

Australian Standard[®]

**Information technology—
Open Systems Interconnection—
The Directory**

Part 6: Selected attribute types

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Open Systems Interconnection—
The Directory**

Part 6: Selected attribute types

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PREFACE

This Standard was prepared by the Standards Australia Committee on Information Systems—Interconnection. It is identical with and has been reproduced from ISO/IEC 9594-6:1990, *Information technology—Open Systems Interconnection—The Directory—Part 6: Selected attribute types*.

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<i>Reference to International Standard or other Publication</i>		<i>Australian Standard</i>	
ISO		AS	
3166	Codes for the representation of names of countries	2632	Codes for the representation of names of countries
ISO/IEC			
8824	Information Technology—Open Systems Interconnection—Specification of Abstract Syntax Notation One (ASN.1)	3625	Information technology—Open Systems Interconnection—Specification of Abstract Syntax Notation One (ASN.1)
9594	Information Technology—Open Systems Interconnection—The Directory	4019	Information technology—Open Systems Interconnection—The Directory
9594-2	Part 2: Models	4019.2	Part 2: Models
9597-7	Part 7: Selected Object Classes	4019.7	Part 7: Selected object classes
CCITT			
E.123	Notation for National and International Telephone numbers	—	
E.164	Numbering plan for the ISDN era	—	
F.1	Operational provisions for the international public telegram service	—	
F.200	Teletex service	—	
F.401	Message handling services: Naming and addressing for public message handling services	—	
T.30	Procedures for document facsimile transmission in the general switched telephone network	—	
T.61	Character repertoire and coded character sets for the international teletex service	—	
T.62	Control procedures for teletex and Group 4 facsimile services	—	
X.121	International numbering plan for public data networks	—	

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Information technology—Open Systems Interconnection—The Directory

Part 6: Selected attribute types

SECTION 1: GENERAL

1 Scope

1.1 This part of ISO/IEC 9594 defines a number of attribute types which may be found useful across a range of applications of the Directory.

1.2 Attribute types (and attribute syntaxes) fall into three categories, as described in 1.2.1 through 1.2.3.

1.2.1 Some attribute types (syntaxes) are used by a wide variety of applications or are understood and/or used by the Directory itself.

Note — It is recommended that an attribute type (syntax) defined in this document be used, in preference to the generation of a new one, whenever it is appropriate for the application.

1.2.2 Some attribute types (syntaxes) are internationally-standardized, but are application-specific. These are defined in the standards associated with the application concerned.

1.2.3 Any administrative authority can define its own attribute types (syntaxes) for any purpose. These are not internationally standardized, and are available to others beyond the administrative authority which created them only by bilateral agreement.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 9594. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 9594 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

- ISO 3166:1988, *Codes for the representation of names of countries.*
- ISO/IEC 8824:1990, *Information Technology—Open Systems Interconnection—Specification of Abstract Syntax Notation One (ASN.1).*

ISO/IEC 9594-2:1990, *Information Technology—Open Systems Interconnection—The Directory—Part 2: Models.*

ISO/IEC 9594-7:1990, *Information Technology—Open Systems Interconnection—The Directory—Part 7: Selected Object Classes.*

CCITT Recommendation E.123, *Notation for National and International Telephone numbers*

CCITT Recommendation E.123, *Notation for National and International Telephone numbers*

CCITT Recommendation E.164, *Numbering plan for the ISDN era*

CCITT Recommendation F.1, *Operational provisions for the international public telegram service*

CCITT Recommendation F.200, *Teletex service*

CCITT Recommendation F.401, *Message handling services: Naming and addressing for public message handling services*

CCITT Recommendation T.30, *Procedures for document facsimile transmission in the general switched telephone network*

CCITT Recommendation T.61, *Character repertoire and coded character sets for the international teletex service*

CCITT Recommendation T.62, *Control procedures for teletex and Group 4 facsimile services*

CCITT Recommendation X.121, *international numbering plan for public data networks.*

3 Definitions

This part of ISO/IEC 9594 makes use of the following definitions from ISO/IEC 9594-2:

- a) attribute type;
- b) attribute syntax;
- c) object class.

4 Notation

Attribute types and attribute syntaxes are defined in this document by the use of special notation, defined

as ASN.1 macros in ISO/IEC 9594-2. There are two such macros, **ATTRIBUTE** and **ATTRIBUTE-SYNTAX**.

Two ‘generic’ object identifiers (**attributeType** and **attributeSyntax**) are used in defining the object identifiers being allocated to attribute types and attribute syntaxes respectively. Their definitions can be found in Annex B of ISO/IEC 9594-2.

Examples of the use of the attribute types are described using an informal notation, where attribute type and value pairs are represented by an acronym for the attribute type, followed by an equals sign (“=”), followed by the example value for the attribute.

SECTION 2: SELECTED ATTRIBUTE TYPES

5 Definition of Selected Attribute Types

This part of ISO/IEC 9594 defines a number of attribute types which may be found useful across a range of applications of the Directory.

5.1 System Attribute Types

These attribute types are concerned with information about objects known to the Directory.

5.1.1 Object Class

The *Object Class* attribute type, which is known to the Directory, is specified, except for the allocation of an object identifier, in ISO/IEC 9594-2.

objectClass **ObjectClass** ::= {attributeType 0}

5.1.2 Aliased Object Name

This attribute type is defined, except for the allocation of an object identifier, in ISO/IEC 9594-2.

aliasedObjectName **AliasedObjectName**
::={attributeType 1}

5.1.3 Knowledge Information

The *Knowledge Information* attribute type specifies a human-readable accumulated description of knowledge mastered by a specific DSA.

knowledgeInformation **ATTRIBUTE**
WITH ATTRIBUTE-SYNTAX **caseIgnoreStringSyntax**
::={attributeType 2}

5.2 Labelling Attribute Types

These attributes type are concerned with information about objects which has been explicitly associated with the objects by a labelling process.

5.2.1 Common Name

The *Common Name* attribute type specifies an identifier of an object. A Common Name is not a directory name; it is a (possibly ambiguous) name by which the object is commonly known in some limited scope (such as an organization) and conforms to the naming conventions of the country or culture with which it is associated.

An attribute value for common name is a string chosen either by the person or organization it describes or the organization responsible for the object it describes for devices and application entities. For example, a typical name of a person in an English-speaking country comprises a personal title (e.g., Mr, Ms, Dr, Professor, Sir, Lord), a first name, middle name(s), last name, generational qualifier (if any, e.g., Jr.) and decorations and awards (if any, e.g., QC).

Examples:

CN = “Mr Robin Lachlan McLeod BSc(Hons) CEng MIEE”

CN = “Divisional Coordination Committee”

CN = “High Speed Modem”

Any variants should be associated with the named object as separate and alternative attribute values.

Other common variants should also be admitted, e.g., use of a middle name as a preferred first name; use of ‘Bill’ in place of ‘William’, etc.

```

commonName ATTRIBUTE
  WITH ATTRIBUTE-SYNTAX
    caseIgnoreStringSyntax
      (SIZE(1..ub-common-name))
  ::= {attributeType 3}

```

5.2.2 Surname

The *Surname* attribute type specifies the linguistic construct which normally is inherited by an individual from the individual's parent or assumed by marriage, and by which the individual is commonly known.

An attribute value for Surname is a string, e.g., "McLeod".

```

surname ATTRIBUTE
  WITH ATTRIBUTE-SYNTAX
    caseIgnoreStringSyntax
  ::= {attributeType 4}

```

5.2.3 Serial Number

The *Serial Number* attribute type specifies an identifier, the serial number of a device.

An attribute value for Serial Number is a printable string.

```

serialNumber ATTRIBUTE
  WITH ATTRIBUTE-SYNTAX
    printableStringSyntax
      (SIZE(1..ub-serial-number))
  ::= {attributeType 5}

```

5.3 Geographical Attribute Types

These attribute types are concerned with geographical positions or regions with which objects are associated.

5.3.1 Country Name

The *Country Name* attribute type specifies a country. When used as a component of a directory name, it identifies the country in which the named object is physically located or with which it is associated in some other important way.

An attribute value for country name is a string chosen from ISO 3166.

```

countryName ATTRIBUTE
  WITH ATTRIBUTE-SYNTAX
    PrintableString (SIZE (2))--IS 3166 codes only

  MATCHES FOR EQUALITY
  SINGLE VALUE
  ::= {attributeType 6}

```

The matching rule for values of this type is the same as that for caseIgnoreStringSyntax.

5.3.2 Locality Name

The *Locality Name* attribute type specifies a locality. When used as a component of a directory name, it identifies a geographical area or locality in which the

named object is physically located or with which it is associated in some other important way.

An attribute value for Locality Name is a string, e.g. L = "Edinburgh".

```

localityName ATTRIBUTE
  WITH ATTRIBUTE-SYNTAX
    caseIgnoreStringSyntax
      (SIZE(1..ub-locality-name))
  ::= {attributeType 7}

```

5.3.3 State or Province Name

The *State or Province Name* attribute type specifies a state or province. When used as a component of a directory name, it identifies a geographical subdivision in which the named object is physically located or with which it is associated in some other important way.

An attribute value for State or Province Name is a string, e.g., S = "Ohio".

```

stateOrProvinceName ATTRIBUTE
  WITH ATTRIBUTE-SYNTAX
    caseIgnoreStringSyntax
      (SIZE(1..ub-state-name))
  ::= {attributeType 8}

```

5.3.4 Street Address

The *Street Address* attribute type specifies a site for the local distribution and physical delivery in a postal address, i.e., the street name, place, avenue, and the house number. When used as a component of a directory name, it identifies the street address at which the named object is located or with which it is associated in some other important way.

An attribute value for Street Address is a string, e.g., "Arnulfstraße 60".

```

streetAddress ATTRIBUTE
  WITH ATTRIBUTE-SYNTAX
    caseIgnoreStringSyntax
      (SIZE(1..ub-street-address))
  ::= {attributeType 9}

```

5.4 Organizational Attribute Types

These attribute types are concerned with organizations and can be used to describe objects in terms of organizations with which they are associated.

5.4.1 OrganizationName

The *OrganizationName* attribute type specifies an organization. When used as a component of a directory name it identifies an organization with which the named object is affiliated.

An attribute value for OrganizationName is a string chosen by the organization (e.g., O = "Scottish Telecommunications plc"). Any variants should be