

Cultural and Linguistic Characteristics of Québec

Information Technology
Conventions and Practices



Localization
Francization



to click
in French

Direction générale de la francisation
et du traitement des plaintes
Office québécois de la langue française

Bétel

Banc d'évaluation
technolinguistique

Québec 

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PREAMBLE

Québec is located in North America. In 2001, it had a population of close to 7.1 million people, over 83% of whom were French-speaking.

Its location in North America means that it must carry on cultural and commercial exchanges with neighbours where English is the common language and the one that predominates by far in the workplace, in culture and in public communications (over 250 million English-speakers).

With French-speaking Quebecers making up less than 3% of the population of North America, there was a need to bring in legislation to protect the French language in Québec. The Charter of the French Language, which made French Québec's official language, was adopted in 1977. The section of the Charter on the use of French in business was revised in 1993 to promote general use of French in information technology (IT).

Adapting information technology to ensure that it respects Québec's cultural and linguistic characteristics is a major challenge. Localization is an essential condition in the successful marketing and adoption of the technology and it serves the interests of the product designers because it reflects the expectations of the Québec market.

The Office québécois de la langue française (OQLF) is the Québec government agency responsible for implementing the Charter of the French Language. As part of its mission to promote the use of French in IT, the OQLF set up Bétel, a technical and linguistic testing laboratory, which produced this guide.

I. AREA OF APPLICATION

Cultural and Linguistic Characteristics of Québec: Information Technology Conventions and Practices is a guide that reviews Québec, Canadian and international standards that promote the use of French. It covers the rules that apply to the writing of personal and text data, common typographical conventions, data sorting, ordering and search methods, regional parameters for operating systems and Web sites, and terminology resources. It also provides all the information required for configuring the computer environments used in Québec businesses.

The guide is intended primarily for IT product designers and translation and localization professionals.

II. CHARACTERISTICS OF THE FRENCH LANGUAGE

Over 134 characters are required to implement the French writing system:

- The 26 letters of the Latin alphabet, both lowercase and uppercase (52 characters)
- 14 letters with diacritical marks, both lowercase and uppercase (28 characters):
àÂ âÃ çÇ éÉ èÈ êË îÏ ôÔ ûÛ üÜ ùÙ ÿŸ
- The 10 Arabic numerals (10 characters)
- Punctuation marks and other standard signs and symbols common to all European languages (38 characters)
- Ligatures, both lowercase and uppercase (4 characters): æÆ œŒ
- French quotation marks, left and right (2 characters): « »
- A few letters found in words that French has borrowed from other languages (including ñÑ and öÖ)

In French, data processing methods (for entering, displaying, saving, reading, printing, sorting and searching) are governed by specific standards designed to guarantee full support for the language's writing system.

III. STANDARDIZATION

Thanks to the work of ISO (International Organization for Standardization) and its partners, presentation standards have been adopted for the most common linguistic and numerical conventions used in international trade: country codes, currency codes, etc. These characteristics specific to a given society are part of what is called a "locale." More precisely, a locale is a subset of cultural and linguistic conventions defining a user's computer environment. This subset includes one or more of the following categories:

- Character classification and conversion to uppercase or lowercase (LC-CTYPE)
- Sort order (LC-COLLATE)
- Formats for date and time (LC-TIME)
- Formats for numerical monetary data (LC-MONETARY)
- Formats for diagnostic and user-information messages and for interactive messages (LC-MESSAGES)

The information given below complies, where applicable, to the locale for the French language for Canada (which is an integral part of the standard **CAN/CSA Z243.230-98**), to standards promoted by the Bureau de normalisation du Québec (BNQ) for aspects specific to Québec, and to the ISO standards for general aspects.

IV. TERMINOLOGY

When a field develops, new concepts arise and new realities must be given names in all languages. The terminology used in information technology is changing rapidly. Internationally, a number of multilingual teams are working on this terminology, including those with ISO and a joint technical committee of ISO and the International Electrotechnical Commission (see **ISO/IEC JTC1/SC1**).

In Québec, the Office québécois de la langue française has developed *Le grand dictionnaire terminologique* (GDT), which can be accessed free of charge at <http://www.oqlf.gouv.qc.ca>. It is a bilingual, French-English technical terminology bank containing some three million terms from 200 major fields, stored on 800,000 terminology records.



The OQLF also takes part in international exchanges with other French-speaking countries and plays an active role in the work of international French-speaking organizations.

V. CHARACTER SETS

In electronic, digital format, writing systems are implemented using various sets of alphabetic, numeric and other characters that are found in computer hardware and software.

In Québec, at a minimum, access to the complete Latin-1 character set (**ISO/IEC 8859-1**) must be guaranteed. For full support, including the ligatures œ and Œ, the letter Ÿ and the euro symbol €, at a minimum the **ISO/IEC 8859-15** character set must be used. These recommendations apply to 8-bit character sets ($2^8 = 256$ characters). Tables illustrating these character sets are appended to this guide and can also be found on the OQLF Web site at the following URLs:

http://www.oqlf.gouv.qc.ca/ressources/ti/ISO_CEI8859-1.pdf and
http://www.oqlf.gouv.qc.ca/ressources/ti/ISO_CEI8859-15.pdf.

The ISO/IEC 8859-15 character set supports 27 languages based on the Latin alphabet, whereas the ISO/IEC 8859-1 character set supports the following 14 languages: Albanian, Catalan, Danish, Dutch, English, Finnish, French, German, Icelandic, Italian, Norwegian, Portuguese, Spanish and Swedish. The two sets include all the upper- and lowercase characters with diacritical marks used in French.

Not using the proper French diacritics (accents), on both upper- and lowercase letters, in a text you draft in French introduces spelling mistakes that can change the meaning of words.

Examples:

- ON SUBVENTIONNE L'INDUSTRIE DU POISSON SALE (POISSON SALÉ means “salted fish”; POISSON SALE means “dirty fish”)
- CHACUN A LE SOUCI DE SA TACHE QUOTIDIENNE (TÂCHE QUOTIDIENNE means “daily task”; TACHE QUOTIDIENNE “daily stain”)
- UN RESTAURATEUR BLESSE ET VOLE (BLESSÉ ET VOLÉ means “wounded and robbed”; BLESSE ET VOLE “wounds and robs”)
- MAIS ECLATE NON BEURRE MAIS CAMELISE (MAÏS ÉCLATÉ NON BEURRÉ MAIS CAMELISÉ means “caramel-coated, non-buttered popcorn”; MAIS ECLATE NON BEURRE MAIS CAMELISE would mean something as non-sensical as “but explodes not butter but caramelizes”)

In a multilingual context, however, provision should ideally be made for using other characters, at the very least all of the characters common to the languages that use the Latin alphabet, including those characters that can have diacritics, to which characters used nationally and internationally should be added. Only fonts that support all the characters, both upper- and lowercase, required for written French should be used.

ISO recently adopted the first standardized character set designed to cover all the languages in the world: the UCS code, or Universal Multiple-Octet Coded Character Set (**ISO/IEC 10646**). The UCS, which encompasses several tens of thousands of characters (the number is still growing in order to include historical Chinese and dead languages), already takes into account most of the writing systems in use today; it could theoretically be increased up to two billion characters (though a practical limit of one million characters was recently set). The new code is guiding the direction of technological change. This new character set, which is **ISO/IEC 8859-1**-compatible, is supported natively by the most recent operating systems (MS Windows, Mac OS X, Linux, etc.). It is also used on the Internet with the help of **UTF-8** (eight-bit encoded Unicode Transformation Format).

VI. WRITING RULES

Information systems process alphanumeric data, including personal and text data, whether when input through a preformatted data entry template or when output by being displayed on the screen, printed as a report or through data interchange. At all stages in processing, the data must be presented according to a certain number of typographical rules and conventions. The rules and conventions that have an impact on the way that information technologies should process data are outlined in the following pages. They are taken from the guide *Le français au bureau* (6th ed., Les publications du Québec, 2005).

1. Personal names

Surnames and first names take an initial uppercase letter, with the remaining letters being written in lowercase. When a name is preceded by a function word (article or preposition), the function word takes an initial uppercase letter when no first name or title is given (as in street names), although usage is still not fixed for some surnames. In actual fact, the use of a lowercase function word should theoretically indicate a name of noble origin, but that rule is no longer followed much.

Examples: Des Champs, De Margerie, De Foy, De Fontenay (or de Fontenay), De Granpré (or de Granpré), Samuel de Champlain, le marquis de Montcalm

2. Organization and company names

As a general rule, current usage requires an initial uppercase letter only on the first word of the names of companies or organizations.

Examples: la Société générale de financement; l'Union des producteurs agricoles; la Société des alcools du Québec; l'Assemblée nationale

In the case of government departments and agencies, however, current usage is to put an initial uppercase letter on the words specifying their area of responsibility, with the word *ministère* [department] taking a lowercase letter.

Examples: le ministère de la Santé et des Services sociaux; le ministère de l'Emploi; l'Office québécois de la langue française

In the case of company names made up of a generic and a specific, usage calls for an initial uppercase letter on the first word of each (excluding the article).

Examples: Ameublements Dion inc.; Magasin d'alimentation Bernard enr.

The same rule applies to the official names of educational and health care institutions.

Examples: l'Université de Montréal; le Collège de Sherbrooke; le Collège Saint-Charles-Garnier; la Clinique médicale Cartier

3. Mailing addresses

A complete mailing address consists of the name of the person to whom the letter or parcel is being sent, the name of the company or organization, if any, with which the person is associated, the street address and name of the street, the name of the town or city and the province, the postal code, and the name of the country if the letter or parcel is being sent out of the country. The address must be written so as to respect the following conventions:

- Each of the elements is placed on a separate line, with no comma or period at the end.
- A comma is placed after the street address to separate it from the name of the street.
- The name of the street must always be preceded by the appropriate word — *rue*, *boulevard*, *avenue*, *côte* or *chemin*, as the case may be. If there is insufficient space, the accepted abbreviations of these terms may be used (boul., av., etc.).
- When the cardinal points *Est*, *Ouest*, *Nord*, *Sud* are required, they must be written with an initial uppercase letter and be placed immediately after the street name.
- The name of the province is written in parentheses, after the name of the city, town or village. If necessary (owing to lack of space, for instance), the official abbreviation for Québec, QC, may be used.
- The postal code is alphanumeric and consists of two sets of three characters (in which the letters are uppercase), separated by a space. It should come last, after the city or town and the province, and preferably be on the same line as these two, separated from them by a space equivalent to two characters.

Example:

Monsieur Pierre Untel
 Direction des communications
 Association des médecins du Québec
 1554, boulevard De Maisonneuve Ouest
 Montréal (Québec) H2L 3R9

Note: Canada Post's Canadian Addressing Guide meets the requirements of writing the French language because it covers the use of diacritics (accents), punctuation marks, and uppercase and lowercase letters.

4. Electronic addresses

4.1 E-mail addresses

The popularity of the Internet has resulted in the widespread use of electronic mail, or e-mail. Each user must have a unique address made up of identifiers, such as the user name, a domain name and a subdomain. All Internet addresses are compiled and managed worldwide by the Network Information Center (NIC). However, the NIC delegates part of the work to each country. In Canada, responsibility for Internet addresses resides with the Network Corporation Center (NCC), with which each provider connected to the network must register and to which it must apply in order to obtain a class of addresses that it can then assign to its customers. Within Canada, the NCC in turn delegates the administration of address nomenclature to various providers. Within the Québec public service, for example, this responsibility is assumed by Services gouvernementaux.

In Québec, e-mail addresses often include the following parts, in the indicated order:

- The proper name of the user (first name and surname in full without any spaces, an abbreviated name or a pseudonym) without any diacritics
- The @ sign (called the at sign in English, and known in French as *a commercial*, *arrobe*, *arrobas* or *arobas*)
- The domain name itself, consisting of:
 - the site (the name, in full or abbreviated, of the organization or the server), in lowercase or uppercase without any diacritics
 - a two-letter province code (the subdomain), qc in the case of Québec, based on standard **ISO 3166-2:1998** adopted by Canada Post that assigns a two-letter code to each province in Canada
 - a two-letter country code, ca in the case of Canada, based on standard **ISO 3166-1**

Example: Firstname.Surname@organization.qc.ca

Note: These various parts are generally separated by a dot (with the exception of the @, which itself separates two parts). On a business card or in copy, an e-mail address should be referred to by the term *courriel* (e.g. courriel : pierre.untel@organization.qc.ca).

4.2 Other Internet addresses

Many users are already familiar with addresses that provide access to various electronic files, by means of the Telnet, Gopher, FTP (File Transfer Protocol), Usenet, Archie and W3 (World Wide Web) protocols.

The first part of a Web address consists of the abbreviation HTTP. It designates the hypertext transfer protocol used to package and transfer files between servers on the network. The second part is usually the Web identifier WWW. The remaining elements give more specific information according to

a syntax analogous to that of Internet e-mail addresses. These addresses (URIs, or Uniform Resource Identifiers) are governed by the **RFC 2396** standard and can contain only a subset of the 7-bit ASCII characters (less than 128 in ISO/IEC 10646). However, work is currently in progress to internationalize domain names, which will make it possible, in French, to have domain names containing accents .

In a printed text, a Web address can be highlighted in any of a number of ways: by writing it in bold, by putting it in parentheses, in square brackets or in angle brackets (< >). If the address ends the sentence, a final period is added.

Examples: The address of the Government of Québec portal is **<http://www.gouv.qc.ca>**.

On the Web site of the Office québécois de la langue française (<http://www.oqlf.gouv.qc.ca>), you can consult the OQLF's terminology bank, *Le grand dictionnaire terminologique*.

5. Telephone and fax numbers

In North America, telephone numbers consist of a three-digit area code, followed by a three-digit local code and a four-digit personal code. The area code is usually followed by a space, then the local code and finally the personal code, with the last two parts separated by a hyphen.

Example: 418 524-8745

For international calls, the following convention is used: the country code is preceded by the + sign and followed by the telephone number; exceptionally, the country code 1 applies to both Canada and the United States, rather than to just one country, as is usually the case.

Example: +1 418 524-8745

On a business card or in copy, the following French abbreviations may be used: “*tél.*” for telephone and “*télééc.*” (meaning *télécopieur*) for fax or facsimile.

6. Numbers and units of measure

The *Système international d'unités* (**standard ISO 31**), or International System of Units, known by the French abbreviation SI, has been in force in Québec since 1970. The units of measure and the symbols for representing them are those of the metric system. The rules for writing numbers, quantities and units are set out in Bureau de normalisation du Québec (BNQ) standard **NQ 9990-901**.

This standard uses the following conventions:

- The symbols of the units of measure never end with a period and are never pluralized.

Examples: km (kilometre), cm (centimetre), mm (millimetre)

- Decimal numbering uses the ten Arabic numerals (0, 1, 2, 3, 4, 5, 6, 7, 8, 9).
- In French, the comma is used as a decimal separator.

Examples: 27,2 km; 4,35 l

- Numbers having five or more digits are divided into sets of three digits each, and this applies to both the units and the fractions part of the number. In typography, it is recommended that a ½-em quad or a ¼-em quad be used as a separator between the three-digit sets; in computer

applications, a nonbreaking, or “hard,” space (character 160 in the Latin-1 character set) should be used.

Examples: 1 807 915; 0,014 75 but 4232; 0,0147

If a quantity must be written out entirely in words, the name of the unit of measure must be placed immediately after the whole part of the number. Then comes the decimal part with its unit of measure.

Example: 1,90 m is written un mètre et quatre-vingt-dix centimètres

Factors for converting quantities from another system of measurement to the metric system are set out in standard **NQ 9990-941**.

Table 1. Equivalents of units of measure (summary of standard NQ 9990-941)

Name of unit to be converted to SI	Conversion factor	French name of SI unit
acre	4046.856 422 4	mètre carré (m ²)
arpent	3418.894	mètre carré (m ²)
bushel	36.368 72	décimètre cube (dm ³)
cord	3.624 556 363 776	mètre cube (m ³)
cup	227	millilitre (ml)
degree Celsius	T _{°C} + 273.16	kelvin (K)
degree Fahrenheit	5/9 (T _{°F} + 459.67)	kelvin (K)
fluid ounce	28.413 062	centimètre cube (cm ³)
fluid pint	0.568 261 2	décimètre cube (dm ³)
foot	30.48	centimètre (cm)
gallon (gal)	4.546 090	décimètre cube (dm ³)
inch	2.54	centimètre (cm)
knot (kn)	1.852	kilomètre par heure (km/h)
mile	1.609 344	kilomètre (km)
millibar	100	pascal (Pa)
nautical mile	1.852	kilomètre (km)
ounce (oz)	28.349 523 125	gramme (g)
pound (lb)	453.592 37	gramme (g)
quart	1.136 522	décimètre cube (dm ³)
tablespoon	15	millilitre (ml)
teaspoon	5	millilitre (ml)
yard	91.44	centimètre (cm)

7. Dates

As a general rule, the Gregorian calendar is used, as prescribed by standard **ISO 8601:2004**.

The numerical representation of a date should be as follows: four digits for the year, two for the month and two for the day. To make the date easier to read, either spaces or hyphens can be used to separate the three parts.

Example: 20061004 or 2006 10 04 or 2006-10-04

Note: If omitting the century cannot cause any confusion, the representation of the year can be reduced to two digits.

When written out, the days of the week do not take an initial uppercase letter, nor do the names of the months. In French, the first day of the week is *lundi*. The names of the days and months can be

represented by two- or three-character codes or be abbreviated by applying the usual rules for French abbreviation.

Example: le mercredi 4 octobre 2006

Table 2. Abbreviations and codes for days of the week

English name	French name	Single-character abbreviation	Code
Monday	lundi	L.	LUN
Tuesday	mardi	M.	MAR
Wednesday	mercredi	M.	MER
Thursday	jeudi	J.	JEU
Friday	vendredi	V.	VEN
Saturday	samedi	S.	SAM
Sunday	dimanche	D.	DIM

octobre 2006						
lun.	mar.	mer.	jeu.	ven.	sam.	dim.
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Table 3. Abbreviations and codes for months of the year

English name	French name	Common abbreviation	Two-character code	Bilingual two-character code	Three-character code
January	janvier	janv.	JR	JA	JAN
February	février	févr.	FR	FE	FÉV
March	mars	mars	MS	MR	MAR
April	avril	avr.	AL	AL	AVR
May	mai	mai	MI	MA	MAI
June	juin	juin	JN	JN	JUN
July	juillet	juill.	JT	JL	JUL
August	août	août	AT	AU	AOÛ
September	septembre	sept.	SE	SE	SEP
October	octobre	oct.	OE	OC	OCT
November	novembre	nov.	NE	NO	NOV
December	décembre	déc.	DE	DE	DÉC

8. Time

The 24-hour day constitutes the basis for the numerical representation of time, in accordance with standard **ISO 8601:2004**. The hour is followed by the minutes, and the two parts are separated by a colon (with no spaces on either side).

Example: 17:30 (and not 5:30 P.M., which is North American English usage)

In a table or in a technical context, the date and time may be written as follows: 2006100417:30 or 2006 10 04 17:30 or 2006-10-04-17:30.

Within the body of a written document, the alphanumeric representation is to be preferred; in this case, the abbreviation h should be used, with a space before and after.

Example: Le 4 octobre 2006, à 17 h 30

When an exact hour is given, it should be indicated as follows: 17 h (and not 17 h 00).

When a precise time or length of time must be indicated, the abbreviations of the SI (International System of Units) should be used: h, min, s.

Example: L'athlète a couru le marathon en 2 h 13 min 23 s.

For greater precision, and when the context requires it, the time zone, such as *HNE* (*heure normale de l'Est*, or Eastern Standard Time) or *HAE* (*heure avancée de l'Est*, or Eastern Daylight-Saving Time), can also be given. Québec stretches across two time zones, with the îles de la Madeleine [Magdalen Islands] and the Basse-Côte-Nord [Lower North Shore] in the Atlantic time zone, indicated by the abbreviations *HNA* (*heure normale de l'Atlantique*, or Atlantic Standard Time) and *HAA* (*heure avancée de l'Atlantique*, or Atlantic Daylight-Saving Time). In Québec, the spring time change occurs at two o'clock in the morning on the Sunday following the first Saturday in April and the fall time change on the Sunday following the last Saturday in October (**CAN/CSA Z243.230-98**). Standard time is in effect during the winter.

To indicate a time in Coordinated Universal Time, abbreviated UTC, an uppercase Z is written, without any separator, immediately after the last digit of the time; for all practical purposes, UTC is the same as Greenwich Mean Time (GMT).

Example: If the local time in Québec is 10:00, then in UTC it is 15:00Z.

For further information about time zones, refer to the standard **CAN/CSA Z234.4-89**.

9. Monetary units

According to the Bureau de normalisation du Québec standard **NQ 9221-500**, the monetary unit symbol must be placed after the numeric value (and its decimals, if there are any) and be separated from it by a space.

Examples: 250 \$; 24,95 \$; 1288,01 \$

The monetary unit symbol can be preceded by the symbol M, for “million” or by G, for “billion.” In that case the two symbols are written together, with no separator.

Examples: 98 M\$; 12 G\$

Note: This convention is reserved for use in tables and statistical or financial texts.

When a two-letter code is required, CA can be used for the Canadian dollar and US for the American dollar. The three-letter code for Canada is CAN (according to standard **ISO 3166**).

Examples: 48 \$ CA; 789 \$ US

In international exchanges, particularly electronic interchange, when it is important to avoid any possibility of ambiguity, standard **ISO 4217**, which specifies currency codes, can be followed. The currency code assigned to the Canadian dollar is CAD; the code USD refers to the American dollar, FRF to the French franc, which has now been replaced by the euro (EUR), and so on. In texts written in French, it is recommended that the currency code be placed after the amount.

Examples: 48 CAD; 789 USD

10. Names of writing systems

Standard **ISO 15924:2004** provides codes for indicating the names of writing systems. The codes are primarily intended for use in terminology, lexicography, bibliographies and linguistics, but they can also be used whenever a writing system needs to be identified by a code. The code for the writing system used in Québec is “Latn” for Latin.

Example:

```
<META HTTP-EQUIV="Content-Language" CONTENT="fr">  
<META NAME="Content-Script" CONTENT="Latn">
```

VII. COMMON TYPOGRAPHICAL CONVENTIONS

A text is made up of various elements, the arrangement of which must respect a certain number of rules in order to facilitate its presentation and to make it easier to read and process.

1. Paper sizes

Standard **ISO 216** specifies the paper sizes used in most countries in the world today, including the well-known A4 size. It defines three series of paper sizes: A, B and C. Series C is primarily used for envelopes.

In Québec, the most common paper sizes differ from the ISO standard. They are the same as the sizes used elsewhere in North America, which are:

- Letter size: 21.59 x 27.94 cm (8.5 x 11 in), used for letters, reports, news releases, photocopies, etc.
- Legal size: 21.59 x 35.56 cm (8.5 x 14 in), used primarily for legal and administrative documents

2. Margins

There is no standard governing the use of margins. In Québec usage, the top margin is generally about 5 cm on the first page of each part of the body of the text (introduction; development or even each part of the development, such as sections or chapters; and conclusion) and about 2.5 cm on the other pages. The bottom margin and the left and right margins generally vary between 2.5 and 4 cm. There is also a convention that the left margin is at least as wide as, if not wider than, the right margin.

To facilitate international exchanges, it is advisable to ensure that texts can be printed on either North American letter-size paper (21.59 x 27.94 cm) or international standard A4-size paper, which is slightly narrower and a bit longer. Left and right margins of 4 cm and top and bottom margins of 2.5 cm would seem to be appropriate.

3. Text divisions

A complex text can be divided in several different ways. One method is to use various typographic distinctions to mark chapters, sections and subsections: uppercase, lowercase, bold, underscoring, italics, etc. The international numbering system (1, 1.1, 1.1.1, etc.) can also be used, or a traditional outlining system using letters and numbers, in the following order: uppercase Roman numerals (I, II, III, IV ...); uppercase letters (A, B, C, D ...); Arabic numerals (1, 2, 3, 4 ...); and lowercase letters (a, b, c, d ...). These elements are separated from the subheading by a period, a dash, a bullet, a diamond or, in the last two cases, even a right parenthesis.

4. Spacing

To make written French texts uniform in their presentation and so easier to read and understand, there are certain basic typographic rules that must be observed. In typography, a whole range of different spacing is used: hair spaces, mid spaces and thick spaces, word spaces, variable spaces, ¼-quads, ½-quads, exact spacing, etc. These rules take into account the still relatively limited capabilities of common word-processing software programs (in contrast with desktop publishing software and professional layout software, which can produce hair and other fine spacing).

In regular word processing, hair spaces are generally eliminated and so are equivalent to no spacing at all; this is the case for the semicolon, the exclamation mark and the question mark, while any other kind of space is rendered by a single space.

Table 4. Spacing before and after punctuation marks and other common symbols

Name of punctuation mark	Punctuation mark	Spacing before mark	Spacing after mark
Apostrophe	'	No space	No space
Asterisk (placed before the word to which it refers)	*	One space	No space
Asterisk (placed after the word to which it refers)	*	No space	One space
Colon in numerical representation of time	:	No space	No space
Colon	:	One space	One space
Comma (in text)	,	No space	One space
Dash	—	One space	One space
Decimal point	,	No space	No space
Ellipsis (at the start of a sentence or passage)	...		One space
Ellipsis (in the middle or at the end of a sentence)	...	No space	One space
Exclamation mark	!	No space	One space
Hyphen	-	No space	No space
Left angle bracket	<	One space	No space
Left curved English quotation mark	“	One space	No space
Left French quotation mark	«	One space	One space
Left parenthesis	(	One space	No space
Left square bracket	[	One space	No space
Left straight English quotation mark	"	One space	No space
Mathematical signs	+, -, ×, ÷, =, <, >	One space	One space
Monetary unit	\$, M\$, \$ CA, \$ US, ¢, €	One space	One space
Percent sign	%	One space	One space
Period	.	No space	One space
Question mark	?	No space	One space
Right angle bracket	>	No space	One space
Right curved English quotation mark	”	No space	One space
Right French quotation mark	»	One space	One space
Right parenthesis	)	No space	One space
Right square bracket	]	No space	One space
Right straight English quotation mark	"	No space	One space
Semicolon	;	No space	One space
SI or other symbol	kg, s, cm, A, l	One space	One space
Slash (slant, solidus)	/	No space	No space

5. End-of-line word division

In general, words that must be broken at the end of a line should be divided by syllable. The following rules can help in recognizing syllables when using computer programs:

- Generally speaking, a consonant between two vowels begins a new syllable: pa/ri/té, fé/bri/le, La/bra/dor.

- When there are two consonants between two syllables, the first consonant belongs to the preceding syllable, and the second one to the following syllable.
However, l or r preceded by another consonant (other than l or r) forms with that consonant a pair that cannot be divided (bl, cl, fl, gl, pl, br, cr, dr, fr, gr, pr, tr, vr). The consonant combinations ch, ph, gn and th are likewise indivisible.
- When three consecutive consonants are found within a word, the first two normally belong to the first syllable and the third one to the second syllable. However, the consonant groups bl, cl ..., and br, cr ... mentioned above generally begin a new syllable.
- Compound words should be divided between their components, as dividing a component will make the word hard to read: fer/à/cheval; court-/circuit.

Word divisions to be avoided:

- Words at the bottom of a page
- Numbers, percentages, abbreviations and acronyms, and dates
- Words of fewer than four letters
- Breaks that leave a single letter on a line (for example, é/cole)
- Breaks after an apostrophe (for example, aujourd'hui)
- Breaks that separate courtesy or honorific titles from their proper name (a break is allowed, however, between the first name and the surname)
- Breaks between two vowels; however, a word may be divided between its prefix and its stem (for example, pré/avis, anti/allergique)

Despite these few rules, French end-of-line hyphenation rules are less complex than English. Instead of using dictionaries, as is the case with English-language software, in French it is possible to devise a simple word-division routine. This solution uses less computer memory and speeds up processing.

6. Pagination

No page numbers are shown on the title page, the front matter or the subheading pages when a subheading appears alone on a separate page; all these pages are counted in the pagination, however. Pagination begins with the introduction and ends on the last appended page, and includes any illustrations and tables.

VIII. SORTING, ORDERING AND SEARCHING

1. Sorting and ordering

In the course of its history, each language has adopted different methods for ordering the words that are specific to it. These natural sorting methods must be respected, that is, they must be faithfully reproduced automatically by computer programs. However, for a long time, computer technology was very inefficient in performing alphabetical sorting and ordering operations, not only in French but in some other major languages, too, such as German, Spanish, Arabic, Chinese, Thai and even English.

To address this problem, Canada has adopted a national standard (**CAN/CSA Z243.4.1-98**). This standard, which is a synthesis of the ordering methods used in French and English dictionaries, sets down a lexical ordering system that is 100% predictable. The Canadian standard can also be applied in its entirety to German, Portuguese, Italian and Dutch. However, it requires a small adaptation for Spanish.

The Government of Québec uses the standard **ISO/IEC 14651:2001**, which extends beyond the Latin alphabet the range of strings that can be sorted.

Example of standardized sort according to the ordering standard **ISO/IEC 14651:2001** (dictionary sort):

@@@@@	COTÉ	Noël
0000	côté	NOËL
9999	CÔTÉ	notre
Aalborg	du	nôtre
aide	dû	ode
aïeul	élève	œil
air	élevé	ou
@@@air	gène	OÙ
air@@@	gêne	ovoïde
Ålborg	géné	pèche
août	Größe	pêche
bohème	Grossist	péché
Bohême	haie	PÉCHÉ
Bohémien	haïe	pêché
caennais	île	pécher
cæsius	Île d'Orléans	pêcher
ça et là	lame	pechère
C.A.F.	l'âme	péchère
Canon	lamé	relève
cañon	les	relevé
casanier	LÈS	resume
cølibat	lèse	resumé
colon	lésé	résumé
côlon	L'Haÿ-les-Roses	révèle
coop	MacArthur	révélé
co-op	MÂCON	Þorsmörk
COOP	maçon	Thorvardur
CO-OP	medal	Þorvarður
Copenhagen	međal	vice-president
cote	McArthur	vice-président
COTE	Mc Arthur	vice-president's offices
côte	Mc Mahon	vice-presidents' offices
CÔTE	MODÈLE	vice versa
coté	modelé	VICE-VERSA

2. Searching

Text data search methods make use of the same concepts and conventions as data sorting techniques. Ideally, character-string search functions should be independent of case, special characters and diacritics. A search for “contremaître” should also find “contre-maître,” an old spelling now considered incorrect but still often seen. A broad search for “cle” should also find the two accepted spellings, “clef” and “clé.”

If a system is not capable of conducting a broad search that will find alternative spellings of the character string being sought, the search should be restricted to an exact search, that is, to a search that will find only exact matches with the search argument. So a search for “où” will not find “ou.”

IX. COMPUTER HARDWARE

Computer hardware can be considered to be in French if:

- The writing on the controls or the keyboard is in French.
- The electronic display is in French.
- The instructions and documentation (warranty, for instance) that come with it are in French.
- It can generate and read all the diacritics (accents, cedilla, diaeresis) used in French.

Input peripherals

One of the primary computer input peripherals is the keyboard, whether for a desktop computer, a laptop or a personal digital assistant (PDA).

A keyboard used in Québec should therefore be capable of reproducing at least the 134 characters needed for written French. The only keyboard capable of reproducing all 191 characters of the Latin-1 character set is the standardized **CAN/CSA Z243.200-92** keyboard.



It is the only standard respecting computer keyboards. It has been adopted by most manufacturers of computer hardware, and drivers are available for the Windows, Macintosh and Linux environments. A detailed explanation, in French only, can be found at the address <http://www.oqlf.gouv.qc.ca/ressources/ti/clavier.html>. Tables showing the character and function keys that appear on the standardized keyboard are appended to this document.

Other input methods, such as handwriting recognition, are also used; at a minimum, they must support the 134 characters required for written French. Voice recognition, on the other hand, must be able to accommodate the accents of people from different French-speaking countries around the world.

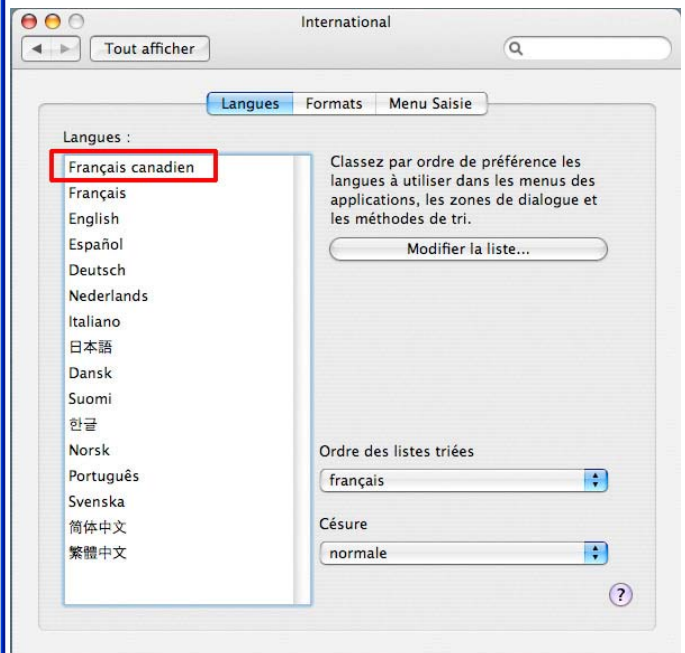
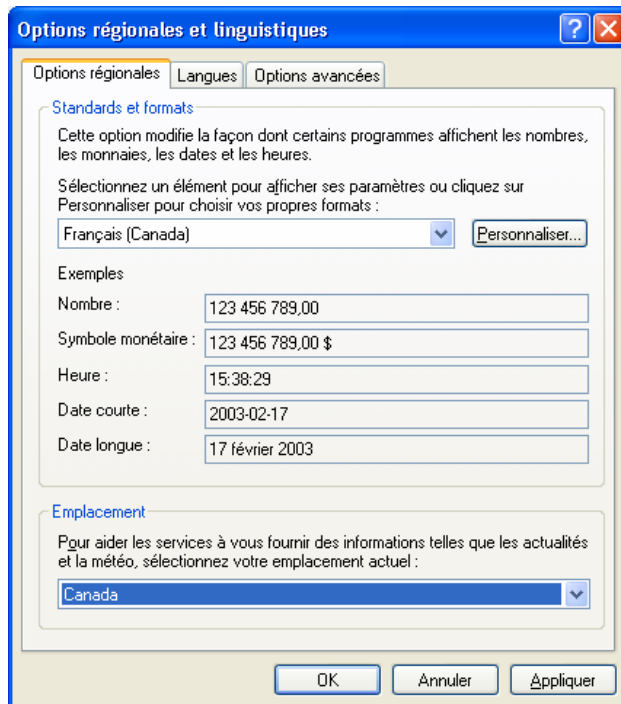
X. OPERATING SYSTEM CONFIGURATION

In addition to the keyboard driver for data input, the regional parameters of operating systems in French must correspond to the criteria in effect in Québec. These parameters concern the display formats for the time, date, numbers, currency symbol, etc.

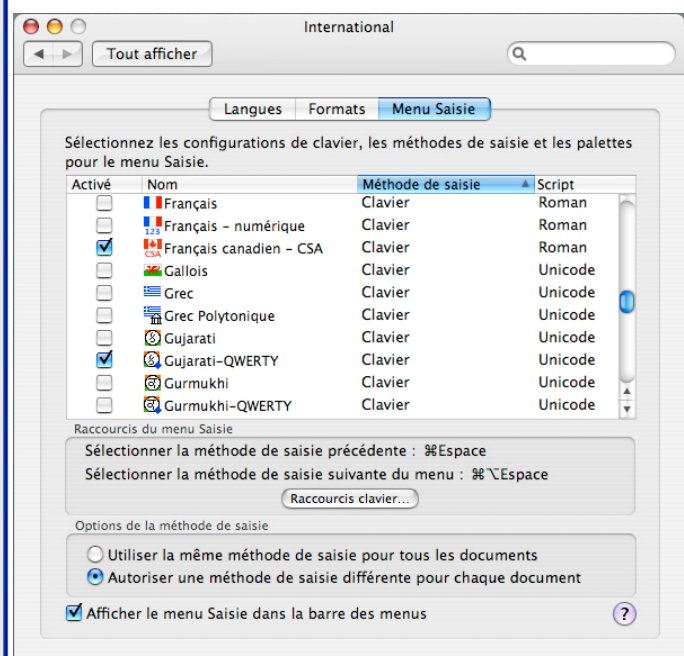
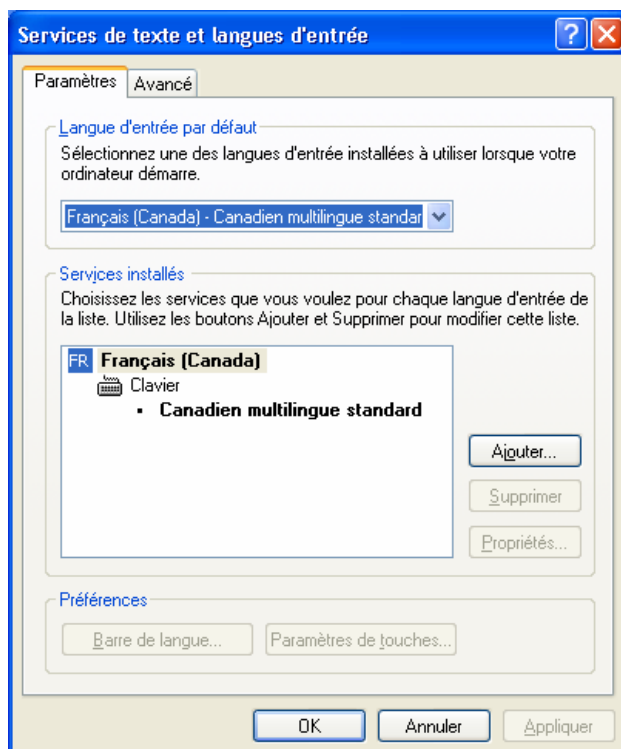
1. MS Windows and Mac OS X

The different parameters to be considered can be accessed, in the Windows XP SP2 environment, through the Panneau de configuration [Control Panel] by clicking on Options régionales et linguistiques [Date, Time, Regional and Language Options] or, in the Mac OS X 10.4.6 environment, through Préférences Système [System Preferences], International icon.

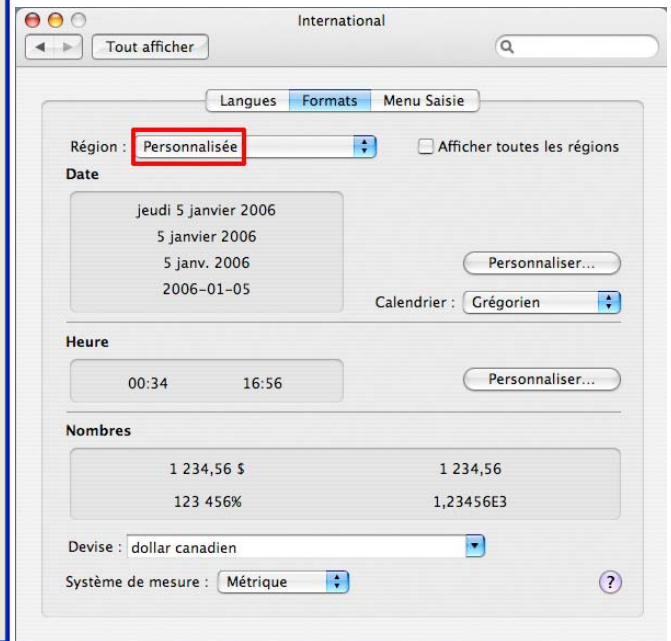
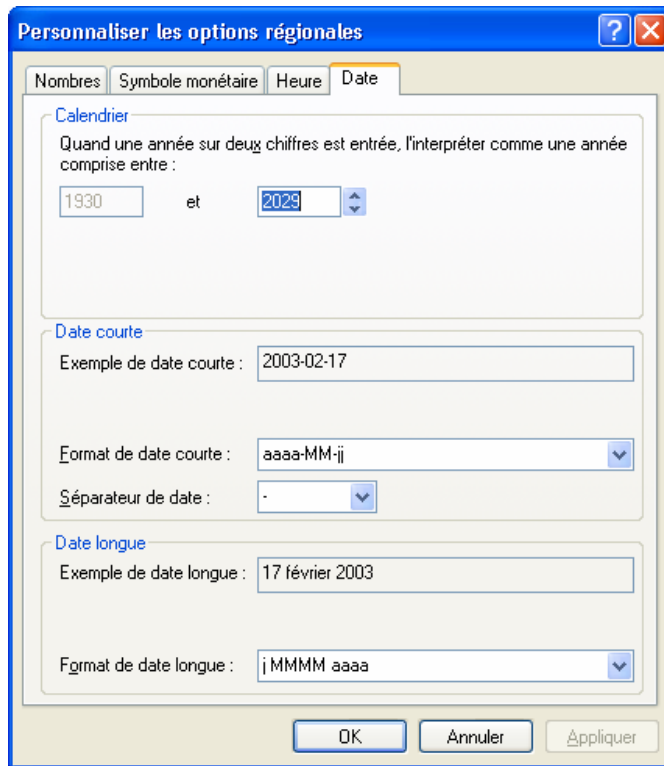
Langue [Language]: In the Windows environment, select “Français (Canada)” [French (Canadian)] on the options régionales [Regional Options] tab; in the Mac OS X environment, select “Français canadien” on the Langues [Languages] tab.



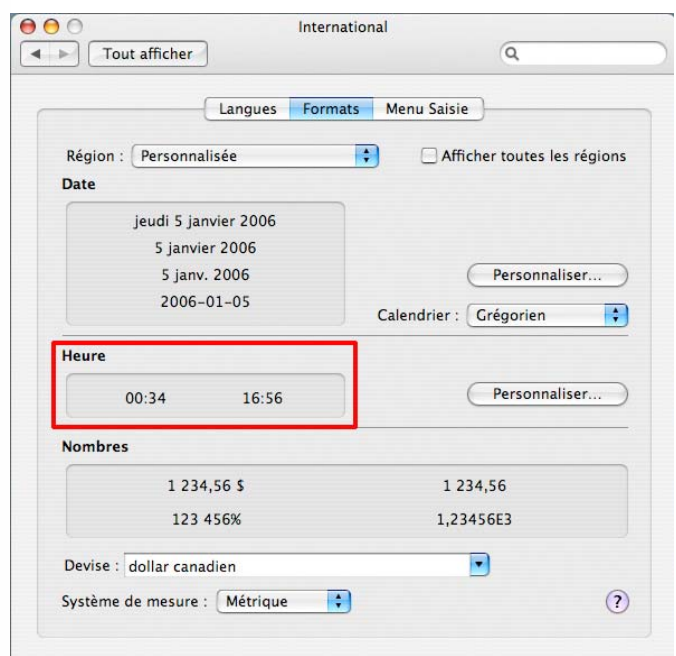
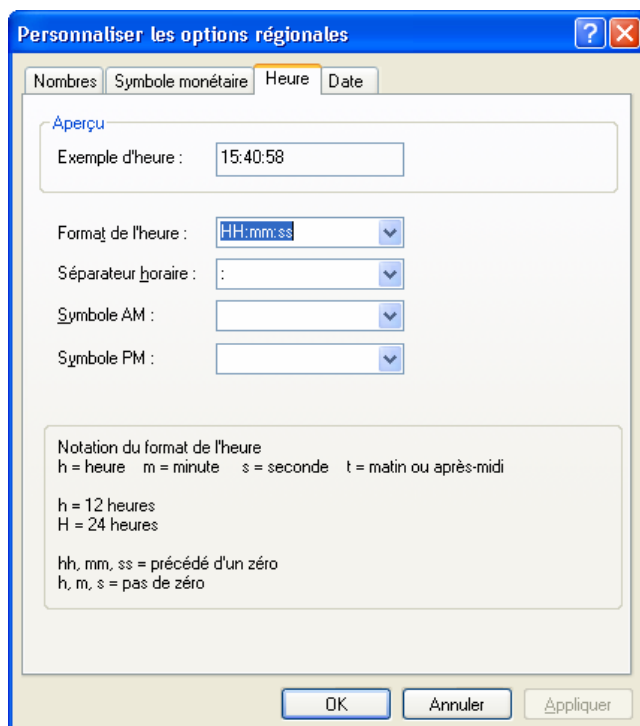
Keyboard: The keyboard driver with the best capabilities for inputting the diacritics used in French is the “Canadien multilingue standard” [Canadian Multilingual Standard] in the Windows environment (Langue d’entrée [input language]) and “Français canadien – CSA” [Canadian French – CSA] in the Mac OS X environment (Menu Saisie [input menu]).



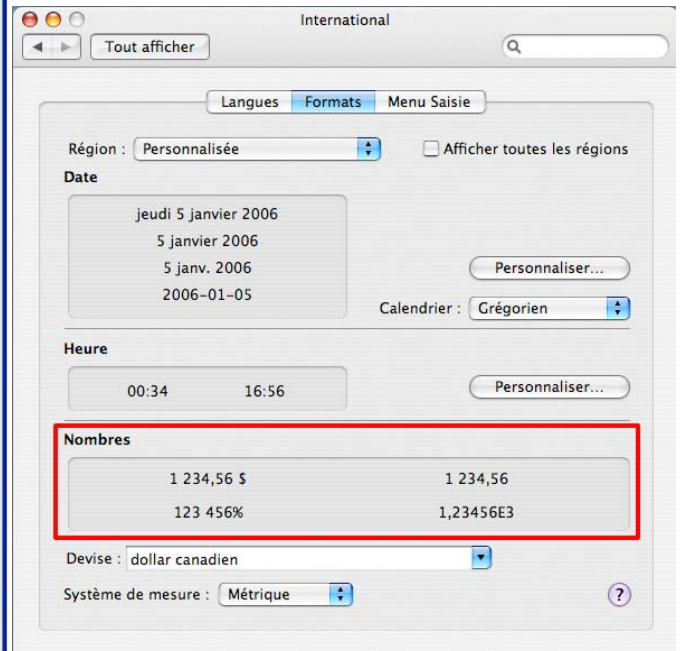
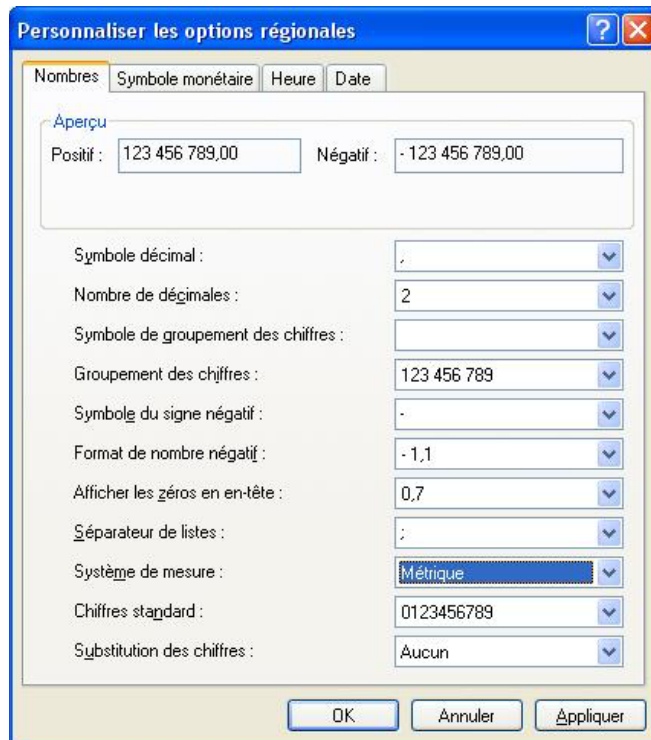
Date: The date courte [Short date] (or date abrégée) format is `aaa-MM-jj[yyyy-MM-dd]`, which corresponds to the ISO 8601:2004 international format. The date longue [Long date] (or date complète) format is `j MMMM aaa[d MMMM yyyy]` (without a comma between the month and the year).



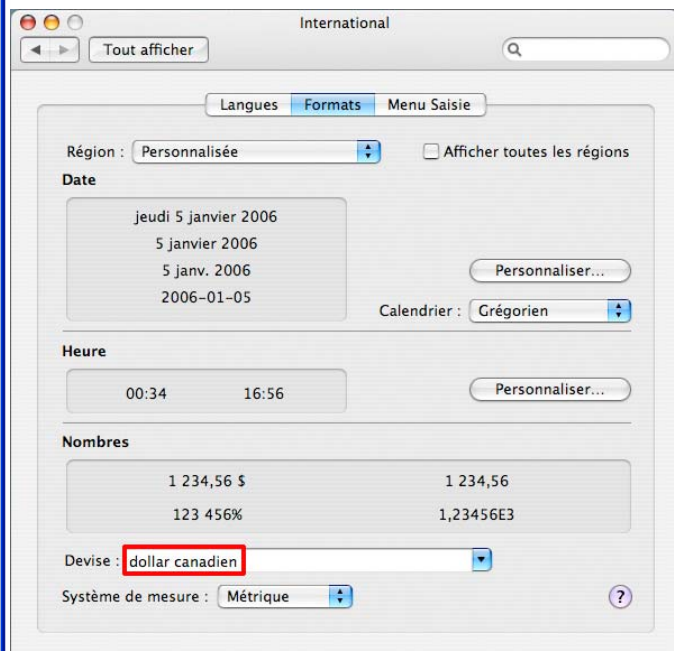
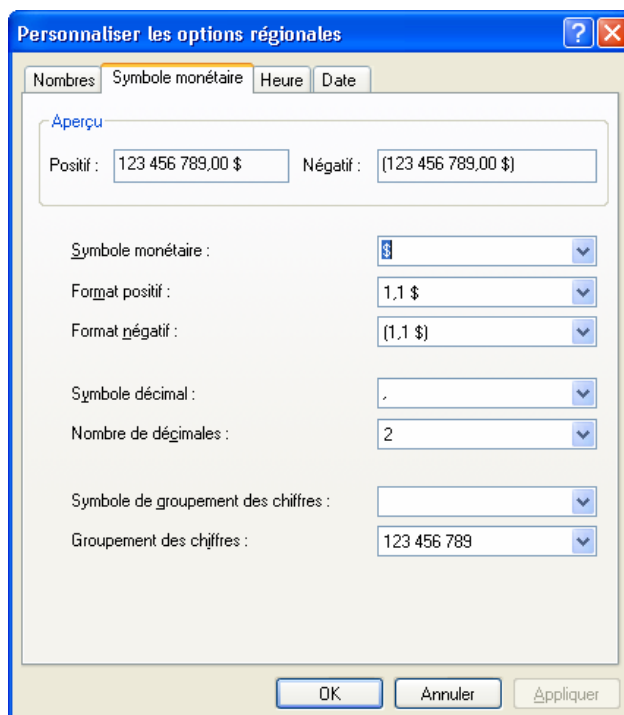
Time: The time format must be `HH:mm:ss`, which corresponds to the ISO 8601:2004 international standard. The H refers to the 24-hour clock.



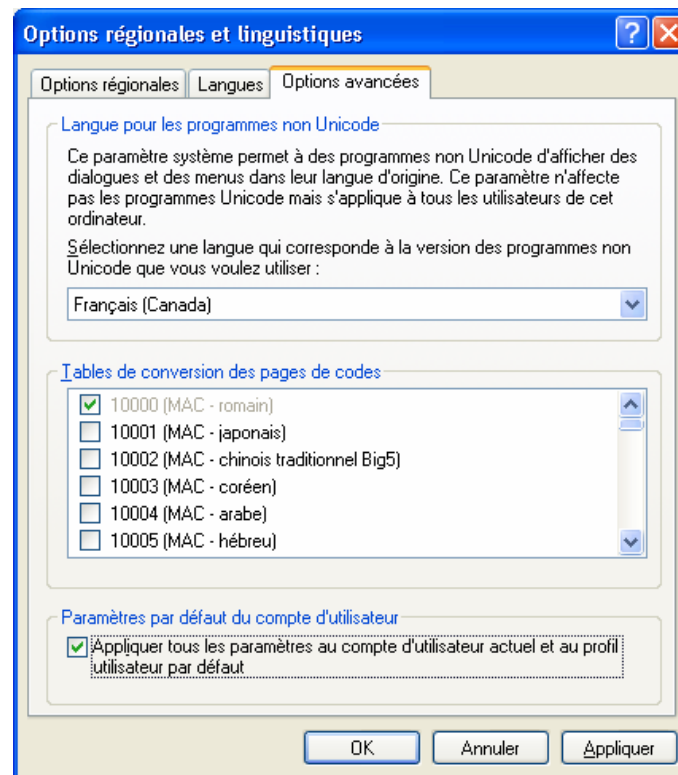
Numbers: Numbers must be displayed in the *Système de mesure métrique* [Measurement system — Metric] as implemented by the International System of Units (SI, standard ISO 31).



Currency: The currency display format and the position of the *symbole monétaire* (or *devise*) [currency symbol] must be in accordance with standard NQ 9921-500.

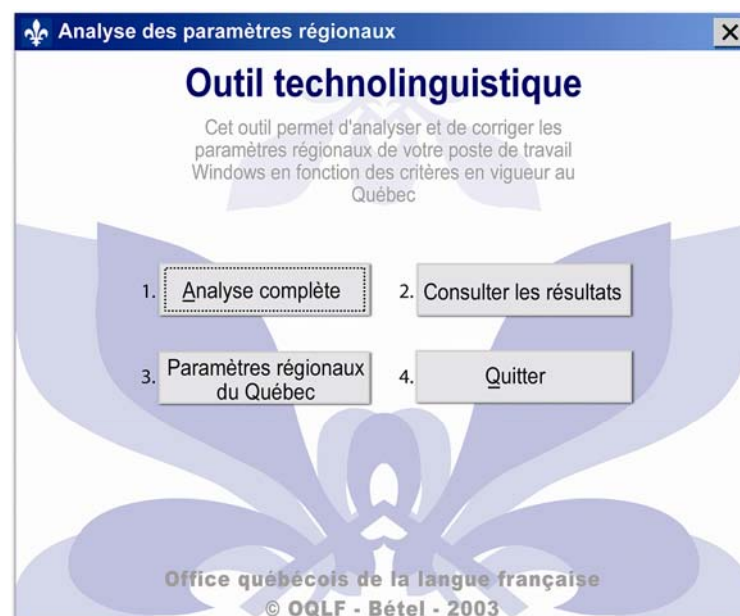


Options avancées [Advanced settings]: Lastly, in the Windows environment, select “Français (Canada)” [French (Canadian)] as the langue pour les programmes non Unicode [Language for non-Unicode programs] and activate the setting so that these parameters are applied as default values for all users.



2. Technical and linguistic tool (OTL)

Windows users can also check their regional options and make sure they meet official Québec standards by downloading a technical and linguistic program tool from the Web site of the Office québécois de la langue française at http://www.oqlf.gouv.qc.ca/ressources/ti/otl_1.html (in French only).



Downloading from the Web site

Click on the icon to download the tool. Save the file “installeOTL.exe” in a temporary folder and run it to unzip it.

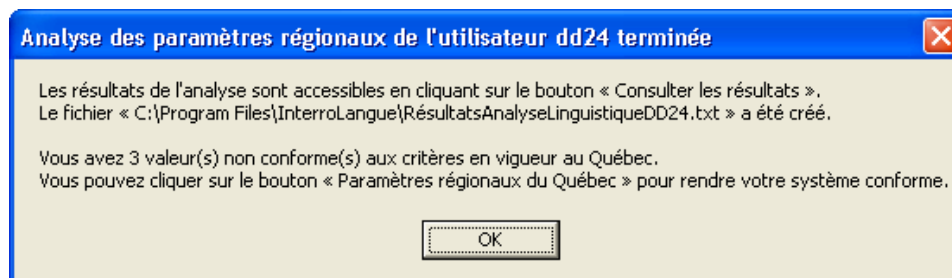


Installing

Double-click on the executable “installe.exe” and follow the instructions on the screen. No operating system files will be replaced.

Using

- To activate the tool, click on Démarrer, Programmes, Outil technolinguistique, OTL [Start, Programs, Technical and linguistic tool, OTL].
- To start the analysis, click on the Analyse complète [Complete analysis] button.
- A message will be displayed to tell you whether your workstation meets the standards in effect in Québec or, if it does not, which parameters are not compliant.



- You can view the results of the analysis by clicking on the “Consulter les résultats” [View results] button.
- To correct any non-compliant settings, click on the “Paramètres régionaux du Québec” [Québec regional parameters] button.



Once this operation has been completed, a comma will no longer appear after the month in the long date format, for instance.

Note: This analysis applies to the current user only. If your operating system has several users, you will have to repeat the operation for each user.

Compliance is assessed on the basis of the criteria set out in *Le français au bureau*, 6th edition, published by the Office québécois de la langue française.

Uninstalling

If you want to uninstall the technical and linguistic tool, follow the normal procedure: from the Démarrer menu, click on Paramètres, Panneau de configuration, Ajout/Suppression de programmes [from the Start menu, click on Settings, Control Panel, Add/Remove Programs].

This tool also lets you change the default language for the operating system (SystemDefaultLangID) from code 040c French (France) to code 0c0c for French (Canada). If you do this, then applications using this code will automatically be adapted for Québec when you install them.

This code will, for instance, change the settings for:

- 128-bit encryption of data
- the default paper size (8½ x 11 letter size, rather than A4)

3. Linux

For users of the Linux operating system, the Québec-compliant configuration of regional options is given in the technical and linguistic study “Linux en français” [Linux in French], available in French on the OQLF’s Web site at http://www.oqlf.gouv.qc.ca/ressources/ti/dossiers/BETEL_Linux.pdf.

XI. RECOMMENDATIONS REGARDING E-MAIL

Server

- An e-mail server connected to the Internet should be upgraded to support the 8BITMIME ESMTP protocol (Extended Simple Mail Transfer Protocol).
- In choosing a server, it is better to opt for one that supports full 8-bit communications. Most transmission problems in languages other than English occur in 7-bit communication mode.

Transmission

- Transmitting in QP mode (quoted printable) is to be avoided. That configuration option for MIME-compliant software allows 7-bit transmission, a mode that is fast disappearing from e-mail servers worldwide. In this mode, when the MIME tags are lost — for instance, when the message goes through a remailer, even if the place of origin and the place of destination both operate in a MIME environment — accented characters get lost, with an “é” appearing as the sequence “E9,” for instance.
- It is recommended that 8-bit MIME be activated in e-mail software programs.
- In the choice of a method for coding e-mail file attachments, **Base 64** mode (also called MIME in some e-mail software) is to be preferred to any other mode. The other common ones are Uuencode, specific to Unix, and BinHex, specific to Macintosh.

XII. WEB SITES

For documents published on the Web, it is recommended that accented characters be coded as single characters (that are part of the **ISO/IEC 8859-1** character set, which constitutes the minimum explicit standard) rather than as SGML entities; for instance, “é” should be coded as that character in the character set rather than as “é” or “é.”

If a language other than those supported by the ISO/IEC 8859-1 character set appears on some pages, an option would be to use the **ISO/IEC 10646** character set, with **UTF-8** encoding, so as to achieve greater compatibility with the XML format.

It is always advisable to indicate, on each Web page, the language in which the page is written. In HTML, this indication is given using the “lang” attribute.

Example: `<html lang='fr-CA'>` for Québec

XML (Extensible Markup Language) is a refinement of SGML that allows HTML document designers to define their own markers and thereby personalize the structure of the data they wish to present. The language of the document content must be specified using the “lang” attribute:

Example:

```
<?xml version="1.0" encoding="utf-8" ?>
<doc xml:lang="fr">
  <list title="Titre en français standard" [Title in standard French] xml:lang="fr">
    <p xml:lang="fr-ca">Texte en français provenant du Québec [Text in French from Québec].</p>
  </List>
</doc>
```

Information displayed on a Web page should be formatted in the same way as recommended above (date, time, address, etc.) and all graphics should be localized to reflect the cultural characteristics of Québec. For instance, French-speaking Québec users may well find it odd to have to click on the French flag in order to get Web pages to display in French.

XIII. TOOLS FOR FRENCH ADAPTATION OF INFORMATION TECHNOLOGY

PIF database



This database provides a listing of computer products (hardware and software) available in French in Québec. It can be queried by product, developer or category and can be accessed from the home page of the OQLF Web site (<http://www.oqlf.gouv.qc.ca>).

Bétel laboratory



The OQLF's technical and linguistic testing lab (Bétel) was set up for the purpose of evaluating computer software and hardware with a view to facilitating the French-language adaptation to information technology in Québec. The degree to which the product satisfies the characteristics of French as defined in established standards is assessed. The seal "*Informatique tout en français*" is awarded if these standards are met. Bétel results are displayed on the OQLF Web site. Any questions regarding the use of a French version of a product may be submitted to Bétel at the following address: betel@oqlf.gouv.qc.ca.



XIV. CONCLUSION

It is hoped that this document will be used as a practical guide to information technology localization. It is based on work being carried out jointly by the secretariat of Québec's treasury board, the Conseil du trésor, and by the Office québécois de la langue française, which are both Québec public agencies. It examines the various issues that must be taken into consideration when targeting a French-speaking clientele in North America, including respecting the cultural and linguistic characteristics of the French language.

When addressing an international audience, it is important to respect distinctive local characteristics. In this age of globalization, the influence of the French language must rely in part on the multilingual capabilities of information systems. Information technologies are now ready to aid in this endeavour.

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ISO 639	Language codes
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ISO 3166-2:1998	Codes for the representation of names of countries and their subdivisions — Part 2: Country subdivision codes
ISO 4217:2001	Codes for the representation of currencies and funds
ISO 8601:2004	Numeric representation of dates and times
ISO/IEC 2382	Information technology — Vocabulary
ISO/IEC 8859-1	Information technology — 8-bit single-byte control graphic character sets -- Part 1: Latin alphabet No. 1
ISO/IEC 8859-15	Information technology — 8-bit single-byte control graphic character sets — Part 1: Latin alphabet No. 9
ISO/IEC 8879	Standard Generalized Markup Language (SGML)
ISO/IEC 9995-7	Information technology — Keyboard layouts for text and office systems — Part 7: Symbols used to represent functions
ISO/IEC 10646-1	Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and basic multilingual plane
ISO/IEC 14651	Information technology — International string ordering and comparison
ISO/IEC 14755	Information technology — Input methods to enter characters from the repertoire of ISO/IEC 10646 with a keyboard or other input device
ISO 15924:2004	Codes for the representation of names of scripts

Canadian standards

CAN/CSA Z234.4-89	Names of Canadian time zones
CAN/CSA Z243.4.1-98	Canadian Alphanumeric Ordering Standard
CAN/CSA Z243.200-92	Canadian keyboard standard for English and French languages
CAN/CSA Z243.230-98	Minimum Canadian software localization conventions

Québec standards

NQ 9921-500	Unité monétaire canadienne et autres — Désignation et règles d'écriture
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NQ 9990-941	Système d'unités de mesure — Facteurs de conversion au système international d'unités (SI)
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- Vocabulaire de la bureautique
- Lexique de la micro-électronique
- Vocabulaire d'Internet

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		yyyy	20

ISO/IEC 8859-1: Latin Alphabet No. 1 Code Page

NUL	DLE		0	@	P	`	p	PAD	DCS	NBS	°	À	Đ	à	đ
000 00	016 10	032 20	048 30	064 40	080 50	096 60	112 70	128 80	144 90	160 A0	176 B0	192 C0	208 D0	224 E0	240 F0
SOH	DC1	!	1	A	Q	a	q	HOP	PU1	;	±	Á	Ñ	á	ñ
001 01	017 11	033 21	049 31	065 41	081 51	097 61	113 71	129 81	145 91	161 A1	177 B1	193 C1	209 D1	225 E1	241 F1
STX	DC2	"	2	B	R	b	r	BPH	PU2	¢	²	Â	Ò	â	ò
002 02	018 12	034 22	050 32	066 42	082 52	098 62	114 72	130 82	146 92	162 A2	178 B2	194 C2	210 D2	226 E2	242 F2
ETX	DC3	#	3	C	S	c	s	APC	STS	£	³	Ã	Ó	ã	ó
003 03	019 13	035 23	051 33	067 43	083 53	099 63	115 73	131 83	147 93	163 A3	179 B3	195 C3	211 D3	227 E3	243 F3
EOT	DC4	\$	4	D	T	d	t	IND	CCH	¤	´	Ä	Ô	ä	ô
004 04	020 14	036 24	052 34	068 44	084 54	100 64	116 74	132 84	148 94	164 A4	180 B4	196 C4	212 D4	228 E4	244 F4
ENQ	NAK	%	5	E	U	e	u	NEL	MW	¥	µ	Å	Õ	å	õ
005 05	021 15	037 25	053 35	069 45	085 55	101 65	117 75	133 85	149 95	165 A5	181 B5	197 C5	213 D5	229 E5	245 F5
ACK	SYN	&	6	F	V	f	v	SSA	SPA	¦	¶	Æ	Ö	æ	ö
006 06	022 16	038 26	054 36	070 46	086 56	102 66	118 76	134 86	150 96	166 A6	182 B6	198 C6	214 D6	230 E6	246 F6
BEL	ETB	‘	7	G	W	g	w	ESA	EPA	§	·	Ç	×	ç	÷
007 07	023 17	039 27	055 37	071 47	087 57	103 67	119 77	135 87	151 97	167 A7	183 B7	199 C7	215 D7	231 E7	247 F7
BS	CAN	(	8	H	X	h	x	HTS	SOS	¨	¸	È	Ø	è	ø
008 08	024 18	040 28	056 38	072 48	088 58	104 68	120 78	136 88	152 98	168 A8	184 B8	200 C8	216 D8	232 E8	248 F8
TAB	EM	)	9	I	Y	i	y	HTJ	SGCI	©	¹	É	Ù	é	ù
009 09	025 19	041 29	057 39	073 49	089 59	105 69	121 79	137 89	153 99	169 A9	185 B9	201 C9	217 D9	233 E9	249 F9
LF	SUB	*	:	J	Z	j	z	VTS	SCI	ª	º	Ê	Ú	ê	ú
010 0A	026 1A	042 2A	058 3A	074 4A	090 5A	106 6A	122 7A	138 8A	154 9A	170 AA	186 BA	202 CA	218 DA	234 EA	250 FA
VT	ESC	+	;	K	[	k	{	PLD	CSI	«	»	Ë	Û	ë	û
011 0B	027 1B	043 2B	059 3B	075 4B	091 5B	107 6B	123 7B	139 8B	155 9B	171 AB	187 BB	203 CB	219 DB	235 EB	251 FB
FF	FS	,	<	L	\	l	|	PLU	ST	¬	¼	Ì	Ü	ì	ü
012 0C	028 1C	044 2C	060 3C	076 4C	092 5C	108 6C	124 7C	140 8C	156 9C	172 AC	188 BC	204 CC	220 DC	236 EC	252 FC
CR	GS	-	=	M	]	m	}	RI	OSC	-	½	Í	Ý	í	ý
013 0D	029 1D	045 2D	061 3D	077 4D	093 5D	109 6D	125 7D	141 8D	157 9D	173 AD	189 BD	205 CD	221 DD	237 ED	253 FD
SO	RS	.	>	N	^	n	~	SS2	PM	®	¾	Î	Þ	î	þ
014 0E	030 1E	046 2E	062 3E	078 4E	094 5E	110 6E	126 7E	142 8E	158 9E	174 AE	190 BE	206 CE	222 DE	238 EE	254 FE
SI	US	/	?	O	_	o	DEL	SS3	APC	-	¿	Ï	ß	ï	ÿ
015 0F	031 1F	047 2F	063 3F	079 4F	095 5F	111 6F	127 7F	143 8F	159 9F	175 AF	191 BF	207 CF	223 DF	239 EF	255 FF

This is an 8-bit character set ($2^8 = 256$ characters). Latin alphabet No. 1, which can be used to transcribe 14 languages, is a subset of the 16- or 32-bit Unicode character set. The Unicode reference is coded as U+ *nnnn*, where *nnnn* is the hexadecimal value found to the right of each character in the table. For all 8-bit characters, the code always begins with 00. For example, the character © is written U00A9, while the code U00A0 represents the nonbreaking space (NBS).

ISO/IEC 8859-15: Latin Alphabet No. 9 Code Page

NUL 000 00	DLE 016 10		0 032 20	@ 048 30	P 064 40	` 080 50	p 096 60	PAD 112 70	DCS 128 80	NBS 144 90	° 160 A0	À 176 B0	Đ 192 C0	à 208 D0	đ 224 E0		
SOH 001 01	DC1 017 11	!	1 033 21	A 049 31	Q 065 41	a 081 51	q 097 61	HOP 113 71	PU1 129 81	ı 145 91	± 161 A1	Á 177 B1	Ñ 193 C1	á 209 D1	ñ 225 E1		
STX 002 02	DC2 018 12	"	2 034 22	B 050 32	R 066 42	b 082 52	r 098 62	BPH 114 72	PU2 130 82	ç 146 92	² 162 A2	Â 178 B2	Ò 194 C2	â 210 D2	ò 226 E2		
ETX 003 03	DC3 019 13	#	3 035 23	C 051 33	S 067 43	c 083 53	s 099 63	APC 115 73	STS 131 83	£ 147 93	³ 163 A3	Ã 179 B3	Ó 195 C3	ã 211 D3	ó 227 E3		
EOT 004 04	DC4 020 14	\$	4 036 24	D 052 34	T 068 44	d 084 54	t 100 64	IND 116 74	CCH 132 84	€ 148 94	Ž 164 A4	Ä 180 B4	Ô 196 C4	ä 212 D4	ô 228 E4		
ENQ 005 05	NAK 021 15	%	5 037 25	E 053 35	U 069 45	e 085 55	u 101 65	NEL 117 75	MW 133 85	¥ 149 95	µ 165 A5	Å 181 B5	Õ 197 C5	å 213 D5	õ 229 E5		
ACK 006 06	SYN 022 16	&	6 038 26	F 054 36	V 070 46	f 086 56	v 102 66	SSA 118 76	SPA 134 86	Š 150 96	¶ 166 A6	Æ 182 B6	Ö 198 C6	æ 214 D6	ö 230 E6		
BEL 007 07	ETB 023 17	'	7 039 27	G 055 37	W 071 47	g 087 57	w 103 67	ESA 119 77	EPA 135 87	§ 151 97	· 167 A7	Ç 183 B7	× 199 C7	ç 215 D7	÷ 231 E7		
BS 008 08	CAN 024 18	(	8 040 28	H 056 38	X 072 48	h 088 58	x 104 68	HTS 120 78	SOS 136 88	š 152 98	ž 168 A8	È 184 B8	Ø 200 C8	è 216 D8	ø 232 E8		
TAB 009 09	EM 025 19	)	9 041 29	I 057 39	Y 073 49	i 089 59	y 105 69	HTJ 121 79	SGCI 137 89	© 153 99	¹ 169 A9	É 185 B9	Ù 201 C9	é 217 D9	ù 233 E9		
LF 010 0A	SUB 026 1A	*	: 042 2A	J 058 3A	Z 074 4A	j 090 5A	z 106 6A	VTS 122 7A	SCI 138 8A	ª 154 9A	º 170 AA	Ê 186 BA	Ú 202 CA	ê 218 DA	ú 234 EA		
VT 011 0B	ESC 027 1B	+	; 043 2B	K 059 3B	[075 4B	k 091 5B	{ 107 6B	PLD 123 7B	CSI 139 8B	« 155 9B	» 171 AB	Ë 187 BB	Û 203 CB	ë 219 DB	û 235 EB		
FF 012 0C	FS 028 1C	,	< 044 2C	L 060 3C	\ 076 4C	l 092 5C	| 108 6C	PLU 124 7C	ST 140 8C	¬ 156 9C	Œ 172 AC	Ì 188 BC	Ü 204 CC	ì 220 DC	ü 236 EC		
CR 013 0D	GS 029 1D	-	= 045 2D	M 061 3D	] 077 4D	m 093 5D	} 109 6D	RI 125 7D	OSC 141 8D	- 157 9D	œ 173 AD	Í 189 BD	Ý 205 CD	í 221 DD	ý 237 ED		
SO 014 0E	RS 030 1E	.	> 046 2E	N 062 3E	^ 078 4E	n 094 5E	~ 110 6E	SS2 126 7E	PM 142 8E	® 158 9E	ÿ 174 AE	Î 190 BE	Þ 206 CE	î 222 DE	þ 238 EE		
SI 015 0F	US 031 1F	/	? 047 2F	O 063 3F	_ 079 4F	o 095 5F	DEL 111 6F	SS3 127 7F	APC 143 8F	- 159 9F	ı 175 AF	İ 191 BF	ß 207 CF	ï 223 DF	ÿ 239 EF		

This is an 8-bit character set ($2^8 = 256$ characters). It is similar to Latin alphabet No. 1 (ISO/IEC 8859-1) but includes the Euro symbol (€), the ligatures œ and Œ, and a few Finnish characters. It will eventually replace Latin Alphabet No. 1.

List of names of additional characters in Latin Alphabet No. 1















\	Barre oblique inverse	Backslash
/	Barre oblique	Slash; solidus
-	Trait horizontal	Horizontal bar
|	Barre verticale interrompue	Broken bar
!	Point d'exclamation	Exclamation mark
¡	Point d'exclamation retourné	Inverted exclamation mark
¹	Exposant un	Superscript one
@	Arrobas, a commercial	Commercial at
²	Exposant deux	Superscript two
#	Carré	Number sign
£	Symbole de la livre	Pound sign
³	Exposant trois	Superscript three
\$	Symbole du dollar	Dollar sign
¤	Symbole monétaire	Currency sign
¼	Fraction un quart	Fraction one quarter
%	Symbole pour cent	Percent sign
½	Fraction un demi	Fraction one half
?	Point d'interrogation	Question mark
¾	Fraction trois quarts	Fraction three quarters
&	Perluète	Ampersand
{	Accolade ouvrante	Left brace
*	Astérisque	Asterisk
}	Accolade fermante	Right brace
(	Parenthèse ouvrante	Left parenthesis
±	Signe plus ou moins	Plus-minus sign
[	Crochet ouvrant	Left square bracket
)	Parenthèse fermante	Right parenthesis
]	Crochet fermant	Right square bracket
_	Trait bas, soulignement	Low line, underscore
-	Signe moins, trait d'union	Minus sign, hyphen
¿	Point d'interrogation retourné	Inverted question mark
+	Signe plus	Plus sign
=	Signe égal	Equals sign
¸	Cédille	Cedilla
¬	Signe de négation	Not sign
®	Symbole marque déposée (anglais)	Registered trademark sign
¶	Symbole du paragraphe (anglais)	Paragraph sign
¥	Symbole du yen	Yen sign
Ø	O barré majuscule	Capital o with stroke















þ	Thorn minuscule	Small thorn
¨	Tréma	Diaeresis
^	Accent circonflexe	Circumflex accent
°	Symbole du degré	Degree sign
`	Accent grave	Grave accent
Ç	C cédille majuscule	Capital c with cedilla
ˉ	Macron	Macron
˜	Tilde	Tilde
Æ	Ligature majuscule ae	Capital ligature ae
§	Symbole du paragraphe	Paragraph sign (French)
ß	S dur (allemand)	Sharp s (German)
Ð	Eth majuscule	Capital eth
ª	Indicateur ordinal féminin	Feminine ordinal indicator
:	Deux-points	Colon
;	Point-virgule	Semicolon
´	Accent aigu	Acute accent
È	E majuscule accent grave	Capital e with grave accent
À	A majuscule accent grave	Capital a with grave accent
Û	U majuscule accent grave	Capital u with grave accent
«	Guillemet français ouvrant	Left quotation mark (French)
»	Guillemet français fermant	Right quotation mark
©	Symbole tous droits réservés	Copyright sign
¢	Symbole du cent	Cent sign
º	Indicateur ordinal masculin	Masculine ordinal indicator
µ	Symbole de <i>micro-</i>	Micro sign
‘	Apostrophe	Apostrophe
,	Virgule	Comma
×	Signe de multiplication	Multiplication sign
<	Signe inférieur à	Less-than sign
"	Guillemet anglais (petit guillemet)	Quotation mark
.	Point	Dot
÷	Signe de division	Division sign
·	Point médian	Middle dot
>	Signe supérieur à	Greater-than sign
É	E majuscule accent aigu	Capital e with acute accent

This list of characters is in the order they appear on the standardized keyboard.

ISO 9995-7 Pictograms

(Standard for computer keyboard function keys)

	Échappement	Escape
	Impression de l'écran	Print Screen
	Défilement	Scroll Lock
	Pause	Pause
	Interruption	Break
	Insertion	Insert
	Suppression	Delete
	Début	Home
	Fin	End
	Page précédente	Page Up
	Page suivante	Page Down
	Curseur vers le haut	Cursor Up
	Curseur vers le bas	Cursor Down
	Curseur vers la droite	Cursor Right

	Curseur vers la gauche	Cursor Left
	Effacement arrière	Backspace
	Retour	Return
	Tabulation à gauche	Tabulation Left
	Tabulation à droite	Tabulation Right
	Verrouillage des majuscules	Caps Lock
	Majuscules; Sélection de niveau 2	Shift; Level 2 Select
	Contrôle	Control
	Alternative	Alternate
	Alternative; Sélection de niveau 3	Alternate; Level 3 Select
	Espace insécable	Nonbreaking space
	Espace	Space
	Contrôle; Sélection de groupe	Control; Group Select
	Verrouillage numérique	Num Lock



The Office québécois de la langue française is a government agency entrusted with the task of promoting and applying the Charter of the French Language. In order to sustain the use of French in the field of Information Technology, the Office offers the French terminology associated with IT in its *Grand dictionnaire terminologique* (GDT). The Office gives information on the availability of French versions of material and software in an online database called Produits informatiques en français (PIF). The Office also publishes the result of benchmark tests performed in its technolinguistic lab BÉTEL (Banc d'évaluation technolinguistique).

The present Guide to Cultural and Linguistic Characteristics of Québec in Information Technology, published by the BÉTEL team, references and explains all pertinent standards, national and international, defining the requirements to fully support French in the Québec context.

Readers, whether translators or developers, will find in this publication all the required standards to be applied in order to produce a proper Québec localization. Also, users of this guide will be able to configure their workstation in accordance with these localization standards.