

NAS9300-200

Long Term Archiving and Retrieval
of digital technical product documentation
such as 3D, CAD and PDM data

PART 200: Fundamentals and Concepts for Long Term Archiving and
Retrieval of Products Structure Information

THIRD ANGLE PROJECTION	CUSTODIAN ENGINEERING MANAGEMENT COMMITTEE	REVISION NEW
PROCUREMENT SPECIFICATION NONE	TITLE LONG TERM ARCHIVING AND RETRIEVAL OF DIGITAL TECHNICAL PRODUCT DOCUMENTATION SUCH AS 3D, CAD AND PDM DATA PART 200: FUNDAMENTALS AND CONCEPTS FOR LONG TERM ARCHIVING AND RETRIEVAL OF PRODUCT STRUCTURE INFORMATION	CLASSIFICATION STANDARD PRACTICE NAS9300-200 SHEET 1 OF 41

FOREWORD

1. This standard was prepared jointly by AIA, ASD-STAN, PDES, Inc., and the PROSTEP iViP Association.
2. The PROSTEP iViP Association is an international non-profit association in Europe. For establishing leadership in IT-based engineering it offers a moderated platform to its nearly 200 members from leading industries, system vendors and research institutions. Its product and process data standardization activities at European and worldwide levels are well known and accepted. The PROSTEP iViP Association sees this standard and the related parts as a milestone of product data technology.
3. PDES Inc is an international non-profit association in USA. The mission of PDES Inc is to accelerate the development and implementation of ISO 10303, enabling enterprise integration and PLM interoperability for member companies. PDES Inc gathers members from leading manufacturers, national government agencies, PLM vendors and research organizations. PDES Inc. supports this standard as an industry resource to sustain the interoperability of digital product information, ensuring and maintaining authentic longevity throughout their product lifecycle.
4. Readers of this standard should note that all standards undergo periodic revisions and that any reference made herein to any other standard implies its latest edition, unless otherwise stated.
5. The Standards will be published under two different standards organizations using different prefixes. ASD-STAN will publish the standard under the number EN 9300–200. AIA will publish the standard under the number NAS9300–200. The content in the EN9300 and NAS9300 documents will be the same. The differences will be noted in the reference documentation (i.e. for EN9300 Geometric Dimensioning & Tolerancing will be referenced in ISO 1101 and ISO 16792, and for NAS9300 the same information will be referenced in ASME Y14.5 and Y 14.41). The document formatting etc., will follow that of the respective editorial rules of ASD-STAN and AIA.

REVISION

NEW

NAS9300-200
SHEET 2



Documents

Document Sharing Hub

TABLE OF CONTENTS

1	PREFACE	5
1.1	Justification	5
1.2	Long Term Archiving and Retrieval of PDM data in NAS9300 context	5
1.3	Location in NAS9300 document structure	5
2	Scope.....	6
2.1	PDM data in NAS9300 context	6
2.2	Objectives and scope of application	7
2.3	Out of Scope	8
3	Normative References	9
4	General Terms, Definitions and Abbreviations.....	9
4.1	General Terms and Definitions.....	9
5	Applicability	13
6	Fundamentals and concepts for long term archiving and retrieval of PDM data	13
6.1	Usage of basic NAS9300 principles.....	13
6.2	Unique identification	15
6.3	Retention trigger points	15
6.4	Data to be retained.....	15
6.5	PDM and Product Life Cycle Stages	18
6.6	Display / re-use of LTA&R format in active PDM systems.....	22
7	Requirements for customization of off-the-shelf PDM systems	22
8	Methods of implementation of the given requirements	22
8.1	Configured Baselines.....	23
8.2	Process Documentation.....	24
8.3	Essential Data in Relation to Business Scenarios to Be Supported	24
8.4	Qualification methods for long term archiving and retrieval of PDM data	26
9	Preservation Planning for archived PDM information.....	28
9.1	Preservation Planning Introduction	28
9.2	General Provisions	29
9.3	Change Management	31
9.4	Configuration Management	32
9.5	Data Management	33
9.6	Product Structure Management	33
9.7	Product Data Database	34
10	Administration and monitoring	34
11	Definition of Archive Information Packages for PDM Data	35
11.1	General.....	35

REVISION

NEW

NAS9300-200
SHEET 3



Document Sharing Hub

11.2	Content Information	35
11.3	Packaging Information	36
11.4	Preservation Description Information	36
11.5	Digital Signature Information.....	37
12	Conformance Classes	37
12.1	Concept of Conformance Classes	38
12.2	Three Conformance Levels are used in this standard.....	38
12.3	Benefits of Conformance Levels	39
13		40

FIGURES

Figure 1— PDM Data and primary technical data	7
Figure 2 — Life cycle view of PDM data.....	16
Figure 3 — PDM data within product life cycle	18
Figure 4 — Data characteristics per view.....	19
Figure 5 — Detailed data characteristics per view	20
Figure 6 — Identify PDM Data Sub-Structure to be archived	23
Figure 7 — Links between Use Cases, essential information and NAS9300 parts	25
Figure 8 — Migration Strategies.....	30
Figure 9 — Relationship of Conformance Class to NAS9300-200 Parts.....	38

TABLES

Table 1 — Mapping table for part 200 structure.....	6
Table 2 — Subparts of NAS9300-200 series and their generic characteristics	21
Table 3 — Scaled conformance levels in accordance to specific requirements	39

ANNEXES

ANNEX A — Mapping table: Notional Information Objects in relation to product life cycle views.....	41
--	----

REVISION

NEW

NAS9300-200

SHEET 4



Documents

Document Sharing Hub

1 PREFACE

The NAS9300 series defines long-term archiving and retrieval (LTA&R) for digital product data. Product data comprises both the content data defining a product and the respective metadata.

In complex product environments the metadata are managed in a product data management (PDM) system. Consequently, the NAS9300 series will comprise a series of domain specific standards to deal with LTA of PDM data.

1.1 Justification

LTA&R of only the original technical data defining a product does not give sufficient information to satisfy the obligation to provide supporting documents for proof of evidence, since essential usage information for these data will be missing. Hence evidential weight of these data in most cases can only be guaranteed by long term archiving and retrieval of a minimum set of the respective metadata.

Two business scenarios describe the basic requirements for LTA&R of PDM data:

1) Assure evidence of product data for verification, certification, or product liability.

This is the minimum requirement for LTA&R and provides sufficient product management data to indicate the proper usage of the primary technical data. Since this is limited to static information on defined product instances and their configurations and is only intended to enable viewing of these data, it can be extracted from PDM systems with attached primary technical data in a viewing format. However this will not allow the reuse of the PDM data.

2) Enable reuse of the archived product data.

LTA&R of PDM data which enables reuse of product data over the complete life cycle of a product is needed for business requirements which increasingly assume the availability of this data. However, this requires deeper integration of processes and PDM data compared to the previous scenario.

More detailed information on these scenarios and their use cases is given in the detailed NAS9300-200 Parts.

1.2 Long Term Archiving and Retrieval of PDM data in NAS9300 context

Since the NAS9300 series defines LTA&R for digital product data, it addresses both the data defining a product and the associated management data, including:

- Product usage of the primary technical data,
- Organization/structure of the data,
- Configuration management of the data (effectivity, status, etc.).

The product management data describe the primary technical data generically in a PDM framework, independently of their specific type (CAD data, for example), which are described in the domain specific parts of NAS9300 series.

1.3 Location in NAS9300 document structure

The NAS9300-200 series of domain specific parts within the NAS9300 context are dedicated to product management data. All concepts of the generic process parts of NAS9300 apply unless stated otherwise.

Reflecting the standard NAS9300 document structure, the NAS9300-200 series is structured as a Part 200 describing the fundamentals and concepts for the series, followed by several domain specific sub-parts.

The documents listed below define metadata requirements for specific PDM domains:

REVISION

NEW

NAS9300-200
SHEET 5



Documents
Document Sharing Hub

Table 1 – Mapping table for part 200 structure

Data domain specific part	Document Number
Product Management Data in an as designed view	NAS9300-210
Product Management Data in an as planned view	NAS9300-220
Product Management Data in an as delivered/ maintained view	NAS9300-230
Product Management Data In-development (including prelim design review, critical design review, etc.)	NAS9300-240
Change documentation	NAS9300-250

2 Scope

2.1 PDM data in NAS9300 context

In most modern industrial environments, product data is maintained and managed using product data management (PDM) systems. In general, these systems:

- Manage the use of the primary technical data contained, for example, in CAD models and documents,
- Allow organization of primary technical data into structures to represent the relevant products,
- Support definition and maintenance processes for products.

Within the NAS9300 context, several domain specific parts address LTA&R for the primary technical data (e.g. CAD, CAx, Documents) as generated by the relevant technical "authoring" systems. The NAS9300-200 series provides information for LTA&R of product management data for the relevant documents, structures and processes.

Note: The terms "PDM data" and "product management data" are synonymous.

This is illustrated in the figure below.

REVISION

NEW

NAS9300-200

SHEET 6



Documents

Document Sharing Hub

LTA for PDM Data

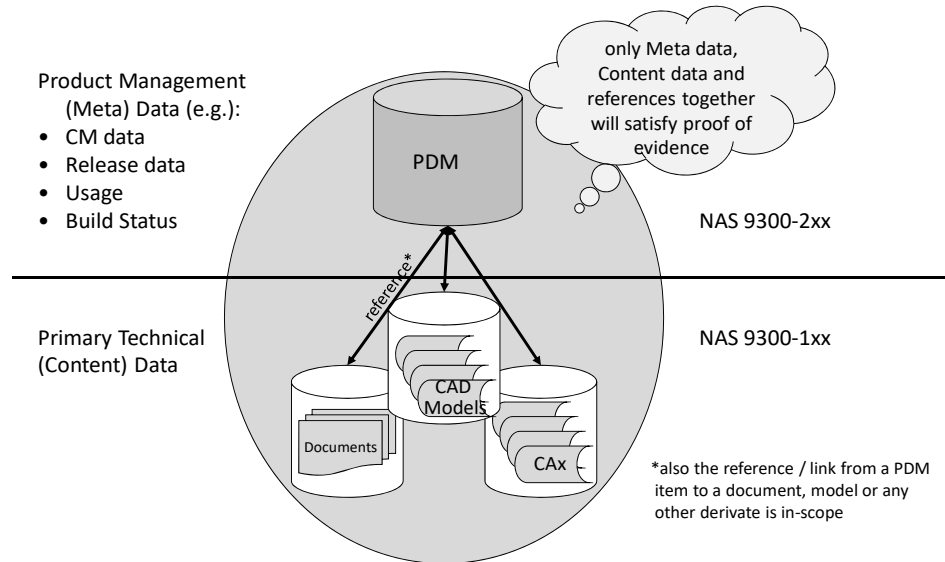


Figure 1— PDM Data and primary technical data

2.2 Objectives and scope of application

This part covers long term archiving and retrieval (LTA&R) for product management data and relevant process related information (e.g. product structure requirements). Regarding process related information, only the process results are considered in scope as these have stable and static characteristics. The workflow used to create the information is not in scope. The resulting information, e.g. change authorization document, approvals/signatures, CAD models, attribute data; are in scope.

Product management data closely reflects the local business and data handling processes of each company. Therefore, an open standard can define only a common generic subset of the overall requirements. Other data that are only of local relevance or dependent on the local application environment are defined by local procedures. For each application environment, the complete set of standards, methods, and procedures related to the archived product management data shall be defined and documented by open standards, industry standards, or company standards and procedures. It is strongly recommended to use open standards whenever possible to ease data exchange, sharing, archiving, and ability to audit.

Three main objectives for LTA&R of product management data are:

- Enable the proper retrieval of archived primary technical data when performing queries relative to product structure, relationships, effectivity, status, etc.,
- Preserving the links between primary technical data and the associated product management data,
- Providing all relevant properties of primary technical data as contained within the associated product management data.

REVISION

NEW

NAS9300-200

SHEET 7



Documents

Document Sharing Hub

2.2.1 Architecture Definition

The product management data and the primary technical data may be managed in different environments (e.g. a database system for the product management data and a file system for the primary technical data with a reference in the database to the unique identifier and location for the file). In many cases, the primary technical data are held by the primary generating systems (e.g. CAD, systems engineering tool set) attached to a PDM backbone architecture.

The relationship between product management data and primary technical data is typically established by referencing mechanisms. The referencing mechanisms and the systems managing them shall be taken into account when archiving.

This can be done by describing the complete architecture of systems involved in the management of the relevant information and by defining common system requirements and procedures such as synchronization, applied quality level, security requirements, and auditing. The overall capability of the architecture requires all systems within the architecture to comply with the common requirements.

The complete architecture definition shall comply with requirements defined in the applicable NAS9300 common process parts.

2.2.2 Archival of frequently changing PDM data

Product management data frequently changes and methods are employed to properly document the changes, and to provide traceability to authorizing change documentation.

The long term archiving process may be applied to frequently changing data to record its condition at a specific point in time, as defined by the management process. The granularity and timing of long term archival processes can vary depending on relevant business processes, the system architecture, and the application environment (i.e. versions of applications).

2.2.3 CAD Authored Data Replicated in PDM

CAD assembly structures (defined within CAD assembly models) show how parts are organized into higher level assemblies, showing their interrelationships and hierarchy. For example, some systems show the configuration of one product instance by visualizing the 3D CAD models in relevant position, where the position information is defined in the CAD Assembly. Another example would be mass properties which are defined in the CAD Assembly, but are also shown as meta data in the PDM system.

The ability to view CAD assembly structures in the context of a product configuration requires configuration management aspects such as change control, variants (e.g. optional configurations), and effectivities. However, these are only provided in a PDM environment.

CAD model defined assembly structures are not in scope for the LTA&R use cases defined in the NAS9300-200 series, and are addressed in the NAS9300-115.

2.3 Out of Scope

The NAS9300-200 series does not address primary technical data content or operation of the configuration management process itself. The NAS9300-200 series only delivers methods for long term archiving and retrieval of PDM data. Methods for long term archiving and retrieval of primary technical data (content data) attached to PDM data is not in scope of the NAS9300-200 series. These are delivered within the scope of other parts of NAS9300 as 1xx series for CAD or by applying existing available standards.

Examples for these are given below:

- 3D Geometry → NAS9300-1xx series,
- 2D Drawings → TIFF G4,
- Documents → PDF A (ISO 19005),
- Document/Database → XML (W3C recommendation),
- Tech-Pubs → Spec 1000D.

REVISION

NEW

NAS9300-200
SHEET 8



Documents
Document Sharing Hub

3 Normative References

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NAS9300 (All parts), Aerospace series — LOTAR — Long Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data

ISO 10303-42:2003, Industrial automation systems and integration — Product data representation and exchange — Part 42: Integrated generic resource: Geometric and topological representation

ISO 10303-203:2011, Industrial automation systems and integration — Product data representation and exchange — Part 203: Application protocol: Configuration controlled 3D design of mechanical parts and assemblies

ISO 10303-214:2010, Industrial automation systems and integration — Product data representation and exchange — Part 214 — Application protocol: Core data for automotive mechanical design processes

ISO 10303-239:2012, Industrial automation systems and integration — Product data representation and exchange — Part 239 — Application protocol: Product Life Cycle Support

ISO 10303-242:2014, Industrial automation systems and integration — Product data representation and exchange — Part 242: Application protocol: Managed model-based 3D engineering

ISO 14721:2012, Space data and information transfer systems — Open archival information system (OAIS) — Reference model

4 General Terms, Definitions and Abbreviations

4.1 General Terms and Definitions

For the purposes of this document, the terms, definitions and abbreviations given in NAS9300-007 apply. Terms and definitions defined only in this standard or referenced from other standards are intended to be included in NAS9300-007.

Archival storage [NAS9300-007:2007]

From the OAIS model, the process that ensures data remains available for access.

Archive [NAS9300-007:2007] (1)

A repository for historical information.

Archive [NAS9300-007:2007] (2)

Any repository conforming to the OAIS standard.

Certification [NAS9300-007:2007]

(1) - the process of assessing a process or product against some particular set of criteria.

(2) - the particular process of certifying an aircraft type as being airworthy.

Note: For clarity, LOTAR uses the term "Type Certification" as defined in CFR in this context.

Configuration [EIA 649 B]

(1) The product attributes of an existing or planned product, or a combination of products; (2) one of a series of sequentially created units or instances of a product.

Configuration [ISO 10303-214:2010(E)]

A Configuration is the association of a Class_condition_association or a Class_specification_association object with a design or with a process in order to define a valid usage of it in the context of a certain Product class.

REVISION

NEW

NAS9300-200
SHEET 9



Document Sharing Hub

NOTE 1 The validity of the association may be limited by a time period through assigning an Effectivity object to it.

NOTE 2 The semantics of the kind of association is defined by the attributes 'configurationType' and 'inheritance type'.

Configuration [ISO 9000:2000]

Arrangement of the elements of a system.

Configuration control [ISO 10007]

Activities comprising the control of changes to a configuration item after formal establishment of its configuration documents

Configuration management [EIA 649 B]

A management process for establishing and maintaining consistency of a product's performance, functional, and physical attributes with its requirements, design and operational information throughout its life.

Configuration management [NAS9300-007: 2007]

(1) - the discipline of managing the information relating to a product design, encompassing planning and management, change management, configuration identification, status accounting and audit.

Note: this is the preferred sense in the aircraft industry, and in the NAS9300 documentation.

(2) - the rules relating to the choice and combinations of options used when configuring a particular physical example of a product.

Content [ISO/IEC 82045, 3.2.2]

Subject information of a document

Data [ISO/IEC 2382-1:1993]

Reinterpretable presentation of information in a formalized manner suitable for communication, interpretation or processing.

Designated community [NAS9300-003:2007]

From OAIS, the community for which the system is designed. In the case of NAS9300, it is the community that will use the information retained in an archive.

Document [NAS9300-007:2007]

This term covers a family of usages, from a physical paper document, through electronic files which can be thought as representing a document, to synthetic view derived from multiple sources for which the user's conceptual model is that of reading a document. See also NAS9300-003 5.3.1 "Archiving Product Models vs. Archiving Documents".

Domain specific part [NAS9300-007:2007]

LOTAR parts are either general or domain specific. LOTAR parts 100 upwards are the domain specific parts, and deal with the particularities of each type of data such as 3D CAD. The general parts (1 to 99) apply to all types of data.

Effectivity

Attribute associated with PDM structures which define application of PDM structure nodes and associated documents to individual units. Values of effectivity attribution may include options, range of units, and date. A resolved product structure is determined by evaluating effectivity for selected options, range, and/or date.

Effectivity [EIA 649 B]

A designation, defining the product range; e.g. serial numbers, block numbers, batch numbers, lot numbers, model, dates or event, at which a specific product configuration applies, a change is to be or has been affected, or to which a variance applies.

Effectivity [ISO 10303-214:2010(E), 4.1.25]

REVISION

NEW

NAS9300-200

SHEET 10



Documents

Document Sharing Hub

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY

PERFORMANCE OF ITEMS PRODUCED UNDER NATIONAL AEROSPACE STANDARDS. AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE SUITABILITY OF

PROVIDED BY IHS MARKET UNDER LICENSE WITH AIA/NAS. NO REPRODUCTION OR NETWORKING PERMITTED WITHOUT LICENSE FROM IHS. Not for Resale.

This unit of functionality provides the capability to represent information concerning the validity of data. Implicit propagation of data specifying validity is not available.

The validity of data can be expressed by effectivities that specify time ranges within which data may be used and by retention periods that specify how long data have to be kept and when they may or have to be deleted.

Both concepts can make use of explicit dates or of dates expressed by events in order to represent the relevant points in time.

Effectivity [ISO/IEC 82045, 3.4.2]

Identification of the valid use of a document version tracked by date or event.

Electronic signature [NAS9300-007:2007]

A defined method to sign an object in electronic environments. It provides means to authenticate the signatory and the signed object in an unambiguous and safe way by attaching to or logically associating data in electronic form to other electronic objects. (See NAS9300-005)

Evidential weight [NAS9300-007:2007]

From Code of Practice for Legal Admissibility, in the case where electronic information is used as evidence in a court case, the degree of reliance that the information is what it purports to be.

Fixity information [NAS9300-007:2007]

Ancillary information that show a particular set of information is unchanged.

Management data – See metadata

Maturity level [ISO/IEC 82045, 3.4.1]

Purpose-oriented degree of completeness of information with regard to the intended final object which is reflected in documents.

Media [NAS9300-007:2007]

The physical material on which data is recorded, such as an optical disc.

Metadata NAS9300-007:2007]

(1) - data about data. For example, the file name is Meta data about a CAD design held as a file.

(2) - the data required for the management and use of information packages.

Note: This is the preferred sense in the NAS9300 documentation.

Metadata for documents [ISO/IEC 82045]

Data for the description of documents and their management

Object [IEC 61346-1, modified]

Entity treated in the process of design, engineering, realization, operation, maintenance and demolition

NOTE 1 The entity may refer to something, which is either physical or non-physical or to a set of information associated with it.

NOTE 2 Depending on its purpose, an object may be viewed in different ways called "aspects".

OAIS model [NAS9300-007:2007]

The Open Archival Information System reference model (see normative references).

Preservation planning [NAS9300-007:2007]

From the OAIS model, the services and functions for monitoring the environment of the OAIS and providing recommendations to ensure that the information stored in the OAIS remains accessible to the Designated User Community over the long term, even if the original computing environment becomes obsolete.

REVISION

NEW

NAS9300-200
SHEET 11



Documents
Document Sharing Hub

Presentation [NAS9300-007:2007]

(Of data) the transformation of data into a form readable or viewable by a human (see also Representation). For example, a point may be displayed as a dot on a computer screen. (cf Representation)

Primary technical data

Models, drawings, and documents essential to describing, defining, verifying, etc. the product.

Product [IEC 61346-1, 3.3.1]

Intended or accomplished result of labor [labor], or of a natural or artificial process

Product, part, item and article [NAS9300-007:2007]

In general aerospace usage during the design phase, Part, Item and Article are treated as synonyms referring to unitary parts or simple assemblies that are treated as a single unit, such as composite material part or an electrical connector. The term Product tends to be used to refer to something that is complex and deliverable, such as an airplane. In ISO 10303, Product is the general class of any deliverable, from individual components upwards, and allows for the fact that even a simple bolt is the product of a bolt manufacturer. ISO 10303-239 (PLCS) uses Part as a subtype of Product to identify the design of a physically realizable component or assembly, as distinct from other subtypes such as Product breakdown or Interface. It also uses the term Product_as_realised to distinguish a physical realization of a design from the design itself. That is, the terminology is context sensitive. Since the initial focus of LOTAR was the design phase for the manufacturers of aircraft and aircraft engines, the terminology follows the general aerospace usage.

Product data management (PDM) [NAS9300-007:2007]

The tracking, control and status control of product data, either as files, or through a database. The usage is frequently confined to the design stage of product development, although may extend to planning for manufacture.

Product information model [NAS9300-003, 3.2.1]

The product information model is an information model which provides an abstract description of facts, concepts and instructions about a product, such as a STEP Application reference model or STEP Application interpreted model.

Product life cycle [ISO 15226, 3.3.2]

Period from the conceptual idea to the ultimate disposal of a product

Product lifecycle management (PLM) [NAS9300-007:2007]

The tracking, control and status control of product data, either as files, or through a database. PLM extends the scope of PDM to include each physical product produced from a design, including deviations from the design and usage of the product.

Product management data

The product management data describe the primary technical data generically in a PDM framework, independently of their specific type (CAD data, for example), which are described in the domain specific parts of NAS9300 series.

Product model [NAS9300-003, 3.2.2]

The Product model represents an occurrence of a product information model for a particular product, e.g. the geometric model of part a123.

Provenance [NAS9300-007:2007]

The information describing the context in which information was created.

Product structure [EIA 649 B]

A hierarchical view of the relationship of products and component products.

Provenance [NAS9300-007:2007]

The information describing the context in which information was created.

REVISION

NEW

NAS9300-200
SHEET 12



Documents

Document Sharing Hub

Representation [NAS9300-007:2007]

The way in which a concept is modeled as a system of data elements. For example, a point may be defined as a set of three numbers, representing its x, y, and z coordinates (cf presentation).

Static information

Information that is unchanging. For example, the product structure that results when resolved for a specific effectivity value.

Use case [NAS9300-007:2007]

A description of a particular situation in which the system is used. Use cases form a part of the UML methodology (cf. NAS9300-004 section 5 and UML reference).

Validation [NAS9300-007:2007] (1)

The assurance that a collection of information has the correct representation (cf verification and NAS9300-003 5.3.5). In the context of LOTAR, this means that the model reconstructed from the archive data has not changed from the original - for example, it still has the same volume.

Validation [NAS9300-007:2007] (2)

The process of establishing documented evidence that provides a high degree of assurance that a product, service, or system accomplishes its intended requirements. Validation ensures that 'you built the right thing'.

Validation properties [NAS9300-007:2007]

Information calculated from a model or document whose invariance is used to validate the content after recovery, and so to demonstrate that the key characteristics are unchanged. For example, the volume of a solid in a CAD file.

Variance [EIA 649 B]

A departure from approved product definition information, for a limited amount of time or for a specified effectivity, that does not require revision of approved product definition information.

Verification [NAS9300-007:2007] (1)

The assurance that a collection of information has the correct content (cf validation, and NAS9300-003 5.3.5). In the context of LOTAR, verification rules test whether the structure of the model is correct, for example, that the faces that make up a shape knit together to form a solid, without gaps between the faces.

Verification [NAS9300-007:2007] (2)

A quality process that is used to evaluate whether or not a product, service, or system complies with a regulation, specification, or conditions imposed at the start of a development phase. Verification ensures that 'you built it right'.

Verification [EIA 649 B]

Confirmation that a specified requirement has been fulfilled by the product.

5 Applicability

Refer to applicability of NAS9300-001, paragraph 4.

6 Fundamentals and concepts for long term archiving and retrieval of PDM data

6.1 Usage of basic NAS9300 principles

The domain specific parts of the NAS9300-200 series are established within the consistent framework of NAS9300 principles. This is to guarantee overall consistency of the LTA&R architecture and to ease operation and maintenance of the logical and physical LTA&R infrastructure.

REVISION

NEW

NAS9300-200
SHEET 13



Documents

Document Sharing Hub