# CST-PDA Model

All models require three external parameter data areas (PDAs): the model PDA, CU—PDA, and CSASTD. CU—PDA and CSASTD are supplied with Natural Construct. The model PDA is user-created and contains variables and conditions specific to the model. This section describes how to use the CST-PDA model to generate the model PDA.

This section covers the following topics:

- Introduction

- Parameters for the CST-PDA Model

## Introduction

All models require the following external parameter data areas (PDAs):

| PDA | Description |
|---|---|
| Model PDA | User-defined; contains variables and conditions specific to a model.<br><br>**Note:**<br>If you are creating a model that generates modules to run on a Natural Construct client, you must also generate a stream subprogram to convert the contents of the model PDA into a format that can be transmitted between the client and the server. For information, see CST-Stream Model. |
| CU—PDA | Supplied with Natural Construct. |
| CSASTD | Supplied with Natural Construct. |

The model PDA passes information between the Natural Construct nucleus and the model and generation subprograms. Before generating your model PDA, create the code frames and define your model. Natural Construct uses information in the model code frames to generate the model PDA, such as:

- substitution parameters

- condition codes

The CST-PDA model builds the model PDA by scanning the model code frames for substitution parameters and condition codes. Substitution parameters are character strings that begin with an ampersand (&) and end with a special character such as a period (.), parentheses, or an asterisk (*), but not a hyphen (-).

For each substitution parameter, the model generates a field (prefixed by #PDAX) within the redefinition of the #PDA-USER-AREA field in the model PDA. The model assigns the default format and length for alphanumeric fields (A10), which you can change as required.

For each condition code, the model generates a logical field (prefixed by #PDAC) within the redefinition of the #PDA-CONDITION-CODES field in the model PDA.

**References**

- For information about isolating the parameters for your model PDA, see Step 4: Isolate the Parameters in the Prototype.

- For information about creating code frames and defining models, see Step 5: Create Code Frame(s) and Define the Model.

- For more information about creating the model PDA, see Step 6: Create the Model PDA.

- For an example of a generated model PDA, refer to CUMNPDA in the SYSCST library.

- For more information about substitution parameters, see the Natural documentation.

# Parameters for the CST-PDA Model

Use the CST-PDA model to create the model PDA. This model has one specification panel, Standard Parameters.

## Standard Parameters Panel

```
  CUPDMA                     CST-PDA Parameter Data Area                  CUPDMA1
  Feb 04                        Standard Parameters                        1 of 1

   Module name ........ CXMNPDA_
   Model name ......... _____ *















 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      help  retrn quit                                                      main
```

The input fields on the Standard Parameters panel are:

| Field | Description |
|---|---|
| Module name | Name specified on the Generation main menu. The name of the model PDA must be alphanumeric and no more than eight characters in length. Use the following naming convention:<br><br>`CXxxPDA`<br><br>where *xx* uniquely identifies your model. |
| Model name | Name of the model that uses the model PDA.<br><br>**Note:**<br>Ensure that the specified model and its corresponding code frames have been defined on the Maintain Models panel. |

After specifying the required parameters and generating the model PDA, edit the generated code and assign the correct format and length for each field. All substitution parameters are generated with a default format and length of A10. You can also add any new parameters your model PDA may require.