Округление координат

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Небольшой скрипт на VBA, который округляет координаты **выделенных** отрезков, полилиний и 3dface с заданной точностью

round-selected.vbs

```
Dim ms
Set ms = ThisDrawing.ModelSpace
Dim ut
Set ut = ThisDrawing.Utility

ut.Prompt "Небольшой скрипт на VBA, который округляет координаты выделенных
отрезков, полилиний и 3dface с заданной точностью"

Dim myObj
Dim i, m
Dim ppt0, ppt1, pt0(2), pt1(2)
Dim ppt3d, pt3d(11), pt3da

Dim sSet, cnt
set sSet = ThisDrawing.ActiveSelectionSet
sSet.SelectOnScreen
cnt = sSet.Count

Dim scale
scale = ut.GetInteger("Введите точность округления: ")

for i=0 to cnt-1
    set myObj = sSet.Item(i)
    if (myObj.ObjectName = "AcDbLine") then
        ppt0 = ut.CreateSafeArrayFromVector(myObj.StartPoint)
        ppt1 = ut.CreateSafeArrayFromVector(myObj.EndPoint)

        for m = 0 to 2
            if int(ppt0(m)/scale) = int(ppt0(m)/scale+0.5) then
                pt0(m) = int(ppt0(m)/scale) * scale
            else
                pt0(m) = int(ppt0(m)/scale+0.5) * scale
            end if
            if int(ppt1(m)/scale) = int(ppt1(m)/scale+0.5) then
                pt1(m) = int(ppt1(m)/scale) * scale
            else
                pt1(m) = int(ppt1(m)/scale+0.5) * scale
            end if
        next
```

```
        myObj.StartPoint = pt0
        myObj.EndPoint = pt1
    end if
    if (myObj.ObjectName = "AcDbFace") then
        ppt3d = ut.CreateSafeArrayFromVector(myObj.Coordinates)
        for m = 0 to 11
            if int(ppt3d(m)/scale) = int(ppt3d(m)/scale+0.5) then
                pt3d(m) = int(ppt3d(m)/scale) * scale
            else
                pt3d(m) = int(ppt3d(m)/scale+0.5) * scale
            end if
        next
        ut.CreateTypedArray pt3da, 5, pt3d(0), pt3d(1), pt3d(2),
pt3d(3), pt3d(4), pt3d(5), pt3d(6), pt3d(7), pt3d(8), pt3d(9),
pt3d(10), pt3d(11)
        myObj.Coordinates = pt3da
    end if
    if (myObj.ObjectName = "AcDbPolyline") then
        dim pptpl
        pptpl = ut.CreateSafeArrayFromVector(myObj.Coordinates)
        dim cntpl
        cntpl =  UBound(myObj.Coordinates)
        dim ptpl(999)
        dim ptpls
        for m = 0 to cntpl
            if int(pptpl(m)/scale) = int(pptpl(m)/scale+0.5) then
                ptpl(m) = int(pptpl(m)/scale) * scale
            else
                ptpl(m) = int(pptpl(m)/scale+0.5) * scale
            end if
            if m = 0 then
                ptpls = ptpl(m)
            else
                ptpls = ptpls & ";" & ptpl(m)
            end if
        next
        myObj.Coordinates = ut.CreateTypedArrayFromJSArray (5,
CStr(ptpls))
    end if
next
ut.Prompt "Готово, проверяй!"
sSet.Clear
```

Небольшой скрипт на VBA, который округляет координаты **всех** отрезков, полилиний и 3dface с заданной точностью

round-all.vbs

```
Dim ms
Set ms = ThisDrawing.ModelSpace
Dim ut
Set ut = ThisDrawing.Utility

ut.Prompt "Небольшой скрипт на VBA, который округляет координаты всех отрезков,
полилиний и 3dface с заданной точностью"

Dim myObj
Dim i, m
Dim ppt0, ppt1, pt0(2), pt1(2)
Dim ppt3d, pt3d(11), pt3da

Dim scale
scale = ut.GetInteger("Введите точность округления: ")

for i=0 to ms.count-1
    set myObj = ms.Item(i)
    if (myObj.ObjectName = "AcDbLine") then
        ppt0 = ut.CreateSafeArrayFromVector(myObj.StartPoint)
        ppt1 = ut.CreateSafeArrayFromVector(myObj.EndPoint)

        for m = 0 to 2
            if int(ppt0(m)/scale) = int(ppt0(m)/scale+0.5) then
                pt0(m) = int(ppt0(m)/scale) * scale
            else
                pt0(m) = int(ppt0(m)/scale+0.5) * scale
            end if
            if int(ppt1(m)/scale) = int(ppt1(m)/scale+0.5) then
                pt1(m) = int(ppt1(m)/scale) * scale
            else
                pt1(m) = int(ppt1(m)/scale+0.5) * scale
            end if
        next

        myObj.StartPoint = pt0
        myObj.EndPoint = pt1
    end if
    if (myObj.ObjectName = "AcDbFace") then
        ppt3d = ut.CreateSafeArrayFromVector(myObj.Coordinates)
        for m = 0 to 11
            if int(ppt3d(m)/scale) = int(ppt3d(m)/scale+0.5) then
                pt3d(m) = int(ppt3d(m)/scale) * scale
            else
                pt3d(m) = int(ppt3d(m)/scale+0.5) * scale
            end if
        next
        ut.CreateTypedArray pt3da, 5, pt3d(0), pt3d(1), pt3d(2),
pt3d(3), pt3d(4), pt3d(5), pt3d(6), pt3d(7), pt3d(8), pt3d(9),
pt3d(10), pt3d(11)
        myObj.Coordinates = pt3da
```

```
    end if
    if (myObj.ObjectName = "AcDbPolyline") then
        dim pptpl
        pptpl = ut.CreateSafeArrayFromVector(myObj.Coordinates)
        dim cntpl
        cntpl =  UBound(myObj.Coordinates)
        dim ptpl(999)
        dim ptpls
        for m = 0 to cntpl
            if int(pptpl(m)/scale) = int(pptpl(m)/scale+0.5) then
                ptpl(m) = int(pptpl(m)/scale) * scale
            else
                ptpl(m) = int(pptpl(m)/scale+0.5) * scale
            end if
            if m = 0 then
                ptpls = ptpl(m)
            else
                ptpls = ptpls & ";" & ptpl(m)
            end if
        next
        myObj.Coordinates = ut.CreateTypedArrayFromJSArray (5,
CStr(ptpls))
    end if
next
ut.Prompt "Готово, проверяй!"
```

nanocad, vba, отрезки, swell