

# TEKLYNX CENTRAL 4.6 Printing Interface

## Variable values data integrity validation

### 1 General information

Variables data integrity checks are based on input mask and minimum length features which generally duplicate the same functionality in CODESOFT application and are configurable through Administration website.

#### **IMPORTANT NOTICE**

Input masks and minimum length values are not synchronized with those which are set up for label variables in CODESOFT due to technical reasons. When you add a label to Printing Interface database input mask and minimum length values are not set by default, thus you need to specify their appropriate values manually.

Input mask and minimum length requirements are only supported for basic variables which allow user to manually enter the value using a keyboard. Variables for which pick list of values is defined are not validated against mask/length requirements.

The following sections describe the behavior of integrity checks when you define input masks and minimum length values on Administration website and when you change variable values for label to be printed through Printing Interface website.

## 2 Administration website

### 2.1 Setting up Input Mask for variable

After new label is added to the system through Labels page of Administration website input mask for all of the label variables is blank. Administrator is able to specify appropriate values on the following form:

#### Labels

Product Name

TestP

Labels

Label	Data Source	Table
@:\Desktop\LabelArchive\CODESOFT\Identity.lab	Not selected	Not selected

Add Label

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show	Bull Run Ranch	NONE	0		<input type="checkbox"/>	
City	City	Show	Aurora	NONE	0		<input type="checkbox"/>	
Code	Code	Show	1909	NONE	0		<input type="checkbox"/>	
FirstName	FirstName	Show	Doris	NONE	0		<input type="checkbox"/>	
Name	Name	Show	Samuelson	NONE	0		<input type="checkbox"/>	
State	State	Show	CO	NONE	0		<input type="checkbox"/>	
Zip	Zip	Show	96268	NONE	0		<input type="checkbox"/>	

Label Preview

Input mask supports the same format characters as CODESOFT application:

Format characters	Characters entered
#	Numeric values (0-9)
@	Alpha characters (A-Z, a-z)
!	Punctuation characters
*	Any printable character
\	Escape character which allows the character following it to be displayed

Any character not in a "Format characters" range is considered as a separator character (it is visible in the value on the form, is not removable when using DELETE or BACKSPACE keys, but will not be present on printout).

Refer to CODESOFT user manual to see examples of input masks with format data, form display and printout values.

When you define input mask on Labels page as soon as you leave the field (using TAB key or selecting another field) the mask will be applied to existing variable value (this change will be immediately saved to database).

Empty mask:

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	Bull Run Ranch	NONE ▼ ...	0		<input type="checkbox"/>	▼

Mask is set:

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	Bull Run	NONE ▼ ...	0	@@@@*@@@	<input type="checkbox"/>	▼

### IMPORTANT NOTICE

As Printing Interface input masks are not synchronized with CODESOFT ones there could be a situation when existing label does not contain CODESOFT definition of input mask, but it has the one set up on Administration website.

When new version of label appears in LABEL ARCHIVE, Administrator may initiate the synchronization process between LABEL ARCHIVE and Printing Interface databases. In this case, if variable value in new version of label exceeds the mask's format length, this value will be truncated to mask definition which is set on the form next time the label is selected on Labels page or Print page.

It is recommended to control such situations in the following manner:

- In case of large amount of labels with defined input masks: when you set up a mask on Administration website, make sure that it corresponds with the CODESOFT one; if mask is changed on CODESOFT side for a new label version, make appropriate changes for mask on Administration website before initiating synchronization process;
- In case of small amount of labels with defined input masks you can clear masks on Labels page for appropriate labels before synchronization, and restore mask values later.

## 2.2 Mask validation

Once mask is defined, each change in variable value on the form will be validated. If mask format is not completed the system will show an underscore in place of the absent character and highlight the variable textbox when user tries to apply changes by leaving it.

When removing characters within value for which mask is set:

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	Bull R_	NONE ▼ ...	0	@@@@*@@@	<input type="checkbox"/>	▼

When trying to leave textbox with incomplete value:

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	Bull R_	NONE ▼ ...	0	@@@@*@@@	<input type="checkbox"/>	▼

Administrator should fix all "Default value" textboxes which are highlighted with red color before the label will be used in production on Printing Interface website.

## 2.3 Setting up Minimum Length for variable

After new label is added to the system through Labels page of Administration website Minimum Length for all of the label variables is set to 0. Administrator is able to define value length requirement for particular variable using "Minimum Length" column on variables form:

### Labels

The screenshot shows the 'Labels' administration page. At the top, there is a search box for 'Product Name' and a dropdown menu for 'TestP'. Below this is a table with columns 'Label', 'Data Source', and 'Table'. The 'Label' column contains the path '@:\Desktop\LabelArchive\CODESOFT\Identity.lab'. To the right is a 'Label Preview' showing a sample label with fields for Name, Address, City, State, and Zip, along with a QR code and a photo.

Below the preview is an 'Add Label' button and a table of variables. The 'Minimum Length' column in this table is highlighted with a green box, showing a value of 0 for all variables.

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show	Bull Run Ranch	NONE	0		<input type="checkbox"/>	▼
City	City	Show	Aurora	NONE	0		<input type="checkbox"/>	▲ ▼
Code	Code	Show	1909	NONE	0		<input type="checkbox"/>	▲ ▼
FirstName	FirstName	Show	Doris	NONE	0		<input type="checkbox"/>	▲ ▼
Name	Name	Show	Samuelson	NONE	0		<input type="checkbox"/>	▲ ▼
State	State	Show	CO	NONE	0		<input type="checkbox"/>	▲ ▼
Zip	Zip	Show	96268	NONE	0		<input type="checkbox"/>	▲

At the bottom right of the table is a 'New' button.

Lower bound of "Minimum Length" parameter is 0, meaning that variable value will not be validated against length requirements. Upper bound of this parameter is 255. All values between 0 and 255 will require defining variable value which is NOT LESS THAN specified "Minimum Length".

Make sure that Minimum Length value does not conflict with Input Mask format if the latter is set. See the following table for examples:

Minimum Length	Input Mask	Conflict?
6	@ @ @ -###	NO
12	###.###.###.###	NO
10	@ @ @ -***-@ @	YES
7	ABCD-###	YES (ABCD- is a separator part)

## 2.4 Minimum Length validation

Once Minimum Length is defined each change in variable value will be validated. If value length becomes lesser than Minimum Length the value textbox will be highlighted and the system will not allow saving the value until it fixed.

Case of allowed length when changing variable value:

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	Bull Run R	NONE ▼ ...	10		<input type="checkbox"/>	▼

Case of incomplete variable value:

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	Bull Run	NONE ▼ ...	10		<input type="checkbox"/>	▼

Administrator should fix all "Default value" textboxes which are highlighted with red color before the label will be used in production on Printing Interface website.

## 2.5 Input Mask and Minimum Length with Pick List defined

If the Pick List is defined for variable the system will disable Input Mask or Minimum Length fields. Thus variable values will not be validated against them, even when values for Input Mask and Minimum Length are set.

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	North Wood Road	Addresses ▼ ...	0		<input type="checkbox"/>	▼

Variable Name	Variable Prompt	Show/Hide	Default Value	Pick List	Minimum Length	Input Mask	Revert to Default	Order
Address	Address	Show ▼	North Wood Road	Addresses ▼ ...	10	@@@@*@@@	<input type="checkbox"/>	▼

# 3 Printing Interface

## 3.1 Hints

If input mask and/or minimum length value are set for a variable on Administration interface when you select a label on Printing Interface this variable textbox will be supplied with a hint of current mask/length requirements:

The screenshot shows the Printing Interface with several tabs: Print, Preview, and Local Print. Below the tabs are fields for Quantity (1), Product (TestP), Label (@:\Desktop\LabelArchive\CODESOFT\Identity.lab), and Printer (Bullzip PDF Printer, BULLZIP). A 'Variables' section contains the following fields and hints:

Address	Bull Run	Mask: @@@@*@@@
City	Aurora	
Code	19-09	Mask: ##-##
FirstName	Doris	
Name	Samuelson	
State	CO	
Zip	96268	Mask: ##### Min Length: 5

Green arrows point to the mask hints for Address, Code, and Zip. A 'Save' button is located at the bottom right.

## 3.2 Validation

When you are changing a value of variable with input mask/minimum length the system will validate changes. If mask or length requirements are not satisfied in any of variables the appropriate textboxes will be highlighted:

The Zip field is highlighted in red. The input is '9626' followed by a cursor. The hint 'Mask: ##### Min Length: 5' is shown to the right.

If any variable value is not complete the system will not allow performing print operations, preview print layout, or save changes. Thus **Print**, **Preview**, **Local Print** and **Save** buttons will be disabled until all variables will not satisfy mask/length requirements:

The screenshot shows the Printing Interface with the 'Print', 'Preview', and 'Local Print' buttons disabled (greyed out). A red arrow points to the 'Local Print' button. The 'Code' field is highlighted in red and contains '19-0' followed by a cursor. A red arrow points to the 'Code' field. The 'Save' button is also disabled (greyed out). A red arrow points to the 'Save' button.