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ISO/IEC ISP 11186-4

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Information technology — International Standardized Profiles FVT3nn — Virtual Terminal Basic Class — Register of attribute assignment type definitions —

Part 4:
FVT322 — Font Assignment Type No. 2

Technologies de l'information — Profils normalisés internationaux FVT3nn — Classe de base du terminal virtuel — Registre de définitions de type d'allocation d'attribut —

Partie 4: FVT322 — Attribution de la fonte de type nº 2

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Contents

Page

Foreword iii

Introduction iv

1 Scope 1
1.1 General 1
1.2 Position within the taxonomy 1
1.3 Scenario 2

2 Normative references 3

3 Definitions 3
3.1 General OSI terminology 3
3.2 Terminology of VT base standards 3
3.3 Terminology of font information interchange standards 3

4 Abbreviations 3

5 Principles of conformance to VT Profiles 4

6 Entry number 4

7 Name of sponsoring authority 4

8 Date 4

9 Identifier 4

10 Descriptor value 4

11 Font designation 4
11.1 Principles of designation 4
11.2 The parent repertoire assignment type 5
11.3 The font assignment value 5

12 Abstract syntax 5

ANNEX A Illustrative Example 6
A.1 Repertoire Assignment Type for ISO/IEC 10646 6

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. In addition to developing International Standards, ISO/IEC JTC 1 has created a Special Group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75% of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 11186-4 was prepared with the collaboration of

- OSI Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- Open Systems Environment Implementors' Workshop (OIW).

ISO/IEC ISP 11186 consists of the following parts, under the general title *Information technology — International Standardized Profiles FVT3nn — Virtual Terminal Basic Class — Register of attribute assignment type definitions*.

- *Part 1: FVT321 — Font Assignment Type No.1*
- *Part 2: FVT311 — Repertoire Assignment Type for ISO/IEC 10646*
- *Part 3: FVT312 — Repertoire Assignment Type for ISO/IEC 2022 Level 2*
- *Part 4: FVT322 — Font Assignment Type No.2*

Annex A of this part of ISO/IEC ISP 11186 is for information only.

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Introduction

ISO/IEC ISP 11186 is defined within the context of Functional Standardization, in accordance with the principles specified in ISO/IEC TR 10000, "Framework and Taxonomy of International Standardized Profiles". The context of Functional Standardization is one part of the overall field of Information Technology (IT) standardization activities, covering base standards, profiles and registration mechanisms.

The Open Systems Interconnection (OSI) Standard ISO 9040 for the Virtual Terminal Basic Class Service provides for the identification of attribute assignment types by means of ASN.1 object identifiers. This International Standardized Profile provides a means for the registration of such attribute assignment type definitions in accordance with ISO/IEC 9834-1. The individual entries in this register constitute Interchange Format and Representation Profiles (F-Profiles) within the framework of ISO/IEC TR 10000.

This part of ISO/IEC ISP 11186 was developed in close cooperation between the three Regional OSI Workshops, namely the OSE Implementors Workshop (OIW) of the United States, the European Workshop for Open Systems (EWOS) and the OSI Asia-Oceania Workshop (AOW). The text is harmonized between these three Workshops and it has been ratified by the plenary assemblies of each Workshop.

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Information technology — International Standardized Profiles FVT3nn — Virtual Terminal Basic Class — Register of attribute assignment type definitions —

Part 4:
FVT322 — Font Assignment Type No.2

1 Scope

1.1 General

The concept of Profiles for OSI, and the structure of the International Standardized Profiles that document them, are defined in ISO/IEC TR 10000-1. Such Profiles are divided into a number of different classes and sub-classes. Two of these classes contain sub-classes comprising functions of the Virtual Terminal Basic Class Service and Protocol specified in the base standards ISO 9040 and ISO 9041. These are the Application Profiles (A-Profiles) and the Interchange Format and Representation Profiles (F-Profiles).

The relationship between A-Profiles and F-Profiles is described in 7.3.2 of ISO/IEC TR 10000-1 and is as follows. Application Layer base standards require, implicitly or explicitly, the structure of information carried or referenced by them to be specified for each instance of communication. It is the purpose of F-Profiles to specify such information structures. Particular functional requirements may then be met by the combination of an A-Profile with one or more F-Profiles.

Establishment of a VT-association involves the selection by negotiation of a particular Virtual Terminal Environment profile (VTE-profile), and of particular values for any arguments of that VTE-profile. The VTE-profile specification, and possibly also the values of certain VTE-profile arguments, may in turn reference the definitions of VT control object types and attribute assignment types. These VTE-profiles, control object types and attribute assignment types are therefore Information Objects that require explicit reference within the VT protocol. Particular instances of these Information Objects are fully defined within the base standards, but the base standards also provide for further instances to be defined by registration. Each registered instance constitutes an F-Profile within the framework of ISO/IEC TR 10000.

The Virtual Terminal Basic Class Service and Protocol may be used to realise a wide range of distinct functions. Particular functions may be realised through the selection of appropriate VT functional units, F-Profiles and other VTE-profile argument values. The specification of the selection required to realise a particular function and to promote interoperability constitutes a Virtual Terminal A-Profile within the framework of ISO/IEC TR 10000.

The three International Registers of VT information objects and the specifications of VT Application Profiles are each published as a separate multi-part ISP as follows:

— ISO/IEC ISP 11184 is the Register of VTE-profiles;

— ISO/IEC ISP 11185 is the Register of control object type definitions;

— ISO/IEC ISP 11186 is the Register of attribute assignment type definitions;

— ISO/IEC ISP 11187 contains the specifications of VT Application Profiles.

This part of ISO/IEC ISP 11186 provides the specification of a font assignment type that may be used to specify a font assignment value in which different font property values may be assigned to different characters within a single VT character-repertoire. This font assignment type is intended for use in conjunction with a repertoire assignment type that permits the characters of more than one script to be present in a single VT character-repertoire. It is particularly suited for use in conjunction with the repertoire assignment type for ISO/IEC 10646 whose specification is given in ISO/IEC ISP 11186-2. It is intended that font property values should be assigned on a script-by-script basis, for example so that scripts with a left-to-right writing mode and with a right-to-left writing mode may coexist within a single VT character-repertoire.

1.2 Position within the taxonomy

The taxonomy of International Standardized Profiles for OSI is laid down in ISO/IEC TR 10000-2. Within the classification scheme of this taxonomy, the OSI Profiles specified in this International Standardized Profile are in the Virtual Terminal Registered Object sub-class of the class of Interchange Format and Representation Profiles.

A Profile within this subclass has a Profile identifier of the form FVT*abc*, where *abc* is a structured numerical identifier that identifies the position of the Profile within each of the three levels of subdivision of the subclass. The values of *a* and *b* are single digits but *c* is an integer that is not necessarily a single digit.

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In principle the ISO Virtual Terminal model allows for multiple classes of operation, although at the time of publication of this International Standardized Profile only the Basic Class has been defined. The value of the identifier component *a* distinguishes between distinct types of information object as follows:

— *a* = 1 for Basic Class VTE-profiles;

— *a* = 2 for Basic Class Control Objects;

— *a* = 3 for Basic Class Assignment Types.

Values of *a* greater than 3 are reserved for future developments.

This International Standardized Profile ISO/IEC ISP 11186 contains the specifications of the Profiles with identifiers of the form FVT3*bc*. For this form of identifier, the component *b* distinguishes between the three attributes of display object array elements for which assignment types are defined in accordance with ISO 9040. The values of *b* are allocated as follows:

— *b* = 1 for repertoire assignment types;

— *b* = 2 for font assignment types;

— *b* = 3 for colour assignment types.

The identifier component *c* is the serial number of the attribute assignment type in the sub-register for the particular attribute concerned. Values of *b* greater than 3 are reserved for further attributes that may be defined as subject to registration in future amendments to ISO 9040.

This part of ISO/IEC ISP 11186 contains the definition of the font assignment type with the Profile identifier

FVT322 — Font Assignment Type No.2.

1.3 Scenario

The specification of the Virtual Terminal Service is given in ISO 9040. It is based on a model in which two VT-users communicate by means of a shared Conceptual Communication Area (CCA) that is a conceptual part of the VT service-provider. Information exchange is modelled by one VT-user updating the content of the CCA and the changed state of the CCA then being made accessible to the peer VT-user.

The CCA is structured by the Virtual Terminal Service into a number of components. Of these components, the Conceptual Data Store (CDS) contains one or two display objects (DOs), each of which includes a one, two or three dimensional array of array elements. Each array element is either empty or has a content that consists of a primary attribute and a number of secondary attributes. The primary attribute value selects one character-box graphic element from a repertoire of such elements that is determined by the character-repertoire secondary attribute. The other secondary attributes are the font, emphasis, foreground-colour and background-colour attributes which are collectively referred to as rendition attributes.

The values permitted for the secondary attributes are specified by attribute assignments that are included among the parameters of a Virtual Terminal Environment (VTE). The font attribute is subservient to the character-repertoire attribute in that a separate set of permitted values for the font attribute is specified for each permitted value of the character-repertoire attribute. The values permitted for the other secondary attributes are mutually independent.

With the exception of the emphasis attribute, an attribute assignment is composed of two parts, a type and a value. For the emphasis attribute, the syntax of permitted values is prescribed by the VT service base standard ISO 9040 and the semantics of each value is determined by the specification of the VTE-profile currently in use. For all other secondary attributes, the assignment type determines both the syntax of the permitted values and the semantic interpretation of each such value.

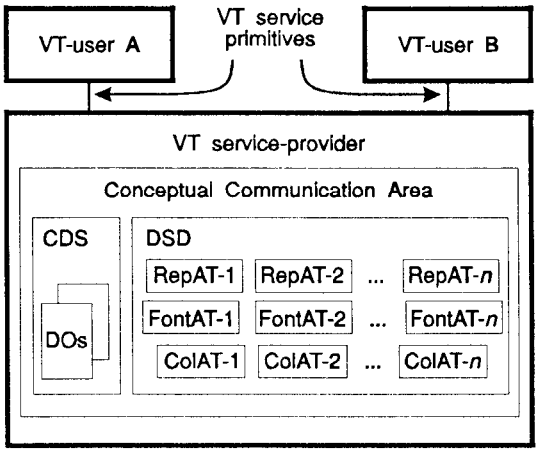


Figure 1 — Attribute assignment types in the VT Service model

Assignment type definitions are required for only three distinct attributes, namely repertoire, font and colour, since both foreground-colour and background-colour secondary attributes reference the same assignment types. The attribute assignments specified by the parameter values of a VTE, and the assignment type definitions to which they refer, are held in the Data Structure Definition (DSD) component of the CCA. This is illustrated in figure 1, in which RepAT-1, RepAT-2, ... RepAT-*n* represent a number of different repertoire assignment types, FontAT-1, FontAT-2, ... FontAT-*n* represent a number of different font assignment types and ColAT-1, ColAT-2, ... ColAT-*n* represent a number of different colour assignment types. The negotiation during establishment of a VT-association will determine whether or not these will include the attribute assignment type whose definition is given in this part of ISO/IEC ISP 11186.

NOTE — A VTE-profile specification may prescribe the attribute assignments that are present in any VTE established by its use, or may provide VTE-profile arguments for the negotiation of these attribute assignments, or may use a combination of these methods. Where some or all of the attribute assignments are determined by negotiation, attribute assignment types are referenced by their registered name. The permitted syntax of the corresponding attribute assignment value is determined by the definition that has this registered name. Since the VT service-provider is not required to have knowledge of these registered definitions, in principle the VT-users provide the VT service-provider with such information through local management procedures. Whether or not this is necessary in practice depends on the nature of the implementations concerned.

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2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 11186. At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties to agreements based on this International Standardized Profile are warned against automatically applying any more recent editions of the documents listed below, since the nature of references made by ISPs to such documents is that they may be specific to a particular edition. Members of IEC and ISO maintain registers of currently valid International Standards and ISPs, and ITU-T maintains published editions of its current Recommendations.

ISO/IEC 8824:1990, *Information technology — Open Systems Interconnection — Specification of Abstract Syntax Notation One (ASN.1)*. (See also CCITT Recommendation X.208.)

ISO/IEC 9040:1997, *Information technology — Open Systems Interconnection — Virtual Terminal Basic Class Service.*

ISO/IEC 9041-1:1997, *Information technology — Open Systems Interconnection — Virtual Terminal Basic Class Protocol — Part 1: Specification.*

ISO/IEC 9541-1:1991, *Information technology — Font information interchange — Part 1: Architecture.*

ISO/IEC 9834-1:1993, *Information technology — Open Systems Interconnection — Procedures for the operation of OSI Registration Authorities: General procedures.* (See also CCITT Recommendation X.660.)

ISO/IEC TR 10000-1:1995, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 1: General principles and documentation framework.*

ISO/IEC TR 10000-2:1995, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 2: Principles and Taxonomy for OSI profiles.*

ISO/IEC 10731:1994, *Information technology — Open Systems Interconnection — Basic Reference Model — Conventions for the definition of OSI services.* (See also ITU-T Recommendation X.210).

ISO/IEC ISP 11186-1:1996, *Information technology — International Standardized Profiles FVT3nn — Virtual Terminal Basic Class — Register of attribute assignment type definitions — Part 1: FVT321 — Font Assignment Type No.1.*

3 Definitions

For the purposes of this International Standardized Profile, the following definitions apply.

3.1 General OSI terminology

3.1.1 This part of ISO/IEC ISP 11186 makes use of the following terms defined in ISO/IEC 10731:

a) service primitive;

b) service-provider.

3.1.2 This part of ISO/IEC ISP 11186 makes use of the following terms defined in ISO/IEC 8824:

a) any type;

b) component type;

c) information object;

d) module;

e) object descriptor type;

f) object identifier;

g) structured type.

3.1.3 This part of ISO/IEC ISP 11186 makes use of the following terms defined in ISO/IEC 9834-1:

a) registration;

b) registration-hierarchical-name.

3.2 Terminology of VT base standards

3.2.1 This part of ISO/IEC ISP 11186 makes use of the following terms defined in ISO 9040:

a) array element;

b) character-box graphic element;

c) character-repertoire;

d) display object;

e) primary attribute;

f) rendition attributes;

g) secondary attribute;

h) VT-association;

i) VT-environment (VTE);

j) VT-user;

k) VTE-parameter;

l) VTE-profile;

m) VTE-profile argument.

3.3 Terminology of font information interchange standards

3.3.1 This part of ISO/IEC ISP 11186 makes use of the following terms defined in ISO/IEC 9541-1:

a) font;

b) property.

4 Abbreviations

For the purposes of this International Standardized Profile the following abbreviations apply.

ASN.1 Abstract Syntax Notation One

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CCA Conceptual Communication Area
CDS Conceptual Data Store
DO Display Object
DSD Data Structure Definition
PDU Protocol Data Unit
VT Virtual Terminal
VTE Virtual Terminal Environment

All other abbreviations used are defined in ISO/IEC TR 10000-1.

5 Principles of conformance to VT Profiles

Profiles with taxonomy identifiers of the form FVT3*nn* provide attribute assignment type definitions for reference as required by VTE-profile specifications given in FVT1*nn* Profiles, by control object type definitions given in FVT2*nn* Profiles and by VT Application Profiles given in AVT*nn* Profiles.

There is no concept of conformance to an FVT3*nn* Profile in isolation. An FVT1*nn* Profile that references an FVT3*nn* Profile may place requirements on an implementation of the VT protocol to be able to negotiate the presence in the CCA of attribute assignments of the type concerned. An FVT2*nn* Profile may impose similar requirements concerning FVT31*n* Profiles if it permits negotiation of values for the CO-repertoire-assignment VTE-parameter.

NOTE — The use of an attribute assignment type by a VTE-profile specification will have no effect on the operation of the VT protocol unless the attribute assignment concerned is subject to negotation during association establishment. Attribute assignments are referenced in display object update operations by their position in an ordered list, so that the PDUs carrying these operations are transparent to the specific assignments being referenced.

Such requirements of FVT1*nn* and FVT2*nn* Profiles reference the syntax of attribute assignment values as specified by the attribute assignment type concerned. A system that includes an implementation of the VT protocol may be claimed to conform also to an AVT*nn* Profile. Conformance to an AVT*nn* Profile may require that the image of the display object array presented by a real display device is in accordance with semantics specified by the attribute assignment type definitions referenced by the contents of the array elements. Conformance to attribute assignment type semantics is not within the scope of conformance to any FVT*nnn* Profile.

In accordance with these conformance principles, an FVT3*nn* Profile does not provide a Profile Requirements List as defined by ISO/IEC 9646-1.

6 Entry number

The remaining clauses of this part of ISO/IEC ISP 11186 provide the entry for the Font Assignment Type No.2 in the International Register of VT Attribute Assignment Type Definitions. This register complies with the requirements of ISO/IEC 9834-1 concerning registration authorities that operate in a technical role. This International Register is maintained as three sub-registers, one each for repertoire, font and colour assignment type definitions.

This entry is the second in the sub-register for font assignment type definitions. This register assigns it the entry number:

FONT-2.

7 Name of sponsoring authority

This entry is sponsored by the European Workshop for Open Systems (EWOS).

8 Date

The date of submission of this proposal was 1995-12-13.

9 Identifier

The name assigned to an information object by an International Register is required by ISO/IEC 9834-1 to be a registration-hierarchical-name. A registration-hierarchical-name may have more than one form. The permitted forms include an ASN.1 object identifier as defined in ISO/IEC 8824 and a distinguished name as defined in ISO/IEC 9594-2.

In accordance with annex A of ISO/IEC 9834-1, this register assigns the following object identifier form for the name of this register entry:

{ iso(1) standard(0) 11186 4 font(3) font2(2) }.

In accordance with 18.3 of ISO 9040, this object identifier shall be used as the font-assignment-type component of a value of the font-assignment VTE-parameter to specify this register entry as providing the method used to designate the font and to determine the form of the font-assignment-value component.

This register does not assign any other form to the name of this entry.

NOTE — By ISO/IEC 9834-1 a distinguished name for the purposes of the OSI Directory may only be assigned together with an object identifier when the object identifier form is generated under the arc { joint-iso-ccitt(2) country(16) country-name }.

10 Descriptor value

The value of the ASN.1 object descriptor type assigned to this register entry is:

"FVT322: Font Assignment Type No.2".

11 Font designation

11.1 Principles of designation

A font assignment value of the font assignment type no.1 that is defined in ISO/IEC ISP 11186-1 consists of a set of values for certain font properties as defined in ISO/IEC 9541-1. Within that font assignment type, these font property values apply to every character-box graphic element of the character-repertoire concerned.

The font assignment type defined in this part of ISO/IEC ISP 11186 permits different sets of these same font property values to be applied to different elements of the character-repertoire. For a character-repertoire that contains characters of more than one script, this enables a single font assignment value to specify that, for example, Japanese kanji characters shall be displayed with twice the width of Latin and Hebrew characters and that the Hebrew characters shall be written

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from right to left while Latin and Japanese characters are written from left to right.

This flexibility is achieved by making use of font assignment type no.1 for the specification of a particular set of font property values but by associating different font assignment values of that type with different sub-repertoires of the character-repertoire concerned.

11.2 The parent repertoire assignment type

The VTE-parameters defined in clause 17 of ISO 9040 are structured as a directed graph in which there is a sub-tree that concerns character-attributes. It is the values taken by these character-attribute VTE-parameters that determine the values permitted for the primary and secondary attributes of an array element of a display object, as described in 1.3 above. In particular, the values taken by the repertore-assignment and font-assignment VTE-parameters determine the values permitted for the character-repertoire and font attributes of an array element.

Within the structure of the directed graph, the font-assignment VTE-parameter lies below the repertoire-assignment VTE-parameter. Each of these parameters may have multiple occurrences in a VTE. The values of the repertoire-assignment VTE-parameter form an ordered list, and for each value in this list there may be a separate ordered list of values for the font-assignment VTE-parameter. For any particular occurrence of the font-assignment VTE-parameter, there is therefore a specific "parent" value of the repertoire-assignment VTE-parameter.

The font assignment type defined in this part of ISO/IEC ISP 11186 references the repertoire assignment type of this parent value in its specification of the sub-repertoires with which particular values of font assignment type no.1 will be associated.

11.3 The font assignment value

A font assignment value of this font assignment type shall be specified by means of an ordered list of value pairs, each pair having the form

{ repertoire-specification, font-property-list }.

For a particular instance of the font-assignment VTE-parameter, the repertoire-specification component in each pair shall be a repertoire-assignment-value in accordance with 18.2.4 of ISO 9040 for the repertoire-assignment-type that is the parent type of the instance concerned. This component therefore identifies a character-repertoire. The font-property-list component shall be a font-assignment-value in accordance with 18.3 of ISO 9040 for the font-assignment-type identified by the ASN.1 object identifier

{ iso standard 11186 1 font(3) font1(1) }.

The specification of this font assignment type is given in ISO/IEC ISP 11186-1. This component therefore identifies a set of font property values.

Such a font assignment value assigns a set of font property values to every character-box graphic element of the parent character-repertoire as follows. If the character-box graphic element is a member of any of the character-repertoires identified by the repertoire-specification components in this ordered list of value pairs, then the set of font property values is that identified by the font-property-list component of the first such value pair in the ordered list. If the character-box graphic element is not a member of any of these character-repertoires then the font property values of the set shall be the default values specified in ISO/IEC ISP 11186-1. The semantics of the assigned set of font property values shall be as specified in ISO/IEC ISP 11186-1.

NOTE — The abstract syntax for this font assignment type provides a default mechanism for designating a repertoire-specification component that is the whole of the parent character-repertoire. This may be used in the final value pair of the ordered list to specify explicitly an alternative set of default property values.

12 Abstract syntax

A value for the font-assignment VTE-parameter is referenced in the VT protocol of ISO 9041-1 by a value of the ASN.1 structured type CDS.FontAssignment. This type has two component types with the identifiers 'type' and 'value'. When the 'type' component takes a value other than the value vt-b-font-adhoc defined in 18.3 of ISO 9040, the 'value' component is specified by an ASN.1 any type.

This assignment type requires that when the 'type' component takes the ASN.1 object identifier value specified herein in clause 9 then the value of this ASN.1 any type shall be a value of the type Font2-Description that is exported from the ASN.1 module ISP11186-FONT2 defined below.

```
ISP11186-FONT2 { 1 0 11186 4 3 2 }
DEFINITIONS ::= BEGIN

EXPORTS
   Font2-Description, Font2-Item;

IMPORTS
   Font1-Description
      FROM ISP11186-FONT1
         { 1 0 11186 1 3 1 }
         -- module defined in ISO/IEC ISP 11186-1

   RepertoireAssignment
      FROM CDS
         -- module of conceptual data store definitions
         -- from ISO 9041-1 -- ;

Font2-Description ::= SEQUENCE OF Font2-Item

Font2-Item ::= SEQUENCE {
   repertoire-specification  RepertoireAssignment
      (WITH COMPONENTS {
         type                ABSENT,
         value               PRESENT
         -- the value component is governed by the type
         -- component of the parent RepertoireAssignment
         -- value -- } ) OPTIONAL,
   font-property-list        Font1-Description }

   -- omission of the repertoire-specification component
   -- shall be taken to represent by default the parent
   -- RepertoireAssignment value

END -- OF ISP11186-FONT2 DEFINITIONS
```


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Annex A
(informative)

Illustrative Example

A.1 Repertoire Assignment Type for ISO/IEC 10646

The font assignment type no.2 defined in this part of ISO/IEC ISP 11186 is particularly suited for use with the repertoire assignment type for ISO/IEC 10646 that is defined in ISO/IEC ISP 11186-2. The nominal writing mode property of font assignment type no.1 may be used to specify the escapement direction and the character cell size of a character-repertoire, with the specified parameter values applying to every element of that character-repertoire. Font assignment type no.2 permits different values to be assigned to these parameters for different character scripts that may be present simultaneously in a single character-repertoire.

To illustrate this, consider a character-repertoire that consists of the following collections of characters from annex A of ISO/IEC 10646-1, listed by number and name as given in that annex:

1	BASIC LATIN
2	LATIN-1 SUPPLEMENT
12	BASIC HEBREW
60	CJK UNIFIED IDEOGRAPHS

It is desired to specify that characters of the BASIC HEBREW collection should be written from right to left and that characters of the CJK UNIFIED IDEOGRAPHS collection should have double width, *i.e.* each character should occupy two adjacent character-boxes in the image on a real display device.

The character-repertoire may be designated by the first of the following assignments:

```
my-rep-assignment RepertoireAssignment ::= {
    type   {iso standard 11186 2 repertoire(2) iso10646(1)},
    value  isonnnn my-rep-value }
    -- RepertoireAssignment is imported from module CDS
    -- defined in ISO 9041-1

my-rep-value Rep1-value ::= {
    abstract-syntax   { iso10646-level1 1 2 12 60 } }
    -- Rep1-value is imported from module ISP11186-REP1
    -- defined in ISO/IEC ISP 11186-2

iso10646-level1 OBJECT IDENTIFIER ::=
    { iso standard 10646 1 level-1(1) collections(1) }
```

When this is the parent character-repertoire, the desired font properties may be designated by the first of the following assignments:

```
my-font-assignment FontAssignment ::= {
    type   {iso standard 11186 4 font(3) font2(2)},
    value  isonnnn my-font-value }
    -- FontAssignment is imported from module CDS
    -- defined in ISO 9041-1

my-font-value Font2-Description ::= {
    script1-item, script2-item, default-item }
    -- the ordering ensures that the default item applies only
    -- to characters that are not in the character-repertoires of
    -- the first two items

script1-item Font2-Item ::= {
    repertoire-specification   script1-rep,
    font-property-list         script1-properties }

script2-item Font2-Item ::= {
    repertoire-specification   script2-rep,
    font-property-list         script2-properties }

default-item Font2-Item ::= {
    font-property-list         default-properties }
    -- by default the repertoire-specification references the
    -- parent character-repertoire

script1-rep Rep1-value ::= {
    abstract-syntax   {iso10646-level1 12} }
    -- BASIC HEBREW collection

script2-rep Rep1-value ::= {
    abstract-syntax   {iso10646-level1 60} }
    -- CJK UNIFIED IDEOGRAPHS collection

script1-properties Font1-Description ::= {
    iso-standard-9541-nomwrmode {
        name-value {
            owner-name   {{1 0 11186 1}},
            object-name  {"RIGHT-TO-LEFT", "1", "1"}}}}
    -- Font1-Description is imported from module
    -- ISP11186-FONT1 defined in ISO/IEC ISP 11186-1

script2-properties Font1-Description ::= {
    iso-standard-9541-nomwrmode {
        name-value {
            owner-name   {{1 0 11186 1}},
            object-name  {"LEFT-TO-RIGHT", "2", "1"}}}}

default-properties Font1-Description ::= {
    iso-standard-9541-nomwrmode {
        name-value {
            owner-name   {{1 0 11186 1}},
            object-name  {"LEFT-TO-RIGHT", "1", "1"}}}}
```

In these designations of font properties, each element in the object-name sequence is an ASN.1 VisibleString. The second and third elements give the width and height of the character cells in units of the width and height of the standard character-box of the real display device.

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