



Zeiss Industrial Quality Solutions

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[https://carl-zeiss-industrial-metrology-llc.helpjuice.com/piweb
/piweb_0009-characteristic-attributes](https://carl-zeiss-industrial-metrology-llc.helpjuice.com/piweb/piweb_0009-characteristic-attributes)

PiWeb: How to Add Characteristic Attributes



This document contains the steps for adding characteristic attributes to both a Calypso measurement plan and PiWeb. A characteristic attribute is any value that changes or could change from characteristic to characteristic but will remain the same for each measurement. Examples of this type of attribute are: nominal, tolerances, print locations, etc.

How to Add Characteristic Attributes to CALYPSO and PiWeb

This tutorial will walk through the steps to add characteristic attributes to both Calypso and PiWeb. A characteristic attribute is any value that changes or could change from characteristic to characteristic but remains the same for each measurement, such as the nominal, tolerances, print locations, etc.

Adding Characteristic Attributes



CALYPSO

- Open the userattributes.ini file.
 - For Calypso 5.4 or before: C:\Program Files (x86)\Zeiss\CALYPSO X.X\opt\om\config\userattributes.ini.
 - Where Calypso X.X is the Calypso version.
 - For Calypso 5.6 and after: C:\Users\Public\Documents\Zeiss\CALYPSO X.X\data\config\userattributes.ini.
 - Where Calypso X.X is the Calypso version.

- If the userattributes.ini does not exist, create a text document in the above location and name it userattributes, changing the extension from *.txt to *.ini.
- Fill out the userattributes.ini file with the desired characteristic attributes.
 - Create the userfieldnames, remembering that they must begin with "u_".
 - Cannot contain spaces.
 - List all the characteristic attributes.

```

userattributes.ini - Notepad
File Edit Format View Help
REM ... \opt\om\config\userattributes.ini
REM By convention the userfieldnames begin with "u_"
[fieldnames]
u_operation
u_toolwear
u_Measurement_Device
u_Print_Location
u_Characteristic_Comment

```

- Define the userattributes
 - name=
 - Where you name the attribute. This value will be how you see it in Calypso.
 - This field may contain spaces.
 - selectiveList=
 - Either true or false.
 - True means that the attribute value will be selected from a list.
 - False means that the attribute value will be typed into a blank field.
 - selectiveListValues=
 - Where you name the list of values that you can select from.
 - Must be in the format "u_nameofattribute_valueList".
 - editable=
 - either true or false.
 - True means the values can be edited in Calypso.
 - False means you must select a predefined value from the list.

```

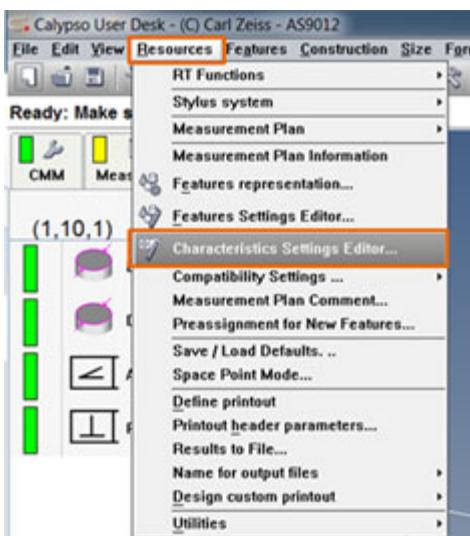
userattributes.ini - Notepad
File Edit Format View Help
REM Now defining the userfield named u_operation
[u_operation]
name=Operation
selectiveList=true
selectiveListValues=u_operation_valueList
editable=false

```

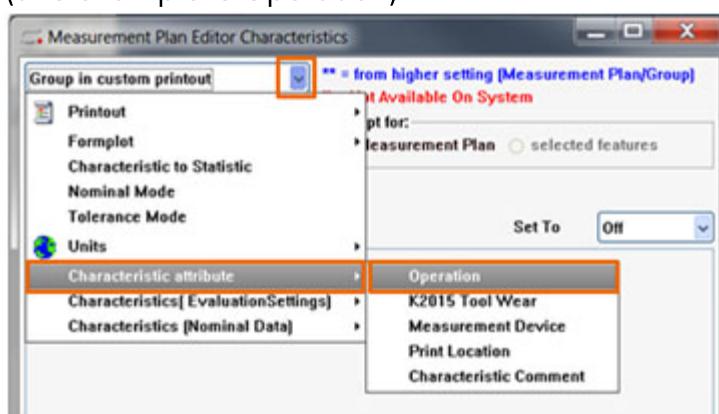
- Define the selectiveListValues if needed.
 - Type the name you gave the selectiveListValues above in square brackets.
 - List out the values.

```
[u_operation_valueList]
010=OP10
020=OP20
030=OP30
040=OP40
050=OP50
060=OP60
070=OP70
080=OP80
090=OP90
```

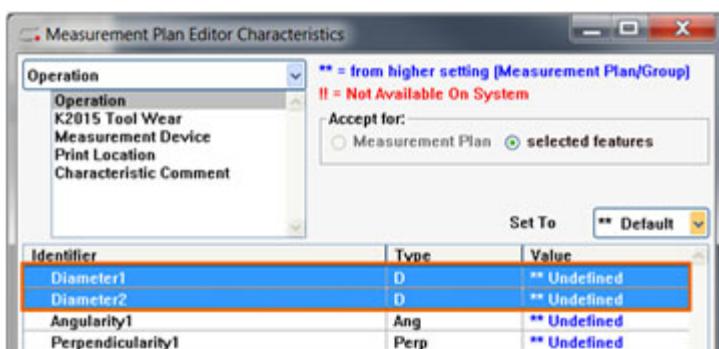
- Continue on for all desired attributes.
- Save the file and close it.
- Open Calypso and a Measurement Plan.
- Go to Resources → Characteristics Settings Editor...



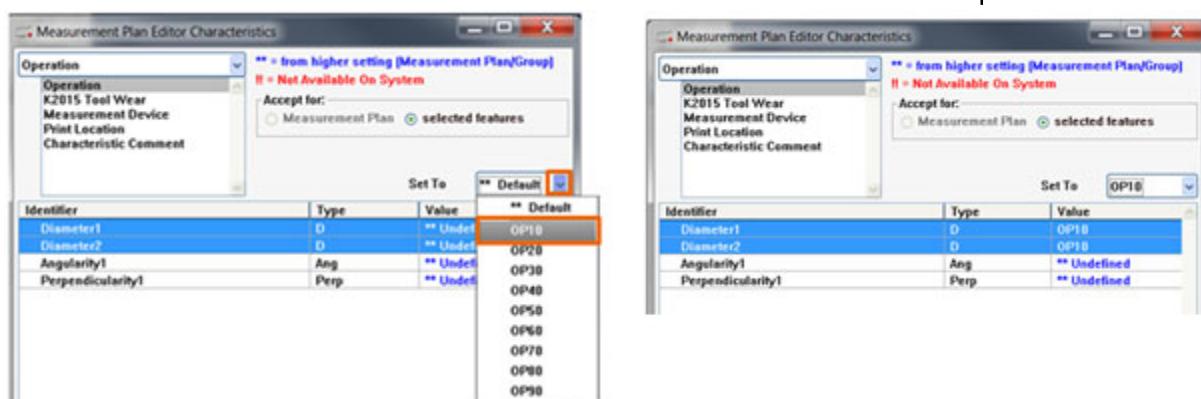
- From the drop down, select Characteristic attribute and the desired attribute from the list (this example is Operation).



- Highlight the desired characteristics.



- Select the values for the characteristic attribute from the Set To drop down.

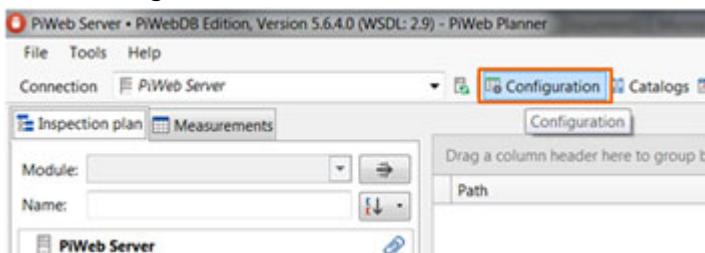


- When finished assigning values, click OK.

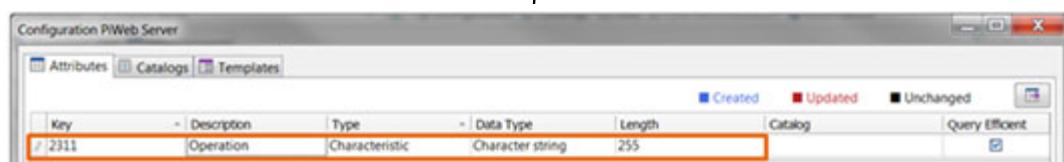


PiWeb Planner

- Open PiWeb Planner and select your database.
- Click Configuration.

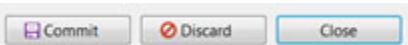


- In the top row, type in the Keyvalue that corresponds to the desired characteristic attribute.
 - If there is no known Key value, select one between 2800 and 2899. These are user defined fields.
- Add the attribute name under Description.



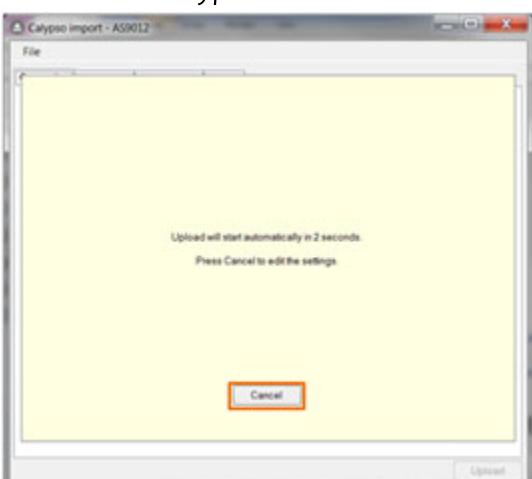
- Make sure the Type is Characteristic.
- Select the appropriate Data Type.
 - For the most part, either Characteristic string or Catalog are used.

- See the next section for creating a catalog.
- Hit Enter, and the characteristic attribute will be located under the Characteristic section and will be in a blue font.
- The Commit and Discard buttons should activate. Click Commit to save the changes to the database or Discard to discard any changes.



Calypso Interface

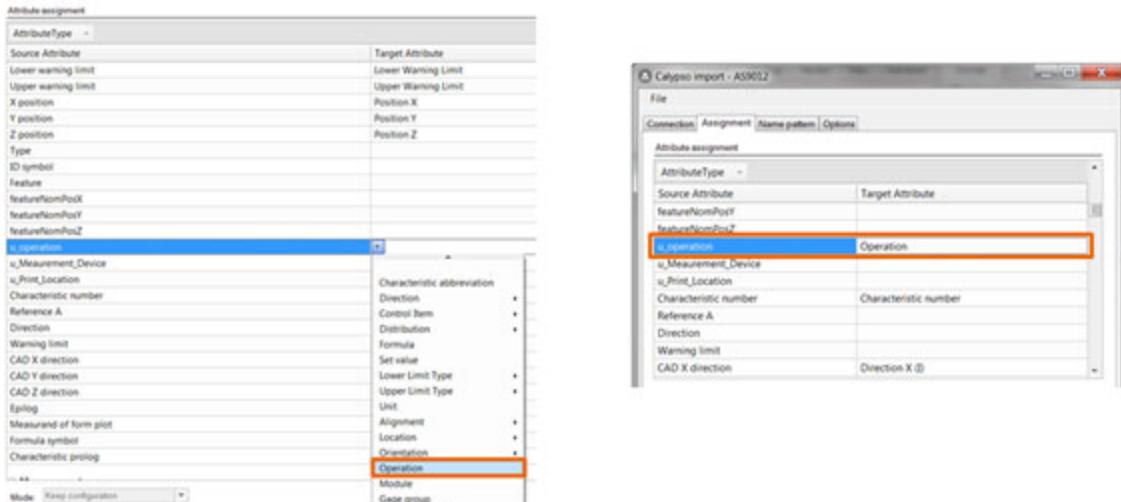
- Run your Calypso Program in simulation.
- When the Calypso Interface counts down, click Cancel.



- In the Assignment tab, scroll through the InspectionPlan section until you see your created attribute (u_operation).

Output class	Target Attribute
Decimal places	Decimal places
Nominal value	Nominal Value
Lower tolerance	Lower Allowance
Type of lower limit	Lower Limit
Lower specification limit	Upper Allowance
Upper tolerance	Upper Limit
Type of upper limit	Lower Warning Limit
Upper specification limit	Upper Warning Limit
Lower warning limit	Position X
Upper warning limit	Position Y
X position	Position Z
Y position	
Z position	
Type	
ID symbol	
Feature	
featureNomPosX	
featureNomPosY	
featureNomPosZ	
u_operation	

- In the Target Attribute column, scroll through the drop down until you locate the characteristic attribute you created in PiWeb Planner and select it.



- Save the file by going to File → Save as...
 - Save the file in one of the following locations. If the folders do not exist, create them.
 - %appdata%\Zeiss\PiWeb
 - %allusersprofile%\Zeiss\PiWeb



- Overwrite the existing file.
- Click Upload.
- Go into PiWeb Planner and make sure the data was written to the database.

Path	Operat...	Nominal Val...	Lower Limit	Upper Limit
/AS9012/Diameter1	010	30	29.9	
/AS9012/Diameter2	010	12	11.9	
/AS9012/Angularity1		0	0	
/AS9012/Perpendicularity1		0	0	

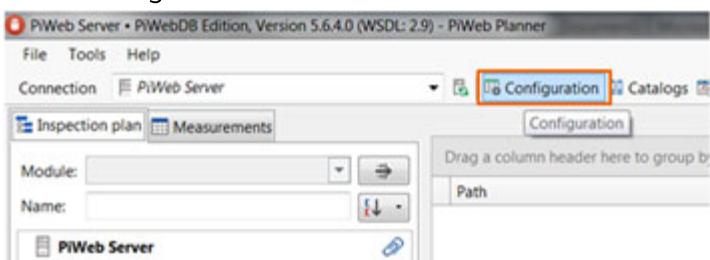
Creating a Catalog in PiWeb Planner

Some attributes associate a word or description with a numeric value. This numeric value is usually what is inputted into PiWeb. From there, we can associate the proper word(s) to the value by use of a catalog.



PiWeb Planner

- Open PiWeb Planner and select your database.
- Click Configuration.



- Create two different attributes.
 - Add a Keyvalue.
 - If there is no known Key value, select one between 2800 and 2899. These are user defined fields.
 - Add the attribute name under Description.
 - This example will use Operation Description and Operation Number.
 - Select the Type: Catalog from the drop down.

Configuration PiWeb Server				
Attributes Catalogs Templates				
Key	Description	Type	Data Type	Length
2312	Operation Description	Catalog	Character string	255

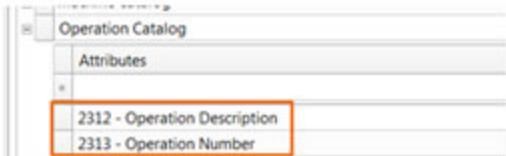
- Edit the length if desired.
- Hit Enter and create the second attribute.
- The two attributes will be located under the Catalog section.

Measurement				
Catalog				
2009	Direction	Catalog	Character string	10
2090	Orientation	Catalog	Character string	10
2091	Location	Catalog	Character string	10
2135	.Lower Class Limit	Catalog	Floating point number	
2136	.Upper Class Limit	Catalog	Floating point number	
2312	Operation Description	Catalog	Character string	255
2313	Operation Number	Catalog	Character string	255
2520	Reference system	Catalog	Character string	20

- Create a catalog.
 - Click on the Catalogs tab at the top of the Configuration window.
 - In the top box, type the name of your catalog to create a new catalog.

Configuration PiWeb Server				
Attributes Catalogs Templates				
Catalog				
	Operation Catalog			

- Hit Enter and the catalog will now display in the list.
- Expand the catalog.
- Click under Attributes and select one of your created attributes.
- Click off the line and repeat the previous step for the second attribute.



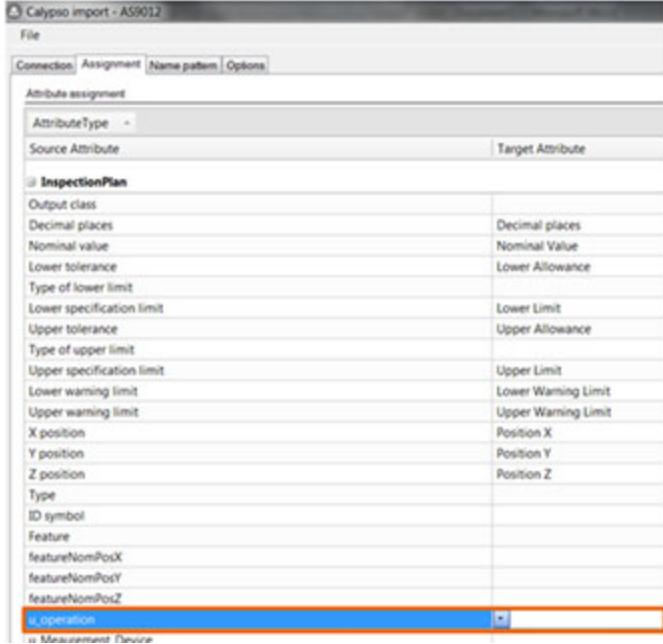
- Click Commit and return to the Attributes tab.
- Create a third attribute (Operation).
 - Enter the Key value and Description.
 - Select the Type of attribute (part, characteristic, measured value, or measurement).
 - Do not select Catalog as the Type.
 - The Data Type will be Catalog.
 - Under Catalog at the far right of the line, select the catalog you wish to use with this attribute.

Key	Description	Type	Data Type	Length	Catalog
2311	Operation	Characteristic	Catalog		Operation Catalog

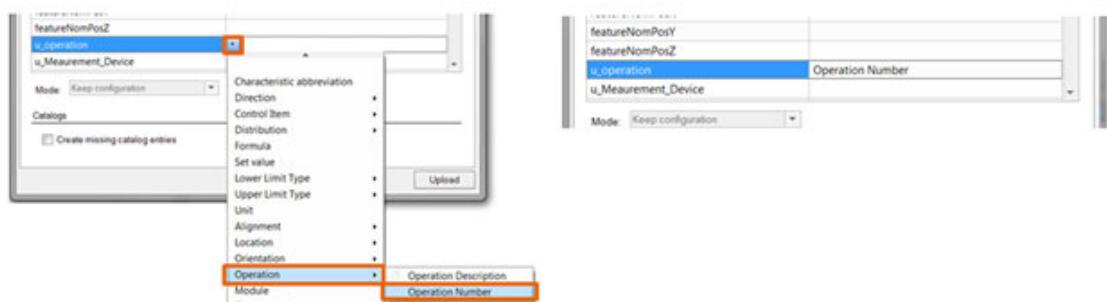


Calypso Interface

- The corresponding catalog value can now be mapped using the Calypso Interface located at Start → All Programs → Zeiss → PiWeb → Calypso Interface.
 - Open the saved UploadOptions.upl located in either.
 - %appdata%/Zeiss/PiWeb.
 - %allusersprofile%/Zeiss/PiWeb.
- If this file does not exist, create one.
- In the Assignment tab, scroll through the InspectionPlan section until you see the desired attribute (u_operation).



- In the Target Attribute column, scroll through the drop down until you locate the characteristic attribute you created in PiWeb Planner.
 - In the drop down for that attribute, select the desired catalog attribute. This is usually the option referencing the number in the catalog.



- Save the file by going to File → Save as...
 - Save the file in one of the following locations;
 - %appdata%\Zeiss\PiWeb.
 - %allusersprofile%\Zeiss\PiWeb.



- Overwrite the existing file.