

.NET中将圆转成多义线

2011-01-05 22:02:38| 分类: [AutoCAD.NET二次](#) | 标签: [polyline](#) [circle](#) |字号 订阅

直接上代码:

```
using System;
using Autodesk.AutoCAD.Runtime;
using Autodesk.AutoCAD.Geometry;
using Autodesk.AutoCAD.ApplicationServices;
using Autodesk.AutoCAD.DatabaseServices;
using Autodesk.AutoCAD.EditorInput;
namespace CADTest
{
    public class Class1
    {
        [CommandMethod("c2p")]
        public void CircleToPolyline()
        {
            Document doc =
Application.DocumentManager.MdiActiveDocument;
            Database db = doc.Database;
            Editor ed = doc.Editor;
            Transaction trans =
db.TransactionManager.StartTransaction();
            BlockTable bt =
(BlockTable)trans.GetObject(db.BlockTableId, OpenMode.ForRead);
            BlockTableRecord btr =
(BlockTableRecord)trans.GetObject(db.CurrentSpaceId,
OpenMode.ForWrite);
            PromptSelectionResult psr = ed.GetSelection();
//获取选择集, 这里就不过滤了
            SelectionSet ss = null;
            if (psr.Status == PromptStatus.OK)
            {
                ss = psr.Value;
                foreach (SelectedObject so in ss)
                {
                    Circle c = trans.GetObject(so.ObjectId,
OpenMode.ForWrite) as Circle;
                    double r = c.Radius;
                    Point3d cc = c.Center;
                    Point2d p1 = new Point2d(cc.X + r, cc.Y);
                    Point2d p2 = new Point2d(cc.X - r, cc.Y);
                    Polyline poly = new Polyline();
                    poly.AddVertexAt(0, p1, 1, 0, 0);
                    poly.AddVertexAt(1, p2, 1, 0, 0);
                    poly.AddVertexAt(2, p1, 1, 0, 0);
                    btr.AppendEntity(poly);
                    trans.AddNewlyCreatedDBObject(poly, true);
                    c.Erase(true);
                }
            }
            trans.Commit();
        }
    }
}
```

```

        trans.Dispose();
    }

    [CommandMethod("GET")]
    public void GetEntityType()
    {
        Document doc =
Application.DocumentManager.MdiActiveDocument;
        Database db = doc.Database;
        Editor ed = doc.Editor;
        PromptEntityOptions peo = new PromptEntityOptions("请选择一个实体");
        PromptEntityResult per = null;
        try
        {
            per = ed.GetEntity(peo);
            if (per.Status == PromptStatus.OK)
            {
                ObjectId id = per.ObjectId;
                Transaction trans =
db.TransactionManager.StartTransaction();
                Entity ent = (Entity)trans.GetObject(id,
OpenMode.ForRead, true);

                ed.WriteLine("\n实体ObjectId为: " +
ent.ObjectId + "\n实体类型为: " + ent.GetType().FullName);
                trans.Commit();
                trans.Dispose();
            }
        }
        catch (Autodesk.AutoCAD.Runtime.Exception exc)
        {
            ed.WriteLine("发生异常, 原因为: " +
exc.Message);
        }
    }
}

```

运行效果如下：

