

DICOM Correction Proposal

Correction Number	CP-325
Log Summary: Case-insensitive PN matching allows accent-insensitive matching	
Type of Modification	Name of Standard
Clarification	PS 3.4
Rationale for Correction	
It is unclear whether the case-insensitive PN query matching allows accent-insensitive matching. This adds a clarification that such may be explicitly claimed in a conformance statement.	
Sections of documents affected	
PS 3.4 Annex C	
Correction Wording:	

C.2.2.2.1 Single Value Matching

If the value specified for a Key Attribute in a request is non-zero length and if it is:

- a) not a date or time or datetime, contains no wild card characters
- b) a date or time or datetime, contains a single date or time or datetime with no "-"

then single value matching shall be performed. **Except for Attributes with a PN Value Representation, only entities with values which match exactly the value specified in the request shall match. This matching is case-sensitive, i.e., sensitive to the exact encoding of the key attribute value in character sets where a letter may have multiple encodings (e.g., based on its case, its position in a word, or whether it is accented).**

except For Attributes with an PN Value Representation (e.g., Patient Name (0010,0010)) , an application may perform matching that is either case-sensitive, or that is insensitive to some or all aspects of case, position, accent, or other character encoding variants. The manner in which case it such matching is performed is implementation dependent and shall be specified in the conformance statement.

Notes: 1. This definition implies that dates or times or datetimes are matched by their meaning, not as literal strings. For example:

- the DT "19980128103000.0000" matches "19980128103000"
- the DT "19980128103000GMT" matches "19980128073000GMT-3"
- the TM "2230" matches "223000"
- the TM "223000" matches the deprecated ACR/NEMA 2.0 form "22:30:00"
- the DA "19980128" matches the deprecated ACR/NEMA 2.0 form "1998.01.28"

2. If an application is concerned about how single value matching of dates and times is performed by another application, it may consider using range matching instead, which is always performed by meaning, with both values in the range the same.

3. Matching of PN Attributes may be accent-insensitive, as specified in the conformance statement. Accent-insensitive matching would successfully match, for instance, a query character "SMALL LETTER a" (06/01 in the default ISO-IR 6) with

"SMALL LETTER a WITH GRAVE ACCENT" (14/00 in ISO-IR 100),

"SMALL LETTER a WITH TILDE" (14/03 in ISO-IR 100),

"SMALL LETTER a WITH BREVE" (14/03 in ISO-IR 101), and

"CAPITAL LETTER a WITH ACUTE ACCENT" (12/01 in ISO-IR 100) (if matching is also case-insensitive),

but would not match 14/00 in ISO-IR 101, which is “SMALL LETTER r WITH ACUTE ACCENT”. Matching to particular bit-combinations is specific to each supported character set (note the difference in meaning of 14/00), and should be described in the conformance statement.