.

Technical Maturity

The standard is technically mature and stable, to include established conformance test criteria, tools, services and technical consultation for the implementation profile used by the NITFS. Existing commercial products conforming to this profile include, but not limited to: Paragon Imaging, Inc.

Electronic Light Table Products (PocketELT ELT/4000 ELT/1500 Global Image Viewer ELT/5500 ELT/View Image Light Table (ILT) Plus and ELT/5500 Pro) BAE VITecELT ERDAS Imagine Sensor Systems, Inc. RemoteView Professional PhotoTelesis Image and Research Systems, Inc. The Environment for Visualizing Imagery (ENVI). The NITFS profile of this standard has been part of the NITFS suite of standards since 1994 and part of STANAG 4545, NATO Secondary Imagery Format (NSIF) since 1998. A follow on standard for use within NITFS/NSIF is not currently in consideration. A sunset status should not yet be added for this currently mandated (for use with NITFS/NSIF) standard implementation profile.

Public Availability

The BPCGM01.00 is freely available at no charge from the following URLs:
ISO/IEC International Register of Graphical Items
(http://jitic.fhu.disa.mil/nitf/graph_reg/welcome.html).
<http://gwg.nga.mil/ntb/baseline/docs/bpcgm/index.html>

Implementability

The BIIF Profile of CGM (ISO/IEC 8632) is widely implemented by a variety of systems (data production, dissemination, library/archive, exploitation work stations, etc.) supporting the NITFS and NSIF suite of standards. Sample data, sample software, technical consultation, and conformance testing services are available to government and commercial implementers of the standard by contacting the NITFS Test Facility operated by the Joint Interoperability Test Command (JITC) on behalf of the National Geospatial-Intelligence Agency (NGA). Contact information available at <http://jitic.fhu.disa.mil/nitf/nitf.htm>, 1-800-538-5482, x8-5458, and jitcn@disa.mil. A list of government and commercially developed conforming implementations of the NITFS suite of standards is available at <http://jitic.fhu.disa.mil/nitf/register.html>.

Authority

The ISO/IEC 8632 series of standards was developed by ISO/IEC Joint Technical Committee 1/SubCommittee 24, Computer Graphics and Image Processing. The process for maintaining and developing the standard is an internationally open process by members of national bodies and liaison organizations participating with ISO/IEC. The international documentation, BPCGM01.00, was developed jointly by the NTB and NATO standardization activities (STANAG 4545 Custodial Support Team), and placed on the Graphical Items Register through international ballot. The NTB has broad participation across the DoD/IC with open participation by commercial industry.

Standard Type Non-Military

Keywords for Search None