

# ISO/IEC 30112:2020-09 (E)

## Information technology - Specification methods for cultural conventions

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>3.1</b>	<b>Bytes and characters .....</b>	<b>2</b>
<b>3.2</b>	<b>Cultural and other major concepts .....</b>	<b>2</b>
<b>3.3</b>	<b>FDCC-related categories .....</b>	<b>3</b>
<b>4</b>	<b>Notations .....</b>	<b>3</b>
<b>4.1</b>	<b>Notation for defining syntax .....</b>	<b>3</b>
<b>4.2</b>	<b>Portable character set .....</b>	<b>4</b>
<b>5</b>	<b>FDCC-set .....</b>	<b>6</b>
<b>5.1</b>	<b>General .....</b>	<b>6</b>
<b>5.2</b>	<b>FDCC-set description .....</b>	<b>7</b>
<b>5.2.1</b>	<b>General .....</b>	<b>7</b>
<b>5.2.2</b>	<b>Character representation .....</b>	<b>8</b>
<b>5.2.3</b>	<b>Continuation of lines .....</b>	<b>9</b>
<b>5.2.4</b>	<b>Names for copy keyword .....</b>	<b>9</b>
<b>5.2.5</b>	<b>Pre-category statements .....</b>	<b>9</b>
<b>5.3</b>	<b>LC_IDENTIFICATION .....</b>	<b>10</b>
<b>5.4</b>	<b>LC_CTYPE .....</b>	<b>12</b>
<b>5.4.1</b>	<b>General .....</b>	<b>12</b>
<b>5.4.2</b>	<b>Character classification keywords .....</b>	<b>13</b>
<b>5.4.3</b>	<b>Character string transliteration .....</b>	<b>17</b>
<b>5.4.4</b>	<b>"i18n" LC_CTYPE category .....</b>	<b>17</b>
<b>5.5</b>	<b>LC_COLLATE .....</b>	<b>42</b>
<b>5.5.1</b>	<b>General .....</b>	<b>42</b>
<b>5.5.2</b>	<b>Collation statements .....</b>	<b>44</b>
<b>5.5.3</b>	<b>"copy" keyword .....</b>	<b>46</b>
<b>5.5.4</b>	<b>"coll_weight_max" keyword .....</b>	<b>46</b>
<b>5.5.5</b>	<b>"section-symbol" keyword .....</b>	<b>47</b>
<b>5.5.6</b>	<b>"collating-element" keyword .....</b>	<b>47</b>
<b>5.5.7</b>	<b>"collating-symbol" keyword .....</b>	<b>47</b>
<b>5.5.8</b>	<b>"symbol-equivalence" keyword .....</b>	<b>48</b>
<b>5.5.9</b>	<b>"order_start" keyword .....</b>	<b>48</b>
<b>5.5.10</b>	<b>"order_end" keyword .....</b>	<b>49</b>
<b>5.5.11</b>	<b>"reorder-after" keyword .....</b>	<b>49</b>
<b>5.5.12</b>	<b>"reorder-end" keyword .....</b>	<b>50</b>
<b>5.5.13</b>	<b>"section" keyword .....</b>	<b>50</b>
<b>5.5.14</b>	<b>"reorder-section-after" keyword .....</b>	<b>51</b>
<b>5.6</b>	<b>LC_MONETARY .....</b>	<b>53</b>
<b>5.7</b>	<b>LC_NUMERIC .....</b>	<b>57</b>
<b>5.8</b>	<b>LC_TIME .....</b>	<b>58</b>
<b>5.8.1</b>	<b>General .....</b>	<b>58</b>
<b>5.8.2</b>	<b>Date field descriptors .....</b>	<b>62</b>
<b>5.8.3</b>	<b>Modified field descriptors .....</b>	<b>63</b>

5.8.4	"i18n" LC_TIME category .....	64
5.9	LC_MESSAGES .....	65
5.10	LC_XLITERATE .....	65
5.10.1	General .....	65
5.10.2	Transliteration statements .....	66
5.10.3	"include" keyword .....	67
5.10.4	Example of use of transliteration .....	67
5.11	LC_NAME .....	68
5.12	LC_ADDRESS .....	69
5.13	LC_TELEPHONE .....	72
5.14	LC_PAPER .....	73
5.15	LC_MEASUREMENT .....	73
5.16	LC_KEYBOARD .....	74
6	CHARMAP .....	74
6.1	General .....	74
6.2	Character Set Description Text .....	74
7	Repertoiremap .....	79
8	Functionality .....	117
8.1	General .....	117
8.2	The "strpcoll" function .....	117
8.3	The "setmedia" function .....	118
8.4	String, encoding, repertoire and locale data types .....	118
8.4.1	General .....	118
8.4.2	String data type .....	118
8.4.3	Encoding data type .....	118
8.4.4	Repertoire data type .....	121
8.4.5	Locale data type .....	121
8.4.6	Character handling .....	123
8.4.7	String comparison .....	124
8.4.8	Message formatting .....	125
8.4.9	Conversion between string and other data types .....	127
8.4.10	Utilities .....	131
9	Messages format .....	133
	Annex B (informative) Rationale .....	136
	Annex C (informative) BNF grammar .....	149
	Annex D (informative) Relation to taxonomy .....	155
	Annex E (informative) Implementation in glibc .....	158
	Annex F (informative) Relation between categories and keywords, and APIs .....	159
	Annex G (informative) Bindings guidelines .....	160