Open CASCADE Modeling Data - Points on Curves

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几何算法用来计算三维空间中参数化曲线的特征点的值。这些特征点如下：

- 均分曲线的点；
- 等弦长均分曲线点；
- 计算曲线上指定点和距离的另一点；

包 ***GCPnts*** 用来计算常量偏差或常量横坐标值的点。这些算法类有：

- ***AbscissaPoint***：根据曲线上指定点和距离计算出曲线上满足要求的另一个点；
- ***UniformAbscissa***：根据曲线上指定的横坐标计算出一系列的点；
- ***UniformDeflection***：***Calculation of a set of points at maximum constant deflection between the curve and the polygon that results from the computed points***.

例子：***Visualizing a curve***.

C is an adapted curve, i.e. an object which is an interface between: the services provided by either a 2D curve from the package Geom2d (in the case of an Adaptor_Curve2d curve) or a 3D curve from the package Geom (in the case of an Adaptor_Curve curve), and those required on the curve by the computation algorithm. The adapted curve is created in the following way:

case 2D:

```
Handle(Geom2d_Curve) mycurve = ... ;
Geom2dAdaptor_Curve C (mycurve) ;
```

case 3D:

```
Handle(Geom_Curve) mycurve = ... ;
 GeomAdaptor_Curve C (mycurve) ;
```

The algorithm is then constructed with this object:

```
GCPnts_UniformDeflection myAlgo () ;
Standard_Real Deflection = ... ;
myAlgo.Initialize ( C , Deflection ) ;
if ( myAlgo.IsDone() )
   { Standard_Integer nbr = myAlgo.NbPoints() ;
     Standard_Real param ;
     for ( Standard_Integer i = 1 ; i <= nbr ; i++ )
            { param = myAlgo.Parameter (i) ;
            ...
            }
   }
```

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