



# **Cúram 8.1.3**

## **Regionalization Guide**



## Note

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Before using this information and the product it supports, read the information in [Notices on page 21](#)



# Edition

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This edition applies to Cúram 8.1, 8.1.1, 8.1.2, and 8.1.3.

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# Contents

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|   |            |
|---|------------|
| <b>Note.....</b>                              | <b>iii</b> |
| <b>Edition.....</b>                           | <b>v</b>   |
| <b>1 Developing for Regional Support.....</b> | <b>9</b>   |
| 1.1 Configuring Regional Settings.....        | 9          |
| The <i>Application.prx</i> file.....          | 9          |
| Code Table Settings.....                      | 10         |
| ApplicationConfiguration.properties.....      | 11         |
| Environment Variables.....                    | 11         |
| bootstrap.properties.....                     | 12         |
| 1.2 Settings Reference.....                   | 12         |
| Bootstrap properties.....                     | 12         |
| Application Configuration properties.....     | 13         |
| I18n.properties files.....                    | 14         |
| Project Properties.....                       | 16         |
| Code Tables.....                              | 17         |
| <b>Notices.....</b>                           | <b>21</b>  |
| Privacy policy.....                           | 22         |
| Trademarks.....                               | 22         |



# 1 Developing for Regional Support

You can modify the regional settings of a Cúram application. You can alter locale defaults which reflect their region's currency, date and time standards, address formats, and other non-linguistic aspects of a locale.

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.

**Note:** How to translate the user interface of the application is outside of the scope of this information.

## 1.1 Configuring Regional Settings

You can customize the currency, date and time standards, and address formats in the Development Environment. To set your locale defaults for en, en\_US or en\_GB locale, see the settings that are listed for that locale. Use the settings as a guide if you want to alter the locale defaults.

### The *Application.prx* file

In *EJBServer/project/properties/Application.prx*, you can update properties according to the locale that you are implementing.

Table 1: Settings for en locale

| Property Name                                    | Value        |
|--|--------------|
| 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           |

Table 2: Settings for en\_US locale

| Property Name                                    | Value        |
|--|--------------|
| 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        |

Table 3: Settings for en\_GB locale

| Property Name                                    | Value        |
|--|--------------|
| curam.environment.default.locale                 | en_GB        |
| curam.financial.basecurrency                     | GBP          |
| curam.financial.currencysymbol                   | £            |
| curam.financial.currencysymbolplacement          | before       |
| curam.miscapp.defaultdateformat                  | Date_dmy_ext |
| curam.address.addressDataLocaleForDefaultAddress | en_GB        |

## Code Table Settings

In *EJBServer\components\core\codetable*, update Code Table values according to the locale that you are implementing.

Table 4: Settings for en locale

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

Table 5: Settings for en\_US locale

| Code Table               | Settings  |
|--------------------------|---|
| CT_Currency.ctx          | Locate the value="USD" set default="true"<br>set existing default to false. |
| CT_Nationality.ctx       | Locate the value="NT5" set default="true"<br>set existing default to false. |
| CT_Country.ctx           | Locate the value="US" set default="true"<br>set existing default to false.  |
| CT_addressLayoutType.ctx | Locate the value="US" set default="true"<br>set existing default to false.  |

| Code Table    | Settings  |
|---------------|---|
| CT_Locale.ctx | Locate the value="en_US" set default="true"<br>set existing default to false. |

Table 6: Settings for en\_GB locale

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

## ApplicationConfiguration.properties

Update the properties in *webclient/JavaSource/curam/omega3* and / *ApplicationConfiguration.properties*.

Table 7: 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 locale environment variables.

Table 8: 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            |

## bootstrap.properties

In *EJBServer\project\properties\bootstrap.properties*, update the properties.

Table 9: *bootstrap.properties* settings

| Property name                           | en       | en_US    | en_GB    |
|---|----------|----------|----------|
| 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.

## 1.2 Settings Reference

Detailed reference of the region settings in the application.

### Bootstrap properties

Use the *Bootstrap.properties* file to specify database settings and other server-side properties including date format and separator.

Table 10: *Settings*

| ID                                      | Value                                  | Details   |
|---|--|---|
| curam.environment.default.dateseparator | separator 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 yyyy MM dd |
| curam.environment.default.timeseparator | separator                              | Overrides the default time separator :                |
| curam.environment.default.timeformat    | hh mm ss a, hh mm a, HH mm or HH mm ss | Overrides the default time format HH mm ss            |
| 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.

Table 11: `Bootstrap.properties` details

| Type         | Value                                      |
|--------------|--|
| Setting      | <code>Bootstrap.properties</code> settings |
| Setting Type | Override String values                     |
| Path         | <code>\EJBServer\project\properties</code> |
| Filename     | <code>Bootstrap.properties</code>          |

## 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:** For more information, see the *Cúram Web Client Reference Manual*.

Table 12: `Settings`

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

Table 13: `Application Configuration` details

| Type         | Value  |
|--------------|--|
| Setting      | <code>ApplicationConfiguration</code> settings   |
| Setting Type | Override String values                           |
| Path         | <code>\webclient\JavaSource\curam\omega3</code>  |
| Filename     | <code>ApplicationConfiguration.properties</code> |

## I18n.properties files

Update the properties files in *webclient/JavaSource/curam/omega3/i18n*.

### **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

Table 14: Settings

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

Table 15: CDEJ Resources details

| Type         | Value   |
|--------------|---|
| Setting      | CDEJ Resources                                  |
| Setting Type | Override String values                          |
| Path         | <i>\webclient\JavaSource\curam\omega3\i18n</i>  |
| Filename     | <i>CDEJ_Resources_&lt;locale&gt;.properties</i> |

### **CDEJ Calendar Strings**

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

Table 16: Settings

| 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 |

| ID                  | Value | Details   |
|---------------------|-------|---|
| MonthView.DayFormat | long  | Chooses how to display day names in long (for example, Monday) or short (for example, Mon) format |

Table 17: CDEJ Calendar Strings details

| Type         | Value  |
|--------------|--|
| Setting      | CDEJ Calendar Strings                                |
| Setting Type | Override String values                               |
| Path         | <code>\webclient\JavaSource\curam\omega3\i18n</code> |
| Filename     | <code>Calendar_&lt;locale&gt;.properties</code>      |

### 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.

Table 18: Frequency Pattern Selector details

| Type         | Value   |
|--------------|---|
| Setting      | Frequency Pattern Selector                                      |
| Setting Type | Override String values  |
| Path         | <code>\webclient\JavaSource\curam\omega3\i18n</code>            |
| Filename     | <code>FrequencyPatternSelector_&lt;locale&gt;.properties</code> |

### 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.

Table 19: GanttChart Currency Symbol details

| Type         | Value  |
|--------------|--|
| Setting      | GanttChart Currency Symbol                           |
| Setting Type | Override String values                               |
| Path         | <code>\webclient\JavaSource\curam\omega3\i18n</code> |
| Filename     | <code>GanttChart_&lt;locale&gt;.properties</code>    |
| Sample Value | € or \$  |

## Project Properties

In `\EJBServer\project\properties`, you can update the application properties file.

### 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.

Table 20: Application Properties (.PRX) details

| Type         | Value                                      |
|--------------|--|
| Setting      | Application properties file                |
| Setting Type | Application properties                     |
| Path         | <code>\EJBServer\project\properties</code> |
| Filename     | <code>Application.prx</code>               |

### Application Properties (.PRX) settings

Table 21: `Application.prx` settings

| ID   | Value   | Details   |
|--|---|---|
| curam.environment.default.locale                   | <pre>&lt;value&gt;en_GB &lt;/value&gt; &lt;default-value&gt;en_GB &lt;/default-value&gt;</pre>                | Specifies the default value of the locale code that is used on the server if one is not set       |
| curam.financial.basecurrency                       | <pre>&lt;value&gt;EUR &lt;/value&gt; &lt;default-value&gt;EUR &lt;/default-value&gt;</pre>                    | Application base currency   |
| curam.miscapp.defaultdateformat                    | <pre>&lt;value&gt;Date_mdy_ext &lt;/value&gt; &lt;default-value&gt; Date_mdy_ext &lt;/default-value&gt;</pre> | Date/time format that is used in server messages that are displayed on the client                 |
| curam.address.addressDataLocaleForDefaultAddresses | <pre>&lt;value&gt;en_GB &lt;/value&gt; &lt;default-value&gt;en_GB &lt;/default-value&gt;</pre>                | Sets the locale for the address data when an address for which no details are provided is created |
| curam.rules.default.locale                         | <pre>&lt;value&gt;en_GB &lt;/value&gt; &lt;default-value&gt;en_GB &lt;/default-value&gt;</pre>                | Constant for property name that specifies the default locale to be used by the Rules Editor API   |

## Code Tables

In `\EJBServer\components\core\codetable`, you can override a number of default code table values.

### 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".

Table 22: Default Currency details

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

### 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".

Table 23: Default Nationality details

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

### 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".

Table 24: Default Country details

| Type         | Value   |
|--------------|---|
| Setting      | Default Country   |
| Setting Type | Codetable values  |
| Path         | <code>\EJBServer\components\core\codetable</code>   |
| Filename     | <code>CT_Country.ctx</code>   |
| Sample Value | <code>&lt;code default="true" java_identifier="GB" status="ENABLED" value="GB"&gt;</code> |

### 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".

Table 25: Default Address Layout Type details

| Type         | Value   |
|--------------|---|
| Setting      | Default Address Layout Type   |
| Setting Type | Codetable values  |
| Path         | <code>\EJBServer\components\core\codetable</code>   |
| Filename     | <code>CT_addressLayoutType.ctx</code>   |
| Sample Value | <code>&lt;code default="true" java_identifier="UK" status="ENABLED" value="UK"&gt;</code> |

### 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".

Table 26: Codetable Language details

| Type         | Value  |
|--------------|--|
| Setting      | Codetable Language   |
| Setting Type | Codetable values   |
| Path         | <code>\EJBServer\components\core\codetable</code>  |
| Filename     | <code>CT_CodetableLanguage.ctx</code>  |
| Sample Value | <code>&lt;code default="true" java_identifier="" status="ENABLED" value="en_GB"&gt;</code> |

## 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".

Table 27: Language details

| Type         | Value  |
|--------------|--|
| Setting      | Language   |
| Setting Type | Codetable values   |
| Path         | <code>\EJBServer\components\core\codetable</code>  |
| Filename     | <code>CT_Language.ctx</code>   |
| Sample Value | <code>&lt;default="true" java_identifier="ENGLISH" status="ENABLED" value="LN1"&gt;</code> |

## 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".

Table 28: Available Locales details

| Type         | Value   |
|--------------|---|
| Setting      | Available Locales   |
| Setting Type | Codetable values  |
| Path         | <code>\EJBServer\components\core\codetable</code>   |
| Filename     | <code>CT_Locale.ctx</code>  |
| Sample Value | <code>&lt;code default="true" java_identifier="ENGLISH_GB" status="ENABLED" value="en_GB" &gt;</code> |



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