Presentation Title: Scanned Plat Viewer Application
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Software: Spatial Database Engine 3.0.2.1 NT / Oracle 8.1.5.1a,

Problem
How do I load an SDE Layer into a Map Control Using MapObjects 2.0

Code Sample

```
Screen.MousePointer = vbHourglass                        ' Set the mouse cursor to busy
Dim oSDEConnect as New MapObjects2.DataConnection        ' Declare a data connection object

oSDEConnect.Server = "gu10"                              ' Pass the machine/server name,
oSDEConnect.User = "cad"                                 ' the data base user name,
oSDEConnect.Password = "XXXXXXXX"                        ' the user password,
oSDEConnect.Database = "esri_sde"                        ' and the SDE instance

If oSDEConnect.Connect Then                              ' If the connection to SDE works
    For each oGeoDataSet in oSDEConnect.GeoDataSets      ' for each layer in the SDE DB
      Dim oLayer as New MapObjects2.MapLayer
      Set oLayer.GeoDataset = oSDEConnect.FindGeoDataSet(oGeoDataSet.Name)
       Map1.Layers.Add oLayer                            ' add the layer to the map control
    Next
Else
    MsgBox oSDEConnnect.ConnectError, vbCritical, "Connection Error"
End If
Screen.MousePointer = vbDefault
```

This code is just an example of how to load an SDE layer into a MapObjects 2.0 Map Control. It would not be advisable to run this code against an existing SDE database because it would load every layer in the SDE database into the Map Control. A more elegant solution to this problem can be found in the "SDELoader" example provided for Visual Basic with MapObjects 2.0 samples.

Creating an SDE Layer and Table to store/manage CAD Data

To store data and related attribute information through SDE, you first define business tables and layers.

```
sdetable -o create -t facility -i esri_sde -s gu10 -u cad -p XXXXXXX -d "angle
double(12,5), cellname string(8), color integer(8), drawingname string(255), elevation
double(12,5), entityhandle string(8), fillcolor integer(8), levelnumber
integer(8), levelname string(255), linetype string(255), lineweight integer(8), textvalue
string(255), entitytype integer(8), mslink1 integer(8)" " -k SMALL
```

```
-o create –t facility –i esri_sde -s gu10 -u cad -p XXXXXXX
```

Create a spatially enabled business table named "facility" on the "gu10" server serving the "esri_sde" instance of SDE. Provide the user name and password of the person who will own the data.

```
-d "angle double(12,5),… , entitytype integer(8), mslink1 integer(8)" " -k SMALL
```

Define some fields that describe in English the attributes of the CAD data stored within the input Microstation file. **NOTE:** the "mslink" attribute allows the user to link each element in a CAD drawing to descriptive attributes in an external database. The MSLINK fields contains the Foreign Key values that the element will use to link to these external data. A connection must be established with the external database before the CAD data is loaded into SDE otherwise the MSLINK field values will be blank.

```
sdelayer -o add -l facility, shape -e nplsa3+McA -x -790000,4850000,1835 -g 55000 -z 0,100
-i esri_sde -s gu10 -u cad -p XXXXXXX " -k SMALL
```

Define a thematic layer for "facilities", add the SHAPE column to the table, allow all data types, convert all floating values to integers for faster processing using an offset, assign the dimension of the spatial index grid, provide the login and server access information. **NOTE:** the "-k SMALL" refers to Oracle loading parameters in the DBTUNE file.