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Gidas

Database description

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1. Handbook purpose

Gidas is a Microsoft SQL Server compatible database, and it's used by LSI LASTEM programs for storage of data acquired and elaborated through the instruments. This handbook describes the technical characteristics of the database.

To get information about installing and managing Gidas database and SQL Server see the *Gidas database management* document.

2. Database description

2.1. Schemas

Database includes following schemas:

1. *Core*: it includes the main components of database (data and their structures);
2. *Viewer*: it includes the specific components used the by program *GidasViewer*.

2.2. Database version

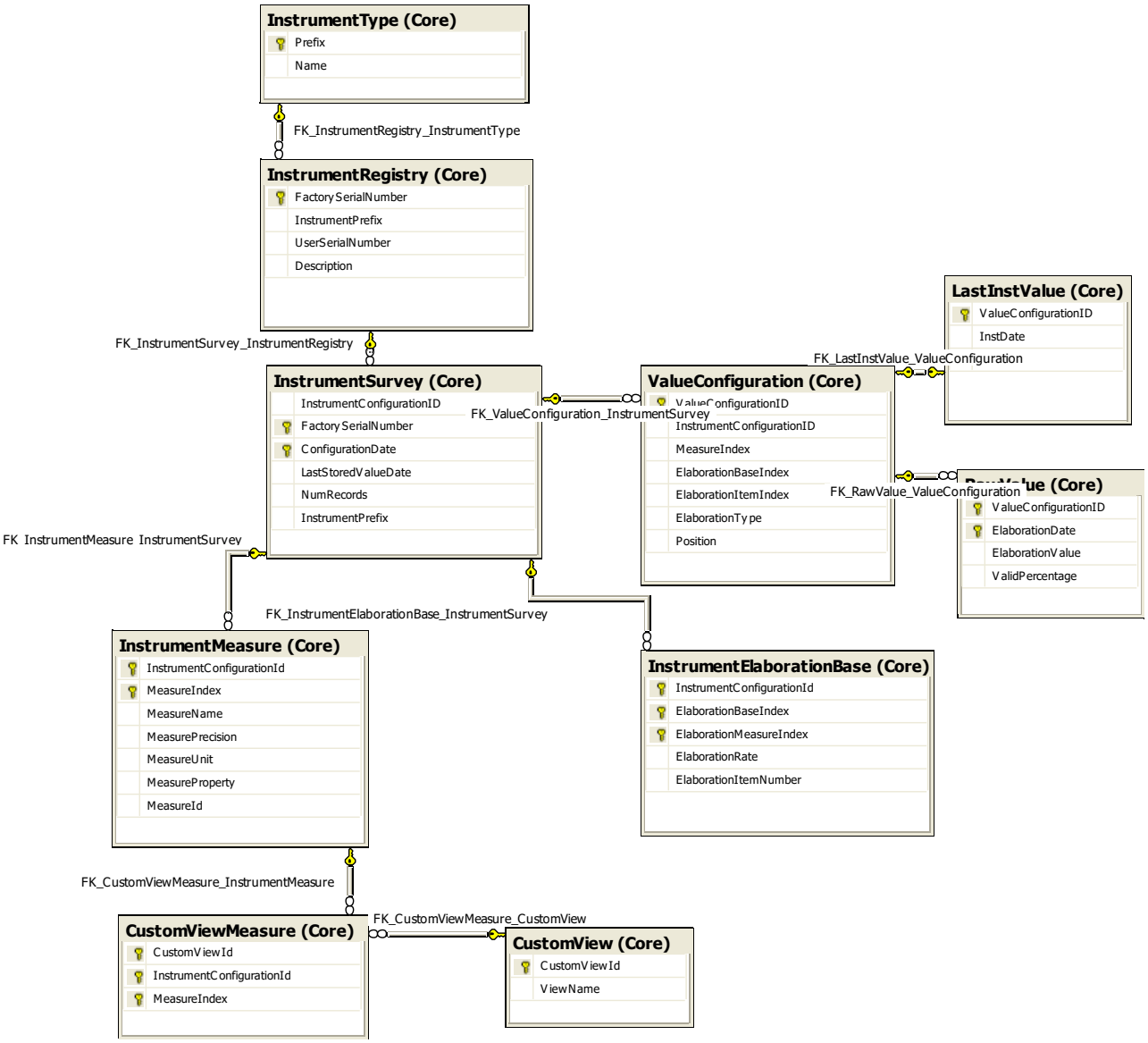
The table *Core.GidasVersion* includes the fields *Version [varchar(15)]* and *ReleaseDate [datetime]* which represent current version of database.

In order to know the current version of database follow the stored procedure *Core.spGidasVersion_Get*.

2.3. Additional modules support

The database support the installation of additional modules (for example the additional module Synop used with the GidasToSynop program to generate Synop meteorological bulletin).Additional modules are inserted into the *Core.AddIns* table(§ ref. 2.5.1.3).
For information on the additional modules the relative manuals are seen.

2.4. Main diagram of data tables



This is the main diagram of table *Dati* of database: it shows the tables of the data and their connections.

All connections set up the update and the delete of cascading connected fields.

2.5. Structure of data stored in database

2.5.1. Data Table

The tables *Data* include the structure for data storage, it's the same for all LSI LASTEM instruments:

Core.InstrumentType: it includes the description of instruments supported by database. Fields:

- *Prefix:* it shows the instrument type;
- *Name:* description of the instrument*;*

Core.InstrumentRegistry: it includes the instruments entered into database. Fields:

- *FactorySerialNumber*: instrument's serial number;
- *InstrumentPrefix:* it identifies the instrument's type;
- *UserSerialNumber:* serial number that user may input in the instrument;
- *Description:* description of the instrument*;*
- *DbDescription:* description of the instrument added by GidasViewer program

Core.InstrumenSurvey: it includes the couple <*serial number* - *survey*>. For E-Log instruments the survey has the same date of instrument's configuration. Fields:

- *InstrumentConfigurationID*: table's Identity;
- *FactorySerialNumber*: instrument's serial number;
- *ConfigurationDate*: date of configuration setup;
- *InstrumentPrefix*: instrument type;
- *LastStoredValueDate*: date of storage of last datum;
- *NumRecords*: records number of stored data;

Core.InstrumenMeasure: it includes the measures combined to each survey. Fields:

- *Core.InstrumentConfigurationID*: ID of table *Core.InstrumentSurvey* connected.
- *Core.MeasureIndex*: index of measure in configuration;
- *Core.MeasureName:* measure's name;
- *Core.MeasurePrecision:* measure's precision (number of decimal digits);
- *Core.MeasureUnit:* string that shows the unit of measurement of each measure;
- *Core.MeasureProperty:* string of integers separated by coma; they represent the properties of measure;
- *Core.MeasureId:* integer that represents the measure type

Core.InstrumentElaborationBase: it includes the processing bases connected to each measure. The E-Log instruments have only one processing base for each processed measure. Fields:

- *Core.InstrumentConfigurationID*: ID of connected table *Core.InstrumentSurvey*.
- *Core.ElaborationMeasureIndex*: index of connected measure;
- *Core.ElaborationBaseIndex*: index of processing base;
- *Core.ElaborationRate*: elaboration rate (expressed in seconds);

- *Core.ElaborationItemNumber*: number of elaborations associated to this measure and this elaboration base

NOTE
Field *Core.ElaborationBaseIndex* for instantaneous data has value -1 (see 2.5.1.1).

Core.ValueConfiguration: it includes the information required for identifying of each datum. Fields:

- *ValueConfigurationID*: identity of the table;
- *InstrumentConfigurationID:* it identifies the record of table *Core.InstrumentSurvey* of the reference configuration;
- *MeasureIndex:* it identifies the measure;
- *ElaborationBaseIndex:* it identifies the elaboration base;
- *ElaborationItemIndex:* it identifies the item in the elaboration mask (for example: the item 1 in the elaboration mask *MinMaxAve* is *Max*);
- *ElaborationType:* integer that represents the type of elaboration associated to the datum (linked to table *Core.ElabTypeList*)
- *Position:* position of the datum inside data record coming from the instrument.

NOTE
All indexes have base 0. The fields *Core.ElaborationBaseIndex, Core.ElaborationItemIndex Core.Elaborationtype* for instantaneous data have value -1 (see 2.5.1.1).

Core.RawValue: it includes the real data. Fields:

- *ValueConfigurationID:* it identifies the datum in the table *Core.ValueConfiguration*;
- *ElaborationDate:* storage date of elaborated datum;
- *ElaborationValue:* value processed by the instrument;
- *ValidPercentage:* percentage of data used for value processing;

Core.LastInstValue: it includes last instantaneous data logged by each instrument. Fields:

- *ValueConfigurationID:* it identifies the datum inside the table *Core.ValueConfiguration*;
- *InstDate:* storage date of instantaneous datum;
- *InstValue:* last instantaneous value downloaded from the instrument;

2.5.1.1. Storage of instantaneous data

The instantaneous data are stored in two tables:

- *Core.RawValue*
- *Core.LastInstValue*

Only last instantaneous data downloaded from the instrument are stored (for each measure) in the table *Core.LastInstValue*. But in the table *Core.RawValue* are stored all downloaded instantaneous data; in this way they're available for further re-processings. The instantaneous data stored in the table *Core.RawValue* are assigned to an elaboration base that have got following values:

- *Core.InstrumentConfigurationID*: table ID *Core.InstrumentSurvey* linked;

- *Core.ElaborationMeasureIndex*: index of connected measure;
- *Core.ElaborationBaseIndex*: -1;
- *Core.ElaborationRate*: 1;
- *Core.ElaborationItemNumber*: 1.

In order to identify these values use like filter the value *Core.ElaborationBaseIndex*= -1.

2.5.1.2. CustomView

A *CustomView* rapresents a group of measures belonging to different surveys or instruments. The CustomView are defined by the users and are represented in two tables.

Core.CustomView: it's a view that can be generated by the user. Fields:

- *CustomViewId:* table ID;
- *ViewName*: name associated to the table.

Core.CustomViewMeasure: it includes the measures associated to a view. Fields:

- *CustomViewId:* table ID;
- *InstrumentConfigurationID:* ID of the couple instrument – survey of measure's source;
- *MeasureIndex:* index of measure in the survey.

2.5.1.3. Other data tables

Core.ElabTypeList: it includes the list of different processings used by the measures. Fields:

- *IdElabType:* table ID;
- *ElabTypeString:* string that identifies the elaboration type made by the instrument about the datum;
- *ElabTypeToDo:* string that identifies the simple re-elaboration type that can be applied to this type of elaboration.

```
-1 Inst (n.e.)   Ave
0  Nothing       Nothing
1  Inst          Ave
2  Min           Min
3  Ave           Ave
4  Max           Max
5  StdDev        Nothing
6  Tot           Sum
7  Duration      Sum
8  PrevDir       AvgDirection
9  RisDir        AvgDirection
10 RisVel        Ave
11 StdDevDir     Nothing
```

```
12 CalmPerc      Ave
13 ValidDataPerc Ave
14 PSBisect      AvgDirection
15 PSPrevDir     AvgDirection
16 PSPrevVel     Ave
17 PSStdDevDir   Nothing
18 DirFreq1      Ave
19 DirFreq2      Ave
20 DirFreq3      Ave
21 DirFreq4      Ave
22 DirFreq5      Ave
23 DirFreq6      Ave
24 DirFreq7      Ave
25 DirFreq8      Ave
26 DirFreq9      Ave
27 DirFreq10     Ave
28 DirFreq11     Ave
29 DirFreq12     Ave
30 DirFreq13     Ave
31 DirFreq14     Ave
32 DirFreq15     Ave
33 DirFreq16     Ave
```

NOTE
Value `-1,Inst (n.e.)` is the pure instantaneous value whereas value `1,Inst` is instantaneous value associated to elaboration.
Values form 14 are relatives to Babuc ABC instruments.

Core.RegistryLog: it includes the confidential information internally used.

Core.AddIns: it includes the list of additional module. Fields:

- *AddInCode:* string that identifies the additional module;
- *Description:* description of the additional module;
- *AttachedDate:* installation date of the additional module.

2.5.1.4. External library Files

The values of fields *MeasureProperty* and *MeasureId* of the table *Core.InstrumentMeasure* are located in one library file used by LSI LASTEM applications. This is the file:

```
C:\Documents and Settings\All Users\Application Data\LSI-Lastem\Sltn2\Lib\[Culture]\MeasureAttributes.xml
```

This is the contents of the file:

```
<?xml version="1.0" encoding="utf-8"?>
<MeasureAttributes>
  <Culture>it</Culture>
```

```
<MeasureId>
  <Item code="0" text="Not defined" />
  <Item code="1" text="Temperature" />
  <Item code="2" text="Humidity" />
  <Item code="3" text="Pressure" />
  <Item code="4" text="Angle" />
  <Item code="5" text="Direction" />
  <Item code="6" text="Speed" />
  <Item code="7" text="Radiation" />
  <Item code="8" text="Rain" />
  <Item code="9" text="Presence" />
  <Item code="10" text="MetricLevel" />
  <Item code="11" text="Illumination" />
  <Item code="12" text="ThermalFlux" />
  <Item code="13" text="Concentration" />
  <Item code="14" text="SoundLevel" />
  <Item code="15" text="Acidity" />
  <Item code="16" text="Displacement" />
  <Item code="17" text="Count" />
  <Item code="18" text="Asymmetry" />
  <Item code="19" text="Enthalpy" />
  <Item code="20" text="Rate" />
  <Item code="21" text="Product" />
  <Item code="22" text="Delta" />
  <Item code="23" text="Density" />
  <Item code="24" text="Integral" />
  <Item code="25" text="Ave" />
  <Item code="26" text="Flow" />
  <Item code="27" text="Sunshine" />
  <Item code="28" text="Run" />
  <Item code="29" text="Frequency" />
  <Item code="30" text="Evaporation" />
  <Item code="31" text="Resistance" />
  <Item code="32" text="Voltage" />
  <Item code="33" text="Current" />
  <Item code="34" text="WBGT" />
  <Item code="35" text="CET" />
  <Item code="36" text="Conductance" />
  <Item code="37" text="LuminousIntensity" />
  <Item code="38" text="Intensity" />
  <Item code="39" text="DR" />
  <Item code="40" text="Unsatisfied" />
  <Item code="41" text="Day light factor" />
  <Item code="42" text="Index" />
  <Item code="43" text="Level" />
  <Item code="44" text="Discomfort" />
  <Item code="45" text="WindChillIndex" />
  <Item code="46" text="TempChilling" />
  <Item code="47" text="Not specified" />
  <Item code="48" text="Permittivity" />
  <Item code="49" text="Albedo" />
  <Item code="50" text="Volumic" />
</MeasureId>
<MeasureProperty>
  <Item code="0" text="Not defined" />
  <Item code="1" text="Environment" />
  <Item code="2" text="ColdJoint" />
  <Item code="3" text="ForcedVentilation" />
  <Item code="4" text="WetBulb" />
  <Item code="5" text="DewPoint" />
  <Item code="6" text="Mean Radiant" />
  <Item code="7" text="GlobeThermometer" />
  <Item code="8" text="Black Body" />
```

```
<Item code="9" text="Surface" />
<Item code="10" text="Phsiologic" />
<Item code="11" text="Wall1" />
<Item code="12" text="Wall2" />
<Item code="13" text="Relative" />
<Item code="14" text="Absolute" />
<Item code="15" text="Of moist air" />
<Item code="16" text="Of miscellany" />
<Item code="17" text="Partial Vapour" />
<Item code="18" text="PartialVapourSature" />
<Item code="19" text="Wind" />
<Item code="20" text="OfAir" />
<Item code="21" text="Atmospheric" />
<Item code="22" text="Differential" />
<Item code="23" text="Resultant" />
<Item code="24" text="Prevalent" />
<Item code="25" text="Global" />
<Item code="26" text="Net" />
<Item code="27" text="Direct" />
<Item code="28" text="Diffuse" />
<Item code="29" text="Radiant" />
<Item code="30" text="UVA" />
<Item code="31" text="UVB" />
<Item code="32" text="PAR" />
<Item code="33" text="VIR" />
<Item code="34" text="Soil" />
<Item code="35" text="Cl2" />
<Item code="36" text="CO" />
<Item code="37" text="CO2" />
<Item code="38" text="NH3" />
<Item code="39" text="NO" />
<Item code="40" text="NO2" />
<Item code="41" text="H2" />
<Item code="42" text="H2S" />
<Item code="43" text="HCl" />
<Item code="44" text="HCN" />
<Item code="45" text="O2" />
<Item code="46" text="O3" />
<Item code="47" text="SO2" />
<Item code="48" text="Rain" />
<Item code="49" text="Wetting" />
<Item code="50" text="FastA" />
<Item code="51" text="FastC" />
<Item code="52" text="SlowA" />
<Item code="53" text="SlowC" />
<Item code="54" text="Battery" />
<Item code="55" text="Planar" />
<Item code="56" text="Of delivery" />
<Item code="57" text="Of mass" />
<Item code="58" text="Specific" />
<Item code="59" text="Integral" />
<Item code="60" text="Interal" />
<Item code="61" text="External" />
<Item code="62" text="Change" />
<Item code="63" text="Draught" />
<Item code="64" text="NaturalVentilation" />
<Item code="65" text="Luminance" />
<Item code="66" text="Turbolence" />
<Item code="67" text="Manganine" />
<Item code="68" text="Wire" />
<Item code="69" text="Ankles" />
<Item code="70" text="Floor" />
<Item code="71" text="VerticalAirTemp" />
```

```
    <Item code="72" text="FlootTemperature" />
    <Item code="73" text="RadiantTempAsymm" />
    <Item code="74" text="Partial" />
    <Item code="75" text="Total" />
    <Item code="76" text="Impulsive" />
    <Item code="77" text="StandDev" />
    <Item code="78" text="Heat" />
    <Item code="79" text="UV" />
    <Item code="80" text="UVExposition" />
    <Item code="81" text="CH4" />
    <Item code="82" text="VOC" />
    <Item code="83" text="NMHC" />
    <Item code="84" text="Gas" />
    <Item code="85" text="Not specified" />
    <Item code="86" text="Snow" />
    <Item code="87" text="Vertical" />
    <Item code="88" text="Internal" />
    <Item code="89" text="Esternal" />
    <Item code="90" text="Shortwave" />
    <Item code="91" text="Longwave" />
    <Item code="92" text="Reflected" />
    <Item code="93" text="Incident" />
  </MeasureProperty>
</MeasureAttributes>
```

The support of Babuc ABC instruments are located in one library file used by LSI LASTEM applications. This is the file:

```
C:\Documents and Settings\All Users\Application Data\LSI-Lastem\Sltn2\Lib\[Culture]\BabucABCCodOpValues.xml
```

This is the contents of the file:

```
<?xml version="1.0" encoding="utf-8"?>
<appSettings>
  <CodOpDataTableManager
type="LSI_Lastem.Lib2.Sltn.InfoGap.CodOpDataTableManager,LSI.Lib2.Sltn">
    <property name="CodOpDataTables">
      <item name="CodOpDataTable">
        <property name="CodOp" value="1" />
        <property name="MeasureId" value="1" />
        <property name="MeasureProperty" value="1" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="2" />
        <property name="MeasureId" value="1" />
        <property name="MeasureProperty" value="4;3" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="3" />
        <property name="MeasureId" value="1" />
        <property name="MeasureProperty" value="1" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="4" />
        <property name="MeasureId" value="1" />
        <property name="MeasureProperty" value="4; 64" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="5" />
        <property name="MeasureId" value="1" />
```

```
    <property name="MeasureProperty" value="3" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="6" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="4; 3" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="7" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="8" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="4; 64" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="9" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="10" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="7" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="11" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="7" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="12" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="8" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="13" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="9" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="14" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="15" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="10" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="16" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="17" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="7" />
  </item>
  <item name="CodOpDataTable">
```

```
    <property name="CodOp" value="18" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="7" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="19" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="8" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="20" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="9" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="21" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="22" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="9" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="23" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="24" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="9" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="25" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="26" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="9" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="27" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="28" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="9" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="29" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="1" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="30" />
    <property name="MeasureId" value="1" />
    <property name="MeasureProperty" value="9" />
```

```
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="31" />
  <property name="MeasureId" value="2" />
  <property name="MeasureProperty" value="13" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="32" />
  <property name="MeasureId" value="2" />
  <property name="MeasureProperty" value="13" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="33" />
  <property name="MeasureId" value="3" />
  <property name="MeasureProperty" value="21" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="34" />
  <property name="MeasureId" value="5" />
  <property name="MeasureProperty" value="19" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="35" />
  <property name="MeasureId" value="6" />
  <property name="MeasureProperty" value="19" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="36" />
  <property name="MeasureId" value="5" />
  <property name="MeasureProperty" value="19" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="37" />
  <property name="MeasureId" value="3" />
  <property name="MeasureProperty" value="22" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="38" />
  <property name="MeasureId" value="3" />
  <property name="MeasureProperty" value="22" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="39" />
  <property name="MeasureId" value="3" />
  <property name="MeasureProperty" value="22" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="40" />
  <property name="MeasureId" value="6" />
  <property name="MeasureProperty" value="19" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="41" />
  <property name="MeasureId" value="11" />
  <property name="MeasureProperty" value="0" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="42" />
  <property name="MeasureId" value="11" />
  <property name="MeasureProperty" value="0" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="43" />
```

```
    <property name="MeasureId" value="11" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="44" />
    <property name="MeasureId" value="11" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="45" />
    <property name="MeasureId" value="31" />
    <property name="MeasureProperty" value="34" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="46" />
    <property name="MeasureId" value="8" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="47" />
    <property name="MeasureId" value="7" />
    <property name="MeasureProperty" value="25" />
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    <property name="MeasureId" value="36" />
    <property name="MeasureProperty" value="9; 11" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="175" />
    <property name="MeasureId" value="45" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="176" />
    <property name="MeasureId" value="46" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="177" />
    <property name="MeasureId" value="30" />
    <property name="MeasureProperty" value="34" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="178" />
    <property name="MeasureId" value="21" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="179" />
    <property name="MeasureId" value="25" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="180" />
    <property name="MeasureId" value="25" />
    <property name="MeasureProperty" value="0" />
  </item>
  <item name="CodOpDataTable">
    <property name="CodOp" value="181" />
    <property name="MeasureId" value="22" />
    <property name="MeasureProperty" value="0" />
  </item>
```

```
<item name="CodOpDataTable">
  <property name="CodOp" value="182" />
  <property name="MeasureId" value="22" />
  <property name="MeasureProperty" value="0" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="183" />
  <property name="MeasureId" value="22" />
  <property name="MeasureProperty" value="0" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="184" />
  <property name="MeasureId" value="2" />
  <property name="MeasureProperty" value="14" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="185" />
  <property name="MeasureId" value="2" />
  <property name="MeasureProperty" value="58" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="186" />
  <property name="MeasureId" value="20" />
  <property name="MeasureProperty" value="16" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="187" />
  <property name="MeasureId" value="19" />
  <property name="MeasureProperty" value="15" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="188" />
  <property name="MeasureId" value="28" />
  <property name="MeasureProperty" value="19" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="189" />
  <property name="MeasureId" value="7" />
  <property name="MeasureProperty" value="59" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="190" />
  <property name="MeasureId" value="39" />
  <property name="MeasureProperty" value="63" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="191" />
  <property name="MeasureId" value="40" />
  <property name="MeasureProperty" value="71" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="192" />
  <property name="MeasureId" value="40" />
  <property name="MeasureProperty" value="72" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="193" />
  <property name="MeasureId" value="40" />
  <property name="MeasureProperty" value="73" />
</item>
<item name="CodOpDataTable">
  <property name="CodOp" value="194" />
  <property name="MeasureId" value="42" />
```

```
        <property name="MeasureProperty" value="79" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="195" />
        <property name="MeasureId" value="43" />
        <property name="MeasureProperty" value="80" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="196" />
        <property name="MeasureId" value="42" />
        <property name="MeasureProperty" value="78" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="197" />
        <property name="MeasureId" value="44" />
        <property name="MeasureProperty" value="78" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="198" />
        <property name="MeasureId" value="47" />
        <property name="MeasureProperty" value="85" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="199" />
        <property name="MeasureId" value="47" />
        <property name="MeasureProperty" value="85" />
      </item>
      <item name="CodOpDataTable">
        <property name="CodOp" value="999" />
        <property name="MeasureId" value="0" />
        <property name="MeasureProperty" value="0" />
      </item>
    </property>
    <property name="CodOdDbFile" value="C:\Programmi\File comuni\lsi-
lastem\CodOp\LSICodOp.mdb" />
    <property name="Version">
      <property name="NumVer" value="13" />
      <property name="Data" value="2008-05-26T00:00:00.0000000+02:00" />
    </property>
    <property name="CodOpInstrumentType" value="1" />
  </CodOpDataTableManager>
</appSettings>
```

2.5.2. E-Log Tables

Core.ELogConfiguration: it includes the E-Log configurations connected to data stored in database. Fields:

- *InstrumentConfigurationID*: configuration ID (table *Core.InstrumentSurvey*);
- *UpdateRate*: rate of configuration's update;
- *CISSConfiguration*: string that includes configuration's CISS (communication protocol) format version;
- *FirmwareVersion*: firmware version of the instrument.

2.6. Users

2.6.1. Users Database

Database includes three users with following characteristics:

LSI.Gidas.Administrator:
- role: `db_owner`

LSI.Gidas.Reader:
- roles: db_datareader
- CORE diagram permits: SELECT, EXECUTE

LSI.Gidas.Writer:
- roles: db_datareader, db_datawriter
- CORE diagram permits: SELECT, EXECUTE, INSERT, ADD, UPDATE

These three users are connected to two server level LOGIN:
- LSI.Gidas.Reader (password=`redaer_6`)
- LSI.Gidas.Writer (password=`retirw_6`)
- LSI.Gidas.Administrator(password=`sadig_admin`)

The user *LSI.Gidas.Administrator* (available from version 2.2.1) is used internally to update the database.

2.7. Stored procedures

2.7.1. Stored procedures that operates on data

Database includes several stored procedures for management of included data.
Stored procedures are called [*Schema*].sp[*Name*]_[*Action*] where:

- [*Schema*]: *Core* or *Viewer*;
- [*Name*]: name of the table where Stored Procedure operates;
- [*Action*]: action performed by Stored Procedure. These are possible actions:

  1. Add
  2. Remove
  3. Update
  4. Get, GetAll
  5. GetBy[*id*] where id is applied filter.
  6. Refresh

2.8. Views

- *Core.vInstrumentSurvey_GetRecordCount:* it counts real number of record of elaborated data associated to each *Survey* (the datum included in the table *InstrumentSurvey* could be one not up-to-date datum);
  WARNING: in order to select the data use this view with terms WHERE on the InstrumentConfigurationId field
- *Core.vInstrumentSurvey_GetMoreRecentID:* it extracts the value *InstrumentConfigurationID* from latest configuration of each instrument;
- *vValueConfiguration_GetByMoreRecentInstrumentConfigurationID:* it extracts the configuration indexes of each instrument using its latest configuration;
- *Core. vInstrumentMeasures_GetAll*: it extracts the data referred to measures included in surveys unifying the information included in the tables *Core.InstrumentSurvey, Core.InstrumentMeasures, Core.ValueConfiguration* in one only table;
- *Core.vFlatLastInstData:* it extracts all the data of the table *Core.LastInstValue* (latest instantaneous data of current configuration of each instrument), unifying in one table three levels of data tables *Core.InstrumentSurvey*, *Core.ValueConfiguration*, *Core.LastInstValue*;
- *Core.vFlatCoreData:* it extracts the data of database, unifying in one table three levels of data tables *Core.InstrumentSurvey*, *Core.ValueConfiguration*, *Core.RawValue*.
  WARNING: in order to select the data use this view with terms WHERE.

3. Database connection

This section describes how to connect to the Gidas database.

3.1. Example: connection strings

Use of the SQL Server authentication to read/write data:

```
Data Source=dbserver;
Initial Catalog=Gidas;
Persist Security Info=True;
User ID=LSI.Gidas.Writer;
Password=retirw_6
```

Use of the SQL Server authentication manage database:

```
Data Source=dbserver;
Initial Catalog=Gidas;
Persist Security Info=True;
User ID=LSI.Gidas.Administrator;
Password= sadig_admin
```

Use of the Windows authentication:

```
Data Source= dbserver;
Initial Catalog=Gidas;
Integrated Security=True;
Persist Security Info=True
```

4. Data storage

This section describes the storage of data measured by E-Log instrument through programs *CommNetEG* and *3DOM*.

4.1. Example: instrument E-Log type

Considering an instrument with serial number *05110008* and configured with two measures (*Temperature* and *relative humidity*) that have following processings *Min, Ave, Max, StDev, ValidDataPerc.*, you can download the elaborated data and the instantaneous data. At first data downloading the following records are added:

Core.InstrumentRegistry: one record added

```
FactorySerialNumber InstrumentPrefix UserSerialNumber Description
05110008            ELog             05110008         Instrument description …
```

Core.InstrumentSurvey: one record added

```
Instrument      FactorySerial  Configuration  LastStored   NumRecords  Instrument
```

ConfigurationID	Number	Date	ValueDate		Prefix
95	05110008	02/11/2006 10.20.34	07/05/2008 11.00.00	20568	ELog

Core.InstrumentMeasure: two records added (two measures)

Instrument ConfigurationID	Measure Index	MeasureName	Measure Precision	Measure Unit	Measure Property	MeasureId
95	1	Humidity	1	%	13	2

Core.InstrumentElaborationBase: 4 records added, (two processings bases for each measure, where one processing base is associated to instantaneous data and is identified by value *ElaborationBaseIndex*=-1);

Instrument ConfigurationID	Elaboration BaseIndex	Elaboration MeasureIndex	Elaboration Rate	Elaboration ItemNumber
95	-1	0	1	1
95	0	0	1800	5
95	-1	1	1	1
95	0	1	1800	5

Core.ValueConfiguration: 12 records added (each measure includes five elaborated values *Min, Ave, Max, StDev, ValidDataPerc* to which it's added the instantaneous value identified by value *ElaborationBaseIndex=ElaborationItemIndex=ElaborationType*=-1. Field *Position* for instantaneous data isn't important)

Value ConfigurationID	Instrument ConfigurationID	Measure Index	Elaboration BaseIndex	Elaboration ItemIndex	Elaboration Type	Position
3102	95	0	-1	-1	-1	0
3103	95	0	0	0	2	0
3104	95	0	0	1	3	1
3105	95	0	0	2	4	2
3106	95	0	0	3	5	3
3107	95	0	0	4	13	4
3108	95	1	-1	-1	-1	1
3109	95	1	0	0	2	5
3110	95	1	0	1	3	6
3111	95	1	0	2	4	7
3112	95	1	0	3	5	8
3113	95	1	0	4	13	9

Core.RawValue: if the instrument downloads *n* records, (*n*10 + 2)* data records are added (in the table are inputted *n* records for each value of *ValueConfigurationID* inputted into above mentioned table, except values of *ValueConfigurationID* of the instantaneous data that are always one value for each measure, at every data download).

Core.LastInstValue: two records are added the first time, and during next updates they're updated (one instantaneous value for each measure; the values of *ValueConfigurationID* of the table correspond to the instantaneous data)

Value	ElaborationDate	ElaborationValue

ConfigurationID		
3102	07/05/2008 12.11.12	24,5
3108	07/05/2008 12.11.12	33,3

Core.ELogConfiguration: one record added (field CISSConfiguration includes the configuration of the instrument in CISS format of the communication protocol)

Instrument ConfigurationID	UpdateRate	CISSConfiguration	FirmwareVersion
95	1800	….	01.00.02

5. Data extraction

5.1. List of the measures and their processings associated to one survey

Considering one instrument (For example *FactorySerialNumber=05110008*), in order to obtain the list of all measures connected to one survey identified by *ConfigurationDate*= '2006-11-02 10:20:34.000' use the following query:

```
SELECT * FROM Core.vInstrumentMeasures_GetAll
WHERE FactorySerialNumber='05110008' AND ConfigurationDate='2006-11-02T10:20:34'
```

The result is one table like this one:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
05110008	2006-11-02 10:20:34.000	3102	Temperature	0	-1	1	'C	1	1
05110008	2006-11-02 10:20:34.000	3103	Temperature	0	0	1	'C	1	1
05110008	2006-11-02 10:20:34.000	3104	Temperature	0	1	1	'C	1	1
05110008	2006-11-02 10:20:34.000	3105	Temperature	0	2	1	'C	1	1
05110008	2006-11-02 10:20:34.000	3106	Temperature	0	3	1	'C	1	1
05110008	2006-11-02 10:20:34.000	3107	Temperature	0	4	1	'C	1	1
05110008	2006-11-02 10:20:34.000	3108	Humidity	1	-1	1	%	13	2
05110008	2006-11-02 10:20:34.000	3109	Humidity	1	0	1	%	13	2
05110008	2006-11-02 10:20:34.000	3110	Humidity	1	1	1	%	13	2
05110008	2006-11-02 10:20:34.000	3111	Humidity	1	2	1	%	13	2
05110008	2006-11-02 10:20:34.000	3112	Humidity	1	3	1	%	13	2
05110008	2006-11-02 10:20:34.000	3113	Humidity	1	4	1	%	13	2

Where:

(1): FactorySerialNumber;
(2): ConfigurationDate;
(3): ValueConfigurationId;
(4): MeasureName;
(5): MeasureIndex;
(6): ElaborationItemIndex;
(7): MeasurePrecision;
(8): MeasureUnit;
(9): MeasureProperty;
(10): MeasureId

5.2. Extraction of elaborated data

Considering one instrument (for example *FactorySerialNumber=05110008*), the selection of all data connected to latest configuration can be obtained through following query:

```
SELECT * FROM Core.vFlatCoreData WHERE InstrumentConfigurationID=
(
      SELECT  maxCfgId FROM Core.vInstrumentSurvey_GetMoreRecentID WHERE
      FactorySerialNumber='05110008'
)
```

The result is one table like this one:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
95	05110008	2006-11-02 10:20:34.000	0	0	2	3105	2008-03-14 22:00:00.000	21,19743	100
95	05110008	2006-11-02 10:20:34.000	0	0	3	3106	2008-03-14 22:00:00.000	0,0379049	100
95	05110008	2006-11-02 10:20:34.000	1	0	0	3109	2008-03-14 22:00:00.000	35,93158	100
..	..	..	..	..	..	..	..	..	..

Where:

(1): InstrumentConfigurationID;
(2): FactorySerialNumber;
(3): ConfigurationDate;
(4): MeasureIndex;
(5): ElaborationBaseIndex;
(6): ElaborationItemIndex;
(7): ValueConfigurationId;
(8): ElaborationDate;
(9): ElaborationValue;
(10): ValidPercentage

In order to obtain the data of one specified configuration (identified by *InstrumentConfigurationID=95*) use the following query:

```
SELECT * FROM Core.vFlatCoreData WHERE InstrumentConfigurationID=95
```

In order to limit the data temporarily use following query:

```
SELECT * FROM Core.vFlatCoreData WHERE InstrumentConfigurationID=95
AND Elaborationdate
BETWEEN '2008-03-14T23:00:00' AND '2008-03-15T23:00:00'
```

5.3. Extraction of instantaneous data

In order to display latest instantaneous data of all instruments use following query

```
SELECT * FROM Core.vFlatLastInstData
```

The result is one table like this one:

(1)	(2)	(3)	(4)	(5)	(6)	(7)
79	05110000	2006-11-01 10:20:34.000	Temperature	2954	2008-04-30 10:00:00.000	12,5
80	05110000	2006-11-02 10:20:34.000	Temperature	2964	2008-04-30 10:00:00.000	12,6
95	05110008	2006-11-02 10:20:34.000	Temperature	3102	2008-05-07 12:11:12.423	24,5
95	05110008	2006-11-02 10:20:34.000	Humidity	3108	2008-05-07 12:11:12.423	33,3

Where:

(1): InstrumentConfigurationID;
(2): FactorySerialNumber;
(3): ConfigurationDate;
(4): MeasureName;
(5): ValueConfigurationId;
(6): Date;
(7): Value;

6. Installation scripts

6.1. Database creation first step:

WARNING
Following instructions should be commented on SQL Server 2014 or superior

```
EXEC dbo.sp_dbcmptlevel @dbname=N'Gidas', @new_cmptlevel=90
GO
```

Change #SIZE# string with the desired database dimension (example 500MB)

Script

```
-------------------------------------------------------------------------------------------------------
--
-- Object:  Create Database [Gidas]
-- Date:       Script Date:
-- Remarks: Database files will be created in the same path of master db
-------------------------------------------------------------------------------------------------------
USE [master]
GO

-------------------------------------------------------------------------------
-- Create database object in the default storage path
-------------------------------------------------------------------------------
DECLARE @name char(5)
```

```
DECLARE @logname char(9)
DECLARE @path varchar(500)
DECLARE @dbFile varchar(500)
DECLARE @dbLogFile varchar(500)
SET @name='Gidas'
SET @logname='Gidas_log'
SELECT @path=[filename] FROM sysdatabases WHERE [name]='master'
SET @dbFile= REPLACE(@path,'\master.mdf','\Gidas.mdf')
SET @dbLogFile= REPLACE(@path,'\master.mdf','\Gidas_log.ldf')
DECLARE @queryTx nvarchar(3000)
SET @queryTx=N'CREATE DATABASE [Gidas]  ON PRIMARY (NAME = N'+ QUOTENAME(@name,'''') +
                              ',FILENAME = N' + QUOTENAME(@dbFile,'''')  +
                              ',SIZE = #SIZE#, MAXSIZE=UNLIMITED, FILEGROWTH = 10%) LOG ON ' +
                              '(NAME = N' + QUOTENAME(@logname,'''') +
                              ', FILENAME = N' + QUOTENAME(@dbLogFile,'''') +
                              ',SIZE  =  200MB  ,  MAXSIZE  =  UNLIMITED  ,  FILEGROWTH  =  100MB)  COLLATE
Latin1_General_CI_AS '
EXEC (@queryTx)
GO
------------------------------------------------------------------------------------
-- Alter database to add properties
------------------------------------------------------------------------------------
--EXEC dbo.sp_dbcmptlevel @dbname=N'Gidas', @new_cmptlevel=90
--GO
IF (1 = FULLTEXTSERVICEPROPERTY('IsFullTextInstalled'))
begin
EXEC [Gidas].[dbo].[sp_fulltext_database] @action = 'disable'
end
GO
ALTER DATABASE [Gidas] SET ANSI_NULL_DEFAULT OFF
GO
ALTER DATABASE [Gidas] SET ANSI_NULLS OFF
GO
ALTER DATABASE [Gidas] SET ANSI_PADDING OFF
GO
ALTER DATABASE [Gidas] SET ANSI_WARNINGS OFF
GO
ALTER DATABASE [Gidas] SET ARITHABORT OFF
GO
ALTER DATABASE [Gidas] SET AUTO_CLOSE ON
GO
ALTER DATABASE [Gidas] SET AUTO_CREATE_STATISTICS ON
GO
ALTER DATABASE [Gidas] SET AUTO_SHRINK OFF
GO
ALTER DATABASE [Gidas] SET AUTO_UPDATE_STATISTICS ON
GO
ALTER DATABASE [Gidas] SET CURSOR_CLOSE_ON_COMMIT OFF
GO
ALTER DATABASE [Gidas] SET CURSOR_DEFAULT  GLOBAL
GO
ALTER DATABASE [Gidas] SET CONCAT_NULL_YIELDS_NULL OFF
GO
ALTER DATABASE [Gidas] SET NUMERIC_ROUNDABORT OFF
GO
ALTER DATABASE [Gidas] SET QUOTED_IDENTIFIER OFF
GO
ALTER DATABASE [Gidas] SET RECURSIVE_TRIGGERS OFF
GO
ALTER DATABASE [Gidas] SET  DISABLE_BROKER
GO
ALTER DATABASE [Gidas] SET AUTO_UPDATE_STATISTICS_ASYNC OFF
GO
ALTER DATABASE [Gidas] SET DATE_CORRELATION_OPTIMIZATION OFF
GO
ALTER DATABASE [Gidas] SET ALLOW_SNAPSHOT_ISOLATION OFF
GO
ALTER DATABASE [Gidas] SET PARAMETERIZATION SIMPLE
GO
ALTER DATABASE [Gidas] SET  READ_WRITE
GO
ALTER DATABASE [Gidas] SET RECOVERY SIMPLE
GO
ALTER DATABASE [Gidas] SET  MULTI_USER
GO
ALTER DATABASE [Gidas] SET PAGE_VERIFY CHECKSUM
GO
```

```
-------------------------------------------------------------------------------------------
-- Create database logins
-------------------------------------------------------------------------------------------
IF NOT EXISTS (SELECT * FROM syslogins WHERE [name]='LSI.Gidas.Reader')
BEGIN
	CREATE LOGIN [LSI.Gidas.Reader] WITH PASSWORD=N'redaer_6', DEFAULT_DATABASE=[Gidas],
DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
END
GO
IF NOT EXISTS (SELECT * FROM syslogins WHERE [name]='LSI.Gidas.Writer')
BEGIN
	CREATE LOGIN [LSI.Gidas.Writer] WITH PASSWORD=N'retirw_6', DEFAULT_DATABASE=[Gidas],
DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
END
GO
IF NOT EXISTS (SELECT * FROM syslogins WHERE [name]='LSI.Gidas.Administrator')
BEGIN
	CREATE LOGIN [LSI.Gidas.Administrator] WITH PASSWORD=N'sadig_admin',
DEFAULT_DATABASE=[Gidas], DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
END
GO
```

6.2. Database creation second step:

```
-------------------------------------------------------------------------------------------------------------
-- Object:  Add objects to database [Gidas]
-- Date: Script Date: 15/11/2012
-- Version:	2.10.0
-- aggiunge la gestione della descrizione in UserConfigurationAttributes
-------------------------------------------------------------------------------------------------------------
USE [Gidas]

-------------------------------------------------------------------------------------------
-- Create Users and Schema
-------------------------------------------------------------------------------------------
GO
IF NOT EXISTS (SELECT * FROM sys.schemas WHERE name = N'Viewer')
EXEC sys.sp_executesql N'CREATE SCHEMA [Viewer] AUTHORIZATION [db_owner]'
GO
IF NOT EXISTS (SELECT * FROM ::fn_listextendedproperty(N'Description' , N'SCHEMA',N'Viewer', NULL,NULL,
NULL,NULL))
EXEC sys.sp_addextendedproperty @name=N'Description', @value=N'Schema used by GidasViewer application' ,
@level0type=N'SCHEMA',@level0name=N'Viewer'
GO
IF NOT EXISTS (SELECT * FROM sys.schemas WHERE name = N'Core')
EXEC sys.sp_executesql N'CREATE SCHEMA [Core] AUTHORIZATION [db_owner]'
GO
IF NOT EXISTS (SELECT * FROM ::fn_listextendedproperty(N'Description' , N'SCHEMA',N'Core', NULL,NULL, NULL,NULL))
EXEC sys.sp_addextendedproperty @name=N'Description', @value=N'Schema that contains data' ,
@level0type=N'SCHEMA',@level0name=N'Core'
GO
IF NOT EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Writer')
CREATE USER [LSI.Gidas.Writer] FOR LOGIN [LSI.Gidas.Writer] WITH DEFAULT_SCHEMA=[Core]
GO
IF NOT EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Reader')
CREATE USER [LSI.Gidas.Reader] FOR LOGIN [LSI.Gidas.Reader] WITH DEFAULT_SCHEMA=[Core]
GO
IF NOT EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Administrator')
CREATE USER [LSI.Gidas.Administrator] FOR LOGIN [LSI.Gidas.Administrator] WITH DEFAULT_SCHEMA=[Core]
GO
GRANT EXECUTE, INSERT, DELETE, SELECT, UPDATE ON SCHEMA :: Core TO [LSI.Gidas.Writer]
GO
GRANT EXECUTE, INSERT, DELETE, SELECT, UPDATE ON SCHEMA :: Viewer TO [LSI.Gidas.Writer]
GO
GRANT SELECT ON SCHEMA :: Core TO [LSI.Gidas.Reader]
GO
GRANT SELECT ON SCHEMA :: Viewer TO [LSI.Gidas.Reader]
GO
EXEC sp_addrolemember N'db_owner', N'LSI.Gidas.Administrator'
GO
-------------------------------------------------------------------------------------------
-- Create Tables
-------------------------------------------------------------------------------------------
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[GidasVersion]') AND type in (N'U'))
BEGIN
CREATE TABLE [Core].[GidasVersion](
```

```
        [Version] [varchar](15) NOT NULL,
        [ReleaseDate] [datetime] NOT NULL
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[InstrumentType]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[InstrumentType](
        [Prefix] [varchar](15) NOT NULL,
        [Name] [varchar](100) NOT NULL,
 CONSTRAINT [PK_InstrumentType_1] PRIMARY KEY CLUSTERED
(
        [Prefix] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[ELogConfiguration]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[ELogConfiguration](
        [InstrumentConfigurationId] [int] NOT NULL,
        [UpdateRate] [int] NOT NULL,
        [CISSConfiguration] [ntext] NOT NULL,
        [FirmwareVersion]   [char](8)   NOT   NULL   CONSTRAINT   [DF_ELogConfiguration_FirmwareVersion]     DEFAULT
('00.00.00'),
 CONSTRAINT [PK_ELogConfiguration] PRIMARY KEY CLUSTERED
(
        [InstrumentConfigurationId] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY] TEXTIMAGE_ON [PRIMARY]
END
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_Description'    ,    N'SCHEMA',N'Core',
N'TABLE',N'ELogConfiguration', N'COLUMN',N'UpdateRate'))
EXEC   sys.sp_addextendedproperty   @name=N'MS_Description',   @value=N'Rate   di   elaborazione   in   secondi'   ,
@level0type=N'SCHEMA',@level0name=N'Core',                   @level1type=N'TABLE',@level1name=N'ELogConfiguration',
@level2type=N'COLUMN',@level2name=N'UpdateRate'
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[RegistryLog]') AND type in (N'U'))
BEGIN
CREATE TABLE [Core].[RegistryLog](
        [logId] [bigint] IDENTITY(1,1) NOT NULL,
        [logKey] [nvarchar](50) NOT NULL,
        [logKeyId] [nvarchar](50) NOT NULL,
        [logKeyNumber] [int] NOT NULL,
 CONSTRAINT [PK_RegistryLog] PRIMARY KEY CLUSTERED
(
        [logId] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[CustomView]') AND type in (N'U'))
BEGIN
CREATE TABLE [Core].[CustomView](
        [CustomViewId] [int] IDENTITY(1,1) NOT NULL,
        [ViewName] [nvarchar](50) NOT NULL,
 CONSTRAINT [PK_CustomView] PRIMARY KEY CLUSTERED
(
        [CustomViewId] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
```

```
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[CustomFilter]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Viewer].[CustomFilter](
        [CustomFilterId] [int] IDENTITY(1,1) NOT NULL,
        [ParentType] [int] NOT NULL,
        [ParentId] [int] NOT NULL,
        [FilterConfiguration] [ntext] NOT NULL,
 CONSTRAINT [PK_CustomFilter] PRIMARY KEY CLUSTERED
(
        [CustomFilterId] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY] TEXTIMAGE_ON [PRIMARY]
END
GO
IF   NOT   EXISTS   (SELECT   *   FROM   ::fn_listextendedproperty(N'MS_Description'   ,   N'SCHEMA',N'Viewer',
N'TABLE',N'CustomFilter', N'COLUMN',N'ParentType'))
EXEC   sys.sp_addextendedproperty   @name=N'MS_Description',   @value=N'0->   Survey;   1   ->   CustomView'   ,
@level0type=N'SCHEMA',@level0name=N'Viewer',                    @level1type=N'TABLE',@level1name=N'CustomFilter',
@level2type=N'COLUMN',@level2name=N'ParentType'
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[ElabTypeList]') AND type in (N'U'))
BEGIN
CREATE TABLE [Core].[ElabTypeList](
        [IdElabType] [int] NOT NULL,
        [ElabTypeString] [nvarchar](15) NOT NULL,
        [ElabTypeToDo] [varchar](15) NULL,
 CONSTRAINT [PK_ElabTypeList] PRIMARY KEY CLUSTERED
(
        [IdElabType] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[InstrumentSurvey]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[InstrumentSurvey](
        [InstrumentConfigurationID] [int] IDENTITY(1,1) NOT NULL,
        [FactorySerialNumber] [varchar](20) NOT NULL,
        [ConfigurationDate] [datetime] NOT NULL,
        [LastStoredValueDate] [datetime] NOT NULL,
        [NumRecords] [bigint] NOT NULL CONSTRAINT [DF_InstrumentConfiguration_RecordNumber]  DEFAULT ((0)),
        [InstrumentPrefix] [varchar](15) NOT NULL,
 CONSTRAINT [PK_InstrumentConfiguration] PRIMARY KEY CLUSTERED
(
        [FactorySerialNumber] ASC,
        [ConfigurationDate] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

IF NOT EXISTS (SELECT * FROM sys.indexes WHERE object_id = OBJECT_ID(N'[Core].[InstrumentSurvey]') AND name =
N'UN_InstrumentConfiguration_InstrumentConfigurationID')
CREATE      UNIQUE      NONCLUSTERED      INDEX      [UN_InstrumentConfiguration_InstrumentConfigurationID]      ON
[Core].[InstrumentSurvey]
(
        [InstrumentConfigurationID] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
GO
IF   NOT   EXISTS   (SELECT   *   FROM   ::fn_listextendedproperty(N'MS_Description'   ,   N'SCHEMA',N'Core',
N'TABLE',N'InstrumentSurvey', N'COLUMN',N'LastStoredValueDate'))
EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value=N'inizialmente si pone uguale a ConfigurationDate'
,         @level0type=N'SCHEMA',@level0name=N'Core',         @level1type=N'TABLE',@level1name=N'InstrumentSurvey',
@level2type=N'COLUMN',@level2name=N'LastStoredValueDate'
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[CustomViewMeasure]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[CustomViewMeasure](
        [CustomViewId] [int] NOT NULL,
        [InstrumentConfigurationId] [int] NOT NULL,
        [MeasureIndex] [int] NOT NULL,
```

```
 CONSTRAINT [PK_CustomViewMeasure] PRIMARY KEY CLUSTERED
(
        [CustomViewId] ASC,
        [InstrumentConfigurationId] ASC,
        [MeasureIndex] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[InstrumentRegistry]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[InstrumentRegistry](
        [FactorySerialNumber] [varchar](20) NOT NULL,
        [InstrumentPrefix] [varchar](15) NOT NULL,
        [UserSerialNumber]  [varchar](50)  NOT  NULL  CONSTRAINT  [DF_SltnInstrument_UserSerialNumber]    DEFAULT
('=FactorySerialNumber'),
        [Description]   [varchar](200)   NOT   NULL   CONSTRAINT   [DF_SltnInstrument_Description]      DEFAULT
('=FactorySerialNumber'),
        DbDescription [varchar] (200) NULL,
 CONSTRAINT [PK_InstrumentRegistry] PRIMARY KEY CLUSTERED
(
        [FactorySerialNumber] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

IF NOT EXISTS (SELECT * FROM sys.indexes WHERE object_id = OBJECT_ID(N'[Core].[InstrumentRegistry]') AND name =
N'IX_InstrumentRegistry')
CREATE UNIQUE NONCLUSTERED INDEX [IX_InstrumentRegistry] ON [Core].[InstrumentRegistry]
(
        [FactorySerialNumber] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[InstrumentMeasure]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[InstrumentMeasure](
        [InstrumentConfigurationId] [int] NOT NULL,
        [MeasureIndex] [int] NOT NULL,
        [MeasureName] [nvarchar](50) NOT NULL CONSTRAINT [DF_InstrumentMeasure_MeasureName]  DEFAULT (N'-'),
        [MeasurePrecision] [int] NOT NULL CONSTRAINT [DF_InstrumentMeasure_MeasurePrecision]  DEFAULT ((2)),
        [MeasureUnit] [nvarchar](15) NOT NULL CONSTRAINT [DF_InstrumentMeasure_UnitMeasure]  DEFAULT (N'-'),
        [MeasureProperty]  [nvarchar](20)  NOT  NULL  CONSTRAINT  [DF_InstrumentMeasure_MeasureProperty]    DEFAULT
((0)),
        [MeasureId] [int] NOT NULL CONSTRAINT [DF_InstrumentMeasure_MeasureType]  DEFAULT ((0)),
 CONSTRAINT [PK_InstrumentMeasure_1] PRIMARY KEY CLUSTERED
(
        [InstrumentConfigurationId] ASC,
        [MeasureIndex] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[InstrumentElaborationBase]') AND
type in (N'U'))
BEGIN
CREATE TABLE [Core].[InstrumentElaborationBase](
        [InstrumentConfigurationId] [int] NOT NULL,
        [ElaborationBaseIndex] [int] NOT NULL,
        [ElaborationMeasureIndex] [int] NOT NULL,
        [ElaborationRate] [int] NOT NULL,
        [ElaborationItemNumber] [int] NOT NULL,
 CONSTRAINT [PK_InstrumentElaborationBase] PRIMARY KEY CLUSTERED
(
        [InstrumentConfigurationId] ASC,
        [ElaborationMeasureIndex] ASC,
        [ElaborationBaseIndex] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_Description'    ,    N'SCHEMA',N'Core',
N'TABLE',N'InstrumentElaborationBase', N'COLUMN',N'ElaborationRate'))
```

```
EXEC sys.sp_addextendedproperty @name=N'MS_Description', @value=N'Rate di elaborazione in secondi' ,
@level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'TABLE',@level1name=N'InstrumentElaborationBase',
@level2type=N'COLUMN',@level2name=N'ElaborationRate'
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[ValueConfiguration]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[ValueConfiguration](
        [ValueConfigurationID] [int] IDENTITY(1,1) NOT NULL,
        [InstrumentConfigurationID] [int] NOT NULL,
        [MeasureIndex] [int] NOT NULL,
        [ElaborationBaseIndex] [int] NOT NULL,
        [ElaborationItemIndex] [int] NOT NULL,
        [ElaborationType] [int] NOT NULL CONSTRAINT [DF_ValueConfiguration_ElabType]  DEFAULT ((0)),
        [Position] [int] NOT NULL CONSTRAINT [DF_ValueConfiguration_Position]  DEFAULT ((0)),
 CONSTRAINT [PK_ValueConfiguration] PRIMARY KEY CLUSTERED
(
        [ValueConfigurationID] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[LastInstValue]') AND type in
(N'U'))
BEGIN
CREATE TABLE [Core].[LastInstValue](
        [ValueConfigurationID] [int] NOT NULL,
        [InstDate] [datetime] NOT NULL,
        [InstValue] [real] NOT NULL,
 CONSTRAINT [PK_LastInstValue] PRIMARY KEY CLUSTERED
(
        [ValueConfigurationID] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[RawValue]') AND type in (N'U'))
BEGIN
CREATE TABLE [Core].[RawValue](
        [ValueConfigurationID] [int] NOT NULL,
        [ElaborationDate] [datetime] NOT NULL,
        [ElaborationValue] [real] NOT NULL,
        [ValidPercentage] [tinyint] NOT NULL CONSTRAINT [DF_RawValue_ValidPercentage]  DEFAULT ((100)),
 CONSTRAINT [PK_RawValue] PRIMARY KEY CLUSTERED
(
        [ElaborationDate] ASC,
        [ValueConfigurationID] ASC
)WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
) ON [PRIMARY]
END
GO

IF NOT EXISTS (SELECT * FROM sys.indexes WHERE object_id = OBJECT_ID(N'[Core].[RawValue]') AND name =
N'NCINDX_RawValue_ElaborationDate')
CREATE NONCLUSTERED INDEX [NCINDX_RawValue_ElaborationDate] ON [Core].[RawValue]
(
        [ElaborationDate] ASC
)
INCLUDE ( [ValueConfigurationID],
[ElaborationValue]) WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
GO

--Aggiunto con la versione 2.6 solo per i nuovi database
IF NOT EXISTS (SELECT * FROM sys.indexes WHERE object_id = OBJECT_ID(N'[Core].[RawValue]') AND name =
N'NCINDX_RawValue_ElaborationeDateDESC')
CREATE NONCLUSTERED INDEX [NCINDX_RawValue_ElaborationeDateDESC] ON [Core].[RawValue]
(
        [ElaborationDate] DESC
)
INCLUDE ( [ValueConfigurationID],
[ElaborationValue]) WITH (PAD_INDEX  = OFF, IGNORE_DUP_KEY = OFF) ON [PRIMARY]
GO

IF NOT EXISTS (SELECT * FROM ::fn_listextendedproperty(N'MS_Description' , N'SCHEMA',N'Core',
N'TABLE',N'RawValue', N'COLUMN',N'ValidPercentage'))
```

```
EXEC    sys.sp_addextendedproperty    @name=N'MS_Description',    @value=N'il    tipo    va    da    0    a    255'    ,
@level0type=N'SCHEMA',@level0name=N'Core',                              @level1type=N'TABLE',@level1name=N'RawValue',
@level2type=N'COLUMN',@level2name=N'ValidPercentage'
GO

-------------------------------------------------------------------------------------
-- Create Views and Stored Procedures
-------------------------------------------------------------------------------------

IF NOT EXISTS (SELECT * FROM sys.views WHERE object_id = OBJECT_ID(N'[Core].[vInstrumentSurvey_GetRecordCount]'))
EXEC dbo.sp_executesql @statement = N'CREATE VIEW [Core].[vInstrumentSurvey_GetRecordCount]
AS
SELECT                                      COUNT(Core.RawValue.ValueConfigurationID)        AS        RecordCount,
Core.ValueConfiguration.InstrumentConfigurationID
FROM         Core.ValueConfiguration INNER JOIN
                      Core.RawValue           ON           Core.ValueConfiguration.ValueConfigurationID           =
Core.RawValue.ValueConfigurationID
WHERE     (Core.RawValue.ValueConfigurationID IN
                        (SELECT     ValueConfigurationID
                          FROM          Core.ValueConfiguration AS ValueConfiguration_1
                          WHERE      (ElaborationBaseIndex >= 0)))
GROUP BY Core.ValueConfiguration.InstrumentConfigurationID
'
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_DiagramPane1'    ,    N'SCHEMA',N'Core',
N'VIEW',N'vInstrumentSurvey_GetRecordCount', NULL,NULL))
EXEC sys.sp_addextendedproperty @name=N'MS_DiagramPane1', @value=N'[0E232FF0-B466-11cf-A24F-00AA00A3EFFF, 1.00]
Begin DesignProperties =
   Begin PaneConfigurations =
      Begin PaneConfiguration = 0
         NumPanes = 4
         Configuration = "(H (1[21] 4[21] 2[23] 3) )"
      End
      Begin PaneConfiguration = 1
         NumPanes = 3
         Configuration = "(H (1 [50] 4 [25] 3))"
      End
      Begin PaneConfiguration = 2
         NumPanes = 3
         Configuration = "(H (1 [50] 2 [25] 3))"
      End
      Begin PaneConfiguration = 3
         NumPanes = 3
         Configuration = "(H (4 [30] 2 [40] 3))"
      End
      Begin PaneConfiguration = 4
         NumPanes = 2
         Configuration = "(H (1 [56] 3))"
      End
      Begin PaneConfiguration = 5
         NumPanes = 2
         Configuration = "(H (2 [66] 3))"
      End
      Begin PaneConfiguration = 6
         NumPanes = 2
         Configuration = "(H (4 [50] 3))"
      End
      Begin PaneConfiguration = 7
         NumPanes = 1
         Configuration = "(V (3))"
      End
      Begin PaneConfiguration = 8
         NumPanes = 3
         Configuration = "(H (1[56] 4[18] 2) )"
      End
      Begin PaneConfiguration = 9
         NumPanes = 2
         Configuration = "(H (1 [75] 4))"
      End
      Begin PaneConfiguration = 10
         NumPanes = 2
         Configuration = "(H (1[66] 2) )"
      End
      Begin PaneConfiguration = 11
         NumPanes = 2
         Configuration = "(H (4 [60] 2))"
      End
      Begin PaneConfiguration = 12
         NumPanes = 1
         Configuration = "(H (1) )"
      End
      Begin PaneConfiguration = 13
         NumPanes = 1
         Configuration = "(V (4))"
      End
      Begin PaneConfiguration = 14
         NumPanes = 1
         Configuration = "(V (2))"
      End
      ActivePaneConfig = 0
```

```
   End
   Begin DiagramPane =
      Begin Origin =
         Top = 0
         Left = 0
      End
      Begin Tables =
         Begin Table = "RawValue (Core)"
            Begin Extent =
               Top = 6
               Left = 286
               Bottom = 121
               Right = 469
            End
            DisplayFlags = 280
            TopColumn = 0
         End
         Begin Table = "ValueConfiguration (Core)"
            Begin Extent =
               Top = 0
               Left = 0
               Bottom = 115
               Right = 210
            End
            DisplayFlags = 280
            TopColumn = 0
         End
      End
   End
   Begin SQLPane =
   End
   Begin DataPane =
      Begin ParameterDefaults = ""
      End
      Begin ColumnWidths = 9
         Width = 284
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
      End
   End
   Begin CriteriaPane =
      Begin ColumnWidths = 12
         Column = 2970
         Alias = 900
         Table = 2370
         Output = 720
         Append = 1400
         NewValue = 1170
         SortType = 1350
         SortOrder = 1410
         GroupBy = 1350
         Filter = 1350
         Or = 1350
         Or = 1350
         Or = 1350
      End
   End
End
' , @level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'VIEW',@level1name=N'vInstrumentSurvey_GetRecordCount'
GO
IF   NOT   EXISTS   (SELECT   *   FROM   ::fn_listextendedproperty(N'MS_DiagramPaneCount'   ,   N'SCHEMA',N'Core',
N'VIEW',N'vInstrumentSurvey_GetRecordCount', NULL,NULL))
EXEC           sys.sp_addextendedproperty           @name=N'MS_DiagramPaneCount',           @value=1           ,
@level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'VIEW',@level1name=N'vInstrumentSurvey_GetRecordCount'
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentSurvey_UpdateNumrecords]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 7/5/2008
-- Description:  Updates instrument survey record numbers
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_UpdateNumrecords]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
```

```
        -- interfering with SELECT statements.
        SET NOCOUNT ON;
        DECLARE @RecordCount int

        SELECT  @RecordCount= count(Core.RawValue.ValueCOnfigurationID) FROM Core.RawValue
        WHERE Core.RawValue.ValueCOnfigurationID IN
        (
                select ValueConfigurationID
                FROM Core.ValueCOnfiguration
                WHERE ElaborationBaseIndex >=0 AND InstrumentConfigurationID=@InstrumentConfigurationID
        )

        UPDATE            Core.InstrumentSurvey            SET            NumRecords=@RecordCount            WHERE
InstrumentConfigurationID=@InstrumentConfigurationID
        Return @RecordCount
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spRawValue_Add]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'

-- =============================================
-- Author:              Stefano Giarola
-- Create date: 27/10/2006
-- Description:  Add a single row of data, checking primarykey violation
-- Return:              1=added, -1=error, 0=already in the table
-- =============================================
CREATE PROCEDURE [Core].[spRawValue_Add]
        -- Add the parameters for the stored procedure here
        @ValueConfigurationID int,
        @ElaborationDate datetime,
        @ElaborationValue real,
        @ValidPercentage tinyint,
        @RowCount int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        BEGIN TRY
                INSERT INTO Core.RawValue
                (
                        ValueConfigurationID,
                        ElaborationDate,
                        ElaborationValue,
                        ValidPercentage
                )
                VALUES
                (
                        @ValueConfigurationID,
                        @ElaborationDate,
                        @ElaborationValue,
                        @ValidPercentage
                )
                SET @RowCount=''1''

        END TRY
        BEGIN CATCH
                IF (ERROR_NUMBER() = 2627) BEGIN
                        SET @RowCount=''0''
                END
                ELSE BEGIN
                        SET @RowCount=''-1''
                END
        END CATCH

END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.views WHERE object_id = OBJECT_ID(N'[Core].[vFlatCoreData]'))
EXEC dbo.sp_executesql @statement = N'CREATE VIEW [Core].[vFlatCoreData]
AS
SELECT               Core.InstrumentSurvey.InstrumentConfigurationID,   Core.InstrumentSurvey.FactorySerialNumber,
Core.InstrumentSurvey.ConfigurationDate,
                     Core.ValueConfiguration.MeasureIndex,          Core.ValueConfiguration.ElaborationBaseIndex,
Core.ValueConfiguration.ElaborationItemIndex,
```

```
                    Core.ValueConfiguration.ValueConfigurationID,                Core.RawValue.ElaborationDate,
Core.RawValue.ElaborationValue,
                    Core.RawValue.ValidPercentage
FROM         Core.ValueConfiguration INNER JOIN
                    Core.RawValue           ON           Core.ValueConfiguration.ValueConfigurationID           =
Core.RawValue.ValueConfigurationID INNER JOIN
                    Core.InstrumentSurvey       ON       Core.ValueConfiguration.InstrumentConfigurationID      =
Core.InstrumentSurvey.InstrumentConfigurationID
'
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_DiagramPane1'    ,    N'SCHEMA',N'Core',
N'VIEW',N'vFlatCoreData', NULL,NULL))
EXEC sys.sp_addextendedproperty @name=N'MS_DiagramPane1', @value=N'[0E232FF0-B466-11cf-A24F-00AA00A3EFFF, 1.00]
Begin DesignProperties =
   Begin PaneConfigurations =
      Begin PaneConfiguration = 0
         NumPanes = 4
         Configuration = "(H (1[38] 4[17] 2[16] 3) )"
      End
      Begin PaneConfiguration = 1
         NumPanes = 3
         Configuration = "(H (1 [50] 4 [25] 3))"
      End
      Begin PaneConfiguration = 2
         NumPanes = 3
         Configuration = "(H (1 [50] 2 [25] 3))"
      End
      Begin PaneConfiguration = 3
         NumPanes = 3
         Configuration = "(H (4 [30] 2 [40] 3))"
      End
      Begin PaneConfiguration = 4
         NumPanes = 2
         Configuration = "(H (1 [56] 3))"
      End
      Begin PaneConfiguration = 5
         NumPanes = 2
         Configuration = "(H (2 [66] 3))"
      End
      Begin PaneConfiguration = 6
         NumPanes = 2
         Configuration = "(H (4 [50] 3))"
      End
      Begin PaneConfiguration = 7
         NumPanes = 1
         Configuration = "(V (3))"
      End
      Begin PaneConfiguration = 8
         NumPanes = 3
         Configuration = "(H (1[56] 4[18] 2) )"
      End
      Begin PaneConfiguration = 9
         NumPanes = 2
         Configuration = "(H (1 [75] 4))"
      End
      Begin PaneConfiguration = 10
         NumPanes = 2
         Configuration = "(H (1[66] 2) )"
      End
      Begin PaneConfiguration = 11
         NumPanes = 2
         Configuration = "(H (4 [60] 2))"
      End
      Begin PaneConfiguration = 12
         NumPanes = 1
         Configuration = "(H (1) )"
      End
      Begin PaneConfiguration = 13
         NumPanes = 1
         Configuration = "(V (4))"
      End
      Begin PaneConfiguration = 14
         NumPanes = 1
         Configuration = "(V (2))"
      End
      ActivePaneConfig = 0
   End
   Begin DiagramPane =
      Begin Origin =
         Top = 0
         Left = 0
      End
      Begin Tables =
         Begin Table = "ValueConfiguration (Core)"
            Begin Extent =
               Top = 18
               Left = 248
               Bottom = 133
               Right = 458
            End
```

```
            DisplayFlags = 280
            TopColumn = 0
         End
         Begin Table = "RawValue (Core)"
            Begin Extent =
               Top = 18
               Left = 630
               Bottom = 133
               Right = 813
            End
            DisplayFlags = 280
            TopColumn = 0
         End
         Begin Table = "InstrumentSurvey (Core)"
            Begin Extent =
               Top = 6
               Left = 38
               Bottom = 121
               Right = 248
            End
            DisplayFlags = 280
            TopColumn = 0
         End
      End
   End
   Begin SQLPane =
   End
   Begin DataPane =
      Begin ParameterDefaults = ""
      End
      Begin ColumnWidths = 9
         Width = 284
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
      End
   End
   Begin CriteriaPane =
      Begin ColumnWidths = 11
         Column = 1440
         Alias = 900
         Table = 1170
         Output = 720
         Append = 1400
         NewValue = 1170
         SortType = 1350
         SortOrder = 1410
         GroupBy = 1350
         Filter = 1350
         Or = 1350
         Or = 1350
         Or = 1350
      End
   End
End
' , @level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'VIEW',@level1name=N'vFlatCoreData'
GO
IF   NOT   EXISTS   (SELECT   *   FROM   ::fn_listextendedproperty(N'MS_DiagramPaneCount'   ,   N'SCHEMA',N'Core',
N'VIEW',N'vFlatCoreData', NULL,NULL))
EXEC           sys.sp_addextendedproperty           @name=N'MS_DiagramPaneCount',           @value=1           ,
@level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'VIEW',@level1name=N'vFlatCoreData'
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentRegistry_Remove]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- =============================================
-- Author:              Stefano Giarola
-- Create date: 17/4/2008
-- Description:  Remove a selected InstrumentRegistry
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentRegistry_Remove]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20)
AS
BEGIN
        --impostare per avere il valore di ritorno
        --SET NOCOUNT ON;

    -- Insert statements for procedure here
        DELETE FROM Core.InstrumentRegistry WHERE FactorySerialNumber=@FactorySerialNumber
END
```

```
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentRegistry_Add]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Insert a new Instrument if not already present
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentRegistry_Add]
        -- Add the parameters for the stored procedure here
                @FactorySerialNumber varchar(20),
                @InstrumentPrefix varchar(15),
                @UserSerialNumber varchar(50),
                @Description varchar(200)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Prima dell''inserimento verifica se esiste già il record
        SELECT FactorySerialNumber  FROM Core.InstrumentRegistry  WHERE FactorySerialNumber=@FactorySerialNumber

    -- Insert statements for procedure here
        IF (@@ROWCOUNT <= 0)
        BEGIN
                INSERT INTO Core.InstrumentRegistry
                (
                        FactorySerialNumber,
                        InstrumentPrefix,
                        UserSerialNumber,
                        Description
                )
                VALUES
                (
                        @FactorySerialNumber,
                        @InstrumentPrefix,
                        @UserSerialNumber,
                        @Description
                )
        END
END


'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentRegistry_GetAll]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Load all instruments
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentRegistry_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

SELECT   Core.InstrumentRegistry.InstrumentPrefix, Core.InstrumentRegistry.FactorySerialNumber,
        Core.InstrumentRegistry.UserSerialNumber,                           Core.InstrumentRegistry.[Description],
Core.InstrumentRegistry.DbDescription,
        Core.InstrumentType.Name AS InstrumentName
FROM    Core.InstrumentRegistry INNER JOIN
        Core.InstrumentType ON Core.InstrumentRegistry.InstrumentPrefix = Core.InstrumentType.Prefix
END'

END
GO
```

```
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentRegistry_GetByPrefix]')
AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Load all instruments of a defined type
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentRegistry_GetByPrefix]
        -- Add the parameters for the stored procedure here
        @prefix varchar(15)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert
SELECT  Core.InstrumentRegistry.InstrumentPrefix, Core.InstrumentRegistry.FactorySerialNumber,
       Core.InstrumentRegistry.UserSerialNumber,                          Core.InstrumentRegistry.[Description],
Core.InstrumentRegistry.DbDescription,
       Core.InstrumentType.Name AS InstrumentName
FROM    Core.InstrumentRegistry INNER JOIN
       Core.InstrumentType ON Core.InstrumentRegistry.InstrumentPrefix = Core.InstrumentType.Prefix
WHERE  Core.InstrumentRegistry.InstrumentPrefix = @prefix
END'

END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentRegistry_GetByFSN]')
AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Load an instrument
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentRegistry_GetByFSN]
        -- Add the parameters for the stored procedure here
        @fMatr varchar(20)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
SELECT  Core.InstrumentRegistry.InstrumentPrefix, Core.InstrumentRegistry.FactorySerialNumber,
       Core.InstrumentRegistry.UserSerialNumber,                          Core.InstrumentRegistry.[Description],
Core.InstrumentRegistry.DbDescription,
       Core.InstrumentType.Name AS InstrumentName
FROM    Core.InstrumentRegistry INNER JOIN
       Core.InstrumentType ON Core.InstrumentRegistry.InstrumentPrefix = Core.InstrumentType.Prefix
WHERE FactorySerialNumber=@fMatr
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentMeasure_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:              Stefano Giarola
-- Create date: 4/02/2008
-- Description:  Load measures of an InstrumentSurvey
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentMeasure_GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int
AS
```

```
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT  InstrumentConfigurationId, MeasureIndex,MeasureName, MeasurePrecision, MeasureUnit,
                        MeasureProperty, MeasureId
        FROM Core.InstrumentMeasure
        WHERE InstrumentConfigurationId=@InstrumentConfigurationId
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentMeasure_Add]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Add an InstrumentMeasure
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentMeasure_Add]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int,
        @MeasureIndex int,
        @MeasureName nvarchar(50),
        @MeasurePrecision int,
        @MeasureUnit nvarchar(15),
        @MeasureProperty nvarchar(20),
        @MeasureId int,
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO Core.InstrumentMeasure
        (
                InstrumentConfigurationId,
                MeasureName,
                MeasurePrecision,
                MeasureUnit,
                MeasureProperty,
                MeasureId,
                MeasureIndex
        )
        VALUES
        (
                @InstrumentConfigurationId,
                @MeasureName,
                @MeasurePrecision,
                @MeasureUnit,
                @MeasureProperty,
                @MeasureId,
                @MeasureIndex
        )

        --recupera l''id
        SET @NewId= SCOPE_IDENTITY()

END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.views WHERE object_id = OBJECT_ID(N'[Core].[vFlatLastInstData]'))
EXEC dbo.sp_executesql @statement = N'
CREATE VIEW [Core].[vFlatLastInstData]
AS
SELECT
Core.InstrumentSurvey.InstrumentConfigurationID,                        Core.InstrumentSurvey.FactorySerialNumber,
Core.InstrumentSurvey.ConfigurationDate,
Core.InstrumentMeasure.MeasureName,
Core.ValueConfiguration.ValueConfigurationID,
Core.LastInstValue.InstDate, Core.LastInstValue.InstValue
FROM
```

```
Core.ValueConfiguration
INNER        JOIN        Core.LastInstValue        ON        Core.ValueConfiguration.ValueConfigurationID        =
Core.LastInstValue.ValueConfigurationID
INNER       JOIN       Core.InstrumentSurvey       ON       Core.ValueConfiguration.InstrumentConfigurationID       =
Core.InstrumentSurvey.InstrumentConfigurationID
INNER       JOIN      Core.InstrumentMeasure       ON       Core.ValueConfiguration.InstrumentConfigurationID       =
Core.InstrumentMeasure.InstrumentConfigurationID
                                                                                    AND
Core.ValueConfiguration.MeasureIndex = Core.InstrumentMeasure.MeasureIndex
'
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.views WHERE object_id = OBJECT_ID(N'[Core].[vInstrumentMeasures_GetAll]'))
EXEC dbo.sp_executesql @statement = N'CREATE VIEW [Core].[vInstrumentMeasures_GetAll]
AS
SELECT                      Core.InstrumentSurvey.FactorySerialNumber,     Core.InstrumentSurvey.ConfigurationDate,
Core.ValueConfiguration.ValueConfigurationID,
                      Core.InstrumentMeasure.MeasureName,                       Core.InstrumentMeasure.MeasureIndex,
Core.ValueConfiguration.ElaborationItemIndex,
                      Core.InstrumentMeasure.MeasurePrecision,                   Core.InstrumentMeasure.MeasureUnit,
Core.InstrumentMeasure.MeasureProperty,
                      Core.InstrumentMeasure.MeasureId
FROM         Core.InstrumentMeasure INNER JOIN
                      Core.InstrumentSurvey       ON       Core.InstrumentMeasure.InstrumentConfigurationId       =
Core.InstrumentSurvey.InstrumentConfigurationID INNER JOIN
                      Core.ValueConfiguration      ON      Core.InstrumentMeasure.InstrumentConfigurationId      =
Core.ValueConfiguration.InstrumentConfigurationID AND
                      Core.InstrumentMeasure.MeasureIndex = Core.ValueConfiguration.MeasureIndex
'
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_DiagramPane1'    ,    N'SCHEMA',N'Core',
N'VIEW',N'vInstrumentMeasures_GetAll', NULL,NULL))
EXEC sys.sp_addextendedproperty @name=N'MS_DiagramPane1', @value=N'[0E232FF0-B466-11cf-A24F-00AA00A3EFFF, 1.00]
Begin DesignProperties =
   Begin PaneConfigurations =
      Begin PaneConfiguration = 0
         NumPanes = 4
         Configuration = "(H (1[26] 4[27] 2[16] 3) )"
      End
      Begin PaneConfiguration = 1
         NumPanes = 3
         Configuration = "(H (1 [50] 4 [25] 3))"
      End
      Begin PaneConfiguration = 2
         NumPanes = 3
         Configuration = "(H (1 [50] 2 [25] 3))"
      End
      Begin PaneConfiguration = 3
         NumPanes = 3
         Configuration = "(H (4 [30] 2 [40] 3))"
      End
      Begin PaneConfiguration = 4
         NumPanes = 2
         Configuration = "(H (1 [56] 3))"
      End
      Begin PaneConfiguration = 5
         NumPanes = 2
         Configuration = "(H (2 [66] 3))"
      End
      Begin PaneConfiguration = 6
         NumPanes = 2
         Configuration = "(H (4 [50] 3))"
      End
      Begin PaneConfiguration = 7
         NumPanes = 1
         Configuration = "(V (3))"
      End
      Begin PaneConfiguration = 8
         NumPanes = 3
         Configuration = "(H (1[56] 4[18] 2) )"
      End
      Begin PaneConfiguration = 9
         NumPanes = 2
         Configuration = "(H (1 [75] 4))"
      End
      Begin PaneConfiguration = 10
         NumPanes = 2
         Configuration = "(H (1[66] 2) )"
      End
      Begin PaneConfiguration = 11
         NumPanes = 2
         Configuration = "(H (4 [60] 2))"
      End
      Begin PaneConfiguration = 12
         NumPanes = 1
         Configuration = "(H (1) )"
      End
```

```
      Begin PaneConfiguration = 13
         NumPanes = 1
         Configuration = "(V (4))"
      End
      Begin PaneConfiguration = 14
         NumPanes = 1
         Configuration = "(V (2))"
      End
      ActivePaneConfig = 0
   End
   Begin DiagramPane =
      Begin Origin =
         Top = 0
         Left = 0
      End
      Begin Tables =
         Begin Table = "InstrumentMeasure (Core)"
            Begin Extent =
               Top = 6
               Left = 264
               Bottom = 121
               Right = 473
            End
            DisplayFlags = 280
            TopColumn = 0
         End
         Begin Table = "InstrumentSurvey (Core)"
            Begin Extent =
               Top = 8
               Left = 0
               Bottom = 123
               Right = 210
            End
            DisplayFlags = 280
            TopColumn = 0
         End
         Begin Table = "ValueConfiguration (Core)"
            Begin Extent =
               Top = 6
               Left = 533
               Bottom = 121
               Right = 743
            End
            DisplayFlags = 280
            TopColumn = 3
         End
      End
   End
   Begin SQLPane =
   End
   Begin DataPane =
      Begin ParameterDefaults = ""
      End
      Begin ColumnWidths = 12
         Width = 284
         Width = 1500
         Width = 2670
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
      End
   End
   Begin CriteriaPane =
      Begin ColumnWidths = 11
         Column = 1440
         Alias = 900
         Table = 1170
         Output = 720
         Append = 1400
         NewValue = 1170
         SortType = 1350
         SortOrder = 1410
         GroupBy = 1350
         Filter = 1350
         Or = 1350
         Or = 1350
         Or = 1350
      End
   End
End
' , @level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'VIEW',@level1name=N'vInstrumentMeasures_GetAll'
GO
IF   NOT   EXISTS   (SELECT   *   FROM   ::fn_listextendedproperty(N'MS_DiagramPaneCount'   ,   N'SCHEMA',N'Core',
N'VIEW',N'vInstrumentMeasures_GetAll', NULL,NULL))
```

```
EXEC           sys.sp_addextendedproperty           @name=N'MS_DiagramPaneCount',           @value=1           ,
@level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'VIEW',@level1name=N'vInstrumentMeasures_GetAll'
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spGidasVersion_Get]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- ============================================
-- Author:              Stefano Giarola
-- Create date: 27/10/2005
-- Description:  Get database version
-- ============================================
CREATE PROCEDURE [Core].[spGidasVersion_Get]
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT Version, ReleaseDate FROM Core.GidasVersion
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentType_GetAll]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- ============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Get all instrument types
-- ============================================
CREATE PROCEDURE [Core].[spInstrumentType_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT Prefix, [Name]
        FROM Core.InstrumentType
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentElaborationBase_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- ============================================
-- Author:               Stefano Giarola
-- Create date: 4/02/2008
-- Description:  Get all elaboration bases of a defined Survey
-- ============================================
CREATE PROCEDURE [Core].[spInstrumentElaborationBase_GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT  ElaborationBaseIndex, ElaborationRate,ElaborationMeasureIndex,ElaborationItemNumber
        FROM Core.InstrumentElaborationBase
        WHERE InstrumentConfigurationId=@InstrumentConfigurationId
END
```

```
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentElaborationBase_Add]')
AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Add a new ElaborationBase
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentElaborationBase_Add]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int,
        @ElaborationBaseIndex int,
        @ElaborationRate int,
        @ElaborationMeasureIndex int,
        @ElaborationItemNumber int

AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO Core.InstrumentElaborationBase
        (
                InstrumentConfigurationId,
                ElaborationBaseIndex,
                ElaborationRate,
                ElaborationMeasureIndex,
                ElaborationItemNumber
        )
        VALUES
        (
                @InstrumentConfigurationId,
                @ElaborationBaseIndex,
                @ElaborationRate,
                @ElaborationMeasureIndex,
                @ElaborationItemNumber
        )

END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spElogConfiguration_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:               Stefano Giarola
-- Create date: 4/02/2008
-- Description:  Get extended properties of an E-Log configuration
-- =============================================
CREATE PROCEDURE [Core].[spElogConfiguration_GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT  UpdateRate, CISSConfiguration, FirmwareVersion
        FROM Core.ELogConfiguration
        WHERE InstrumentConfigurationId=@InstrumentConfigurationId
END
```

```
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spELogConfiguration_Add]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- ============================================
-- Author:               Stefano Giarola
-- Create date: 27/1072006
-- Description:  Insert ELog configuration
-- ============================================
CREATE PROCEDURE [Core].[spELogConfiguration_Add]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int,
        @UpdateRate int,
        @FirmwareVersion char(8),
        @CISSConfiguration ntext
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;
        INSERT     INTO     Core.ELogConfiguration     (InstrumentConfigurationId,     UpdateRate,FirmwareVersion,
CISSConfiguration)
        VALUES (@InstrumentConfigurationId, @UpdateRate,@FirmwareVersion, @CISSConfiguration)

END
```

```
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentSurvey_Remove]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- ============================================
-- Author:               Stefano Giarola
-- Create date: 17/4/2008
-- Description:  Remove a selected InstrumentSurvey
-- ============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_Remove]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20),
        @ConfigurationDate datetime
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        --SET NOCOUNT ON;
    -- Insert statements for procedure here
        DELETE FROM Core.InstrumentSurvey WHERE FactorySerialNumber=@FactorySerialNumber
        AND ConfigurationDate=@ConfigurationDate
END

'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.views WHERE object_id = OBJECT_ID(N'[Core].[vInstrumentSurvey_GetMoreRecentID]'))
EXEC dbo.sp_executesql @statement = N'CREATE VIEW [Core].[vInstrumentSurvey_GetMoreRecentID]
AS
SELECT     FactorySerialNumber, MAX(InstrumentConfigurationID) AS maxCfgId
FROM         Core.InstrumentSurvey
GROUP BY FactorySerialNumber
'
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_DiagramPane1'    ,    N'SCHEMA',N'Core',
N'VIEW',N'vInstrumentSurvey_GetMoreRecentID', NULL,NULL))
```

```
EXEC sys.sp_addextendedproperty @name=N'MS_DiagramPane1', @value=N'[0E232FF0-B466-11cf-A24F-00AA00A3EFFF, 1.00]
Begin DesignProperties =
   Begin PaneConfigurations =
      Begin PaneConfiguration = 0
         NumPanes = 4
         Configuration = "(H (1[40] 4[20] 2[20] 3) )"
      End
      Begin PaneConfiguration = 1
         NumPanes = 3
         Configuration = "(H (1 [50] 4 [25] 3))"
      End
      Begin PaneConfiguration = 2
         NumPanes = 3
         Configuration = "(H (1 [50] 2 [25] 3))"
      End
      Begin PaneConfiguration = 3
         NumPanes = 3
         Configuration = "(H (4 [30] 2 [40] 3))"
      End
      Begin PaneConfiguration = 4
         NumPanes = 2
         Configuration = "(H (1 [56] 3))"
      End
      Begin PaneConfiguration = 5
         NumPanes = 2
         Configuration = "(H (2 [66] 3))"
      End
      Begin PaneConfiguration = 6
         NumPanes = 2
         Configuration = "(H (4 [50] 3))"
      End
      Begin PaneConfiguration = 7
         NumPanes = 1
         Configuration = "(V (3))"
      End
      Begin PaneConfiguration = 8
         NumPanes = 3
         Configuration = "(H (1[56] 4[18] 2) )"
      End
      Begin PaneConfiguration = 9
         NumPanes = 2
         Configuration = "(H (1 [75] 4))"
      End
      Begin PaneConfiguration = 10
         NumPanes = 2
         Configuration = "(H (1[66] 2) )"
      End
      Begin PaneConfiguration = 11
         NumPanes = 2
         Configuration = "(H (4 [60] 2))"
      End
      Begin PaneConfiguration = 12
         NumPanes = 1
         Configuration = "(H (1) )"
      End
      Begin PaneConfiguration = 13
         NumPanes = 1
         Configuration = "(V (4))"
      End
      Begin PaneConfiguration = 14
         NumPanes = 1
         Configuration = "(V (2))"
      End
      ActivePaneConfig = 0
   End
   Begin DiagramPane =
      Begin Origin =
         Top = 0
         Left = 0
      End
      Begin Tables =
         Begin Table = "InstrumentSurvey (Core)"
            Begin Extent =
               Top = 30
               Left = 134
               Bottom = 145
               Right = 430
            End
            DisplayFlags = 280
            TopColumn = 0
         End
      End
   End
   Begin SQLPane =
   End
   Begin DataPane =
      Begin ParameterDefaults = ""
      End
      Begin ColumnWidths = 9
         Width = 284
```

```
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
      End
   End
   Begin CriteriaPane =
      Begin ColumnWidths = 12
         Column = 2550
         Alias = 900
         Table = 1170
         Output = 720
         Append = 1400
         NewValue = 1170
         SortType = 1350
         SortOrder = 1410
         GroupBy = 1350
         Filter = 1350
         Or = 1350
         Or = 1350
         Or = 1350
      End
   End
End
'                                    ,                                          @level0type=N'SCHEMA',@level0name=N'Core',
@level1type=N'VIEW',@level1name=N'vInstrumentSurvey_GetMoreRecentID'
GO
IF   NOT   EXISTS   (SELECT   *   FROM   ::fn_listextendedproperty(N'MS_DiagramPaneCount'   ,   N'SCHEMA',N'Core',
N'VIEW',N'vInstrumentSurvey_GetMoreRecentID', NULL,NULL))
EXEC            sys.sp_addextendedproperty            @name=N'MS_DiagramPaneCount',            @value=1            ,
@level0type=N'SCHEMA',@level0name=N'Core', @level1type=N'VIEW',@level1name=N'vInstrumentSurvey_GetMoreRecentID'
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spLastInstValue_RemoveBySerialNumber]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:                Giarola Stefano
-- Create date: 4/5/2008
-- Description:  Remove all instvalue linked to an instrument
-- =============================================
CREATE PROCEDURE [Core].[spLastInstValue_RemoveBySerialNumber]
        @FactorySerialNumber varchar(20)

AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

        DELETE
        FROM  Core.LastInstValue
        WHERE Core.LastInstValue.ValueConfigurationID IN
        (
                Select Core.LastInstValue.ValueConfigurationID
                FROM
                        Core.InstrumentSurvey INNER JOIN
            Core.ValueConfiguration          ON          Core.InstrumentSurvey.InstrumentConfigurationID          =
Core.ValueConfiguration.InstrumentConfigurationID INNER JOIN
            Core.LastInstValue             ON             Core.ValueConfiguration.ValueConfigurationID             =
Core.LastInstValue.ValueConfigurationID
                WHERE
                        Core.InstrumentSurvey.FactorySerialNumber = @FactorySerialNumber
        )
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentSurvey_Add]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:                Stefano Giarola
-- Create date: 26/10/2006
```

```
-- Description:  Add a new Survey
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_Add]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20),
        @ConfigurationDate datetime,
        @InstrumentPrefix varchar(15),
        @LastStoredValueDate datetime,
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT           INTO           [Core].InstrumentSurvey           (FactorySerialNumber,ConfigurationDate,
InstrumentPrefix,LastStoredValueDate)
        VALUES(@FactorySerialNumber,@ConfigurationDate, @InstrumentPrefix,@LastStoredValueDate)

        --recupera l''id
        SET @NewId= SCOPE_IDENTITY()

END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentSurvey_GetAll]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Get all instrument surveys
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT
InstrumentConfigurationID,FactorySerialNumber,ConfigurationDate,InstrumentPrefix,LastStoredValueDate,NumRecords
        FROM Core.InstrumentSurvey
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentSurvey_GetByFSN]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Get all surveys of a defined instrument
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_GetByFSN]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber char(20)

AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT
InstrumentConfigurationID,FactorySerialNumber,ConfigurationDate,InstrumentPrefix,LastStoredValueDate,NumRecords
        FROM Core.InstrumentSurvey
        WHERE FactorySerialNumber=@FactorySerialNumber
END
```

```
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentSurvey_GetByID]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Get an intrument survey
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_GetByID]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber char(20),
        @ConfigurationDate datetime
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT
InstrumentConfigurationID,FactorySerialNumber,ConfigurationDate,InstrumentPrefix,LastStoredValueDate,NumRecords
        FROM Core.InstrumentSurvey
        WHERE FactorySerialNumber=@FactorySerialNumber AND ConfigurationDate=@ConfigurationDate
END



'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentSurvey_GetMoreRecentByID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Get more recent survey of a defined instrument
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_GetMoreRecentByID]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber char(20)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT                                                                                          TOP(1)
InstrumentConfigurationID,FactorySerialNumber,ConfigurationDate,InstrumentPrefix,LastStoredValueDate,NumRecords
        FROM Core.InstrumentSurvey
        WHERE FactorySerialNumber=@FactorySerialNumber
        ORDER BY ConfigurationDate DESC
END



'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentSurvey_Refresh]') AND
type in (N'P', N'PC'))
```

```
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 2/11/2006
-- Description:  Refresh instrumentsurvey table of a defined instrument
-- =============================================
CREATE PROCEDURE [Core].[spInstrumentSurvey_Refresh]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber  char(20),
        @ConfigurationDate datetime,
        @LastStoredValueDate datetime,
        @NumRecords bigint
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        UPDATE Core.InstrumentSurvey
                SET LastStoredValueDate=@LastStoredValueDate, NumRecords=@NumRecords
                WHERE FactorySerialNumber=@FactorySerialNumber AND ConfigurationDate=@ConfigurationDate
END

'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spRegistryLog_Add]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- =============================================
-- Author:               Stefano Giarola
-- Create date: 15/04/2008
-- Description:  Add a record in the Elogregistry table
-- =============================================
CREATE PROCEDURE [Core].[spRegistryLog_Add]
        -- Add the parameters for the stored procedure here
        @logKey  nvarchar(50),
        @logKeyId nvarchar(50),
        @logKeyNumber int,
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;
        INSERT INTO Core.RegistryLog (logKey, logKeyId, logKeyNumber)
        VALUES (@logKey, @logKeyId, @logKeyNumber)

        --recupera l''id
        SET @NewId= SCOPE_IDENTITY()

END

'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spRegistryLog_GetByKey]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- =============================================
-- Author:               Stefano Giarola
-- Create date: 15/04/2008
-- Description:  Get registrylog
-- =============================================
CREATE PROCEDURE [Core].[spRegistryLog_GetByKey]
        @logKey nvarchar(50)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT logId, logKey, logKeyId, logKeyNumber FROM Core.RegistryLog WHERE logKey=@logKey
END
'
END
GO
SET ANSI_NULLS ON
GO
```

```
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spRegistryLog_Remove]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- ============================================
-- Author:              Stefano Giarola
-- Create date: 17/4/2008
-- Description:  Remove a selected LOG
-- ============================================
CREATE PROCEDURE [Core].[spRegistryLog_Remove]
        -- Add the parameters for the stored procedure here
        @logKey varchar(50)
AS
BEGIN
        --impostare per avere il valore di ritorno
        --SET NOCOUNT ON;

    -- Insert statements for procedure here
        DELETE FROM Core.RegistryLog WHERE logKey=@logKey
END

'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spCustomView_GetAll]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- ============================================
-- Author:              Stefano Giarola
-- Create date: 18/04/2008
-- Description:  Get all records from CustomView
-- ============================================
CREATE PROCEDURE [Core].[spCustomView_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT CustomViewId, ViewName
        FROM Core.CustomView
END







'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spCustomView_Add]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- ============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Insert new CustomView
-- ============================================
CREATE PROCEDURE [Core].[spCustomView_Add]
        -- Add the parameters for the stored procedure here
        @ViewName nvarchar(50),
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO [Core].CustomView (ViewName)
        VALUES(@ViewName)
```

```
        --recupera l''id
        SET @NewId= SCOPE_IDENTITY()

END




'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spCustomView_Remove]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Remove a CustomView
-- =============================================
CREATE PROCEDURE [Core].[spCustomView_Remove]
        -- Add the parameters for the stored procedure here
        @CustomViewId int
AS
BEGIN

    -- Insert statements for procedure here
        DELETE  FROM [Core].CustomView WHERE CustomViewId=@CustomViewId

END






'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spCustomView_Update]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:              Stefano Giarola
-- Create date: 20/4/2008
-- Description:  Update a CustomView
-- =============================================
CREATE PROCEDURE [Core].[spCustomView_Update]
        -- Add the parameters for the stored procedure here
        @ViewName nvarchar(50),
        @CustomViewId int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        UPDATE [Core].CustomView SET ViewName=@ViewName
        WHERE CustomViewId=@CustomViewId

END

'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spCustomViewMeasure_Remove]') AND
type in (N'P', N'PC'))
BEGIN
```

```
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Remove all measure realted to a  CustomView
-- =============================================
CREATE PROCEDURE [Core].[spCustomViewMeasure_Remove]
        -- Add the parameters for the stored procedure here
        @CustomViewId int
AS
BEGIN

    -- Insert statements for procedure here
        DELETE  FROM [Core].CustomViewMeasure WHERE CustomViewId=@CustomViewId

END







'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spCustomViewMeasure_Add]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:               Stefano Giarola
-- Create date: 20/4/2008
-- Description:  Insert new CustomViewMeasure
-- =============================================
CREATE PROCEDURE [Core].[spCustomViewMeasure_Add]
        -- Add the parameters for the stored procedure here
        @CustomViewId int,
        @InstrumentConfigurationId int,
        @MeasureIndex int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO [Core].CustomViewMeasure (CustomViewId, InstrumentConfigurationId, MeasureIndex)
        VALUES(@CustomViewId, @InstrumentConfigurationId, @MeasureIndex)

END







'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spCustomViewMeasure_GetAll]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:               Stefano Giarola
-- Create date: 18/04/2008
-- Description:  get all records from CustomViewMeasure
-- =============================================
CREATE PROCEDURE [Core].[spCustomViewMeasure_GetAll]
        -- Add the parameters for the stored procedure here
```

```
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT CustomViewId, InstrumentConfigurationId, MeasureIndex
        FROM Core.CustomViewMeasure
END




'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spCustomViewMeasure_GetByCustomViewId]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- ============================================
-- Author:               Stefano Giarola
-- Create date: 18/04/2008
-- Description:  get all cutosmview related records from CustomViewMeasure
-- ============================================
CREATE PROCEDURE [Core].[spCustomViewMeasure_GetByCustomViewId]
        -- Add the parameters for the stored procedure here
        @CustomViewId int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT CustomViewId, InstrumentConfigurationId, MeasureIndex
        FROM Core.CustomViewMeasure
        WHERE CustomViewId=@CustomViewId
END




'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomFilter_Add]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- ============================================
-- Author:               Stefano Giarola
-- Create date: 25/04/2008
-- Description:  Insert a new custom filter
-- ============================================
CREATE PROCEDURE [Viewer].[spCustomFilter_Add]
        -- Add the parameters for the stored procedure here
        @ParentType int,
        @ParentId int,
        @FilterConfiguration ntext,
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;
        INSERT INTO Viewer.CustomFilter (ParentType, ParentId, FilterConfiguration)
        VALUES (@ParentType, @ParentId,  @FilterConfiguration)

        --recupera l''id
        SET @NewId= SCOPE_IDENTITY()
END
```

```
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomFilter_GetAll]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:               Stefano Giarola
-- Create date: 25/04/2008
-- Description:  get all records from CustomFilter
-- =============================================
CREATE PROCEDURE [Viewer].[spCustomFilter_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT CustomFilterId, ParentType,ParentId, FilterConfiguration
        FROM Viewer.CustomFilter
END




'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomFilter_Remove]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'


-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Remove a CustomFilter
-- =============================================
CREATE PROCEDURE [Viewer].[spCustomFilter_Remove]
        -- Add the parameters for the stored procedure here
        @CustomFilterId int
AS
BEGIN

    -- Insert statements for procedure here
        DELETE  FROM Viewer.CustomFilter WHERE CustomFilterId=@CustomFilterId

END




'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomFilter_Update]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
```

```
-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Update a CustomFilter
-- =============================================
CREATE PROCEDURE [Viewer].[spCustomFilter_Update]
        -- Add the parameters for the stored procedure here
        @CustomFilterId int,
        @ParentType int,
        @ParentId int,
        @FilterConfiguration ntext
AS
BEGIN

    -- Insert statements for procedure here
        UPDATE Viewer.CustomFilter SET ParentType=@ParentType,
                        ParentId=@ParentId, FilterConfiguration=@FilterConfiguration
        WHERE CustomFilterId=@CustomFilterId
END







'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Viewer].[spCustomFilter_RemoveByParentId]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'



-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Remove a CustomFilter by ParentId
-- =============================================
CREATE PROCEDURE [Viewer].[spCustomFilter_RemoveByParentId]
        -- Add the parameters for the stored procedure here
        @ParentId int
AS
BEGIN

    -- Insert statements for procedure here
        DELETE  FROM Viewer.CustomFilter WHERE ParentId=@ParentId

END







'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spValueConfiguration_GetMoreRecent]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- ================================================================================
-- Author:              Stefano Giarola
-- Create date: 16/11/2006
-- Description:
-- ================================================================================
CREATE PROCEDURE [Core].[spValueConfiguration_GetMoreRecent]
        -- Add the parameters for the stored procedure here
        @OldInstCfgId int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;
```

```
        --verifica la presenza di una configurazione più recente
        declare @maxId int
        SELECT @maxId=MAX(Core.InstrumentConfiguration.InstrumentConfigurationID)
        FROM   Core.InstrumentConfiguration INNER JOIN
                    Core.InstrumentConfiguration AS InstrumentConfiguration_1 ON
                    Core.InstrumentConfiguration.FactorySerialNumber                                    =
InstrumentConfiguration_1.FactorySerialNumber
        WHERE InstrumentConfiguration_1.InstrumentConfigurationID=@OldInstCfgId

        --se ha trovato esegue la query per recuperare tutte le nuove configurazioni
        IF(@maxId > @OldInstCfgId) BEGIN
                SELECT  ValueConfigurationID,  InstrumentConfigurationID,    MeasureIndex,  ElaborationBaseIndex,
ElaborationItemIndex, ElaborationType, Position
                FROM Core.ValueConfiguration
                WHERE InstrumentConfigurationID=@maxId
        END

END



'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spValueConfiguration_GetAll]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:
-- =============================================
CREATE PROCEDURE [Core].[spValueConfiguration_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT
ValueConfigurationID,InstrumentConfigurationID,MeasureIndex,ElaborationBaseIndex,ElaborationItemIndex,
                    ElaborationType, Position
        FROM Core.ValueConfiguration
END



'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spValueConfiguration_Add]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- =============================================
-- Author:              Stefano Giarola
-- Create date: 27/10/2006
-- Description:
-- =============================================
CREATE PROCEDURE [Core].[spValueConfiguration_Add]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int,
        @MeasureIndex int,
        @ElaborationBaseIndex int,
        @ElaborationItemIndex int,
        @ElaborationType int,
        @Position int,
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO Core.ValueConfiguration
        (
                InstrumentConfigurationID,
                MeasureIndex,
```

```
                ElaborationBaseIndex,
                ElaborationItemIndex,
                ElaborationType,
                Position
        )
        VALUES
        (
                @InstrumentConfigurationID,
                @MeasureIndex,
                @ElaborationBaseIndex,
                @ElaborationItemIndex,
                @ElaborationType,
                @Position
        )

        --recupera l''id
        SET @NewId= SCOPE_IDENTITY()
END



'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spValueConfiguration_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 26/10/2006
-- Description:
-- =============================================
CREATE PROCEDURE [Core].[spValueConfiguration_GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int = -1
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT
        ValueConfigurationID,InstrumentConfigurationID,MeasureIndex,ElaborationBaseIndex,ElaborationItemIndex,
                        ElaborationType, Position
        FROM Core.ValueConfiguration
        WHERE InstrumentConfigurationID=@InstrumentConfigurationID
END



'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spValueConfiguration_GetSingleMoreRecent]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- =============================================
-- Author:               Stefano Giarola
-- Create date: 16/11/2006
-- Description:
-- =============================================
CREATE PROCEDURE [Core].[spValueConfiguration_GetSingleMoreRecent]
        -- Add the parameters for the stored procedure here
        @OldInstCfgId int,
        @MeasureIndex int,
        @ElaborationBaseIndex int,
        @ElaborationItemIndex int

AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    --Verifica se esiste una nuova configurazione più recente
        declare @maxId int
        SELECT @maxId=MAX(Core.InstrumentConfiguration.InstrumentConfigurationID)
        FROM   Core.InstrumentConfiguration INNER JOIN
                    Core.InstrumentConfiguration AS InstrumentConfiguration_1 ON
```

```
                    Core.InstrumentConfiguration.FactorySerialNumber                                        =
InstrumentConfiguration_1.FactorySerialNumber
        WHERE InstrumentConfiguration_1.InstrumentConfigurationID=@OldInstCfgId

        --se ha trovato una nuova configurazione prosegue
        IF(@maxId > @OldInstCfgId) BEGIN

                --ricava la configurazione aggiornata
                SELECT   ValueConfigurationID,   InstrumentConfigurationID,   MeasureIndex,   ElaborationBaseIndex,
ElaborationItemIndex, ElaborationType, Position
                FROM Core.ValueConfiguration
                WHERE InstrumentConfigurationID=@maxId
                AND MeasureIndex=@MeasureIndex
                AND ElaborationBaseIndex=@ElaborationBaseIndex
                AND ElaborationItemIndex=@ElaborationItemIndex
        END
END



'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spLastInstValue_Add]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:              Stefano Giarola
-- Create date: 27/10/2006
-- Description:
-- =============================================
CREATE PROCEDURE [Core].[spLastInstValue_Add]
        -- Add the parameters for the stored procedure here
        @ValueConfigurationID int,
        @InstDate datetime,
        @InstValue real
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON

        DECLARE @rc int
        SELECT          @rc=Count(ValueCOnfigurationID)          FROM          Core.LastInstValue          WHERE
ValueConfigurationID=@ValueConfigurationID

        IF(@rc > 0)
                -- aggiorna il record
                UPDATE Core.LastInstValue SET InstDate=@InstDate, InstValue=@InstValue
                WHERE ValueConfigurationID=@ValueConfigurationID

        ELSE
                -- inserisce il nuovo recor
                INSERT INTO Core.LastInstValue
                (
                        ValueConfigurationID,
                        InstDate,
                        InstValue
                )
                VALUES
                (
                        @ValueConfigurationID,
                        @InstDate,
                        @InstValue
                )
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spElabTypeList_Get]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'-- =============================================
-- Author:              Stefano Giarola
-- Create date: 27/10/2005
-- Description:  Get ElabType list
-- =============================================
CREATE PROCEDURE [Core].[spElabTypeList_Get]
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
```

```
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT IdElabType, ElabTypeString, ElabTypeToDo FROM Core.ElabTypeList
END


'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.views       WHERE       object_id       =
OBJECT_ID(N'[Core].[vValueConfiguration_GetByMoreRecentInstrumentConfigurationID]'))
EXEC dbo.sp_executesql @statement = N'/*WHERE       (Core.vInstrumentSurvey_GetMoreRecentID.FactorySerialNumber =
''05110008'')*/
CREATE VIEW [Core].[vValueConfiguration_GetByMoreRecentInstrumentConfigurationID]
AS
SELECT                                                Core.vInstrumentSurvey_GetMoreRecentID.FactorySerialNumber,
Core.ValueConfiguration.ValueConfigurationID,
                      Core.ValueConfiguration.MeasureIndex,           Core.ValueConfiguration.ElaborationBaseIndex,
Core.ValueConfiguration.ElaborationItemIndex,
                      Core.ValueConfiguration.ElaborationType
FROM         Core.vInstrumentSurvey_GetMoreRecentID INNER JOIN
                      Core.ValueConfiguration       ON       Core.vInstrumentSurvey_GetMoreRecentID.maxCfgId       =
Core.ValueConfiguration.InstrumentConfigurationID
'
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_DiagramPane1'    ,    N'SCHEMA',N'Core',
N'VIEW',N'vValueConfiguration_GetByMoreRecentInstrumentConfigurationID', NULL,NULL))
EXEC sys.sp_addextendedproperty @name=N'MS_DiagramPane1', @value=N'[0E232FF0-B466-11cf-A24F-00AA00A3EFFF, 1.00]
Begin DesignProperties =
   Begin PaneConfigurations =
      Begin PaneConfiguration = 0
         NumPanes = 4
         Configuration = "(H (1[40] 4[13] 2[20] 3) )"
      End
      Begin PaneConfiguration = 1
         NumPanes = 3
         Configuration = "(H (1 [50] 4 [25] 3))"
      End
      Begin PaneConfiguration = 2
         NumPanes = 3
         Configuration = "(H (1 [50] 2 [25] 3))"
      End
      Begin PaneConfiguration = 3
         NumPanes = 3
         Configuration = "(H (4 [30] 2 [40] 3))"
      End
      Begin PaneConfiguration = 4
         NumPanes = 2
         Configuration = "(H (1 [56] 3))"
      End
      Begin PaneConfiguration = 5
         NumPanes = 2
         Configuration = "(H (2 [66] 3))"
      End
      Begin PaneConfiguration = 6
         NumPanes = 2
         Configuration = "(H (4 [50] 3))"
      End
      Begin PaneConfiguration = 7
         NumPanes = 1
         Configuration = "(V (3))"
      End
      Begin PaneConfiguration = 8
         NumPanes = 3
         Configuration = "(H (1[56] 4[18] 2) )"
      End
      Begin PaneConfiguration = 9
         NumPanes = 2
         Configuration = "(H (1 [75] 4))"
      End
      Begin PaneConfiguration = 10
         NumPanes = 2
         Configuration = "(H (1[66] 2) )"
      End
      Begin PaneConfiguration = 11
         NumPanes = 2
         Configuration = "(H (4 [60] 2))"
      End
      Begin PaneConfiguration = 12
         NumPanes = 1
         Configuration = "(H (1) )"
      End
      Begin PaneConfiguration = 13
         NumPanes = 1
```

```
         Configuration = "(V (4))"
      End
      Begin PaneConfiguration = 14
         NumPanes = 1
         Configuration = "(V (2))"
      End
      ActivePaneConfig = 0
   End
   Begin DiagramPane =
      Begin Origin =
         Top = 0
         Left = 0
      End
      Begin Tables =
         Begin Table = "vInstrumentSurvey_GetMoreRecentID (Core)"
            Begin Extent =
               Top = 6
               Left = 38
               Bottom = 91
               Right = 219
            End
            DisplayFlags = 280
            TopColumn = 0
         End
         Begin Table = "ValueConfiguration (Core)"
            Begin Extent =
               Top = 6
               Left = 257
               Bottom = 121
               Right = 467
            End
            DisplayFlags = 280
            TopColumn = 0
         End
      End
   End
   Begin SQLPane =
   End
   Begin DataPane =
      Begin ParameterDefaults = ""
      End
      Begin ColumnWidths = 9
         Width = 284
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
         Width = 1500
      End
   End
   Begin CriteriaPane =
      Begin ColumnWidths = 11
         Column = 1440
         Alias = 900
         Table = 1170
         Output = 720
         Append = 1400
         NewValue = 1170
         SortType = 1350
         SortOrder = 1410
         GroupBy = 1350
         Filter = 1350
         Or = 1350
         Or = 1350
         Or = 1350
      End
   End
End
'                                    ,                                          @level0type=N'SCHEMA',@level0name=N'Core',
@level1type=N'VIEW',@level1name=N'vValueConfiguration_GetByMoreRecentInstrumentConfigurationID'
GO

-----------------------------------------------------------------------------------
-- Relazioni
------------------------------------------------------------------------------------ */
IF   NOT   EXISTS   (SELECT   *   FROM   ::fn_listextendedproperty(N'MS_DiagramPaneCount'   ,   N'SCHEMA',N'Core',
N'VIEW',N'vValueConfiguration_GetByMoreRecentInstrumentConfigurationID', NULL,NULL))
EXEC            sys.sp_addextendedproperty            @name=N'MS_DiagramPaneCount',            @value=1            ,
@level0type=N'SCHEMA',@level0name=N'Core',
@level1type=N'VIEW',@level1name=N'vValueConfiguration_GetByMoreRecentInstrumentConfigurationID'
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.foreign_keys       WHERE       object_id       =
OBJECT_ID(N'[Core].[FK_InstrumentSurvey_InstrumentRegistry]')           AND           parent_object_id           =
OBJECT_ID(N'[Core].[InstrumentSurvey]'))
ALTER TABLE [Core].[InstrumentSurvey]  WITH CHECK ADD  CONSTRAINT [FK_InstrumentSurvey_InstrumentRegistry] FOREIGN
KEY([FactorySerialNumber])
REFERENCES [Core].[InstrumentRegistry] ([FactorySerialNumber])
```

```
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [Core].[InstrumentSurvey] CHECK CONSTRAINT [FK_InstrumentSurvey_InstrumentRegistry]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_CustomViewMeasure_CustomView]') AND parent_object_id =
OBJECT_ID(N'[Core].[CustomViewMeasure]'))
ALTER TABLE [Core].[CustomViewMeasure] WITH CHECK ADD CONSTRAINT [FK_CustomViewMeasure_CustomView] FOREIGN
KEY([CustomViewId])
REFERENCES [Core].[CustomView] ([CustomViewId])
ON DELETE CASCADE
GO
ALTER TABLE [Core].[CustomViewMeasure] CHECK CONSTRAINT [FK_CustomViewMeasure_CustomView]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_CustomViewMeasure_InstrumentMeasure]') AND parent_object_id =
OBJECT_ID(N'[Core].[CustomViewMeasure]'))
ALTER TABLE [Core].[CustomViewMeasure] WITH CHECK ADD CONSTRAINT [FK_CustomViewMeasure_InstrumentMeasure]
FOREIGN KEY([InstrumentConfigurationId], [MeasureIndex])
REFERENCES [Core].[InstrumentMeasure] ([InstrumentConfigurationId], [MeasureIndex])
ON DELETE CASCADE
GO
ALTER TABLE [Core].[CustomViewMeasure] CHECK CONSTRAINT [FK_CustomViewMeasure_InstrumentMeasure]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_InstrumentRegistry_InstrumentType]') AND parent_object_id =
OBJECT_ID(N'[Core].[InstrumentRegistry]'))
ALTER TABLE [Core].[InstrumentRegistry] WITH CHECK ADD CONSTRAINT [FK_InstrumentRegistry_InstrumentType] FOREIGN
KEY([InstrumentPrefix])
REFERENCES [Core].[InstrumentType] ([Prefix])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [Core].[InstrumentRegistry] CHECK CONSTRAINT [FK_InstrumentRegistry_InstrumentType]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_InstrumentMeasure_InstrumentSurvey]') AND parent_object_id =
OBJECT_ID(N'[Core].[InstrumentMeasure]'))
ALTER TABLE [Core].[InstrumentMeasure] WITH CHECK ADD CONSTRAINT [FK_InstrumentMeasure_InstrumentSurvey] FOREIGN
KEY([InstrumentConfigurationId])
REFERENCES [Core].[InstrumentSurvey] ([InstrumentConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [Core].[InstrumentMeasure] CHECK CONSTRAINT [FK_InstrumentMeasure_InstrumentSurvey]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_InstrumentElaborationBase_InstrumentSurvey]') AND parent_object_id =
OBJECT_ID(N'[Core].[InstrumentElaborationBase]'))
ALTER TABLE [Core].[InstrumentElaborationBase] WITH CHECK ADD CONSTRAINT
[FK_InstrumentElaborationBase_InstrumentSurvey] FOREIGN KEY([InstrumentConfigurationId])
REFERENCES [Core].[InstrumentSurvey] ([InstrumentConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [Core].[InstrumentElaborationBase] CHECK CONSTRAINT [FK_InstrumentElaborationBase_InstrumentSurvey]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_ValueConfiguration_InstrumentSurvey]') AND parent_object_id =
OBJECT_ID(N'[Core].[ValueConfiguration]'))
ALTER TABLE [Core].[ValueConfiguration] WITH CHECK ADD CONSTRAINT [FK_ValueConfiguration_InstrumentSurvey]
FOREIGN KEY([InstrumentConfigurationID])
REFERENCES [Core].[InstrumentSurvey] ([InstrumentConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [Core].[ValueConfiguration] CHECK CONSTRAINT [FK_ValueConfiguration_InstrumentSurvey]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_LastInstValue_ValueConfiguration]') AND parent_object_id =
OBJECT_ID(N'[Core].[LastInstValue]'))
ALTER TABLE [Core].[LastInstValue] WITH CHECK ADD CONSTRAINT [FK_LastInstValue_ValueConfiguration] FOREIGN
KEY([ValueConfigurationID])
REFERENCES [Core].[ValueConfiguration] ([ValueConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [Core].[LastInstValue] CHECK CONSTRAINT [FK_LastInstValue_ValueConfiguration]
GO
IF NOT EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id =
OBJECT_ID(N'[Core].[FK_RawValue_ValueConfiguration]') AND parent_object_id = OBJECT_ID(N'[Core].[RawValue]'))
ALTER TABLE [Core].[RawValue] WITH CHECK ADD CONSTRAINT [FK_RawValue_ValueConfiguration] FOREIGN
KEY([ValueConfigurationID])
REFERENCES [Core].[ValueConfiguration] ([ValueConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE [Core].[RawValue] CHECK CONSTRAINT [FK_RawValue_ValueConfiguration]
GO
```

```
IF      NOT      EXISTS      (SELECT      *      FROM      sys.check_constraints      WHERE      object_id      =
OBJECT_ID(N'[Core].[CK_RawValue_ValidPercentage]') AND parent_object_id = OBJECT_ID(N'[Core].[RawValue]'))
ALTER   TABLE   [Core].[RawValue]      WITH   CHECK   ADD      CONSTRAINT   [CK_RawValue_ValidPercentage]   CHECK
(([ValidPercentage]>=(0) AND [ValidPercentage]<=(100)))
GO
ALTER TABLE [Core].[RawValue] CHECK CONSTRAINT [CK_RawValue_ValidPercentage]
GO
IF    NOT    EXISTS    (SELECT    *    FROM    ::fn_listextendedproperty(N'MS_Description'    ,    N'SCHEMA',N'Core',
N'TABLE',N'RawValue', N'CONSTRAINT',N'CK_RawValue_ValidPercentage'))
EXEC     sys.sp_addextendedproperty     @name=N'MS_Description',     @value=N'valori     ammessi     0-100'     ,
@level0type=N'SCHEMA',@level0name=N'Core',                              @level1type=N'TABLE',@level1name=N'RawValue',
@level2type=N'CONSTRAINT',@level2name=N'CK_RawValue_ValidPercentage'
GO

-------------------------------------------------------------------------------------
-- Add AddIns table (versione 2.1.0.0)
-------------------------------------------------------------------------------------- */
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[AddIns]') AND type in (N'U'))
BEGIN
CREATE TABLE [Core].[AddIns](
        [AddInCode] [nvarchar](20) NOT NULL,
        [Description] [nvarchar](200) NOT NULL,
        [AttachedDate] [datetime] NOT NULL
 CONSTRAINT [PK_AddIn] PRIMARY KEY CLUSTERED
(
        [AddInCode] ASC
)WITH  (PAD_INDEX    =  OFF,  STATISTICS_NORECOMPUTE    =  OFF,  IGNORE_DUP_KEY  =  OFF,  ALLOW_ROW_LOCKS    =  ON,
ALLOW_PAGE_LOCKS  = ON) ON [PRIMARY]
) ON [PRIMARY]
END
GO

IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spAddIn_Add]') AND type in (N'P',
N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spAddIn_Add]
        -- Add the parameters for the stored procedure here
        @AddInCode nvarchar(20),
        @Description nvarchar(200),
        @AttachedDate datetime
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO [Core].[AddIns] (AddInCode,[Description],AttachedDate)
        VALUES(@AddInCode,@Description,@AttachedDate)
END'
END

-------------------------------------------------------------------------------------
-- Add backup/restore sp (versione 2.3.0.0)
-------------------------------------------------------------------------------------- */

IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentSurvey_GetFastDataRange]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spInstrumentSurvey_GetFastDataRange]
        -- Add the parameters for the stored procedure here
        @elabID int,
        @instID int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        Select Min(ElaborationDate) as mindate, Max(ElaborationDate) as maxdate from Core.RawValue
        WHERE ValueConfigurationID=@elabID or  ValueConfigurationID=@instID
END'
END
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentSurvey_GetDataRange]')
AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spInstrumentSurvey_GetDataRange]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;
```

```
    -- Insert statements for procedure here
         Select Min(ElaborationDate) as mindate, Max(ElaborationDate) as maxdate from Core.RawValue
         WHERE ValueConfigurationID in
         (
                 SELECT  Core.ValueConfiguration.ValueConfigurationID
                 FROM    Core.ValueConfiguration
                 where   Core.ValueConfiguration.InstrumentConfigurationID=@InstrumentConfigurationID
         )
END'
END
GO
-------------------------------------------------------------------------------------
-- Add survey support (versione 2.4.0.0)
------------------------------------------------------------------------------------- */
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[UserSurvey]') AND type in (N'U'))
BEGIN
CREATE TABLE [Core].[UserSurvey](
         [InstrumentConfigurationId] [int] NOT NULL,
         [FactorySerialNumber] [nvarchar](20) NOT NULL,
         [DtStart] [datetime] NOT NULL,
         [DtEnd] [datetime] NOT NULL,
         [Description] [nvarchar](200) NOT NULL,
         [SurveyNumber] [int] NOT NULL,
 CONSTRAINT [PK_UserSurvey_1] PRIMARY KEY CLUSTERED
(
         [InstrumentConfigurationId] ASC,
         [DtStart] ASC
)WITH  (PAD_INDEX    =  OFF,  STATISTICS_NORECOMPUTE    =  OFF,  IGNORE_DUP_KEY  =  OFF,  ALLOW_ROW_LOCKS    =  ON,
ALLOW_PAGE_LOCKS  = ON) ON [PRIMARY]
) ON [PRIMARY]
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.foreign_keys       WHERE       object_id       =
OBJECT_ID(N'[Core].[FK_UserSurvey_InstrumentSurvey]') AND parent_object_id = OBJECT_ID(N'[Core].[UserSurvey]'))
ALTER   TABLE   [Core].[UserSurvey]     WITH   CHECK   ADD     CONSTRAINT   [FK_UserSurvey_InstrumentSurvey]   FOREIGN
KEY([InstrumentConfigurationId])
REFERENCES [Core].[InstrumentSurvey] ([InstrumentConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
GO
IF  EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id = OBJECT_ID(N'[Core].[FK_UserSurvey_InstrumentSurvey]')
AND parent_object_id = OBJECT_ID(N'[Core].[UserSurvey]'))
ALTER TABLE [Core].[UserSurvey] CHECK CONSTRAINT [FK_UserSurvey_InstrumentSurvey]
GO

SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserSurvey_Remove]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 7/4/2010
-- Description:  Remove a selected UserSurvey
-- =============================================
CREATE PROCEDURE [Core].[spUserSurvey_Remove]
         -- Add the parameters for the stored procedure here
         @InstrumentConfigurationId int,
         @DtStart datetime
AS
BEGIN
         -- SET NOCOUNT ON added to prevent extra result sets from
         -- interfering with SELECT statements.
         --SET NOCOUNT ON;
    -- Insert statements for procedure here
         DELETE FROM Core.UserSurvey
         WHERE InstrumentConfigurationId=@InstrumentConfigurationId AND DtStart=@DtStart
END'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserSurvey_GetByFSN]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
```

```
-- ============================================
-- Author:              Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Get all user surveys of a defined instrument
-- ============================================
CREATE PROCEDURE [Core].[spUserSurvey_GetByFSN]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber char(20)

AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT InstrumentConfigurationID,FactorySerialNumber, DtStart, DtEnd, [Description], SurveyNumber
        FROM Core.UserSurvey
        WHERE FactorySerialNumber=@FactorySerialNumber
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserSurvey_Add]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- ============================================
-- Author:              Stefano Giarola
-- Create date: 7/4/2010
-- Description:  Add a new UserSurvey
-- ============================================
CREATE PROCEDURE [Core].[spUserSurvey_Add]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20),
        @InstrumentConfigurationId int,
        @DtStart datetime,
        @DtEnd datetime,
        @Description nvarchar(200),
        @SurveyNumber int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT           INTO           Core.UserSurvey           (FactorySerialNumber,InstrumentConfigurationId,
DtStart,DtEnd,[Description],SurveyNumber)
        VALUES(@FactorySerialNumber,@InstrumentConfigurationId, @DtStart,@DtEnd,@Description, @SurveyNumber)

END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserSurvey_AddWithCheck]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- ============================================
-- Author:              Stefano Giarola
-- Create date: 08/04/2010
-- Description:  Add a single row of User survey, checking primarykey violation
-- Return:              1=added, -1=error, 0=already in the table
-- ============================================
CREATE PROCEDURE [Core].[spUserSurvey_AddWithCheck]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20),
        @InstrumentConfigurationId int,
        @DtStart datetime,
        @DtEnd datetime,
        @Description nvarchar(200),
        @SurveyNumber int,
        @RowCount int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        BEGIN TRY
```

```
                INSERT INTO Core.UserSurvey
                (
                        FactorySerialNumber,
                        InstrumentConfigurationId,
                        DtStart,
                        DtEnd,
                        [Description],
                        SurveyNumber
                )
                VALUES
                (
                        @FactorySerialNumber,
                        @InstrumentConfigurationId,
                        @DtStart,
                        @DtEnd,
                        @Description,
                        @SurveyNumber
                )
                SET @RowCount=''1''

        END TRY
        BEGIN CATCH
                IF (ERROR_NUMBER() = 2627) BEGIN
                        SET @RowCount=''0''
                END
                ELSE BEGIN
                        SET @RowCount=''-1''
                END
        END CATCH

END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spUserSurvey_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:                Stefano Giarola
-- Create date: 26/10/2006
-- Description:  Get an intrument survey
-- =============================================
CREATE PROCEDURE [Core].[spUserSurvey_GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT InstrumentConfigurationID,FactorySerialNumber,DtStart, DtEnd, [Description], SurveyNumber
        FROM Core.UserSurvey
        WHERE InstrumentConfigurationId=@InstrumentConfigurationId
END
'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserSurvey_GetAll]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:                Stefano Giarola
-- Create date: 7/4/2010
-- Description:  Get all user surveys
-- =============================================
CREATE PROCEDURE [Core].[spUserSurvey_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT InstrumentConfigurationId, FactorySerialNumber, DtStart, DtEnd, [Description], SurveyNumber
        FROM Core.UserSurvey
END
'
```

```
END
GO

------------------------------------------------------------------------------------
-- Add UserConfigurationAttributes support (version 2.5.0.0)
------------------------------------------------------------------------------- */
/****** Object:  Table [Core].[UserConfigurationAttributes]    Script Date: 05/27/2010 17:43:40 ******/
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[UserConfigurationAttributes]') AND
type in (N'U'))
BEGIN
CREATE TABLE [Core].[UserConfigurationAttributes](
        [InstrumentConfigurationID] [int] NOT NULL,
        [Name] [nvarchar](100) NOT NULL,
        [Description] [nvarchar](200) NOT NULL,
        [Code] [nvarchar](50) NOT NULL
) ON [PRIMARY]
ALTER      TABLE      [Core].[UserConfigurationAttributes]            WITH      CHECK      ADD            CONSTRAINT
[FK_UserConfigurationAttributes_InstrumentSurvey] FOREIGN KEY([InstrumentConfigurationID])
REFERENCES [Core].[InstrumentSurvey] ([InstrumentConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
ALTER             TABLE             [Core].[UserConfigurationAttributes]             CHECK             CONSTRAINT
[FK_UserConfigurationAttributes_InstrumentSurvey]
END

IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spUserConfigurationAttributes_Add]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 28/4/2010
-- Description:  Add a new spUserConfigurationAttributes
-- =============================================
CREATE PROCEDURE [Core].[spUserConfigurationAttributes_Add]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int,
        @Name nvarchar(100),
        @Description nvarchar(200),
        @Code nvarchar(25)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO Core.UserConfigurationAttributes (InstrumentConfigurationID, Name, [Description],Code)
        VALUES(@InstrumentConfigurationID, @Name, @Description,@Code)

END'
END

IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spUserConfigurationAttributes_GetAll]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 28/4/2010
-- Description:  Get all UserConfigurationAttributes
-- =============================================
CREATE PROCEDURE [Core].[spUserConfigurationAttributes_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT InstrumentConfigurationID, Name, [Description],Code FROM Core.UserConfigurationAttributes

END'
END

IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spUserConfigurationAttributes_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 28/4/2010
-- Description:  Get UserConfigurationAttributes by ConfigurationID
-- =============================================
CREATE PROCEDURE [Core].[spUserConfigurationAttributes_GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int
AS
BEGIN
```

```
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT InstrumentConfigurationID, Name, [Description],Code FROM Core.UserConfigurationAttributes
        WHERE InstrumentConfigurationID=@InstrumentConfigurationID

END'
END
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spUserConfigurationAttributes_Update]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
-- =============================================
-- Author:               Stefano Giarola
-- Create date: 28/04/2010
-- Description:  Update a UserConfigurationAttributes
-- =============================================
CREATE PROCEDURE [Core].[spUserConfigurationAttributes_Update]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int,
        @Name nvarchar(100),
        @Description nvarchar(200),
        @Code nvarchar(25)

AS
BEGIN

    -- Insert statements for procedure here
        UPDATE Core.UserConfigurationAttributes SET Name=@Name, [Description]=@Description, Code=@Code
        WHERE InstrumentConfigurationID=@InstrumentConfigurationID
END'
END
GO

-------------------------------------------------------------------------------------------
-- Add SurveyInstInfo support (version 2.6.0.0 corretto)
-------------------------------------------------------------------------------------------- */
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[InstrumentSurveyInstInfo]') AND
type in (N'U'))
BEGIN
CREATE TABLE [Core].[InstrumentSurveyInstInfo](
        [InstrumentConfigurationID] [int] NOT NULL,
        [FirstInstDate] [datetime] NOT NULL,
        [LastInstDate] [datetime] NOT NULL,
        [NumIntRecords] [bigint] NOT NULL,
 CONSTRAINT [PK_InstrumentSurveyInstInfo] PRIMARY KEY CLUSTERED
(
        [InstrumentConfigurationID] ASC
)WITH  (PAD_INDEX    =  OFF,  STATISTICS_NORECOMPUTE    =  OFF,  IGNORE_DUP_KEY  =  OFF,  ALLOW_ROW_LOCKS    =  ON,
ALLOW_PAGE_LOCKS  = ON) ON [PRIMARY]
) ON [PRIMARY]
ALTER      TABLE      [Core].[InstrumentSurveyInstInfo]            WITH      CHECK      ADD            CONSTRAINT
[FK_InstrumentSurveyInstInfo_InstrumentSurvey] FOREIGN KEY([InstrumentConfigurationID])
REFERENCES [Core].[InstrumentSurvey] ([InstrumentConfigurationID])
ON UPDATE CASCADE
ON DELETE CASCADE
ALTER TABLE [Core].[InstrumentSurveyInstInfo] CHECK CONSTRAINT [FK_InstrumentSurveyInstInfo_InstrumentSurvey]
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentSurveyInstInfo_Refresh]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spInstrumentSurveyInstInfo_Refresh]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int,
        @InstDate datetime,
        @NumIntRecords bigint

AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON

        DECLARE @rc int
        declare @dt1 datetime
        declare @dt2 datetime
        declare @nr bigint
```

```
        SELECT  @rc=InstrumentConfigurationID,  @dt1=FirstInstDate,  @dt2=LastInstDate,  @nr=NumIntRecords  FROM
Core.InstrumentSurveyInstInfo WHERE InstrumentConfigurationID=@InstrumentConfigurationID

        IF(@rc > 0)
                BEGIN
                        -- aggiorna il record scegliendo i valori giusti
                        IF(@dt1 > @InstDate)
                                SET @dt1=@InstDate

                        IF(@dt2 < @InstDate)
                                SET @dt2=@InstDate

                        UPDATE   Core.InstrumentSurveyInstInfo   SET   FirstInstDate=@dt1   ,LastInstDate=@dt2
,NumIntRecords= @nr +@NumIntRecords
                        WHERE InstrumentConfigurationID=@InstrumentConfigurationID
                END
        ELSE
                -- inserisce il nuovo record
                INSERT INTO Core.InstrumentSurveyInstInfo
                (
                        InstrumentConfigurationID,
                        FirstInstDate,
                        LastInstDate,
                        NumIntRecords
                )
                VALUES
                (
                        @InstrumentConfigurationID,
                        @InstDate,
                        @InstDate,
                        @NumIntRecords
                )
END'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF  NOT  EXISTS  (SELECT  *  FROM  sys.objects  WHERE  object_id  =  OBJECT_ID(N'[Core].[spInstrumentSurveyInstInfo
_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spInstrumentSurveyInstInfo _GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int

AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT      InstrumentConfigurationID,      FirstInstDate,      LastInstDate,      NumIntRecords      FROM
Core.InstrumentSurveyInstInfo
        WHERE InstrumentConfigurationID=@InstrumentConfigurationID
END'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spLastInstValue26_Add]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spLastInstValue26_Add]
        -- Add the parameters for the stored procedure here
        @ValueConfigurationID int,
        @InstDate datetime,
        @InstValue real
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON

        DECLARE @rc int
        SELECT          @rc=Count(ValueCOnfigurationID)          FROM          Core.LastInstValue          WHERE
ValueConfigurationID=@ValueConfigurationID
        IF(@rc > 0)
                begin
                        -- aggiorna il record
                        UPDATE Core.LastInstValue SET InstDate=@InstDate, InstValue=@InstValue
                        WHERE ValueConfigurationID=@ValueConfigurationID
                end
        ELSE
                BEGIN
```

```
                        -- inserisce il nuovo recor
                        INSERT INTO Core.LastInstValue
                        (
                                ValueConfigurationID,
                                InstDate,
                                InstValue
                        )
                        VALUES
                        (
                                @ValueConfigurationID,
                                @InstDate,
                                @InstValue
                        )
                END
END'
END
GO
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
EXEC dbo.sp_executesql @statement = N'
ALTER PROCEDURE [Core].[spLastInstValue_Add]
        -- Add the parameters for the stored procedure here
        @ValueConfigurationID int,
        @InstDate datetime,
        @InstValue real
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON

        DECLARE @rc int
        SELECT          @rc=Count(ValueCOnfigurationID)          FROM          Core.LastInstValue          WHERE
ValueConfigurationID=@ValueConfigurationID
        IF(@rc > 0)
                begin
                        -- aggiorna il record
                        UPDATE Core.LastInstValue SET InstDate=@InstDate, InstValue=@InstValue
                        WHERE ValueConfigurationID=@ValueConfigurationID
                end
        ELSE
                BEGIN
                        -- inserisce il nuovo recor
                        INSERT INTO Core.LastInstValue
                        (
                                ValueConfigurationID,
                                InstDate,
                                InstValue
                        )
                        VALUES
                        (
                                @ValueConfigurationID,
                                @InstDate,
                                @InstValue
                        )
                END

        DECLARE @cfgid int
        declare @dt1 datetime
        declare @dt2 datetime
        declare @nr bigint
        set @rc=-1

        SELECT        @cfgid=InstrumentConfigurationID        FROM        Core.ValueConfiguration        WHERE
ValueConfigurationID=@ValueConfigurationID
        SELECT  @rc=InstrumentConfigurationID,  @dt1=FirstInstDate,  @dt2=LastInstDate,  @nr=NumIntRecords  FROM
Core.InstrumentSurveyInstInfo WHERE InstrumentConfigurationID=@cfgid

        IF(@rc >= 0)
                BEGIN
                        -- aggiorna il record scegliendo i valori giusti
                        IF(@dt1 > @InstDate)
                                SET @dt1=@InstDate

                        IF(@dt2 < @InstDate)
                                SET @dt2=@InstDate

                        UPDATE    Core.InstrumentSurveyInstInfo    SET    FirstInstDate=@dt1    ,LastInstDate=@dt2
,NumIntRecords= @nr +1
                        WHERE InstrumentConfigurationID=@cfgid
                END
        ELSE
                -- inserisce il nuovo record
                INSERT INTO Core.InstrumentSurveyInstInfo
                (
                        InstrumentConfigurationID,
                        FirstInstDate,
                        LastInstDate,
```

```
                        NumIntRecords
                )
                VALUES
                (
                        @cfgid,
                        @InstDate,
                        @InstDate,
                        1
                )
END'

EXEC dbo.sp_executesql @statement = N'
ALTER PROCEDURE [Core].[spInstrumentSurvey_Add]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20),
        @ConfigurationDate datetime,
        @InstrumentPrefix varchar(15),
        @LastStoredValueDate datetime,
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT           INTO           [Core].InstrumentSurvey           (FactorySerialNumber,ConfigurationDate,
InstrumentPrefix,LastStoredValueDate)
        VALUES(@FactorySerialNumber,@ConfigurationDate, @InstrumentPrefix,@LastStoredValueDate)

        --recupera l''id
        SET @NewId= SCOPE_IDENTITY()

        --aggiunge il nuovo record nella nuova tabella
        INSERT   INTO   Core.InstrumentSurveyInstInfo   (InstrumentConfigurationID,   FirstInstDate,   LastInstDate,
NumIntRecords)
        VALUES (@NewId,''2100-01-01'',''1900-01-01'',''0'')

END'
GO
-------------------------------------------------------------------------------------------
-- CreateAddInsFrom20602  (versione 2.7)
-- Aggiunge il supporto ai Gruppi
------------------------------------------------------------------------------------------- */
/****** Object:  Table [Viewer].[CustomGroup] ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF  NOT  EXISTS  (SELECT  *  FROM  sys.objects  WHERE  object_id  =  OBJECT_ID(N'[Viewer].[CustomGroup]')  AND  type  in
(N'U'))
BEGIN
CREATE TABLE [Viewer].[CustomGroup](
        [IdGroup] [int] IDENTITY(1,1) NOT NULL,
        [Name] [nvarchar](100) NOT NULL,
 CONSTRAINT [PK_Group] PRIMARY KEY CLUSTERED
(
        [IdGroup] ASC
)WITH  (PAD_INDEX    =  OFF,  STATISTICS_NORECOMPUTE    =  OFF,  IGNORE_DUP_KEY  =  OFF,  ALLOW_ROW_LOCKS    =  ON,
ALLOW_PAGE_LOCKS  = ON) ON [PRIMARY]
) ON [PRIMARY]
END
GO

/****** Object:  Table [Viewer].[CustomGroupRegistry]    Script Date: 04/13/2011 14:02:33 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[CustomGroupRegistry]') AND type
in (N'U'))
BEGIN
CREATE TABLE [Viewer].[CustomGroupRegistry](
        [Id] [int] IDENTITY(1,1) NOT NULL,
        [IdGroup] [int] NOT NULL,
        [FactorySerialNumber] [varchar](20) NOT NULL,
 CONSTRAINT [PK_GroupRegistry] PRIMARY KEY CLUSTERED
(
        [Id] ASC
)WITH  (PAD_INDEX    =  OFF,  STATISTICS_NORECOMPUTE    =  OFF,  IGNORE_DUP_KEY  =  OFF,  ALLOW_ROW_LOCKS    =  ON,
ALLOW_PAGE_LOCKS  = ON) ON [PRIMARY]
) ON [PRIMARY]
ALTER  TABLE  [Viewer].[CustomGroupRegistry]    WITH  CHECK  ADD    CONSTRAINT  [FK_CustomGroupRegistry_CustomGroup]
FOREIGN KEY([IdGroup])
REFERENCES [Viewer].[CustomGroup] ([IdGroup])
ON UPDATE CASCADE
ON DELETE CASCADE
ALTER TABLE [Viewer].[CustomGroupRegistry] CHECK CONSTRAINT [FK_CustomGroupRegistry_CustomGroup]
END
GO
```

```
/****** Object:  StoredProcedure [Viewer].[spCustomGroup_GetAll]    Script Date: 04/13/2011 14:02:32 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomGroup_GetAll]') AND type
in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Viewer].[spCustomGroup_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT IdGroup, Name
        FROM Viewer.CustomGroup
END'
END
GO

/****** Object:  StoredProcedure [Viewer].[spCustomGroup_RemoveAll]    Script Date: 04/13/2011 14:02:32 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomGroup_RemoveAll]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Viewer].[spCustomGroup_RemoveAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN

    -- Insert statements for procedure here
        DELETE  FROM [Viewer].CustomGroup

END'
END
GO

/****** Object:  StoredProcedure [Viewer].[spCustomGroup_Add]    Script Date: 04/13/2011 14:02:32 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomGroup_Add]') AND type in
(N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Viewer].[spCustomGroup_Add]
        -- Add the parameters for the stored procedure here
        @Name nvarchar(100),
        @NewId int output
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO [Viewer].CustomGroup (Name)
        VALUES(@Name)

        --recupera id
        SET @NewId= SCOPE_IDENTITY()

END'
END
GO

/****** Object:  StoredProcedure [Viewer].[spCustomGroupRegistry_Add]    Script Date: 04/13/2011 14:02:32 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Viewer].[spCustomGroupRegistry_Add]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Viewer].[spCustomGroupRegistry_Add]
        -- Add the parameters for the stored procedure here
        @IdGroup int,
        @FactorySerialNumber varchar(20),
        @NewId int output
```

```
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        INSERT INTO [Viewer].CustomGroupRegistry (IdGroup, FactorySerialNumber)
        VALUES(@IdGroup,@FactorySerialNumber)

        --recupera id
        SET @NewId= SCOPE_IDENTITY()

END'
END
GO

/****** Object:  StoredProcedure [Viewer].[spCustomGroup_GetFactoryMatrsFromIdGroup]    Script Date: 04/13/2011
14:02:32 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id =
OBJECT_ID(N'[Viewer].[spCustomGroup_GetFactoryMatrsFromIdGroup]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Viewer].[spCustomGroup_GetFactoryMatrsFromIdGroup]
        -- Add the parameters for the stored procedure here
        @IdGroup int
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT FactorySerialNumber
        FROM Viewer.CustomGroupRegistry
        WHERE IdGroup=@IdGroup
END'
END
GO

-------------------------------------------------------------------------------------------
-- Add fixed data
-- (2.4.0) aggiunti i record di supporto per RLog e RComm
-- (2.11.0) modificate le elaborazioni per RisDir e RisVel
-------------------------------------------------------------------------------------------- */
INSERT INTO [Gidas].[Core].[InstrumentType] ([Prefix] ,[Name]) VALUES ('BabucABC' ,'Babuc ABC')
INSERT INTO [Gidas].[Core].[InstrumentType] ([Prefix] ,[Name]) VALUES ('BabucM' ,'Babuc A/M')
INSERT INTO [Gidas].[Core].[InstrumentType] ([Prefix] ,[Name]) VALUES ('ELog' ,'E-Log')
INSERT INTO [Gidas].[Core].[InstrumentType] ([Prefix] ,[Name]) VALUES ('RLog' ,'R-Log')
INSERT INTO [Gidas].[Core].[InstrumentType] ([Prefix] ,[Name]) VALUES ('RComm' ,'R-Comm')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES (-1,'Inst
(n.e.)','Ave')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(0,'Nothing','Nothing')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES (1,'Inst','Ave')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES (2,'Min','Min')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES (3,'Ave','Ave')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES (4,'Max','Max')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(5,'StDev','Nothing')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES (6,'Tot','Sum')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(7,'Duration','Sum')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(8,'PrevDir','AvgDirection')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(9,'RisDir','VectDirection')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(10,'RisVel','VectVel')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(11,'StdDevDir','Nothing')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(12,'CalmPerc','Ave')
INSERT INTO [Gidas].[Core].[ElabTypeList] ([IdElabType],[ElabTypeString],[ElabTypeToDo]) VALUES
(13,'ValidDataPerc','Ave')
INSERT INTO Core.AddIns (AddInCode, [Description], AttachedDate) VALUES ('AdminUser', 'Administrator Gidas
User',GETDATE())
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('14','PSBisect','AvgDirection')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('15','PSPrevDir','AvgDirection')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('16','PSPrevVel','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('17','PSStdDevDir','Nothing')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('18','DirFreq1','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('19','DirFreq2','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('20','DirFreq3','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('21','DirFreq4','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('22','DirFreq5','Ave')
```

```
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('23','DirFreq6','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('24','DirFreq7','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('25','DirFreq8','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('26','DirFreq9','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('27','DirFreq10','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('28','DirFreq11','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('29','DirFreq12','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('30','DirFreq13','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('31','DirFreq14','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('32','DirFreq15','Ave')
INSERT INTO Core.ElabTypeList (IdElabType,ElabTypeString, ElabTypeToDo) VALUES ('33','DirFreq16','Ave')

-------------------------------------------------------------------------------------
-- (2.6.2) aggiunge il supporto a S-Log
------------------------------------------------------------------------------------- */
INSERT INTO [Gidas].[Core].[InstrumentType] ([Prefix] ,[Name]) VALUES ('SLog' ,'S-Log')


-------------------------------------------------------------------------------------
-- (2.9) aggiunge il supporto alle descrizioni
------------------------------------------------------------------------------------- */

/*inserisce la nuov sp che gestisce la configurazione */
IF NOT EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spInstrumentRegistry_Add291]') AND
type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spInstrumentRegistry_Add291]
        -- Add the parameters for the stored procedure here
                @FactorySerialNumber varchar(20),
                @InstrumentPrefix varchar(15),
                @UserSerialNumber varchar(50),
                @Description varchar(200),
                @DbDescription varchar(200)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Prima dell''inserimento verifica se esiste già il record
        SELECT FactorySerialNumber  FROM Core.InstrumentRegistry  WHERE FactorySerialNumber=@FactorySerialNumber

    -- Insert statements for procedure here
        IF (@@ROWCOUNT <= 0)
        BEGIN
                INSERT INTO Core.InstrumentRegistry
                (
                        FactorySerialNumber,
                        InstrumentPrefix,
                        UserSerialNumber,
                        Description,
                        DbDescription
                )
                VALUES
                (
                        @FactorySerialNumber,
                        @InstrumentPrefix,
                        @UserSerialNumber,
                        @Description,
                        @DbDescription
                )
        END
END'
END

IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentRegistry_ChangeDescription]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spInstrumentRegistry_ChangeDescription]
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20),
        @DbDescription varchar(200)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

        UPDATE Core.InstrumentRegistry SET  DbDescription=@DbDescription
        WHERE FactorySerialNumber=@FactorySerialNumber
END'
END

IF       NOT       EXISTS       (SELECT       *       FROM       sys.objects       WHERE       object_id       =
OBJECT_ID(N'[Core].[spInstrumentRegistry_ChangeDescriptionAndSerialNumber]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
CREATE PROCEDURE [Core].[spInstrumentRegistry_ChangeDescriptionAndSerialNumber]
```

```
        -- Add the parameters for the stored procedure here
        @FactorySerialNumber varchar(20),
        @Description varchar(200),
        @UserSerialNumber varchar(50)
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

        UPDATE Core.InstrumentRegistry SET  [Description]=@Description, UserSerialNumber=   @UserSerialNumber

        WHERE FactorySerialNumber=@FactorySerialNumber
END'
END

-------------------------------------------------------------------------------
-- (2.10) aggiunge la gestione del DbDescription per le UserConfigurationAttributes
------------------------------------------------------------------------------- */
/* aggiunge il nuovo campo alla tabella */
if   not   exists   (select   *   from   syscolumns   where   id=object_id('Core.UserConfigurationAttributes')   and
name='DbDescription')
BEGIN
EXEC dbo.sp_executesql @statement = N'
ALTER TABLE Core.UserConfigurationAttributes ADD DbDescription varchar(200)'
END

/* modifica le sp che agiscono sulla tabella */
IF EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserConfigurationAttributes_GetAll]')
AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
ALTER PROCEDURE [Core].[spUserConfigurationAttributes_GetAll]
        -- Add the parameters for the stored procedure here
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT       InstrumentConfigurationID,       Name,       [Description],Code,       DbDescription       FROM
Core.UserConfigurationAttributes

END'
END

IF EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserConfigurationAttributes_Add]')
AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
ALTER PROCEDURE [Core].[spUserConfigurationAttributes_Add]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationId int,
        @Name nvarchar(100),
        @Description nvarchar(200),
        @Code nvarchar(25),
        @DbDescription nvarchar(200)=null
AS
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

                -- per i writer che non la supportano
        if @DbDescription IS NULL
        BEGIN
                INSERT      INTO      Core.UserConfigurationAttributes      (InstrumentConfigurationID,      Name,
[Description],Code)
                VALUES(@InstrumentConfigurationID, @Name, @Description,@Code)
                RETURN
        END

     -- procedura aggiornata alla versione 2.9.3 del db
        INSERT        INTO        Core.UserConfigurationAttributes        (InstrumentConfigurationID,        Name,
[Description],Code,DbDescription)
        VALUES(@InstrumentConfigurationID, @Name, @Description,@Code,@DbDescription)

END
'
END

IF        EXISTS        (SELECT        *        FROM        sys.objects        WHERE        object_id        =
OBJECT_ID(N'[Core].[spUserConfigurationAttributes_GetByConfigurationID]') AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
ALTER PROCEDURE [Core].[spUserConfigurationAttributes_GetByConfigurationID]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int
AS
```

```
BEGIN
        -- SET NOCOUNT ON added to prevent extra result sets from
        -- interfering with SELECT statements.
        SET NOCOUNT ON;

    -- Insert statements for procedure here
        SELECT      InstrumentConfigurationID,      Name,      [Description],Code,      DbDescription      FROM
Core.UserConfigurationAttributes
        WHERE InstrumentConfigurationID=@InstrumentConfigurationID

END
'
END

IF EXISTS (SELECT * FROM sys.objects WHERE object_id = OBJECT_ID(N'[Core].[spUserConfigurationAttributes_Update]')
AND type in (N'P', N'PC'))
BEGIN
EXEC dbo.sp_executesql @statement = N'
ALTER PROCEDURE [Core].[spUserConfigurationAttributes_Update]
        -- Add the parameters for the stored procedure here
        @InstrumentConfigurationID int,
        @Name nvarchar(100),
        @Description nvarchar(200),
        @Code nvarchar(25),
        @DbDescription nvarchar(200)=null

AS
BEGIN

        -- per i writer che non la supportano
        if @DbDescription IS NULL
        BEGIN
                UPDATE Core.UserConfigurationAttributes SET Name=@Name, [Description]=@Description, Code=@Code
                WHERE InstrumentConfigurationID=@InstrumentConfigurationID
                RETURN
        END

     -- procedura aggiornata alla versione 2.9.3 del db
        UPDATE   Core.UserConfigurationAttributes   SET   Name=@Name,   [Description]=@Description,   Code=@Code,
DbDescription=@DbDescription
        WHERE InstrumentConfigurationID=@InstrumentConfigurationID
END'
END

-------------------------------------------------------------------------------
-- Versione installazione
------------------------------------------------------------------------------- */
INSERT INTO [Gidas].[Core].[GidasVersion] ([Version],[ReleaseDate]) VALUES('2.11.0' ,'2013-03-04T00:00:00')
INSERT INTO Core.AddIns (AddInCode, [Description],  AttachedDate) VALUES ('CreatedVers_2.11.0', 'Database creation
script v2.11.0',GETDATE())
GO
```

6.3. Users Login and Account:

```
-------------------------------------------------------------------------------
-- Create database logins
-------------------------------------------------------------------------------
IF NOT EXISTS (SELECT * FROM syslogins WHERE [name]='LSI.Gidas.Reader')
BEGIN
       CREATE   LOGIN   [LSI.Gidas.Reader]   WITH   PASSWORD=N'redaer_6',   DEFAULT_DATABASE=[Gidas],
DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
END
GO
IF NOT EXISTS (SELECT * FROM syslogins WHERE [name]='LSI.Gidas.Writer')
BEGIN
       CREATE   LOGIN   [LSI.Gidas.Writer]   WITH   PASSWORD=N'retirw_6',   DEFAULT_DATABASE=[Gidas],
DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
END
GO
IF NOT EXISTS (SELECT * FROM syslogins WHERE [name]='LSI.Gidas.Administrator')
BEGIN
       CREATE       LOGIN       [LSI.Gidas.Administrator]       WITH       PASSWORD=N'sadig_admin',
DEFAULT_DATABASE=[Gidas], DEFAULT_LANGUAGE=[us_english], CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
END
GO

-------------------------------------------------------------------------------
-- Delete and recreate Database Users
-------------------------------------------------------------------------------
USE [Gidas]
```

```
IF EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Writer')
       DROP USER [LSI.Gidas.Writer]
GO
IF EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Reader')
       DROP USER [LSI.Gidas.Reader]
GO
IF EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Administrator')
       DROP USER [LSI.Gidas.Administrator]
GO

IF NOT EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Writer')
CREATE USER [LSI.Gidas.Writer] FOR LOGIN [LSI.Gidas.Writer] WITH DEFAULT_SCHEMA=[Core]
GO
IF NOT EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Reader')
CREATE USER [LSI.Gidas.Reader] FOR LOGIN [LSI.Gidas.Reader] WITH DEFAULT_SCHEMA=[Core]
GO
IF NOT EXISTS (SELECT * FROM sys.database_principals WHERE name = N'LSI.Gidas.Administrator')
CREATE USER [LSI.Gidas.Administrator] FOR LOGIN [LSI.Gidas.Administrator] WITH DEFAULT_SCHEMA=[Core]
GO
GRANT EXECUTE, INSERT, DELETE, SELECT, UPDATE ON SCHEMA :: Core TO [LSI.Gidas.Writer]
GO
GRANT EXECUTE, INSERT, DELETE, SELECT, UPDATE ON SCHEMA :: Viewer TO [LSI.Gidas.Writer]
GO
GRANT SELECT ON SCHEMA :: Core TO [LSI.Gidas.Reader]
GO
GRANT SELECT ON SCHEMA :: Viewer TO [LSI.Gidas.Reader]
GO
EXEC sp_addrolemember N'db_owner', N'LSI.Gidas.Administrator'
GO
```