**DCM Parser Library V1.0**

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**Revision History:**

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| --- | --- | --- | --- | --- |
| **Revision** | **Date** | **Author** | **Description** | **Contact** |
| 1.0 | 18.02.2014 | Vishnu Vasan Nehru | Base Release of DCM Parser Library | vishnuvasan@vishnuvasan.com |
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**How to Use DCM-Parser Library?**

Download the Library DCM\_Parser.pm file and place it in your working directory.

And write your scripts including the Library and place it in the Same path.

Please look in to [manually installing](http://code.activestate.com/recipes/502297-installing-perl-modules-on-windows/) perl Libraries(Creating Packlist and \*pm modules) if you dont like to copy the module every time.

Following are the List of APIs available in DCM Parser Library.

Examples for Each API is written in detail and available in Examples Folder along with the Library.

The List of APIs are as follows.

**Software Functions APIs:**

**1.Functions**

**API Name :** Functions

**Description :** To Find the List of Functions Present in DCM

**Input Arguments :** Nil

**Return :** Array Reference Containing all the Function List.

**Caution :** Array De-Referencing should be done

**Example :** **Example/Functions/Example\_Functions.pl**

**2.Functions\_Count**

**API Name :** Functions\_Count

**Description :** To Find the Number of Functions Present in DCM

**Input Arguments :** Nil

**Return :** Variable Containing the Number of Functions Present

In DCM

**Caution :** Nil

**Example :** **Example/Functions/Example\_Functions\_Count.pl**

**3.Functions\_All**

**API Name :** Functions\_All

**Description :** All the Functions Present in DCM will be returned as a

String separated by Pipe Character.This would be helpful

to interface with other languages like m script in

MATLAB

**Input Arguments :** Nil

**Return :** String Containing all Functions Present

In DCM separated by Pipe Character

**Caution :** Nil

**Example : Example/Functions/Example\_Functions\_All.pl**

**4.Functions\_Print**

**API Name :** Functions\_Print

**Description :** To print All the Functions present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Functions\_Print.pl > Functions\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Functions/Example\_Functions\_Print.pl**

**Software Functions And Description APIs:**

**5.Functions\_And\_Description**

**API Name :** Functions\_And\_Description

**Description :** To Get the Function along with Description

**Input Arguments :** Nil

**Return :** Hash Reference Containing Function Names as Key and

Descriptions as Values

**Caution :** Hash De-Referencing should be done

**Example : Example/Functions/Example\_Functions\_And\_Description.pl**

**6.Functions\_And\_Description\_Count**

**API Name :** Functions\_And\_Description\_Count

**Description :** To Get the Number of Functions/Description Count

**Input Arguments :** Nil

**Return :** Variable Containing the Total Number of

Functions/Descriptions

**Caution :** Nil

**Example : Example/Functions/Example\_Functions\_And\_Description\_Count.pl**

**7.Functions\_And\_Description\_All**

**API Name :** Functions\_And\_Description\_All

**Description :** To Get the Function Name along with Description

**Input Arguments :** Nil

**Return :** Variable Containing the Function with

Descripton( Function => Description ) separated by pipe

character

**Caution :** Nil

**Example : Example/Functions/Example\_Functions\_And\_Description\_All.pl**

**8.Functions\_And\_Description\_Print**

**API Name :** Functions\_And\_Description\_Print

**Description :** To Print the Function Name along with Description

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Functions/Example\_Functions\_And\_Description\_Print.pl**

**Software Parameters APIs:**

**9.Parameters**

**API Name :** Parameters

**Description :** To Find the List of Parameters Present in DCM

**Input Arguments :** Nil

**Return :** Array Reference Containing all the Parameters List.

**Caution :** Array De-Referencing should be done

**Example :** **Example/Parameters/Example\_Parameters.pl**

**10.Parameters\_Count**

**API Name :** Parameters\_Count

**Description :** To Find the Number of Parameters Present in DCM

**Input Arguments :** Nil

**Return :** Variable Containing the Number of Parameters Present

In DCM

**Caution :** Nil

**Example :** **Example/Parameters/Example\_Parameters\_Count****.pl**

**11.Parameters\_All**

**API Name :** Parameters\_All

**Description :** All the Parameters Present in DCM will be returned as a

String separated by Pipe Character.This would be helpful

to interface with other languages like m script in

MATLAB

**Input Arguments :** Nil

**Return :** String Containing all Parameters Present

In DCM separated by Pipe Character

**Caution :** Nil

**Example : Example/Parameters/Example\_Parameters\_All.pl**

**12.Parameters\_Print**

**API Name :** Parameters\_Print

**Description :** To print All the Parameters present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Parameters\_Print.pl >Params\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Parameters/Example\_Parameters\_Print.pl**

**13.Parameters\_Details**

**API Name :** Parameters\_Details

**Description :** Toget Detailed information on each and every

parameter

**Input Arguments :** Nil

**Return :** Hash Reference Containing Parameter Names as the master Key and the following as their Sub Keys

**DESCRIPTION**

**FUNCTION (Function Used In)**

**UNIT**

**VALUE**

Detailed ways of How to access these key values is

mentioned in Examples

**Caution :** Hash De-Referencing to be Done

**Example : Example/Parameters/Example\_Parameters\_Details.pl**

**14.Parameters\_Details\_Print**

**API Name :** Parameters\_Details\_Print

**Description :** To print All the Parameters Details present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Parameters\_Details\_Print.pl >Params\_Details\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Parameters/Example\_Parameters\_Details\_Print.pl**

**Software Arrays APIs:**

**15.Arrays**

**API Name :** Arrays

**Description :** To Find the List of Arrays Present in DCM

**Input Arguments :** Nil

**Return :** Array Reference Containing all the Arrays List.

**Caution :** Array De-Referencing should be done

**Example :** **Example/Arrays/Example\_Arrays.pl**

**16.Arrays\_Count**

**API Name :** Arrays\_Count

**Description :** To Find the Number of Arrays Present in DCM

**Input Arguments :** Nil

**Return :** Variable Containing the Number of Arrays Present

In DCM

**Caution :** Nil

**Example :** **Example/Arrays/Example\_Arrays\_Count****.pl**

**17.Arrays\_All**

**API Name :** Arrays\_All

**Description :** All the Arrays Present in DCM will be returned as a

String separated by Pipe Character.This would be helpful

to interface with other languages like m script in

MATLAB

**Input Arguments :** Nil

**Return :** String Containing all Arrays Present

In DCM separated by Pipe Character

**Caution :** Nil

**Example : Example/Arrays/Example\_Arrays\_All.pl**

**18.Arrays\_Print**

**API Name :** Arrays\_Print

**Description :** To print All the Arrays present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Arrays\_Print.pl >Arrays\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Arrays/Example\_Arrays\_Print.pl**

**19.Arrays\_Details**

**API Name :** Arrays\_Details

**Description :** Toget Detailed information on each and every

Array

**Input Arguments :** Nil

**Return :** Hash Reference Containing Array Names as the master Key and the following as their Sub Keys

**DESCRIPTION**

**SIZE**

**FUNCTION (Function Used In)**

**UNIT**

**VALUE**

Detailed ways of How to access these key values is

mentioned in Examples

**Caution :** Hash De-Referencing to be Done

**Example : Example/Arrays/Example\_Arrays\_Details.pl**

**20.Arrays\_Details\_Print**

**API Name :** Arrays\_Details\_Print

**Description :** To print All the Arrays Details present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Arrays\_Details\_Print.pl >Arrays\_Details\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Arrays/Example\_Arrays\_Details\_Print.pl**

**Software Group Curves APIs:**

**21.Group Curves**

**API Name :** Group\_Curves

**Description :** To Find the List of Group Curves Present in DCM

**Input Arguments :** Nil

**Return :** Array Reference Containing all the Group Curves List.

**Caution :** Group Curve De-Referencing should be done

**Example :** **Example/Group\_Curves/Example\_Group\_Curves.pl**

**22.Group\_Curves\_Count**

**API Name :** Group\_Curves\_Count

**Description :** To Find the Number of Group Curves Present in DCM

**Input Arguments :** Nil

**Return :** Variable Containing the Number of Group Curves Present

In DCM

**Caution :** Nil

**Example :** **Example/Group\_Curves/Example\_Group\_Curves\_Count****.pl**

**23.Group\_Curves\_All**

**API Name :** Group\_Curves\_All

**Description :** All the Group Curves Present in DCM will be returned a String separated by Pipe Character. This would be helpful

to interface with other languages like m script in

MATLAB

**Input Arguments :** Nil

**Return :** String Containing all Group\_Curves Present

In DCM separated by Pipe Character

**Caution :** Nil

**Example : Example/Group\_Curves/Example\_Group\_Curves\_All.pl**

**24.Group\_Curves\_Print**

**API Name :** Group\_Curves\_Print

**Description :** To print All the Group Curves present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Group\_Curves\_Print.pl >Grp\_Crv\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Group\_Curves/Example\_Group\_Curves\_Print.pl**

**25.Group\_Curves\_Details**

**API Name :** Group\_Curves\_Details

**Description :** Toget Detailed information on each and every

Group Curve

**Input Arguments :** Nil

**Return :** Hash Reference Containing Group Curve Names as the master Key and the following as their Sub Keys

**DESCRIPTION**

**SIZE**

**FUNCTION (Function Used In)**

**X AXIS VARIABLE**

**X AXIS UNIT**

**X AXIS VALUE**

**UNIT**

**VALUE**

Detailed ways of How to access these key values is

mentioned in Examples

**Caution :** Hash De-Referencing to be Done

**Example : Example/Group\_Curves/Example\_Group\_Curves\_Details.pl**

**26.Group\_Curves\_Details\_Print**

**API Name :** Group\_Curves\_Details\_Print

**Description :** To print All the Group Curves Details present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Group\_Curves\_Details\_Print.pl >Grp\_Crv\_Details\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Group\_Curves/Example\_Group\_Curves\_Details\_Print.pl**

**Software Distributions APIs:**

**27.Distributions**

**API Name :** Distributions

**Description :** To Find the List of Distributions Present in DCM

**Input Arguments :** Nil

**Return :** Array Reference Containing all the Distributions List.

**Caution :** Distribution De-Referencing should be done

**Example :** **Example/Distributions/Example\_Distributions.pl**

**28.Distributions\_Count**

**API Name :** Distributions\_Count

**Description :** To Find the Number of Distributions Present in DCM

**Input Arguments :** Nil

**Return :** Variable Containing the Number of Distributions Present

In DCM

**Caution :** Nil

**Example :** **Example/Distributions/Example\_Distributions\_Count****.pl**

**29.Distributions\_All**

**API Name :** Distributions\_All

**Description :** All the Distributions Present in DCM will be returned as a

String separated by Pipe Character. This would be helpful

to interface with other languages like m script in

MATLAB

**Input Arguments :** Nil

**Return :** String Containing all Distributions Present

In DCM separated by Pipe Character

**Caution :** Nil

**Example : Example/Distributions/Example\_Distributions\_All.pl**

**30.Distributions\_Print**

**API Name :** Distributions\_Print

**Description :** To print All the Distributions present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Distributions\_Print.pl >Distributions\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Distributions/Example\_Distributions\_Print.pl**

**31.Distributions\_Details**

**API Name :** Distributions\_Details

**Description :** Toget Detailed information on each and every

Distribution

**Input Arguments :** Nil

**Return :** Hash Reference Containing Distribution Names as the master Key and the following as their Sub Keys

**DESCRIPTION**

**SIZE**

**FUNCTION (Function Used In)**

**X AXIS UNIT**

**X AXIS VALUE**

Detailed ways of How to access these key values is

mentioned in Examples

**Caution :** Hash De-Referencing to be Done

**Example : Example/Distributions/Example\_Distributions\_Details.pl**

**32.Distributions\_Details\_Print**

**API Name :** Distributions\_Details\_Print

**Description :** To print All the Distributions Details present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Distributions\_Details\_Print.pl >Distribution\_Details\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Distributions/Example\_Distributions\_Details\_Print.pl**

**Software Maps APIs:**

**33.Maps**

**API Name :** Maps

**Description :** To Find the List of Maps Present in DCM

**Input Arguments :** Nil

**Return :** Array Reference Containing all the Maps List.

**Caution :** Array De-Referencing should be done

**Example :** **Example/Maps/Example\_Maps.pl**

**34.Maps\_Count**

**API Name :** Maps\_Count

**Description :** To Find the Number of Maps Present in DCM

**Input Arguments :** Nil

**Return :** Variable Containing the Number of Maps Present

In DCM

**Caution :** Nil

**Example :** **Example/Maps/Example\_Maps\_Count****.pl**

**35.Maps\_All**

**API Name :** Maps\_All

**Description :** All the Maps Present in DCM will be returned as a

String separated by Pipe Character. This would be helpful

to interface with other languages like m script in

MATLAB

**Input Arguments :** Nil

**Return :** String Containing all Maps Present

In DCM separated by Pipe Character

**Caution :** Nil

**Example : Example/Maps/Example\_Maps\_All.pl**

**36.Maps\_Print**

**API Name :** Maps\_Print

**Description :** To print All the Maps present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Maps\_Print.pl >Maps\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Maps/Example\_Maps\_Print.pl**

**37.Maps\_Details**

**API Name :** Maps\_Details

**Description :** Toget Detailed information on each and every

Map

**Input Arguments :** Nil

**Return :** Hash Reference Containing Map Names as the master Key and the following as their Sub Keys

**DESCRIPTION**

**FUNCTION (Function Used In)**

**X AXIS VARIABLE**

**X AXIS SIZE**

**X AXIS UNIT**

**X AXIS VALUE**

**Y AXIS VARIABLE**

**Y AXIS SIZE**

**Y AXIS UNIT**

**Y AXIS VALUE**

**UNIT**

**VALUE**

Detailed ways of How to access these key values is

mentioned in Examples

**Caution :** Hash De-Referencing to be Done

**Example : Example/Maps/Example\_Maps\_Details.pl**

**38.Maps\_Details\_Print**

**API Name :** Maps\_Details\_Print

**Description :** To print All the Maps Details present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Maps\_Details\_Print.pl >Map\_Details\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Maps/Example\_Maps\_Details\_Print.pl**

**Common APIs:**

**39.All\_Variable\_Details**

**API Name :** All\_Variable\_Details

**Description :** Toget Detailed information on each and every

Map

**Input Arguments :** Nil

**Return :** Hash Reference Containing All Variable Details as the master Key and the following as their Sub Keys

**DESCRIPTION**

**FUNCTION (Function Used In)**

**SIZE**

**X AXIS VARIABLE**

**X AXIS SIZE**

**X AXIS UNIT**

**X AXIS VALUE**

**Y AXIS VARIABLE**

**Y AXIS SIZE**

**Y AXIS UNIT**

**Y AXIS VALUE**

**UNIT**

**VALUE**

Detailed ways of How to access these key values is

mentioned in Examples

**Caution :** Hash De-Referencing to be Done

**Example : Example/Common/Example\_All\_Variable\_Details.pl**

**40.All\_Variable\_Details\_Print**

**API Name :** All\_Variable\_Details\_Print

**Description :** To print All the Variable Details present in DCM.

This function can be used to force the script output from

command line to a text file to analyze the values.

Example :

**perl Variables\_Print.pl >Variables\_Print\_Output.txt**

**Input Arguments :** Nil

**Return :** Nil

**Caution :** Nil

**Example : Example/Common/Example\_All\_Variable\_Details\_Print.pl**