DCM Parser Library V1.0

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Revision History:

Revision	Date	Author	Description	Contact
1.0	18.02.2014	Vishnu Vasan Nehru	Base Release of DCM Parser Library	vishnuvasan@vishnuvasan.com

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 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 : To get 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 **:** To get 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 : To get 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 **:** To get 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 : To get 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 : To get 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**