

IBM Cúram Social Program Management  
Version 7.0.5

*Cúram Regionalization Guide*



**Note**

Before using this information and the product it supports, read the information in [“Notices” on page 12](#)

**Edition**

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# Chapter 1. Developing for Regional Support

The regional settings of a Cúram application can be modified. Locale defaults can be altered which reflect their region's currency, date and time standards, and address formats.

## Overview

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The guide describes how to configure the regional settings of an application. After reading the guide, the reader should have an understanding of how to modify locale defaults to reflect their region's currency, date and time standards and address formats.

The guide is intended for developers and analysts responsible for customizing the region settings of the application to suit the business needs of an organization.

The guide covers the customization of currency, date and time formats, address formats and other non-linguistic aspects of a locale. It does not cover how to translate the user interface of the application.

A Locale represents a specific geographical, political, or cultural entity. It encapsulates user interface language, date and time formats, number and currency formats and other settings. Locales consist of a language with an optional region identifier, for example: English (British) en\_GB or German (Germany) de\_DE.

## Prerequisites

A working knowledge of the development environment is needed to read this document.

## Sections in this Guide

The following list describes the sections within the guide:

“[Regional Settings](#)” on page 1. The section details the changes that are needed to set currency, date, and time standards and address formats in the application.

“[Settings Reference](#)” on page 4. The section provides a detailed reference of region settings in the application.

## Regional Settings

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The section details the changes that are needed to customize the currency, date and time standards, and address formats in the Development Environment.

## Configuring Regional Settings

To set your locale defaults for en, en\_US or en\_GB locale, follow the settings that are listed here for that locale.

You can use these settings as a guide if you want to alter the locale defaults.

### **bootstrap.properties**

Update the following properties in:

EJBServer\project\properties\bootstrap.properties

<i>Table 1: bootstrap.properties settings</i>			
<b>Property Name</b>	<b>en</b>	<b>en_US</b>	<b>en_GB</b>
curam.environment.default.dateformat	M d yyyy	M d yyyy	d M yyyy
curam.environment.default.dateseparator	/	/	/
curam.DMX.locale	en	en_US	en_GB

**Note:** M d y values follow Java™'s SimpleDateFormat syntax.

### The Application.prx file

Update the following properties according to the locale you are implementing in:

EJBServer/project/properties/Application.prx

<i>Table 2: Settings for en locale</i>	
<b>Property Name</b>	<b>Value</b>
curam.environment.default.locale	en
curam.financial.basecurrency	USD
curam.financial.currencysymbol	\$
curam.financial.currencysymbolplacement	before
curam.miscapp.defaultdateformat	Date_mdy_ext
curam.address.addressDataLocaleForDefaultAddress	en

<i>Table 3: Settings for en_US locale</i>	
<b>Property Name</b>	<b>Value</b>
curam.environment.default.locale	en_US
curam.financial.basecurrency	USD
curam.financial.currencysymbol	\$
curam.financial.currencysymbolplacement	before
curam.miscapp.defaultdateformat	Date_mdy_ext
curam.address.addressDataLocaleForDefaultAddress	en_US

<i>Table 4: Settings for en_GB locale</i>	
<b>Property Name</b>	<b>Value</b>
curam.environment.default.locale	en_GB
curam.financial.basecurrency	GBP
curam.financial.currencysymbol	£
curam.financial.currencysymbolplacement	before
curam.miscapp.defaultdateformat	Date_dmy_ext

*Table 4: Settings for en\_GB locale (continued)*

<b>Property Name</b>	<b>Value</b>
curam.address.addressDataLocaleForDefaultAddress	en_GB

**Code Table Settings**

Update the following Code Table values according to the locale you are implementing in:

EJBServer\components\core\codetable

*Table 5: Settings for en locale*

<b>Code Table</b>	<b>Settings</b>
CT_Currency.ctx	Locate the value="USD" set default="true" set existing default to false.
CT_Nationality.ctx	Locate the value="NT5" set default="true" set existing default to false.
CT_Country.ctx	Locate the value="US" set default="true" set existing default to false.
CT_addressLayoutType.ctx	Locate the value="US" set default="true" set existing default to false.
CT_Locale.ctx	Locate the value="en" set default="true" set existing default to false.

*Table 6: Settings for en\_US locale*

<b>Code Table</b>	<b>Settings</b>
CT_Currency.ctx	Locate the value="USD" set default="true" set existing default to false.
CT_Nationality.ctx	Locate the value="NT5" set default="true" set existing default to false.
CT_Country.ctx	Locate the value="US" set default="true" set existing default to false.
CT_addressLayoutType.ctx	Locate the value="US" set default="true" set existing default to false.
CT_Locale.ctx	Locate the value="en_US" set default="true" set existing default to false.

Table 7: Settings for en\_GB locale

Code Table	Settings
CT_Currency.ctx	Locate the value="GBP" set default="true" set existing default to false.
CT_Nationality.ctx	Locate the value="NT2" set default="true" set existing default to false.
CT_Country.ctx	Locate the value="GB" set default="true" set existing default to false.
CT_addressLayoutType.ctx	Locate the value="UK" set default="true" set existing default to false.
CT_Locale.ctx	Locate the value="en_GB" set default="true" set existing default to false.

**ApplicationConfiguration.properties**

Update the following properties in:  
 webclient/JavaSource/curam/omega3  
 /ApplicationConfiguration.properties

Table 8: ApplicationConfiguration.properties settings

Property Name	en	en_US	en_GB
dateformat	M d yyyy	M d yyyy	d M yyyy
dateseparator	/	/	/

**Note:** M d y values follow Java's SimpleDateFormat syntax.

**Environment Variables**

Set the following Environment Variables:

Table 9: Environment Variables

Environment Variable	en	en_US	en_GB
SERVER_LOCALE_LIST	en, en_US, en_GB	en, en_US, en_GB	en_GB, en_US, en
LOCALE_LIST	en	en_US	en_GB

**Settings Reference**

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The section covers individual configuration settings in detail.

## Bootstrap properties

The `Bootstrap.properties` file is used to specify database settings and other server-side properties including date format and separator.

ID	Value	Details
curam.environment.default.dateseparator	, or / or. or -	Overrides the default date separator
curam.environment.default.dateformat	M d yyyy or d M yyyy etc.	Overrides the default date display pattern
curam.DMX.locale	en_US or en_GB etc.	Sets the database locale

**Note:** Data Manager XML (DMX) files store the locale information for the attributes for the database table. As the database must be built for only one locale, the Data Manager uses the `curam.DMX.locale` property to determine the locale that must be used when the data specified in DMX files is inserted into the database. This property can be set in either the `Bootstrap.properties` file or as a system variable. If set in both the `Bootstrap.properties` file and as a system variable, the system variable overrides the setting in the `Bootstrap.properties` file.

This property must be set to a valid locale, that is, in the format `language_Country`, where `language` is mandatory and `country` is optional. For example, `curam.DMX.locale=en_US`

If this property is not set, the infrastructure falls back on the `en` locale.

Type	Value
Setting	Bootstrap.properties settings
Setting Type	Override String values
Path	\EJBServer\project\properties
Filename	Bootstrap.properties

## Application Configuration properties

The `ApplicationConfiguration.properties` file specifies application server-related properties, including date format settings used when dates entered by the user are displayed or interpreted.

**Tip:** See the *Cúram Web Client Reference Manual* for more information.

ID	Value	Details
dateseparator	, or / or. or -	Overrides the default date separator
dateformat	M/d/yyyy or dd MM yyyy and so on.	Overrides the default date display pattern

<i>Table 13: Application Configuration details</i>	
Type	Value
Setting	ApplicationConfiguration settings
Setting Type	Override String values
Path	\webclient\JavaSource\curam\omega3
Filename	ApplicationConfiguration.properties

## I18n.properties files

### Client Development Environment by using Java (CDEJ) Resources

The CDEJ\_Resources\_<locale>.properties file contains strings that are used to display various application-wide locale-specific features.

- Error message icons and ALT Text
- Strings that are used in menus and navigation
- Translatable fields for address elements
- Data/Calendar selector strings
- Application icons
- Calendar validation format strings
- UI Tooltips

<i>Table 14: Settings</i>		
ID	Value	Details
curam.validation.calendar.dateTimeFormat	hh:mm	Overrides the default time format
curam.validation.calendar.dateFormat	M/d/yyyy or dd MM yyyy and so forth.	Overrides the default date display pattern

<i>Table 15: CDEJ Resources details</i>	
Type	Value
Setting	CDEJ Resources
Setting Type	Override String values
Path	\webclient\JavaSource\curam\omega3\i18n
Filename	CDEJ_Resources_<locale>.properties

### CDEJ Calendar Strings

The Calendar\_<locale>.properties file contains overrides for strings that are used to display application-wide locale-specific Calendar values.

ID	Value	Details
DayView.DateBar.DatePattern	EEEE d MMMM	Overrides the default date display pattern
WeekView.DateBar.DatePattern	W - MMMM	Overrides the default date display pattern
MonthView.DateBar.DatePattern	MMMM/y	Overrides the default date display pattern
WeekView.DatePattern	EEEE d MMMM	Overrides the default date display pattern
MonthView.DayFormat	long	Chooses how to display day names in long (for example, Monday) or short (for example, Mon) format

Type	Value
Setting	CDEJ Calendar Strings
Setting Type	Override String values
Path	\webclient\JavaSource\curam\omega3\i18n
Filename	Calendar_<locale>.properties

### Frequency Pattern Selector

The `FrequencyPatternSelector_<locale>.properties` file contains values that are used by the Frequency Pattern Selector widget.

These values primarily consist of strings/labels used by the widget.

Type	Value
Setting	Frequency Pattern Selector
Setting Type	Override String values
Path	\webclient\JavaSource\curam\omega3\i18n
Filename	FrequencyPatternSelector_<locale>.properties

### Gantt Chart Currency Symbol

The `GanttChart_<locale>.properties` file contains the currency symbol that is used when currency amounts are displayed in the Gantt chart.

Type	Value
Setting	GanttChart Currency Symbol

<i>Table 19: GanttChart Currency Symbol details (continued)</i>	
Type	Value
Setting Type	Override String values
Path	\webclient\JavaSource\curam\omega3\i18n
Filename	GanttChart_<locale>.properties
Sample Value	€ or \$

## Project Properties

### Application Properties (.PRX)

The `Application.prx` file contains the properties that are used when running an application.

**Tip:** See the *Cúram Server Developer's Guide* for more information.

<i>Table 20: Application Properties (.PRX) details</i>	
Type	Value
Setting	Application properties file
Setting Type	Application properties
Path	\EJBServer\project\properties
Filename	Application.prx

Application Properties (.PRX) settings

<i>Table 21: Application.prx settings</i>		
ID	Value	Details
curam.environment.default.locale	<value>en_GB </value> <default-value>en_GB </default-value>	Specifies the default value of the locale code that is used on the server if one is not set
curam.financial.basecurrency	<value>EUR </value> <default-value>EUR </default-value>	Application base currency
curam.miscapp.defaultdateformat	<value>Date_mdy_ext </value> <default-value>Date_mdy_ext </default-value>	Date/time format that is used in server messages that are displayed on the client
curam.address.addressDataLocaleForDefaultAddresses	<value>en_GB </value> <default-value>en_GB </default-value>	Sets the locale for the address data when an address for which no details are provided is created

ID	Value	Details
curam.rules.default.locale	<value>en_GB </value> <default-value>en_GB </default-value>	Constant for property name that specifies the default locale to be used by the Rules Editor API

## Code Tables

### Default Currency

The CT\_Currency.ctx file lists the available currency options and includes a single default currency.

To override the currently selected value, locate the appropriate currency value within the file and change the default="false" option to read default="true".

Check the file to ensure that no other currency values are defaulted to "true".

Type	Value
Setting	Default Currency
Setting Type	Codetable values
Path	\EJBServer\components\core\codetable
Filename	CT_Currency.ctx
Sample Value	<code default="true" java_identifier="EURO" status="ENABLED" value="EUR">

### Default Nationality

The CT\_Nationality.ctx file lists the available nationality options and includes a single default nationality.

To override the currently selected value, locate the appropriate nationality value within the file and change the default="false" option to read default="true".

Check the file to ensure that no other nationality values are defaulted to "true".

Type	Value
Setting	Default Nationality
Setting Type	Codetable values
Path	\EJBServer\components\core\codetable
Filename	CT_Nationality.ctx
Sample Value	<code default="true" java_identifier="" status="ENABLED" value="NT2">

### Default Country

The CT\_Country.ctx file lists the available country options and includes a single default country.

To override the currently selected value, locate the appropriate country value within the file and change the default="false" option to read default="true".

Check the file to ensure that no other country values are defaulted to "true".

<i>Table 24: Default Country details</i>	
<b>Type</b>	<b>Value</b>
Setting	Default Country
Setting Type	Codetable values
Path	\EJBServer\components\core\codetable
Filename	CT_Country.ctx
Sample Value	<code default="true" java_identifier="GB" status="ENABLED" value="GB">

### **Default Address Layout Type**

The CT\_addressLayoutType.ctx file lists the available country address layouts options and includes a single default country address layout.

To override the currently selected value, locate the appropriate country address layout value within the file and change the default="false" option to read default="true".

Check the file to ensure that no other country address layouts values are defaulted to "true".

<i>Table 25: Default Address Layout Type details</i>	
<b>Type</b>	<b>Value</b>
Setting	Default Address Layout Type
Setting Type	Codetable values
Path	\EJBServer\components\core\codetable
Filename	CT_addressLayoutType.ctx
Sample Value	<code default="true" java_identifier="UK" status="ENABLED" value="UK">

### **Codetable Language**

The CT\_CodetableLanguage.ctx file lists the available codetable languages and includes a single default value.

To override the currently selected value, locate the appropriate language value within the file and change the default="false" option to read default="true".

If your target language is not present, add the value and check the file to ensure that no other language values are defaulted to "true".

<i>Table 26: Codetable Language details</i>	
<b>Type</b>	<b>Value</b>
Setting	Codetable Language
Setting Type	Codetable values
Path	\EJBServer\components\core\codetable
Filename	CT_CodetableLanguage.ctx
Sample Value	<code default="true" java_identifier="" status="ENABLED" value="en_GB">

## Language

The CT\_Language . ctx file lists the available selectable languages values and includes a single default value.

To override the currently selected value, locate the appropriate language value within the file and change the default="false" option to read default="true".

If your target language is not present, add the value and check the file to ensure that no other language values are defaulted to "true".

<i>Table 27: Language details</i>	
Type	Value
Setting	Language
Setting Type	Codetable values
Path	\EJBServer\components\core\codetable
Filename	CT_Language . ctx
Sample Value	<default="true" java_identifier="ENGLISH" status="ENABLED" value="LN1">

## Available Locales

The CT\_Locale . ctx file lists the available locales and includes a single default value.

To override the currently selected value, locate the appropriate locale value within the file and change the default="false" option to read default="true".

If your target locale is not present, add the value and check the file to ensure that no other locale values are defaulted to "true".

<i>Table 28: Available Locales details</i>	
Type	Value
Setting	Available Locales
Setting Type	Codetable values
Path	\EJBServer\components\core\codetable
Filename	CT_Locale . ctx
Sample Value	<code default="true" java_identifier="ENGLISH_GB" status="ENABLED" value="en_GB" >

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