,   .

Web-   :

–

                                         – **Web-**   **Adobe Flash Player**.

–

                               (   ).

                                                       ,   :

–   .

–   ,

                               .

–   .

                                          :

–   widget-

                    .

                                                                    ,   widget

Web-   .

                                                                     Web-   6.0,

                    .

1

:

1.1

– Flash , -
5, . Widget
- .
Flash.

: : ,
, (true false),
. .

. .

1.2

:

1.2.1

:

1.2.1.1

,
, .

1.2.1.2 *API*

:

- login (login, pass)- . .
  . login(success), success
  . :

  o login – –
  o pass – -

- logout() –   .   .
          .   logout(success),   success
               .   .

- task(taskName) –   .   ,
            .   :

  o taskName –   –   (   )
                 :

- loginReady(success) –
         .

  o success –   –

- taskReady(taskName, success) –
  o taskName –   ,   (
            ,   ).   :
    exportGPX, exportIMG, openVRML, mapReady (   )
  o success –   –   .

1.2.2

               :

        API

1.2.2.1

                         :

-                                   .   ,
               (,   .),
           . (.   findExternalObject,
  findExternalPipeKm, findExternalPipePart)
-                          (,   ),
               (,
).   . (.   refreshLayer, refreshModel)
-                          . (.
  clearModel, clearLayer)
-
       . (.   onObjectsInfo)
-                          :
                      . (.
       getMapWidth, getMapCenter, getMapPosition).

1.2.2.2   API

- findExternalObject(systemId, objectId) –
         .   .
  findExternalObject (success),   success   .
        :
  o systemId –   –   . (system_id
          gis_integration50.gate)
  o objectId –   –   . (obj_id
          gis_integration50.gate)

- findExternalPipeKm(systemId, objected, km) –
  . .
  . findExternalPipeKm (success), success
  . :
  - systemId – – . (system_id
    gis_integration50.gate)
  - objectId – – . (obj_id
    gis_integration50.gate)
  - km – –
- findExternalPipePart (systemId, objected, km) –
  .
  . . findExternalPipePart
  (success), success . :
  - systemId – – . (system_id
    gis_integration50.gate)
  - objectId – – . (obj_id
    gis_integration50.gate)
  - beginkm – –
  - endkm – –
- getMapWidth() – . ,
  null. .
- getMapCenter() – . ,
  null. WGS84.
  .
- getMapPosition() –
  «ll= , &spn= _ _ _ , _ _ _
  &z= _ ». ,
  null. WGS84. .
- refreshLayer(layerName, params) – .
  .
  .
  - layerName – -
  - params – XML <data ILI_INSPECTION_ID='123'/>.
    SYSTEM_ID, OBJ_ID,

    GIS_INTEGRATION50.GATE
    <data
  {KEY_FIELDS}={KEY_VALUES}/>
- clearLayer(layerName) – .
  - layerName – -
- refreshModel(modelName, params) – (
)
  - modelName – -
  - params – XML <data ILI_INSPECTION_ID='123'/>
- clearModel(modelName) – ( )
  - modelName – -

- refreshMap(modelName, params) – (
)
  - modelName – -
  - params – XML <data ILI_INSPECTION_ID='123'/>
- clearMap(modelName) – ( )
  - modelName – -
- onObjectsInfo(objectsList) –
  .

- objectsList – XML – XML <data x=" " y=" " screen_x=" x" screen_y=" "> <item id="..." cls="..."/> </data>, x- , y- , id – , cls – . : select obj_id from gis_integration50.gate where table_name = '{cls}' and key_values = '{id}';

1.2.3

:

API

1.2.3.1

.
:

.

(1.1).

1.1 –

, ,
(1.2).

1.2 –

:   ,
        ,   ,
     ,   ,   (MS Excel).
                                        .   .   .

1.2.3.2   API

- showCAS(type, systemId, objectId, objectName, kmBegin, kmEnd) –
                                  .
                                onshowCAS(success),   ,
                        ,   ,
            .

  o type –   –   ,   : «MG» (
                        ),   «ROUTE»   (   ),«CORIDOR»
      (   )

  o systemId –   –   . (system_id
                    gis_integration50.gate).   ,   ,
                                        .

  o objectId –   –   . (obj_id
                    gis_integration50.gate)

  o kmBegin –   –   . (
                                          ,   ,
                                        ,   kmEnd   ,   ,
                                              .)

  o kmEnd –   –   . (
                                          ,   ,
)

1.2.4

:

API

1.2.4.1

GPS
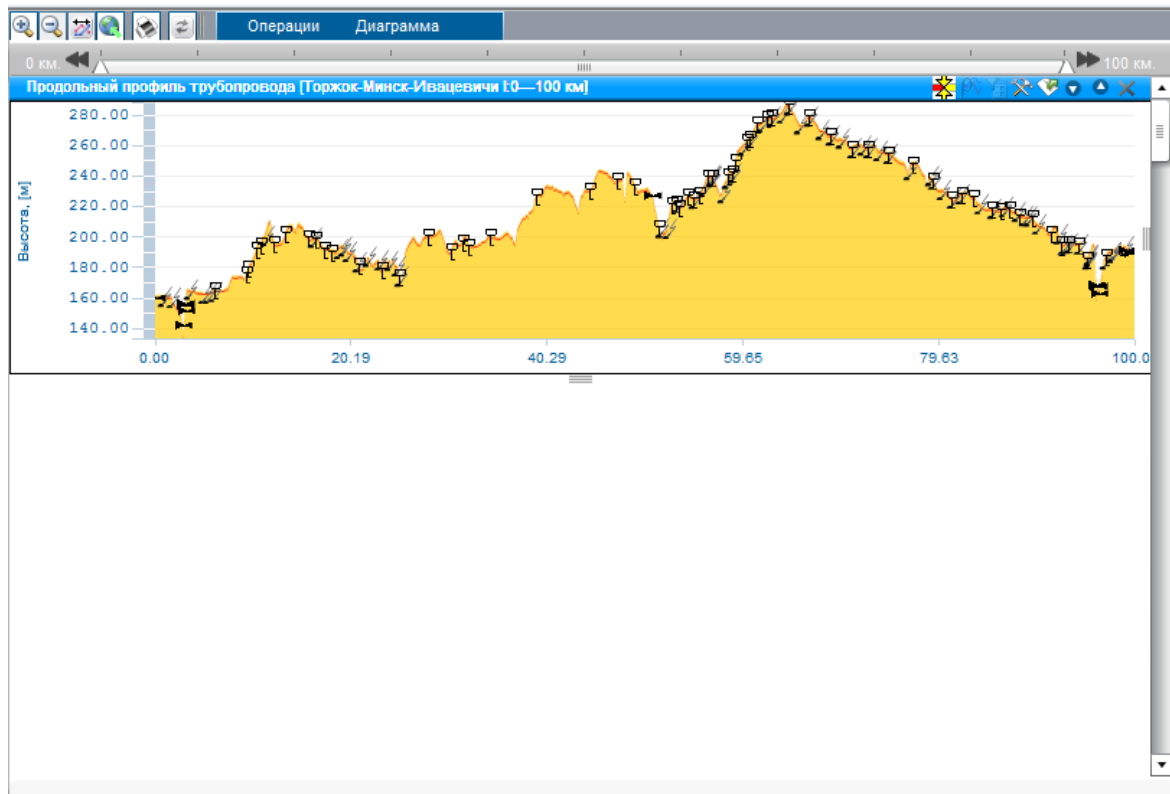Garmin (IMG)   ,   .
,   (1.3).

Выберите навигационные карты для экспорта в навигационный приемник

№	Название	Автор	Дата	Категория
71	Uljanovsk_obl	admin	26.09.2007	Навигационные карты
72	Vladimirsk_obl	admin	26.09.2007	Навигационные карты
73	Vladimirskaya_obl_1	admin	26.09.2007	Навигационные карты
74	Volgogradsk_obl	admin	26.09.2007	Навигационные карты
75	Vologodsk_obl	admin	26.09.2007	Навигационные карты
76	Voronejsk_obl	admin	26.09.2007	Навигационные карты
77	Yaroslavsk_obl	admin	26.09.2007	Навигационные карты
78	Валдайское	admin	02.12.2009	Навигационные карты
79	Волховское	admin	02.12.2009	Навигационные карты
80	Калининградское	admin	02.12.2009	Навигационные карты

Экспортировать   Отмена

1.3 –

,
–
1.4 (   ).
.

Загрузка файла - предупреждение системы безопасности

Запустить или сохранить этот файл?

Имя: A6F8FADB-F7FE-4DC2-C6C0-6942E2C9F4A7.exe

Тип: Приложение, 1,07 МБ

Из: **192.168.127.129**

Запустить   Сохранить   Отмена

Файлы из Интернета могут быть полезны, но этот тип файла
может повредить компьютер. Если вы не доверяете источнику, не
запускайте и не сохраняйте этот файл. Факторы риска

1.4 –

–   ,
.
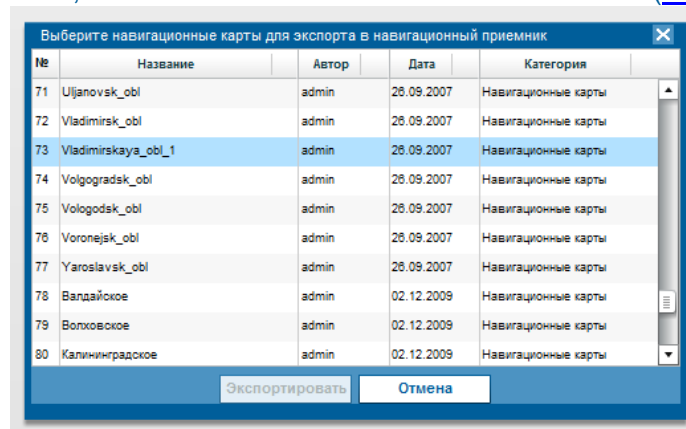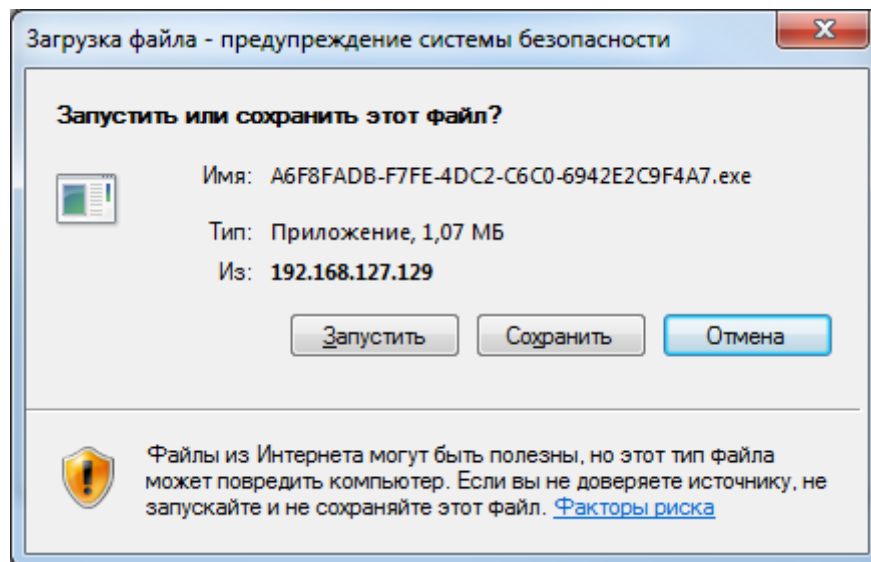,   .

1.2.4.2   *API*

• exportIMG(systemId, objected) –   ,
.

onexportIMG(success).

,

.

- o systemId – – . (system_id
  gis_integration50.gate). , ,

  .

- o objectId – – . (obj_id
  gis_integration50.gate)

1.2.5

:

API

1.2.5.1

VRML .

(<u>   </u>
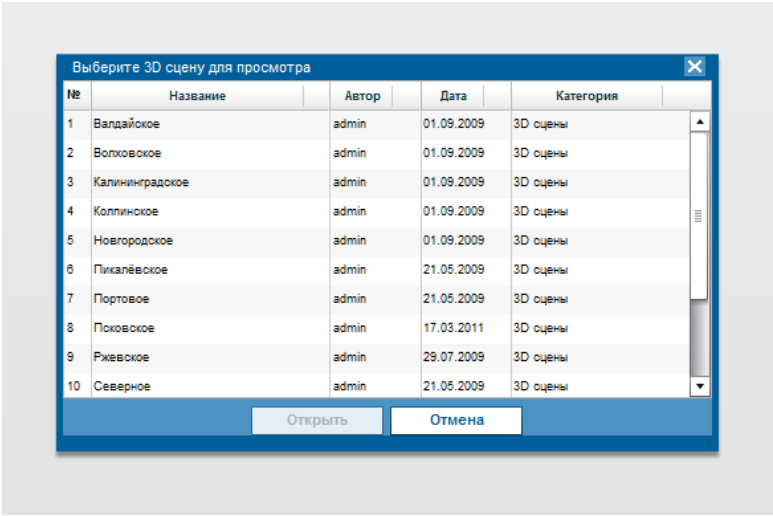<u>1.5</u>) .

.

. VRML

, .

1.5 – 3D-

1.2.5.2 API

- openVRML(systemId, objected) – .
  onopenVRML (success).

  ,
  .

  - o systemId – – . (system_id
    gis_integration50.gate). , ,

    .

  - o objectId – – . (obj_id
    gis_integration50.gate)

1.2.6 **GPX-**

:

API

1.2.6.1

,
GPX (http://www.topografix.com/gpx.asp)
. ,
.

!
, .

1.2.6.2 *API*

- exportGPX(systemId, objected) – GPX
. ( ) – '
. –
.
onexportGPX(success, params). params ,
gpx-
.
! , .
.

  o systemId – – . (system_id
gis_integration50.gate). , ,
.

  o objectId – – . (obj_id
gis_integration50.gate)

1.2.7 **Excel-**

:

API

1.2.7.1

, excel-
. ,
.

1.2.7.2 *API*

- exportExcel(systemId, objected) – Excel- .
  o systemId – – . (system_id
gis_integration50.gate). , ,
.

  o objectId – – . (obj_id
gis_integration50.gate,)

1.4.2   HTML + JavaScript

widget: ,
. (MapWidget.html   )
:

1. SWF   Adobe   ,
    Public/JS/AC_OETags.js   .
2.   JavaScript   –
    JavaScript.
3.   HTML   .
                                        .
4.   JS   widget   //   c widget
5.   JS   .

1.4.3

:

_____
_____

_____
_____

_____
                                                                                1:5000
_____
_____

_____

_____VRML_____
                        GPX (!)
_____Excel (!)

1.4.3.1

```
<TASK>
  <panel id="MAPWIDGET" url="Public/SWF/Modules/WidgetMap.SWF" percentWidth="100"
percentHeight="100" reload="false">
    <settings>
     <Models>
        <model name="PODS" descr="                    " />
     </Models>
    </settings>
  </panel>
  <panel     id="PROP"     url="Public/SWF/modules/PropertiesM.swf"     width="0"
persentHeight="30">
    <settings>
      <editable>false</editable>
      <title></title>
      <width>790</width>
      <height>250</height>
    </settings>
  </panel>
</TASK>
```

1.4.3.2

```
<TASK>
  <panel id="MAPWIDGET" url="Public/SWF/Modules/WidgetMap.SWF" percentWidth="100"
percentHeight="100" reload="false">
    <settings>
      <Models>
        <model name="SELECTION" descr="         "/>
        <model name="PODS" descr="                    " />
      </Models>
      <switch target="PODS" name="C    ">
        <model         name="TR_MAPSHEM"        descr="                               "
onUserChanged="delete"/>
      </switch>
    </settings>
  </panel>
  <functional id="FPROP" url="Public/SWF/modules/ExternalProperties_FM.swf"/>
</TASK>
```

1.4.3.3

```
<TASK>
  <panel id="MAPWIDGET" url="Public/SWF/Modules/WidgetMap.SWF" percentWidth="100"
percentHeight="100" reload="false">
    <settings>
      <Models>
        <model name="PODS" descr="                    " />
        <model name="POI" descr="                    " />
      </Models>
    </settings>
  </panel>
</TASK>
```

1.4.3.4
1:5000

```
<TASK>
  <panel      id="MAPWIDGET"      url="Public/SWF/Modules/WidgetMap.SWF"      percentWidth="100"
percentHeight="100" reload="false">
    <settings>
      <wsp_id>5015</wsp_id>
      <mixed_wsp_id></mixed_wsp_id>
      <raster_wsp_id></raster_wsp_id>
      <position x="30.3654628" y="59.9" zoom="13"/>
    </settings>
  </panel>
</TASK>
```

1.4.3.5

```
<TASK>
  <panel   id="CAS"   url="Public/SWF/modules/CAS_Module.swf"   percentWidth="100"
percentHeight="100">
    <settings>
      <requestSource>SYS_SEM.xml</requestSource>
    </settings>
  </panel>
</TASK>
```

1.4.3.6

```
<TASK>
  <functional      id="EXPORTIMG"      url="Public/SWF/modules/ExportIMG_FM.swf"
percentWidth="0" percentHeight="0">
```

```
<settings>
    <requestSource>SYS_SEM.xml</requestSource>
  </settings>
</functional>
</TASK>
```

1.4.3.7 VRML

```
<TASK>
  <functional    id="EXPORT3D"    url="Public/SWF/modules/ExportScene3D_FM.swf"
percentWidth="0" percentHeight="0">
    <settings>
      <requestSource>SYS_SEM.xml</requestSource>
    </settings>
  </functional>
</TASK>
```

1.4.3.8 GPX (!)

```
<TASK>
  <functional    id="EXPORTGPX"    url="Public/SWF/modules/ExportGPX_FM.swf"
percentWidth="0" percentHeight="0"></functional>
</TASK>
```

1.4.3.9 Excel (!)

```
<TASK>
  <functional    id="EXPORTEXCEL"    url="Public/SWF/modules/ExportExcel_FM.swf"
percentWidth="0" percentHeight="0"></functional>
</TASK>
```

2

:

_____ (SEM, GEO, GRID, EXPORT, DICT, POLICY, TREE)

_____

_____ (TREE)

_____ (LIST)

_____

_____ (UITasks)

_____ (PRELOAD.xml)

2.1   (SEM, GEO, GRID, EXPORT, DICT, POLICY, TREE)

:

_____

_____

_____

_____

_____

_____ (CAS_MATH)

_____ (FILTER.xml)

2.1.1

WebSite\Core\Query
xml.   :

- *_SEM.xml –

- *_SYS_SEM.xml –

- *_DICT.xml –

- *_GEO.xml –

- *_GRID.xml –

- *_EXPORT.xml –   Excel

- *_POLICY.xml –

- *_TREE.xml –

2.1.2

:

_____

GEO_____

2.1.2.1

:

```
<root  version="                         "  xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <data   id="                              1"   comment="              "   schema="      "
table="       ">
    <select check="CanAccessObject('                    ','select')">
     ...
    </select>
    <insert check="CanAccessClass('              ')">
     ...
    </insert>
    <update check="CanAccessObject('               ')">
     ...
    </update>
    <delete check="CanAccessObject('               ')">
     ...
    </delete>
  </data>
  <data id="                    2">
   ...
  </data>
  ...
</root>
```

        data
                           .

           4   : select,
insert, update   delete.   .
                                                    .
         1   :

   • dbQuery –

   • dbCommand –

   • geoQuery –

   • geoCommand –

   • geoReader –   .

   • xmlQuery –   XML

   • xmlCommand –   XML-

   • exslt –   XSLT

   • call –

      :

   • boundaryCalculation –

   • frequencyDistributionCalculation –

   • regressionCalculation –

   • graphicsSumCalculation   –

      '   .
      .

                                            .

var   param,

var   ,

,   {   _   },   :

name –

default –

direction="Output"(postgreSQL
),

,   default,   :

```
<var name="ID" type="Int64" direction="Output" default="SELECT
max(COLUMN_NAME) id FROM TABLE_NAME"/>
```

,   .

,

param

:

name –

default –

source – XPath

type –   (DateTime, Decimal, Double, Int32, Int64, String)

size –

direction –   (Input, Output, InputOutput)

,

(, SQL   XSLT   ).

.

,   var   param
{   _   }.
PostgreSQL,   ,
dbQuery, dbCommand, geoQuery, geoCommand
,   var.   var,
.
:

- :PARAM   {PARAM}.

-

dbQuery, dbCommand, geoQuery, geoCommand   /
—   UTEService   /
,   dbQuery, dbCommand, geoQuery, geoCommand

start_ute_command   .

end_ute_command

(start_ute_command, end_ute_command)
ute_command   UTEService:

```
<ute_command call="KM_ROUTE_Calc.xml" input="route_id={ID};"/>
```
call –

```
input -                                    .                    ";".      /
                                ,                      var  param
       :
<start_ute_command>
      <ute_command call="KM_ROUTE_Calc.xml" input="route_id={ID};"/>
</start_ute_command>

<end_ute_command>
      <ute_command call="KM_ROUTE_Calc.xml" input="route_id={ID};"/>
</end_ute_command>
```

XML.

.

by_row,   .

XML.

XML   .

.

2.1.2.2 GEO

GEO   CAS_*_GEO.xml,

.

:

- LINE_ID –

- START_FILTER –   ,

- LABEL_UNIT –   .

- LABEL –

- FILTERED_CLASS –   ,

- TYPE –   (1D, 2D, interval)
    - 1D –
    - 2D –
    - interval –   ,   ,   ,

2.1.3

:

dbQuery

dbCommand

geoQuery

geoCommand

geoReader

xmlQuery

xmlCommand

exslt

call

2.1.3.1 *dbQuery*

:

- idField – (
)

- query – SQL

.

(gdb, mif, sqlite,..) GDAL:

:

```
<dbQuery idField="ID">
      <param name="FILTER" />
      <param name="COLUMN_LIST" default="ID,LABEL,TYPE"/>
      <param name="LABEL_COLUMN" default="label"/>
      <param name="ID_COLUMN" default="GUID"/>
      <param name="STYLE_COLUMN" default="STYLE"/>
      <param name="GDAL_FILE_NAME" defaultIUST2_prepared.sqlite"/>
      <param name="GDAL_FILE_TYPE" default="SQLite" />
      <param name="GDAL_LAYER_NAME" default="ambit_industry_ics_p" />
      <query> </query>
</dbQuery>
```

GDAL_FILE_NAME		. , ,	`<param name="GDAL_FILE_NAME" defaultIUST2_prepared.sqlite"/>`
GDAL_FILE_TYPE		, , . .	`<param name="GDAL_FILE_TYPE" default="SQLite" />`
GDAL_LAYER_NAME		. mif	`<param name="GDAL_LAYER_NAME" default="ambit_industry_ics_p" />`
GEO_COLUMN		, WKT(GEO_COLUMN)	`<param name="GEO_COLUMN" default="WKT"/>`
STYLE_COLUMN		, STYLE(STYLE_COLUMN)	`<param name="STYLE_COLUMN" default="STYLE"/>`
ID_COLUMN		, ID. GUID, ID gdal feature.GetFID(),	`<param name="ID_COLUMN" default="GUID"/>`
LABEL_COLUMN		, LABEL(LABEL_COLUMN)	`<param name="LABEL_COLUMN" default="label"/>`

COLUMNS_LIST		,	`<param name="COLUMN_LIST" default="ID,LABEL,TYPE" />`
FILTER		";" .	FILTER="ID=123;LABEL= "

GDAL_FILE_TYPE

```
"PCIDSK"
"PDF"
"ESRI Shapefile"
"MapInfo File"
"UK .NTF"
"OGR_SDTS"
"S57"
"DGN"
"OGR_VRT"
"REC"
"Memory"
"BNA"
"CSV"
"GML"
"GPX"
"KML"
"GeoJSON"
"OGR_GMT"
"GPKG"
"SQLite"
"WAsP"
"OpenFileGDB"
"XPlane"
"DXF"
"CAD"
"Geoconcept"
"GeoRSS"
"GPSTrackMaker"
"VFK"
"PGDUMP"
"OSM"
"GPSBabel"
"SUA"
"OpenAir"
"OGR_PDS"
"HTF"
"AeronavFAA"
"EDIGEO"
"SVG"
"Idrisi"
"ARCGEN"
"SEGUKOOA"
"SEGY"
"ODS"
"XLSX"
"SXF"
"Selafin"
"JML"
"VDV"
"TIGER"
"AVCBin"
"AVCE00"
```

UTEService   /
(.   /   2.1.2.1)

2.1.3.2 dbCommand

- query – 	SQL

	.

UTEService	/
	(	.		/			2.1.2.1)

2.1.3.3 geoQuery

	:
- idField –
- partField –
- geoField –

- query – 	SQL

	.					WKB, SDO_GEOMETRY
			,
								.
					WKT.

				(		gdb, mif, sqlite,..)					GDAL:
	:

```
<geoQuery idField="ID" geoField="WKB_GEOMETRY">
     <param name="FILTER" />
     <param name="COLUMN_LIST" default="TYPE"/>
     <param name="ID_COLUMN" default="GUID"/>
     <param name="LABEL_COLUMN" default="label"/>
     <param name="STYLE_COLUMN" default="STYLE"/>
     <param name="GEO_COLUMN" default="WKT"/>
     <param name="GDAL_FILE_NAME" default="IUST2_prepared.sqlite"/>
     <param name="GDAL_FILE_TYPE" default="SQLite" />
     <param name="GDAL_LAYER_NAME" default="ambit_industry_ics_p" />
</geoQuery>
```

						,			2.1.3.1
								UTEService	/
			(	.			/			2.1.2.1)

2.1.3.4 geoCommand

			:
- proc –

- object – SQL

- part – SQL

- coord– SQL

WKT.

object, part coord. object

part.
HOLE,
'Y' 'N' .

coord.

proc

object coord. proc.xml.

:

- BoundsProcessor – XMIN,XMAX,YMIN,YMAX

- BufProcessor – IdField,

Query,

- CSProcessor –

- MetricsProcessor – COUNT, DIM GEOM_TYPE

- WKBProcessor – WKB
  WKB

:

- BufProcessor – IdField,

Query,

- LRSProcessor – SEQ, BACK_SEQ MEASURE,

- XYZProcessor – X,Y Z

2.1.3.5 geoReader

:

- source –

- type –

WKT .

type:

```
"ESRI Shapefile";
"MapInfo File";
"UK .NTF";
"SDTS";
"TIGER";
"S57";
"DGN";
```

```
"VRT";
"REC";
"Memory";
"BNA";
"CSV";
"NAS";
"GML";
"GPX";
"KML";
"GeoJSON";
"GMT";
"PGeo";
"PCIDSK";
"XPlane";
"AVCBin";
"AVCE00";
"DXF";
"Geoconcept";
"GeoRSS";
"GPSTrackMaker";
"VFK";
"PGDump";
"GPSBabel";
"SUA";
"OpenAir";
"PDS";
"WFS";
"HTF";
"AeronavFAA";
"Geomedia";
"EDIGEO";
"GFT";
"SVG";
"CouchDB";
"Idrisi";
"ARCGEN";
"SEGUKOOA";
"SEGY"
```

2.1.3.6 xmlQuery

:

- source –

- xpath – XPath   .

source   xpath   .
xpath.

2.1.3.7 xmlCommand

:

- source –

- template –   ,
  :

- transform –   XSLT   ,

source XSLT transform, ( ) , template .

XSLT
:

```xml
<?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet                                    version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"  xmlns:msxsl="urn:schemas-
microsoft-com:xslt" exclude-result-prefixes="msxsl">
<xsl:output method="xml" indent="yes"/>

  {0}

  <xsl:template match="@* | node()">
<xsl:copy>
    <xsl:apply-templates select="@* | node()"/>
</xsl:copy>
  </xsl:template>

  {1}

</xsl:stylesheet>
```

{0} . transform
XSLT {1}.

2.1.3.8 exslt

:

- xsltPath – XSLT . .

- xmlPath – XML . . ,
.

XSLT ,
( ).

2.1.3.9 call

:

- task –

- by_row –

task WCF. XML
. , by_row false XML
.
.

2.1.4

,
, .
( ) .
, ( ),
: « »
(-).
: , , .

Proc.xml.

2.1.5 **(CAS_MATH)**

:

_____

_____

_____

_____

_____
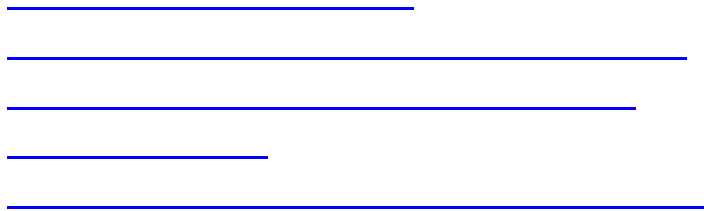
2.1.5.1

,   ,   ,
:

- GROUP_OFFSET (Y   )
- GRAPH_OFFSET (Y   )
- AXIS_OFFSET (   )
- START_KM (   )
- FINISH_KM (   )
- X_SCALE   (X –
        X)
- Y_MIN (–
                      – Y   Y_MIN)
- Y_MAX (   )
- HEIGHT (,   ,
  Y_MIN   Y_MAX)
- COSMETIC_ELEMENT_N –

                                                ,
      ,
                                            ;

      ,   X_SCALE=1   START_KM   FINISH_KM.   ,
      Y_MIN, Y_MAX   HEIGHT   Y.
                                    ,
            ,   .
                                          ,
        ,   .

      COSMETIC_ELEMENT_N –   ,   0,
                                          (;)
default="topology={line,point,polygon};coord=x1,y1,x2,y2;   style={   ,
Default_STYLE.xml}"

2.1.5.2

                                        .

            :

- QUERY QUERY1, QUERY2, …, QUERY{n} – ( ),
  (CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD)
- DISTANCE_TOLERANCE – ,

  (0.000001)
- NEED_GROUP – ,
  data

  :

1) FrequencyDistributionCalculation

  - SIGMA –

  - VALUABLE_SIGMAS_COUNT – ,
    SIGMA,
    (3)
  - SEGMENTS_COUNT_PER_SIGMA –
    SIGMA

2) BoundaryCalculation

  - BOUNDING_VALUE – ( )
  - CUT_TYPE – (0- , 1- , 2-
    , 3-)

3) GistogramCalculation

  - SEGMENT_LENGTH – (
)

4) CorrelationCalculation

  - EXCLUDE_ZERO – ,

5) GraphicsSumCalculation

  - QUERY1 … QUERY{n} ,
    (X
    –)
  - A_COEF A_COEF0 … A_COEF{n} – Ai

  - [COEF_QUERY] –
    .

    A_COEF{n}.

6) RegressionCalculation

  - QUERY1 … QUERY{n} ,

  - CRITERION_QUERY – ,
    (data
    Query{n})
  - EXCLUDE_ZERO – ,

HIGH_ACCURACY –   .

,   .

false.

2.1.5.3

,

,   .

:

- frequencyDistributionCalculation   (
)
- boundaryCalculation (   )
- gistogramCalculation (   )
- correlationCalculation (   )
- regressionCalculation (   )
- graphicsSumCalculation   (
)
-

XML   :

```
<root attribute1="value1" attribute2="value2" … >
   <data attribute1="value1" attribute2="value2" …  />
</root>
```

,   :

XML

root,   root

.

data   data

:

1)   GROUP_OFFSET, GRAPH_OFFSET   AXIS_OFFSET
0

2)   X_SCALE   1

3)   data
(GROUP_OFFSET, GRAPH_OFFSET, AXIS_OFFSET, X_SCALE, HEIGHT,
QUERY),   data
,   .   -   ,
,   data,
.

,   ,
data
.

2.1.5.4

:

_____

_____ - CAS_MATH.xml#BOUNDARY_CALC

_____2_____

_____

_____

_____,_____

_____

2.1.5.4.1

- CAS_MATH.xml#BOUNDARY_CALC

```
<data id="BOUNDARY_CALC" comment="                      ">
      <select>
            <boundaryCalculation by_row="true">
                  <var name="QUERY" default="CAS_MATH.xml#FREQUENCY_DISTRIBUTION_CALC
" />
                  <var name="NEED_GROUP" default="false"/>
                  <var name="BOUNDING_VALUE" default="2.9" />
                  <var name="CUT_TYPE" default="0"/>
                  <var name="DISTANCE_TOLERANCE" default="0.000001"/>
                  <var name="GROUP_OFFSET" default="0"/>
                  <var name="GRAPH_OFFSET" default="-2037"/>
                  <var name="AXIS_OFFSET" default="0"/>
                  <var name="HEIGHT" default="50"/>
                  <var name="X_SCALE"/>
            </boundaryCalculation>
      </select>
</data>
```

XML-   :

```
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
   <data QUERY="CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD" BOUNDING_VALUE="2.9" CUT_TYPE="0"
X_SCALE="1000" >
     <data/>
   </data>
</root>
```

CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD   :

```
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
     <data   BOUNDING_VALUE="2.9"   CUT_TYPE="0"   GROUP_OFFSET="0"   GRAPH_OFFSET="0"
AXIS_OFFSET="0" />

</root>
```

2.1.5.4.2   - CAS_MATH.xml#BOUNDARY_CALC

XML-   :

```
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
   <data QUERY="CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD" BOUNDING_VALUE="2.9" CUT_TYPE="0"
LINE_ID="1300003" START_KM="57" FINISH_KM="284" X_SCALE="1000" >
     <data X_SCALE="300" />
   </data>
</root>
```

CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD   :

```
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
     <data   BOUNDING_VALUE="2.9"   CUT_TYPE="0"   LINE_ID="1300003"   START_KM="57"
FINISH_KM="284" X_SCALE="1" GROUP_OFFSET="0" GRAPH_OFFSET="0" AXIS_OFFSET="0" />
</root>
```

2.1.5.4.3   2

- CAS_MATH.xml#BOUNDARY_CALC

XML-   :

```
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
```

```xml
    <data     QUERY="CAS_MATH.xml#FREQUENCY_DISTRIBUTION_CALC"     BOUNDING_VALUE="9.0"
CUT_TYPE="0" LINE_ID="1300003" START_KM="57" FINISH_KM="284" X_SCALE="1000" >
      <data QUERY="CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD" SIGMA="40.0" X_SCALE="450" >
        <data/>
      </data>
    </data>
</root>
```

CAS_MATH.xml#FREQUENCY_DISTRIBUTION_CALC

```xml
  <data id="FREQUENCY_DISTRIBUTION_CALC" comment="                                        ">
      <select>
          <frequencyDistributionCalculation by_row="true">
              <var name="QUERY" default="CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD"/>
              <var name="NEED_GROUP" default="false"/>
              <var name="SIGMA" default="40"/>
              <var name="SEGMENTS_COUNT_PER_SIGMA" default="10"/>
              <var name="VALUABLE_SIGMAS_COUNT" default="3"/>
              <var name="DISTANCE_TOLERANCE" default="0.000001"/>
              <var name="GROUP_OFFSET" default="0"/>
              <var name="GRAPH_OFFSET" default="-2038"/>
              <var name="AXIS_OFFSET" default="0"/>
              <var name="HEIGHT" default="50"/>
              <var name="X_SCALE"/>
          </frequencyDistributionCalculation>
      </select>
  </data>
```

1   CAS_MATH.xml#FREQUENCY_DISTRIBUTION_CALC
          :

```xml
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
  <data    QUERY="CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD"    SIGMA="40.0"    LINE_ID="1300003"
START_KM="57"    FINISH_KM="284"    X_SCALE="1"    GROUP_OFFSET="0"    GRAPH_OFFSET="0"
AXIS_OFFSET="0" BOUNDING_VALUE="9.0" CUT_TYPE="0">
      <data/>
      </data>
</root>
```

2   CAS_PODS_CAS_ILI_GEO.xml#CAS_ILI_KBD
     :

```xml
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
  <data    SIGMA="40.0"    LINE_ID="1300003"    START_KM="57"    FINISH_KM="284"    X_SCALE="1"
GROUP_OFFSET="0" GRAPH_OFFSET="0" AXIS_OFFSET="0" BOUNDING_VALUE="9.0" CUT_TYPE="0"/>
</root>
```

2.1.5.4.4

CAS_MATH.xml#REGRESSION_CALC:

```xml
  <data id="REGRESSION_CALC" comment="                                        ">
      <select>
          <regressionCalculation by_row="true">
              <var name="CRITERION_QUERY" />
              <var name="EXCLUDE_ZERO" default="false"/>
              <var name="HIGH_ACCURACY" default="false"/>
              <var name="DISTANCE_TOLERANCE" default="0.000001"/>
          </regressionCalculation>
      </select>
  </data>
```

:

```xml
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
  <data                                        QUERY1="UNIT_TEST_DATA.xml#FACTOR1_DATA"
QUERY2="UNIT_TEST_DATA.xml#FACTOR2_DATA"
CRITERION_QUERY="UNIT_TEST_DATA.xml#CRITERION_QUERY"  />
```

```
</root>
```

:

```
<root>
   <data            A_COEF0="7.0173872"            A_COEF1="15.0033901"            A_COEF2="25.13090734"
DETERMINATION_COEFFICIENT="0.6532917" />
</root>
```

2.1.5.4.5

CAS_MATH.xml#GRAPHICS_SUM_CALC:

```
<data id="GRAPHICS_SUM_CALC" comment="                              (
      )">
        <select>
              <graphicsSumCalculation by_row="true">
                      <var name="DISTANCE_TOLERANCE" default="0.000001"/>
              </graphicsSumCalculation>
        </select>
  </data>
```

:

```
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
   <data                                            QUERY1="UNIT_TEST_DATA.xml#FACTOR1_DATA"
QUERY2="UNIT_TEST_DATA.xml#FACTOR2_DATA"    A_COEF0="7.0173872"    A_COEF1="15.0033901"
A_COEF2="25.13090734" />
</root>
```

:

```
<root>
<data WKT="LINESTRING(57  16866.816923288079,58  23520.448403351216,59  19213.946579838146,60
36123.790363798747,61    24351.773852499096,62    23255.796764716411,63    13549.496523911828,64
10330.410995844009,65 11327.064923220811,66 35123.137434086369,156 34021.565413752367)"/>
</root>
```

2.1.5.4.6   ,

:

```
<root USER_ID="1" USER_LOGIN="user" PODS_USER="user">
   <data                                            QUERY1="UNIT_TEST_DATA.xml#FACTOR1_DATA"
QUERY2="UNIT_TEST_DATA.xml#FACTOR2_DATA"
COEF_QUERY="CAS_MATH.xml#REGRESSION_CALC" >
    <data                                           QUERY1="UNIT_TEST_DATA.xml#FACTOR1_DATA"
QUERY2="UNIT_TEST_DATA.xml#FACTOR2_DATA"
CRITERION_QUERY="UNIT_TEST_DATA.xml#CRITERION_DATA" />
   </data>
</root>
```

2.1.5.5

.

:

Math_Calc_Memory_Reserve –   (
      50000000   ).

Boundary_Calc_Bytes_Per_Coordinate –   ,
                                            (2000).

Frequency_Distribution_Calc_Bytes_Per_Coordinate -   ,
(

2000).

Frequency_Distribution_Calc_Bytes_Per_Step   –   ,
,
(200).

Gistogram_Calc_Bytes_Per_Coordinate –   ,
(2000).

Regression_Calc_Max_Factors_Count –   ,
.

2.1.6   (FILTER.xml)

:

_____

_____/_____

_____

2.1.6.1

ID,   ,
WebSite\Core\Query\Filter.xml

FILTER_DATA_BY_ID   (
FILTER.xml#FILTER_DATA_BY_ID)

2.1.6.2   /

:

```
<root USER_ID="1">
 <data                              ORIGINAL_QUERY="UNIT_TEST_DATA.xml#SOURCE_DATA"
FILTER_QUERY="UNIT_TEST_DATA.xml#FILTER_DATA"       MIN_FIELD="1"        MAX_FIELD="3"
COMMON_PARAMS="CMN">
  <data PARAM1="1" PARAM2="2"/>
  <data PARAM1="2" PARAM2="3"/>
 </data>
</root>
```

:

UNIT_TEST_DATA.xml#SOURCE_DATA

```
<root USER_ID="1">
 <data COMMON_PARAMS="CMN" PARAM1="1" PARAM2="2"/>
</root>
```

,
UNIT_TEST_DATA.xml#FILTER_DATA

```
<root USER_ID="1">
 <data COMMON_PARAMS="CMN" PARAM1="2" PARAM2="3"/>
</root>
```

FIELD < MIN_FIELD   **FIELD** > MAX_FIELD.

2.1.6.3

1.   ORIGINAL_QUERY   ,
.

2.   FILTER_QUERY   ,

         MIN_*="…" MAX_*="…"   :

     a. * -   ,

     b.   (,
).   ,

     c.   (   )
     d. MIN_* -   , MAX_* -

     e.   MIN_*,   MAX_*   ,   .
     f.   ,   ,   ,
                   ,

3.   ORIGINAL_QUERY   ID,

4.   FILTER_QUERY   ID,

5.   root   root
ORIGINAL_QUERY FILTER_QUERY

6.   ,   ORIGINAL_QUERY, FILTER_QUERY   MIN_* MAX_*
          data   ORIGINAL_QUERY
FILTER_QUERY.

7.   data   ORIGINAL_QUERY,
   –   FILTER_QUERY.

8.   FILTER_QUERY,   ID   .

9.   (ORIGINAL_QUERY)   ID   .

2.2

           :

          (LAYERS)

          (STYLE)

                (baseLayers)

2.2.1   (LAYERS)

         :

                      dataProvider

               layer

               layer

2.2.1.1

WebSite\Core\Query

*_Layers.xml

:

```xml
<root version="5.5.0.0" descr="                                        " name="POI">
  <dataProvider type="layers" source="POI_SUB_LAYERS.xml"/>
  <dataProvider type="style" source="POI_STYLE.xml"/>

  <layer      id="WEB50_POI_POINT"      comment="WEB50.POI_POINT"      descr="                    "
projection="EPSG:4284"   type="common"   labelField="NAME"   classField="TYPE_CL"   spacing="common"
zoomMin="0" zoomMax="12" cover="false" fitMap="false" order="5" visible="true" topology="point">
    <dataProvider type="propertiesPanel" source="ALL_PROP_LIST.xml#WEB50_POI_POINT" />
    <dataProvider type="style" source="POI_STYLE.xml#WEB50_POI_POINT" />
    <dataProvider type="semantic" source="POI_SEM.xml#WEB50_POI_POINT" />
    <dataProvider type="spatial" source="POI_GEO.xml#WEB50_POI_POINT" />
  </layer>
  <layer id="WEB50_POI_TRACK" comment="WEB50.POI_TRACK" descr="        " projection="EPSG:4284"
zoomMin="0"  zoomMax="18"  type="common"  labelField="NAME"  classField="TYPE_CL"  spacing="common"
cover="false" fitMap="false" order="10" visible="true" topology="line" >
    <dataProvider type="propertiesPanel" source="ALL_PROP_LIST.xml#WEB50_POI_TRACK" />
    <dataProvider type="style" source="WEB50_POI_TRACK" />
    <dataProvider type="semantic" source="POI_SEM.xml#WEB50_POI_TRACK" />
    <dataProvider type="spatial" source="POI_GEO.xml#WEB50_POI_TRACK" />
  </layer>
</root>
```

2.2.1.2

name -   (   );

descr –   (   ) (   );

version –   (   ).

2.2.1.3   *dataProvider*

dataProvider,
.
(type="style"),   ,
(type="layers") (

).

```xml
<dataProvider type="layers" source="POI_SUB_LAYERS.xml"/>
```

,   url   .
(   ),
.

2.2.1.4   *layer*

id -   (   ).   .
!

descr –   (,
) (   ).   .;

order -   (   );

visible -   -   (   ) (
      );

topology -   .   : point, line,polygon.
,   (   );

projection -   http://spatialreference.org/ref/   -   ,
42   (EPSG:4284),   «EPSG:5807»,   WGS84
            (EPSG:900913) (   );

type -   .   system|common|user.
                                                    (   );

labelField -   (   );

classField -   (   );

spacing –   ; common –   ,
                                                    ,

(   );

cover –   ,   ,   (
            ,   )   (,   )
(   );

fitMap –   ,
                                (   )   (   );

zoomMin –   ,   (0
20-24 –   ) (   ).
                            ,   0, NaN, -1.;

zoomMax –   ,   (1
   20-24 –   ) (   ).
                            ,   NaN, -1;

            !   *zoomMin, zoomMax*   ,
                                                                    ,
                              .   ,   ,

                .   -
                  ,   -   .
                                                                                          ,
                                                                                    .

2.2.1.5   **layer**

                                ,   ,   -   ,   .
                                                                              ,   *type*
                (   ).

        <dataProvider type="…" source="…" />

                              .   source   FILE_NAME.EXT#id,
URL.   id,
dataProvider   type.
            29.10.2013   :

        <dataProvider type="propertiesPanel" source="ALL_PROP_LIST.xml#WEB50_POI_POINT"
/> -   ,
                                                      .

        <dataProvider   type="style"   source="POI_STYLE.xml#WEB50_POI_POINT"   />   -
                                                            .

        <dataProvider   type="semantic"   source="POI_SEM.xml#WEB50_POI_POINT"   />   -
                                                            .

`<dataProvider` `type="spatial"` `source="POI_GEO.xml#WEB50_POI_POINT"` `/>` -
.

`<dataProvider` `type="spatial_3D"` `source="POI_GEO3D.xml#WEB50_POI_POINT"` `/>` -
3D   (,
).

2.2.1.6 *filter*

filter,   ,
,
-        .

`<filter>`
    `<pattern></pattern>`
    `<join></join>`
    `<field></field>`
    `<replace></replace>`
`</filter>`
`<pattern>d.ILI_INSPECTION_ID IN ({FILTER})</pattern>` -

`<join>,</join>` -   JS

`<field>PODS_ILI_INSPECTION</field>` -
`<replace>FILTER</replace>` -   .   JS

2.2.2   (STYLE)

:

_____

_____

_____

_____

_____

_____IMG-____

_____VRML-_____

_____MapInfo

2.2.2.1

WebSite\Core\Query   *_Style.xml
:   `<kml`
`version="5.5.3.1"><Document><Style>…</Style> …<Style>…</Style></Document></kml>`

(`<Style>`)   :

```
<Style id="" descr="" short_name="" comment="">
  <value></value>
  <zoomMin></zoomMin>
  <zoomMax></zoomMax>
  <!--                              -->
  <LabelStyle>
      <!--                          -->
  </LabelStyle>
```

```
<MIStyle>
    <!--                    MapInfo -->
    <data>
    </data>
</MIStyle>
<IMGStyle>
    <!--                        IMG -->
    <data type0=""
        type1=""
        type2=""/>
</IMGStyle>
<VRMLStyle>
    <!--                  VRML        -->
    <data process=""
        viewpoint="">
    </data>
</VRMLStyle>
</Style>
```

:

- id="" –

:

- descr="" —

- short_name="" —

- comment="" -

:

- <value></value> -   ,   .

    :

    ○   STYLE,

    ○   ,   TYPE,

    ○   ,

    ○   -   ,

    ○   -   .

- <zoomMin></zoomMin> —   ,
                                                (0   25).   -
        ,   .

- <zoomMax></zoomMax> —   ,
                                                (0   25).   -
        ,   .

                                                    .

:

-   ,
                                                .
    :   ,
        .

-        ,   id,   -   .
                                id,
            -                              .

-
        ,

id   <value>,

:

1 <zoomMin>25</zoomMin><zoomMax>16</zoomMax>…,

2 <zoomMin>15</zoomMin><zoomMax>9</zoomMax>…,

3 <zoomMin>8</zoomMin><zoomMax>8</zoomMax>…,

 4 <zoomMin>25</zoomMin><zoomMax>16</zoomMax>….

2.2.2.2

:

- .

  .

  .

- **Well-known form.**

  .

  .

  .

- .

1.

	XML	
	<IconStyle> <Icon>	
	<href>Public/assets/image.png</href>	
.	<form>bitmap</form>	Bitmap – .
	<size>16</size>	- 16.
	</Icon>	
	<rotation>R_ANGLE</rotation>	, . - 0. JS
	</IconStyle>	
Well-known form		
	<IconStyle> <Icon>	
	<form>triangle</form>	: triangle – , circle – , square - star – cross - X - X
	<size>16</size>	- 16
	</Icon>	
	<color>FF000000</color>	- FF000000
	<outline>1</outline>	: 0 – , 1 – . - 0.
	<rotation>R_ANGLE</rotation>	, . - 0. JS
	</IconStyle>	
	<IconStyle> <Icon>	JS
	<form>symbol</form>	JS
	url	URL ( )
	<position>number</position>	
	<size>16</size>	- 16
	</Icon>	
	<color>FF000000</color>	- FF000000
	<outline>1</outline>	: 0 – , 1 – . - 0.
	<haloColor>FFFFFFFF</haloColor>	- FFFFFFFF. JS
	<rotation>R_ANGLE</rotation>	, . - 0. JS

	</IconStyle>	

:

    .

```xml
<Style     id="PODS_CLOSURE"     schema="PODS"     table="CLOSURE"     comment="PODS.CLOSURE"
descr="            " short_name="            " topology="1">
                    <!--            4.3 C1100037 -->
                    <zoomMin>0</zoomMin>
                    <zoomMax>1500</zoomMax>
                    <IconStyle>
                            <Icon>
                                    <href>Public/assets/CLOSURE.png</href>
                                    <form>bitmap</form>
                                    <size>16</size>
                            </Icon>
                            <color>FF000000</color>
                            <outline>0</outline>
                    </IconStyle>
</Style>
```

    Well-known form   **.**

```xml
<Style        table="ILI_DATA_JUNCTION"        schema="PODS"        id="PODS_ILI_DATA_JUNCTION"
comment="PODS.ILI_DATA_JUNCTION">
                    <zoomMin>NaN</zoomMin>
                    <zoomMax>NaN</zoomMax>
                    <IconStyle>
                            <Icon>
                                    <form>triangle</form>
                                    <size>10</size>
                            </Icon>
                            <color>FFFFFFFF</color>
                            <outline>1</outline>
                    </IconStyle>
            </Style>
```

2.2.2.3

:

-     **.**
    .

-     **,**
    .

2.

	XML	
	<LineStyle>	
	<color>FF000000</color>	- FF000000
	<width>1</width>	
	<perpendicularOffset>0</perpendicularOffset>	. – – , – . - 0. JS
	<pattern>	
	<join>miter|round|bevel</join>	miter – , round – , bevel –
	<caps>butt|round|square</caps>	butt – , round – square – .
,	<marker-start><IconStyle/></marker-start>	, JS
,	<marker-mid step="0"> <IconStyle/></marker-middle>	, . step 0, . . JS
,	<marker-end><IconStyle/></marker-end>	, JS
	<dasharray>1 1</dasharray>	. – , . .
	</pattern>	
	</LineStyle>	
,	<LineStyle> <color>FF000000</color> </LineStyle>	( ) .

:

    ———   **.**

        .

```
<Style     table="ILI_INSPECTION_RANGE"     schema="PODS"     id="PODS_ILI_INSPECTION_RANGE"
comment="ILI_INSPECTION_RANGE">
                    <zoomMin>NAN</zoomMin>
                    <zoomMax>NAN</zoomMax>
                    <LineStyle>
                        <color>FFAB85C0</color>
                        <width>4</width>
                    </LineStyle>
                    <LineStyle>
                        <color>FF000000</color>
                        <width>6</width>
                    </LineStyle>
</Style>
```

2.2.2.4

    3.

.	`<LineStyle>`
	`<color>FF000000</color>`
	`<width>1</width>`
	`</LineStyle>`
	`<LineStyle>`
	`<color>FFFFFFFF</color>`
	`<width>5</width>`
	`</LineStyle>`
		,
		
		 .

.	`<PolyStyle>`	
	`<color>FF000000</color>`	. - , FF000000.
	`<fill>0</fill>`	: **1:** . **0:** .
	`<outline>1</outline>`	
.	`<fillPattern>`<u>solid</u>`|bitmap</fillPattern>`	: **solid** **bitmap** JS
	`<fillUrl>`/Public/assets/FillPatterns/style1. png`</fillUrl>`	png. JS

:

_____.

```xml
<Style        id="PODS_DISTRIBUTION_PLANT"        schema="PODS"        table="DISTRIBUTION_PLANT"
comment="PODS.DISTRIBUTION_PLANT">
                        <zoomMin>NAN</zoomMin>
                        <zoomMax>NAN</zoomMax>
                        <LineStyle>
                                <color>FF000000</color>
                                <width>1</width>
                        </LineStyle>
                        <LineStyle>
                                <color>FFFFFFFF</color>
                                <width>5</width>
                        </LineStyle>
                        <PolyStyle>
                                <color>FF000000</color>
                                <fill>0</fill>
                                <outline>1</outline>
                                <fillPattern>solid</fillPattern>
                        </PolyStyle>
                </Style>
```

2.2.2.5

.

.

-                (LabelStyle):

-   ,   LABEL. (Arial, 10   )

-   ,

.

LABEL

<LabelStyle/>,   0   LabelStyle/auto.

4.

	`<LabelStyle>`	
	`<zoomMin>NaN</zoomMin>` `<zoomMax>NaN</zoomMax>`	, . , ( ).
	`<color>FF000000</color>`	
	`<fontSize>10</fontSize>`	. 0 , , . - 10.

	`<bold>0</bold>`
	`<italic>0</italic>`
	`<underline>1</underline>`
		, ,
		.
		1 0.

	`<duplicate>1</duplicate>`	1 .
	`<overlap>1</overlap>`	1 . . - 0.
	`<align>middle|top|bottom|left|right|center</align>`	: left|right|center : middle|top|bottom |
	`<fontFamily>Arial</fontFamily>`	. Windows.
	`<scale>true|false</scale>`	. , true
	`<rotation>R_ANGLE</rotation>`	, . - 0. JS

:

.

```
<LabelStyle>
    <zoomMin>NaN</zoomMin>
    <zoomMax>NaN</zoomMax>
```

```
        <color>FF000000</color>
        <fontSize>10</fontSize>
        <bold>0</bold>
        <italic>0</italic>
        <underline>1</underline>
        <duplicate>1</duplicate>
        <overlap>1</overlap>
</LabelStyle>
```

2.2.2.6   IMG-

```
<IMGStyle>
        <!--                                IMG -->
        <data name="" <!--                              -->
                type0="" <!--                                 -->
                type1="" <!--                                 -->
                type2=""/> <!--                                -->
</IMGStyle>
```

2.2.2.7   VRML-

```
<VRMLStyle>
        <!--                      VRML          -->
        <data process="" <!--                                        -->
                viewpoint=""
                table="">      <!--
                -->
        </data>
</VRMLStyle>
```

2.2.2.8   MapInfo

                                        MapInfo (MI_STYLE)

                                :

```
<MIStyle>
        <!--                          MapInfo -->
        <data> Font("Times New Roman CYR",257,10,5263440,16777215)</data>
    </MIStyle>
```

                                        :

```
<MIStyle>
        <!--                        MapInfo -->
        <data> Symbol(46,255,12,"UZgrunt_bolota",1,0)</data>
    </MIStyle>
```

2.2.3

                                                                    «

                        »,   : dbQuery, dbCommand, xmlQuery,
xmlCommand, exslt.

2.2.4

                                                                    «

                        »,   : geoQuery, geoCommand, geoReader,
xmlQuery, xmlCommand, exslt.

2.2.5   (baseLayers)

                        :

                ─────────────────

                        layer

extlayer

2.2.5.1

WebSite\Core\Query

,   ,

layersUrl.

:

```
<root version="5.5.1.1">
    <layer id="{MapId}" type="{MapType}">
        ...                              ..
        <properties>

        </properties>
        </layer>
    <extlayer id="{MapId}" type="{MapType}">
        ...                        ..
        <layer id="{MapId}" type="{MapType}">
            ...                                ..
            <properties>

            </properties>
        </layer>
        <layer …>
        </layer>
    </ extlayer >
    <layer …>
    </layer>
  </root>
```

2.2.5.2   *layer*

:

gis.map.layer.OSMLayer –

gis.map.layer.OSMMultiLayer –   ,

gis.map.layer.DynamicWmsLayer –   WMS

gis.map.layer.WMSCadastre –

org.openscales.core.layer.osm.Mapnik –   OpenStreet

org.openscales.core.layer.Layer –

gis.map.layer.RosLayer   –   WMS

gis.map.layer.XYZ –   ,
    OSM   TMS,   ,
                                    .

2.2.5.2.1

-          ,
            :

id=*"MapId"* –   ,

type=*"MapType"* – , , :
gis.map.layer.OSMLayer, gis.map.layer.DynamicWmsLayer, gis.map.layer.WMSCadastre,
org.openscales.core.layer.osm.Mapnik, org.openscales.core.layer.Layer, gis.map.layer.RosLayer

( ):

\<name\> \</name\> - ,

\<isBaseLayer\>true\</isBaseLayer\> - .
true.
.

\<visible\>true\</visible\> - .
true.
.

\<projection\>EPSG:900913\</projection\> - . - , EPSG:900913.

\<proxy\>\</proxy\> - - (
,).
:

\<properties/\> - .
.
:

\<showInfo/\> –
. : true

\<layers/\> - С ,
. ","

\<rasterLayers/\> - С ,
. ",". « »

\<zoomLevels/\> - . - : 20

2.2.5.2.2 gis.map.layer.OSMLayer –

:

\<url\>{SERVER}/Public/Data/Maps/TileTrees/Default/\</url\> - .
{SERVER}, .

\<extension\>.png\</extension\> - . - , .png
:

```
<layer id="MapGenTiles" type="gis.map.layer.OSMLayer">
        <name>     </name>
        <url>{SERVER}/Public/Data/Maps/TileTrees/Default/</url>
        <isBaseLayer>true</isBaseLayer>
        <visible>true</visible>
        <projection>EPSG:900913</projection>
        <proxy></proxy>
        <extension>.png</extension>
        <properties>
                <showInfo>true</showInfo>
                <layers>M_1;M_5;M_10;M_25;M_100;M_200;M_1K;M_R;M_W</layers>
                <zoomLevels>22</zoomLevels>
        </properties>
</layer>
```

2.2.5.2.3 gis.map.layer.OSMMultiLayer –

!   .   (EPSG:3395)
EPSG:900913.
ECW
:

<urls/> -   ,   ,
<url/>   **<rasterUrl/>**

<url>{SERVER}/Public/Data/Maps/TileTrees/Default/</url> -   .
{SERVER},   .

<rasterUrl>{SERVER}/Public/Data/Maps/TileTrees/PodsRaster/</rasterUrl> -
.   «   »
:

extension=*".png"* –   .   -   , .png

opacity="number" –   (0   1).

useInterimTilesOnError="false" –   ,
,   .   true
false.   false.

notInterimTilesOnErrorLevels   ,
.
(   )

:

useEmail="true" –   .
true   false.   false.

useEmailFullAttach="true"   –   ,
(   )   .   true   false.
true.

zouitURL="http://pkk5.rosreestr.ru/api/features/" –

cadastreURL="http://pkk5.rosreestr.ru/api/features/" –

:

```xml
<layer id="MixedTiles" type="gis.map.layer.OSMMultiLayer">
        <name>    </name>
        <isBaseLayer>true</isBaseLayer>
        <visible>true</visible>
        <projection>EPSG:900913</projection>
        <proxy></proxy>
        <properties>
                <showInfo>true</showInfo>
        <layers>M_1;M_5;M_10;M_25;M_100;M_200;M_1K;M_R;M_W</layers>
                <zoomLevels>22</zoomLevels>
        </properties>
        <urls>
                <url extension=".png" opacity="0.8" > {SERVER}/Public/Data/Maps/TileTrees/Default/</url>
                <url extension=".png" opacity="0.2"> {SERVER}/Public/Data/Maps/TileTrees/Default1/</url>
        </urls>
</layer>
```

2.2.5.2.4 gis.map.layer.DynamicWmsLayer –   WMS
:

<url>WmsServicePage.aspx/WmsOperation</url>   -   WMS
(   ).

:

```xml
<layer id="VectorMap" type="gis.map.layer.DynamicWmsLayer">
        <name>                    </name>
        <isBaseLayer>false</isBaseLayer>
        <visible>false</visible>
        <projection>EPSG:900913</projection>
        <url>WmsServicePage.aspx/WmsOperation</url>
        <properties>
                <showInfo>true</showInfo>
                <layers>M_1;M_5;M_10;M_25;M_100;M_200;M_1K;M_R;M_W</layers>
                <zoomLevels>22</zoomLevels>
        </properties>
</layer>
```

2.2.5.2.5 gis.map.layer.WMSCadastre –

:

<url> http://maps.rosreestr.ru/ArcGIS/services/CadastreNew/CadastreWMS/MapServer/WMSServer?</url> - WMS   (   ).

<layers>5,6,8,10,11,12,13,15,16,17,18,19</layers> -

<restURL>http://pkk5.rosreestr.ru/arcgis/rest/services/Cadastre/Cadastre/MapServer/export?</restURL> -   JS

<zouitURL>http://pkk5.rosreestr.ru/arcgis/rest/services/Cadastre/ZONES/MapServer/export?layers=show:4</zouitURL> - JS

<bordersGKNURL>http://pkk5.rosreestr.ru/arcgis/rest/services/Cadastre/BordersGKN/MapServer/export?layers=show:32,33</bordersGKNURL>   - JS

<thematicURL>http://pkk5.rosreestr.ru/arcgis/rest/services/Cadastre/Thematic/MapServer/export?layers=show:6,7,13,14</thematicURL>   - JS

:

```xml
<layer id="KADASTR" type="gis.map.layer.WMSCadastre">
        <name>           (          )</name>

<url>http://maps.rosreestr.ru/ArcGIS/services/CadastreNew/CadastreWMS/MapServer/WMSServer?</url>
        <layers>5,6,8,10,11,12,13,15,16,17,18,19</layers>
<styles>default,default,default,default,default,default,default,default,default,default,default,default</styles>
        <isBaseLayer>false</isBaseLayer>
        <visible>false</visible>
        <projection>EPSG:3857</projection>
        <proxy></proxy>
</layer>
```

2.2.5.2.6 org.openscales.core.layer.osm.Mapnik –   OpenStreet

.

:

```xml
<layer id="OSMapnikLayer" type="org.openscales.core.layer.osm.Mapnik">
        <name>OpenStreetMap</name>
        <isBaseLayer>false</isBaseLayer>
        <visible>false</visible>
        <projection>EPSG:900913</projection>
        <proxy></proxy>
</layer>
```

2.2.5.2.7 org.openscales.core.layer.Layer –

```
<layer id="emptyLayer" type="org.openscales.core.layer.Layer">
  <name>              </name>
  <isBaseLayer>false</isBaseLayer>
  <visible>false</visible>
  <srsCode>EPSG:900913</srsCode>
  <proxy></proxy>
</layer>
```

2.2.5.2.8 gis.map.layer.RosLayer –   WMS

<url>WmsServicePage.aspx/WmsOperation</url>   -   WMS
(   ).

```
<layer id="RosMap" type="gis.map.layer.RosLayer">
  <name>                       </name>
  <url>WmsServicePage.aspx/WmsOperation</url>
  <isBaseLayer>true</isBaseLayer>
  <visible>true</visible>
  <projection>EPSG:900913</projection>
  <properties>
    <showInfo>true</showInfo>
    <layers>M_1;M_5;M_10;M_25;M_100;M_200;M_1K;M_R;M_W</layers>
  </properties>
</layer>
```

2.2.5.2.9 gis.map.layer.XYZ –   ,
OSM   TMS

Proj4js

!   ,   . (EPSG:3395),
                    SAS.Planet,
          EPSG:900913

```
<layer id="YANDEX_MAPS_SCHEMA_OSM" type="gis.map.layer.XYZ">
  <name>            </name>
  <url> https://vec0{1-
3}.maps.yandex.net/tiles?l=map&amp;x={x}&amp;y={y}&amp;z={z}&amp;scale=1&amp;lang=
ru_RU</url>
  <projection>EPSG:3395</projection>
</layer>

<layer id="YANDEX_MAPS_SCHEMA_TMS" type="gis.map.layer.XYZ">
  <name>               </name>
  <!--                             SAS.Planet-->
  <url>{SERVER}/Public/Data/Maps/TileTrees/YandexVector/{z}/{x}/{-y}.jpg</url>
  <projection>EPSG:3395</projection>
</layer>
```

2.2.5.3   *extlayer*

:

gis.map.layer.ExtMultiLayer –   ,   layer

2.2.5.3.1

-     ,

:

id=*"MapId"* –   ,

type=*"MapType"*   –   ,   ,   : gis.map.layer.OSMLayer,   gis.map.layer.DynamicWmsLayer,   gis.map.layer.WMSCadastre, org.openscales.core.layer.osm.Mapnik, org.openscales.core.layer.Layer, gis.map.layer.RosLayer

(   ):

<name>   </name> -   ,

<isBaseLayer>true</isBaseLayer> -   .
                                                true.
                       .

2.2.5.3.2 gis.map.layer.OSMLayer –   ,   **layer**

                            layer   .   layer.

2.3   *(TREE)*

:

2.3.1

                                          WebSite\Public\Modules\Tree   xml.
                              _TREE,   .
                             :

```xml
<?xml version="1.0" encoding="utf-8"?>
<dataset name="{   }" >
    <group comment="{comment}">
      <invoke  id="{  invoke_id  }"  type="{event_type}"   event_name="{event_name}"  icon="{  ICON_PATH
}icon.png" [tooltip="{tooltip}"]>
        [<var name="{ param_name }" value="{ param_value }"/>]
        ...
      </invoke>
    </group>

    <tree  max_items="3">
      [<context_menu run_invoke="{invoke_id}" param_name="{param_value}"/>]
        <level format="{format}" icon="Public/assets/2.png" max_items="5" checkbox_type="childBased">
            [<query source="{source_path}" param="value" />]
            [<context_menu run_invoke="{invoke_id}" param_name="{param_value}"/>]
            [<on_check run_invoke="{invoke_id}" param_name="{param_value}"/>]
            [<on_uncheck run_invoke="{invoke_id}" param_name="{param_value}" />]
            <level...
      </level>
      ....
    </tree>
</dataset>
```

                                :

- `<dataset > </dataset>` -   ,

  o name="   " –
- `<group > </group>` -   ,   1-..   ,   ,

  o comment="   2" –
- `<invoke > </invoke>` -   /   /..
  o id=*"treeRefresh"* – id
  o event_name=   (, control.events.TreeEvent)
  o type=   «local|global»,   «local»,
               ,   -   .
           «global» -
  o tooltip=*"   1"* – tooltip (   )

  o icon=*"{ICON_PATH}/tool1.png"* –   ({ICON_PATH}-
                                  http://site.com/...
  o `<var name="var4" value="4"/>`   `<invoke>`

    - `name="var4"` –
    - `value="4"` –   ,

    - `<tree > </tree>` –
  o toolbarStyle=*"toolbarStyle"* –
  o toolbarStyle=*"toolbarButtonStyle"* –
    - `<context_menu/>` -

  o `run_proc_name="tree_refresh"` –   ,
                     `<invoke>`
  o `var2="{table}"` -   ,
                         `<invoke>`;   {table}   –
                                                                          ,
               ,   «{table}».
                           ,

- `<level> </level>` -
  o `format="{          _          }      "` –
    {   _   } –
                             ,   {table}, +   ,
           ,   .
  o `levelParams="layerId=WEB_POI_POINT;eventName=MyEvent"`   –
                                            .
           layerId,   «;»
  o `icon="{          }"` –   ,

o "{OPENSCALE}" –   openscales,

o "{   _   }" –
            ,   .   {Style.icon}, {icon}

o "Public/assets/Catalog.png" -

o max_items="5" –   ,
                      ,

o checkbox_type="" –   checkbox.   – '' (
                                    ),'none' (   ), 'childBased' (
)

- <context_menu/> -

    o run_proc_name="tree_refresh" –   ,
                              <invoke>

    o var2="{table}" -   ,
                                        <invoke>;   {table} –
                                                                                      ,
                          ,   «{table}».
                                              ,

    !   <context_menu/>   ,   ,

- <on_check run_invoke="tool1" var2="3" /> -
                  ,   <context_menu/> ,

- <on_uncheck run_invoke="check" /> -   ,
                                   ,

- <query source="{   }" params... ></query> -
                                          <level>.
                        .

    o source –   ,   "TREE.xml#EXAMPLE_STYLE"

    o params –   ,   ,
        var1="11"
                        :

```xml
<?xml version="1.0" encoding="utf-8"?>
<dataset name="      /      ">
    <group comment="          " >
    <invoke id="gridTool" type="global" event_name="FULL_GRID_EVENT_ID"
            tooltip="                  "
            icon="Public/assets/GRID.png">
        <var name="gridId" value="DEFAULT_GRID"/>
    </invoke>
    <invoke id="gridTool1" type="global" event_name="createObject"
            tooltip="                  "
            icon="Public/assets/addObject.png">
        <var name="gridId" value="DEFAULT_GRID"/>
    </invoke>
    <invoke id="gridTool2" type="global" event_name="creasteObject"
            tooltip="                  "
            icon="Public/assets/addObject.png">
        <var name="gridId" value="DEFAULT_GRID"/>
    </invoke>
    <invoke id="checkBoxTool" type="global" event_name="checkBoxEvent"
            tooltip="    /              "
            >
```

```
          <var layerParams=""/>
       </invoke>
    </group>
        <tree            toolbarStyle="toolbarStyle"            toolbarButtonStyle="toolbarButtonStyle"
icon="Public/assets/root.ico" max_items="20">
             <level    format="{descr}"    icon="OPENSCALE"    levelParams="layerId=WEB50_POI_POINT"
layerId="WEB50_POI_POINT" max_items="20">
                  <query source="TREE_POI.xml#BASE_STYLE" TABLE_NAME="POI_POINT" >  </query>
                  <context_menu run_invoke="gridTool" gridId="{table}_LIST"/>
                  <context_menu run_invoke="gridTool1" gridId="{table}_LIST"/>
                  <on_check run_invoke="checkBoxTool" layerParams="layerId=WEB50_POI_TRACK;" />
                  <on_uncheck run_invoke="checkBoxTool" layerParams="layerId=WEB50_POI_TRACK;" />
             </level>
             <level    format="{descr}"    icon="OPENSCALE"    levelParams="layerId=WEB50_POI_TRACK"
layerId="WEB50_POI_TRACK" max_items="20">
                  <query source="TREE_POI.xml#BASE_STYLE" TABLE_NAME="POI_TRACK" >  </query>
                  <context_menu run_invoke="gridTool" gridId="{table}_LIST"/>
                  <context_menu run_invoke="gridTool1" gridId="{table}_LIST"/>
                  <on_check run_invoke="checkBoxTool" layerParams="layerId=WEB50_POI_TRACK;" />
                  <on_uncheck run_invoke="checkBoxTool" layerParams="layerId=WEB50_POI_TRACK;" />
             </level>
     </tree>
</dataset>
```

:

```
<?xml version="1.0" encoding="utf-8"?>
<dataset name="    " version="5.4.0.0">
  <group comment="      ">
    <invoke   id="showFilter"   type="global"   event_name="FULL_GRID_ROUGH_FILTER"   tooltip="
       (                 )" icon="Public/assets/GRID.png">
       <var name="gridId" value="DEFAULT_GRID" />
       <var name="requestId" value="PODS_DICT.xml#PODS_ILI_INSPECTION" />
       <var name="variableName" value="ILI_INSPECTION_ID" />
       <var name="winTitle" value="              " />
       <var name="maxRecords" value="5" />
    </invoke>
  </group>
  <tree max_items="20" toolbarStyle="toolbarStyle" toolbarButtonStyle="toolbarButtonStyle">
    <level         format="{descr}"        icon="OPENSCALE"         max_items="20"        checkbox_type=""
levelParams="layerId=PODS_ILI_DATA;">
      <query source="TREE.xml#BASE_STYLE" TABLE_NAME="ILI_DATA" FILE_NAME="PODS_INSP_STYLE.xml" />
      <context_menu run_invoke="showFilter" gridId="PODS_{table}_LIST" />
    </level>
  </tree>
</dataset>
```

```
     <var  name="gridId"  value="DEFAULT_GRID"  /> -


     <var  name="requestId"  value="PODS_DICT.xml#PODS_ILI_INSPECTION"  /> -


     <var  name="variableName"  value="ILI_INSPECTION_ID"  /> -              ,


     <var  name="winTitle"  value="              "  /> -


     <var  name="maxRecords"  value="5"  /> -


     <var  name="filter"  value="ILI_INSP_FILTER,PI_CP_INSP_FILTER,…"  /> -
        ,
                     value.

                ,
     :
```

```
<?xml version="1.0" encoding="utf-8"?>
<dataset name="    " version="5.4.0.0">
  <group comment="      ">
```

```
    <invoke        id="showFilter"        type="global"        event_name="FULL_GRID_ROUGH_FILTER"
tooltip="                  " icon="Public/assets/GRID.png">
        <var name="gridId" value="DEFAULT_GRID" />
        <var name="filter" value="ILI_INSP_FILTER" />
    </invoke>
  </group>
  <tree max_items="20" toolbarStyle="toolbarStyle" toolbarButtonStyle="toolbarButtonStyle">
    <level        format="{descr}"        icon="OPENSCALE"        max_items="20"        checkbox_type=""
levelParams="layerId=PODS_ILI_DATA;">
        <query                    source="TREE.xml#BASE_STYLE"                    TABLE_NAME="ILI_DATA"
FILE_NAME="PODS_INSP_STYLE.xml" />
        <context_menu run_invoke="showFilter" gridId="PODS_{table}_LIST" />
    </level>
  </tree>
</dataset>
```

2.3.2

use_exist_list.

.

true -   (LAYER_ID
)

:

```
    <level format="{descr}" icon="OPENSCALE" max_items="20" checkbox_type="none"
levelParams="layerId=PODS_INSP_Layers.xml#PODS_PI_CP_READING;">
        <query source="COMMON_TREE.xml#LAYER_STYLE_BASE"
LAYER_ID="PODS_PI_CP_READING" FILE_NAME="PODS_INSP_STYLE.xml" />
        <context_menu run_invoke="gridToolModule" use_exist_list="false" title="{descr}"
gridId="PODS_PI_CP_READING_LIST" />
```

2.4   *(LIST)*

:

[_____]

[_____]

[_____]

[_____]

[_____]

[_____ - _____]

[_____]

2.4.1

WebSite\Public\Modules\Grid

            xml.

:

```
    <grids:Grid                                                    xmlns:grids="ru.corelight.grids.*"
    xmlns:columns="ru.corelight.grids.columns.*"
xmlns:buttons="ru.corelight.grids.buttons.*"
xmlns:picPutton="ru.corelight.view.controls.*"
                percentWidth="100"
                id="POI_POINT_LIST"
                percentHeight="100"
                styleName="dgInfoForm"
```

```
                    propertyPanelName="WEB50_POI_POINT"
                    excelTemplateName="WEB50_POI_POINT_LIST"
                    dataRequest="POI_GRID.xml#WEB50_POI_POINT"
                    totalRecordsRequest="POI_GRID.xml#WEB50_POI_POINT_CNT">
<!--                           -->
     <grids:buttons>
                    <picPutton:GridButton source="../../Public/assets/filter.png"
                                          height = "16" width="16"
                                          tooltip="                            "
                                          clickEvent="gridFilterEvent"
                                          isEnabled="true">
                    </picPutton:GridButton >
     </grids:buttons>
     <grids:columns>
<!--                                                  -->
<columns:AllCheckBoxGridColumn  columnWidthMode="fixed"  width="15"  sortable="false"
selectedKeyField="ID"/>
     <!--          -->
     <columns:GridColumn    headerText="        "    width="200"    dataField="DESCR"
itemRenderer="ru.corelight.view.renderer.StringRenderer" filterComparisionType="string"
editable="false"
filterRenderer="ru.corelight.view.controls.dynamicFilter.MultiFilterControl"/>
     <!--       -->
     <columns:GridColumn    headerText    ="X"    dataField    ="X"    width="200"
filterComparisionType                                        ="number"
filterRenderer="ru.corelight.view.controls.dynamicFilter.MultiFilterControl"
itemRenderer="ru.corelight.view.renderer.NumberRenderer?format=3"/>
     <!--      -->
     <columns:GridColumn        headerText="TIME_STAMP"        dataField="TIME_STAMP"
filterComparisionType="date"
filterRenderer="ru.corelight.view.controls.dynamicFilter.MultiFilterControl"
itemRenderer=" ru.corelight.view.renderer.DateRenderer?format=DD.MM.YY JJ:NN:SS"/>
     <!--             ,   Oracle                 -->
     <columns:GridColumn       headerText="IS_PUBLIC"        dataField="IS_PUBLIC"
filterComparisionType="boolean"
filterControl="com.flexicious.controls.TriStateCheckBox"          itemRenderer="
ru.corelight.view.renderer.BooleanRenderer?eventType=events.ShowAlertEvent;eventDat
a={scale:2, title:'        '}}"/>
     <!--           -->
<columns:GridColumn     headerText="        "    width="100"    dataField="STATUS_ID"
sortField="STATUS_ID_LBL"
itemRenderer="ru.corelight.view.renderer.BufferRenderer?filterRequestId=POI_DICT.xml#WE
B50_B_STATUS_REF"                                  filterComparisionType="array"
filterRequestId="POI_DICT.xml#WEB50_B_STATUS_REF"                  editable="false"
filterRenderer="ru.corelight.view.controls.dynamicFilter.InListControl"/>
     <!--         -->
     <columns:GridColumn   headerText="ON_MAP"   dataField="ON_MAP"   itemRenderer="
ru.corelight.view.renderer.ButtonRenderer?propertyValue=true,
eventType=events.ShowAlertEvent;eventData={scale:2, title:'        '}}"/>
     <!--              -->
     <columns:GridColumn          headerText="LINK"                  itemRenderer="
ru.corelight.view.renderer.LinkRenderer?title=        ;
eventType=events.ShowAlertEvent;eventData={scale:2, title:'        '}}"/>
     <!--            -->
     <columns:GridColumn             headerText="IMAGE"              itemRenderer="
ru.corelight.view.renderer.ImageRenderer?propertyName='ON_MAP';
propertyValue=true;path=images/print.png;eventType=events.ShowAlertEvent;eventData
={scale:2, title:'        '}}"/>
<!--                          -->
< columns:GridColumn headerText ="" width="10" sortable="false"
itemRenderer="ru.corelight.view.renderer.ImageRenderer?path=Public/assets/showOnCa
s.png;eventName=showOnCASEHZEvent;task=cas_ehz_intens;toolTip=
         ;openNewWnd=true"
     <!—                                                     (              ,
              ) -->
```

```
<columns:GridColumn    headerText=""    width="0"    sortable="false"    editable="false"
columnWidthMode="percent"/>
  </grids:columns>
</grids:Grid >
```

2.4.2

<grids:Grid xmlns:grids="ru.corelight.grids.*" xmlns:columns="ru.corelight.grids.columns.*"–
,

:

enableFilters="true" –

enableCopy="true" –

enableFooters="false" –   footer

enablePaging="true" –

enablePrint="true" –

percentWidth="100" percentHeight="100" –   .
(,   width   height)

pagerPosition="bottomMiddle"   –

pageSize="50" –

initialSortField="ID" –

initialSortAscending="true"   –

footerRowHeight="60" –   footer

filterPageSortMode="server" –   (
)

pagerRenderer="view.controls.TablePagerControl" –   (
)

pagerRowHeight="50" –

allowMultipleSelection="true" –

styleName="dgInfoForm" –   ,

:

id="grid1" –   ,

percentWidth="100" percentHeight="100" –   .
(,   width   height)

propertyPanelName="WEB50_POI_POINT" –

excelTemplateName="WEB50_POI_POINT_LIST" –   excel

lockedColumnCount="6" –

2.4.3

,

,   ,

<grids:buttons>

<picPutton:GridButton

source="Public/assets/picture.png" -

tooltip="   " –

width="16" -

height="16" -

clickEvent="clickEventName" –   (

                       :   ,   ,..)

isEnabled="null|length|false|true" –   .

      null,length,

true|false –   /

null –

length –

selectedObjects="this" –

      .   ,   selectedObjects

>

</picPutton:GridButton>

2.4.4

<columns:GridColumn

headerText="   " –   (   )

dataField="NAME" –   (!)

filterComparisionType="string" –   (,
                  .   string|number|boolean|array|date)

filterRenderer="view.controls.dynamicFilter.MultiFilterControl"   –   ,
                (,   ,
view.controls.dynamicFilter.MultiFilterControl   ru.corelight.view.controls.dynamicFilter.InListControl –
)

itemRenderer="ru.corelight.view.renderer.StringRenderer" -   ,
               (,   .
ru.corelight.view.renderer.StringRenderer| ru.corelight.view.renderer.DateRenderer|
ru.corelight.view.renderer.NumberRenderer)

width="200" –

sortable="false"   –   . -   , true.
          false   ,

<columns:AllCheckBoxGridColumn

columnWidthMode="fixed" –

 width="15" sortable="false"

selectedKeyField="ID" –   ,

2.4.5

```
<columns:GridColumn                headerText="TIME_STAMP"              dataField="TIME_STAMP"
filterComparisionType="date"
filterRenderer="ru.corelight.view.controls.dynamicFilter.MultiFilterControl"
itemRenderer="ru.corelight.view.renderer.DateRenderer?format=DD.MM.YY JJ:NN:SS"/>
```

                                ,
     itemRenderer="ru.corelight.view.renderer.DateRenderer?format=DD.MM.YY JJ:NN:SS"

                                  .

2.4.6   -

```
<columns:GridColumn            headerText=""            width="10"            sortable="false"
itemRenderer="ru.corelight.view.renderer.ImageRenderer?path=Public/assets/exportGPX.png
;eventName=ru.corelight.business.events.ExportToGPXEvent;toolTip=            GPX"
editable="false"/>
```

headerText="" –

width="10" –

```
itemRenderer="ru.corelight.view.renderer.ImageRenderer?path=Public/assets/exportGPX.png
;eventName=ru.corelight.business.events.ExportToGPXEvent;toolTip=            GPX"   –
path=Public/assets/exportGPX.png  —                         ,
                                                ,                ;
```

2.4.7

```
<columns:GridColumn         headerText="         "          width="100"         dataField="STATUS_ID"
sortField="STATUS_ID_LBL"
itemRenderer="ru.corelight.view.renderer.BufferRenderer?filterRequestId=POI_DICT.xml#WE
B50_B_STATUS_REF"                                      filterComparisionType="array"
filterRequestId="POI_DICT.xml#WEB50_B_STATUS_REF"                       editable="false"
filterRenderer="ru.corelight.view.controls.dynamicFilter.InListControl"/>
itemRenderer="ru.corelight.view.renderer.BufferRenderer?filterRequestId=POI_DICT.xml#WE
B50_B_STATUS_REF":
```

filterRequestId=POI_DICT.xml#WEB50_B_STATUS_REF –
                              .   CODE, DESCR

filterRenderer="ru.corelight.view.controls.dynamicFilter.InListControl" –
   .   .

sortField="STATUS_ID_LBL" –
(,
)

                                          .

2.4.8

                              (itemRenderer="ru.corelight.view.renderer.NumberRenderer")
                        <colorValidation>,
                        .

*<colorValidation   mode="row|cell"   min="   _   "
max="   _   "   color="   (hex   RGB)"
critical="   _   " preload="true|false" type=" number|string " />*

                              <colorValidation>:
- mode –   .   "row" –
"cell" –
- min –   .
- max –   .
          «+/-infinity» -
- color –   .   RGB   .
                        https://www.colorschemer.com/color-picker/
- critical –   .   ,   .

- preload –   .   "true" –
                              ; "false" –
                  .   false.
- type –   .   : "string" –
                                          min   max; "number" –   .
          "number".

"min"   "max".

2.5

:

_____

_____ (ALL_PROP_LIST)

_____ (*.mxml)

2.5.1

1.   (
).
                                                    SYS_PROP.xml#PROP_LIST
   CLASS_ID={   _   }. {   _   }
                                                              <dataProvider   type="propertiesPanel"
   source="ALL_PROP_LIST.xml#{   _   }"/>.
                                        dataProvider'   propertiesPanel
                                                                                  .   :

```
<data id="PODS_ROUTE">
  <panel                     descr="          "                       source="PODS_ROUTE"
dataRequest="PODS_SEM.xml#PODS_ROUTE" default="true" order="1"/>
  <panel    descr="                     "    source="PODS_INTERNAL_COATING_ROUTE"
dataRequest="GAZPROM_SYS_SEM.xml#PODS_INTERNAL_COATING_ROUTE" order="2"/>
  <panel descr="             " source="PODS_COMMENTS" order="3"/>
</data>
```

              descr   ; source –   ;
   dataRequest –   ,
          (   ); default –   ,
                  (   ); order –   (,
                                ,   )
                                            (<data/>)
          ,   {   _
   }.mxml   .

2.   .   –   .
                                                    ,   .   ,
                                                    .

3.   (@default='true')
                     CLASS_ID   ID (   ), FILTER=" ID = {   _   }"

4.   ID,
   SYS_OBJ_ID={ID   }.

5.   ,
                                                                                      dataRequest,
                                                    .   .

6.   ,
                                        ,   (   )
          (–   ).
                                                    SYS_OBJ_ID={ID   }

2.5.2   (ALL_PROP_LIST)

WebSite\Core\Query\ALL_PORP_LIST.xml

.   ,   :

```xml
<data id="WEB50_POI_POINT">
      <panel descr="        " source="WEB50_POI_POINT"
dataRequest="POI_SEM.xml#WEB50_POI_POINT" default="true" order="1" />
      <panel descr="                  " source="WEB50_POI_COORD_POINT"
dataRequest="POI_SEM.xml#WEB50_POI_COORD_POINT" order="15" />
  </data>
```

«   »,   ,

«   »   ,

.

data   id –   .

panel:

   - **descr**   ;

   - **source** –   ;

   - **dataRequest** –   ,   ;

   - **default** –   ,   ,   (   );

   - **order** –   (,

,   )

2.5.3   ,   **web.config**

                        <clientSettings>   :

```xml
<!--                         ,                                 (    ,    ,
        ,      )-->
<!--                              Docs, Save, Undo, Delete, ExportGpx, ShowOnMap,
FindRoute, BufferCustom, ExportToExcel, Back, Forward -->
<!--                                                          -->
<add key="map_deny_prop_buttons" value="          _                _         " />
<!--                                           -->
<add key="cas_deny_prop_buttons" value="          _                _         " />
<!--                                                 -->
<add key="schema_deny_prop_buttons" value="          _                _         " />
<!--                                     -->
<add key="grid_deny_prop_buttons" value="          _                _         " />
```

,   «   _   _   »

1. Docs –
2. Save –
3. Undo –
4. Delete –
5. ExportGpx –   GPX/KML
6. ShowOnMap –
7. FindRoute –
8. BufferCustom –
9. ExportToExcel –   Excel
10. Back –
11. Forward –

       Web.config:

```xml
<?xml version="1.0" encoding="utf-8"?>
<configuration>
```

```
<!-- 7.7.3.0 -->
<configSections>
        <!--                                               .                        . -->
        <sectionGroup name="blowery.web">
                <section name="httpCompress" type="blowery.Web.HttpCompress.SectionHandler,
blowery.Web.HttpCompress"/>
        </sectionGroup>
<clientSettings>
<!--                     -                     -->
<add key="map_deny_prop_buttons" value="" />
<add key="cas_deny_prop_buttons"
value="Save,Undo,Delete,FindRoute,BufferCustom,Back,Forward" />
<add key="schema_deny_prop_buttons" value="FindRoute,BufferCustom,Delete" />
<add key="grid_deny_prop_buttons" value="FindRoute,BufferCustom" />
```

2.5.4   (*.mxml)

                              :

<u>   </u>

<u>   </u>

<u>   </u>

2.5.4.1

                                        WebSite\Public\Modules\Form\   .mxml

                              :

```
<DATA_EDIT_FORM              xmlns="view.data.*"           xmlns:controls="view.controls.*"
xmlns:mx=http://www.adobe.com/2006/mxml      title="                       "       width="760"
ext_data_id="POI_EXPORT.xml#POI_POINT" excelTemplate="POI_POINT">
  <mx:VBox width="760">
    <mx:HBox percentWidth="100">
…
    </mx:HBox>
  </mx:VBox>
  <validatorsArray>
    <controls:DefaultStringValidator  source="{MAIL}"  property="text"  enabled="false"
minLength="1" requiredFieldError="        '              '                              ."
tooShortError="        '                '                              ." />
…
  </validatorsArray>
</DATA_EDIT_FORM>
```

                                        DATA_EDIT_FORM
        DATA_GRID_FORM,   .
                        SYS_DOCUMENT_LIST.mxml,   ,
                        <select script> SYS_SEM.xml#DOCUMENT_LIST </selectScript>:

```
<DATA_GRID_FORM percentWidth="100" percentHeight="100" horizontalScrollPolicy="off"
verticalScrollPolicy="off"          xmlns="view.data.*"          xmlns:controls="view.controls.*"
xmlns:mx="http://www.adobe.com/2006/mxml">

    <DataGridWithScript     id="DATA_GRID"     percentWidth="100"     percentHeight="100"
styleName="dgInfoForm">

      <columns>

        <mx:DataGridColumn headerText="        /        " dataField="CTIME" />

        <mx:DataGridColumn headerText="       " dataField="USERNAME" />

        <mx:DataGridColumn headerText="            " dataField="CATEGORY" />

        <mx:DataGridColumn headerText="                    " dataField="DESCR" />
```

```
</columns>
<selectScript>SYS_SEM.xml#DOCUMENT_LIST</selectScript>
<insertScript>SYS_SEM.xml#DOCUMENT_LIST</insertScript>
<updateScript> UPDATE </updateScript>
<deleteScript>SYS_SEM.xml#DOCUMENT_LIST</deleteScript>
</DataGridWithScript>
</DATA_GRID_FORM>
```

:

width – .   ,
.

title –

ext_data_id –   Excel (   ).
.

excelTemplate –   Excel   .   .

readOnly (   ) –   ,
INSERT, UPDATE   DELETE

.

excelToolip (   ) –

.

:

<mx:VBox> -   .
.

<validatorsArray> -   :   ,   ,
,   , e-mail,   -   .

<insertIfEmpty>true< insertIfEmpty > (   ) –
                SELECT   (   ),
                            INSERT   UPDATE.   ,   ,
        ,   ,
        .

.

,   `<mx:VBox`
`width="760">.`

,   .

:

- **VBox** –   ,
        .
  (http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/containers/VBox.html)

- **HBox** –   ,
        .
  (http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/containers/HBox.html)

- **Text** –
  (http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/controls/Text.html)

- **TextInput** –
  (http://help.adobe.com/ru_RU/AS3LCR/Flash_10.0/fl/controls/TextInput.html)

- **NumberInput** –

- **ComboBox** –
  (http://help.adobe.com/ru_RU/AS3LCR/Flash_10.0/fl/controls/ComboBox.html) Button
  – (http://help.adobe.com/ru_RU/AS3LCR/Flash_10.0/fl/controls/Button.html)
  :

  1. , ComboBox.
  : <mx:Button id="BTN_LIST_LINE_ID"
  selectedField="PODS_LINE" enabled="false" styleName="refList" toolTip="
  " width="16" height="16"/>, id
  BTN_LIST_<id ComboBox'a >, selectedField
  , styleName="refList".

  .
  ComboBox ,
  (
).

  2. , ComboBox.
  : <mx:Button
  id="BUTTON_GROUND_BED_EVENT_ID" selectedField="PODS_GROUND_BED"
  enabled="false" styleName="refObject" toolTip=" ,
  " width="16" height="16"/>, id
  BUTTON_<id ComboBox'a >, selectedField
  , styleName=" refObject ".

  ,
  ComboBox'e.

  3. , IMG- , WRML-
  . : <mx:Button
  id="BTN_FILE_FILE_NAME" enabled="false" selectedField="WEB50_LIB_DOC"
  label=" " width="120" height="22" tabIndex="5"/>, id
  BTN_FILE_<id TextInput FileInput
  >, 3D- , IMG-
  DOC_VERSION_ID DOC_ID,
  DOC_TYPE_ID, (37 – 3D- , 38 –
  IMG- , 41 -). .
  , – .

- **DateField** –
  (http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/controls/Date
  Field.html)

- **CheckBox** –
  (http://help.adobe.com/ru_RU/AS3LCR/Flash_10.0/fl/controls/CheckBox.html)

- **FileInput** – <controls:FileInput id="FILE_NAME" width="225" height="20"
  fileFilterDescription=" " fileFilterExtension="*.*" uploadPath="LIB\"
  tabIndex="4"/> . TextInput
  . fileFilterExtension
  (, «*.*» - ,
  «*.png,*.jpg,*.bmp» -
) fileFilterDescription
  («*.*» « », «*.png,*.jpg,*.bmp»
  « »). uploadPath
  , web.config «DATA_PATH».

- xmlns:components="ru.corelight.view.components.*"
  FilterPopUpButton:

```
<components:FilterPopUpButton        width="100%"        height="22"        title="     "
id="LPU_ACCESS_FILTER"         dataProvider="PODS_POLICY.xml#PODS_LPU"
dataProviderAliases="PODS_SEM.xml#PODS_SRV_DISTRICT_GCL"
```

selectAllElements="false" minWidth="600" minCnt="0" maxCnt="10"/> -
. dataProvider
(comboBox'a),
dataProviderAliases   ,
,   ,
dataProvider.   **selectAllElements** –
.   **minWidth** –   ,
,
.   **minCnt** –
.

- maxCnt="10" –   .

2.5.4.2

.
.

:

- backgroundColor –
- color –
- fontFamily –
- fontSize –
- fontWeight –   (normal   **bold**)
- fontStyle –   (normal   *italic*)
- textDecoration –   (none   underline)
- borderColor –
- borderStyle –   ("none", "solid", "inset"   "outset")
- borderThickness –

2.5.4.3

:

DefaultStringValidator –

DefaultNumberValidator

DefaultEmailValidator

DefaultDateValidator

ComboBoxValidator

2.5.4.3.1 DefaultStringValidator –

,
.   :

http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/validators/StringValidator.html

defaultValue,
.

2.5.4.3.2 DefaultNumberValidator

,
. :

http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/validators/NumberValidator.html

defaultValue,
.

2.5.4.3.3 DefaultEmailValidator

, email
. :

http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/validators/EmailValidator.html

defaultValue,
.

2.5.4.3.4 DefaultDateValidator

,
. :

http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/validators/DateValidator.html

defaultValue,
.

2.5.4.3.5 ComboBoxValidator

,
: - /
.

http://help.adobe.com/ru_RU/FlashPlatform/reference/actionscript/3/mx/validators/Validator.html

:

- notAllowedValues – ,
;
- notAllowedError – , ,
, ;
- notDefaultError – , ,
.

2.6   (UITasks)

:

(B_ROLE_TO_TASKS)

2.6.1

.

panel, – functional.

URL , .

, , URL

.

.

<panel> <functional> :

id="MAIN_LIST" ( ).

percentWidth="100" ,

;

percentHeight="70" ,

;

reload="false" , ,

, .

<panel> <functional> <settings>,

(

).

:

<hbox percentWidth="100" percentHeight="100"/> -

. – , .

<vbox id="vBox" percentWidth="30" percentHeight="100">

. – ,

, .
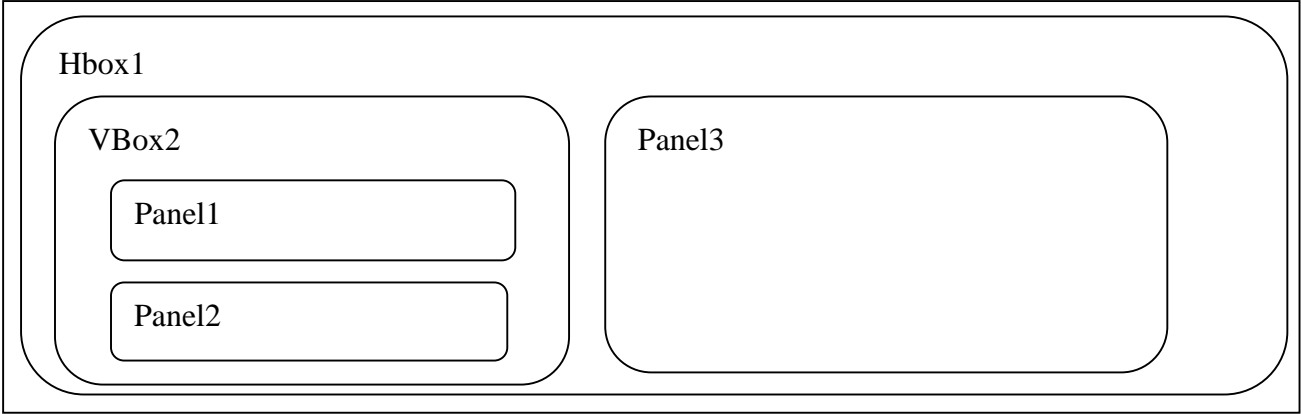
2.6.2 **(B_ROLE_TO_TASKS)**

.

(web50.b_user_public, web50.b_role).

, .

WebSite\Core\IUTasks\B_ROLE_TO_TASKS.xml.

, ,
.

:

```xml
<role id="1" name="USER">
  <tasks>
    <task name="MULT_MAIN" mdl="main_js.html" descr="     " order="1" type="" mask="8"/>
    <task name="MULT_MAIN_FLASH" mdl="Public/SWF/Map_55.swf" descr="      " order="5"
type="main" default="true"  />
    <task name="ADM_LIB_DOC" mdl="LIB_DOC" descr="               " order="6" type="main" />
    <task name="ILI_WIDGET" mdl="main_js.html" descr="      " order="2" type="" />
    <task name="MAIN_WIDGET" mdl="main_js.html" descr="      " order="3" type="" />
    <group descr="        " order="4">
      <task name="CMN_HELP" mdl="Public/Help/help_JS/index.html" descr="        _JS"
order="1" type="user" newWnd="true" auth="false" />
       <task name="CMN_HELP_F" mdl="Public/Help/help_flash/index.html" descr="        _Flash"
order="2" type="user" newWnd="true" auth="false" />
        <task name="CMN_HISTORY" mdl="Public/Help/History/index.html" descr="
      " order="3" type="user" newWnd="true" auth="false" />
       <task name="CMN_CONTACTS" mdl="Public/Help/CONTACTS/index.html" descr="          "
order="4" type="user" newWnd="true" auth="false" />
      </group>
      <task name="USER_OFFICE" descr="           " order="1001" type="user" />
     <task name="GRID" mdl="Public/SWF/Grid_55.swf" descr="       " order="10001" type="" />
     <task name="CAS" mdl="Public/SWF/Cas_55.swf" descr="              (FLASH)" order="10002"
type="" />
     <task name="CAS_JS" mdl="cas.html" descr="             (JS)" order="10002" type="" />
     <task name="VIDEOPLAYER_WIDGET" mdl="Public/SWF/VideoPlayer_55.swf" descr="            "
order="10003" type="" />
     <task name="EXPORT_GPX" mdl="Public/SWF/WidgetExportGPX_55.swf" descr="         GPX"
order="10004" type="" />
     <task name="EXPORT_IMG" mdl="Public/SWF/WidgetExportIMG_55.swf" descr="         IMG"
order="10005" type="" />
     <task name="EXPORT_WRL" mdl="Public/SWF/WidgetExportWRL_55.swf" descr="         WRL"
order="10006" type="" />
     <task name="EXPORT_EXCEL" mdl="Public/SWF/WidgetExportExcel_55.swf" descr="
Excel" order="10007" type="" />
  </tasks>
  </role>
<role id="1045" name="EDITOR">
…
  </role>
</data>
```

role   **id** (_____
)   **name** (,
).

                        role   tasks.
(task)   (group),   .
                                 :

      - **descr** –   ,
      - **order** –

                                          :

      - **name** –

      - **type** –   .   main –
      , user –   .

      - **mask** –   «   »
                      ,   ,
      .   —   ,   ,
                  .   ,

      - **mdl** –   ,

- **newWnd** –   ,   ,   .
            true   false.   - false
- **auth** –   ,   ,   hash
url   .   true   false.   - true

2.6.3

:

_____

_____

_____

HTML

_____

GPX

2.6.3.1

                             ,
                     xml-
           ,   ,   .
       ,   WMS.   .

:

```xml
<panel id="MAPSERVICE" percentWidth="100" percentHeight="70" reload="false">
    <settings>
        <layersUrl>baseLayers.xml</layersUrl> <!--                              -->
        <showPipeLineButton>true</showPipeLineButton>   <!--
                            -->
        <vectorEditing>true</vectorEditing> <!--
      -->
        <label text="                      " font="Times" font-size="12" left="" right="10"
top="" bottom="10" />
        <!--           ,                                         .png -->
          <hideButtons>ExportImage</hideButtons>
      <requestSource>SYS_SEM.xml</requestSource>
<!--                                           . true     false -->
    <add key="MAP_Lock_Redraw" value="false"/>
<!--                                       ,              -->
    <add key="MAP_Info_Radius" value="5"/>
<!--                                   ,      0     MAP_Num_Zoom_Levels -->
    <add key="MAP_Centering_Min_Zoom" value="18"/>
<!--                                       -->
    <add key="MAP_Matrix_DX" value="10"/>
    <!--                                        Y -->
    <add key="MAP_Matrix_DY" value="10"/>
<!--                              (         )                 (           ),
                  -->
    <add key="MAP_Label_Len_Ratio" value = "1.5"/>
<!--                                                                  -->
    <add key="MAP_Len_Ratio" value = "0.001"/>
<!--                                  -->
    <add key="MAP_Label_Font_Ratio" value = "0.7131"/>
    <!--                   ,
      -->
    <add key="MAP_Label_Repeat_Ratio" value = "0.8"/>
<!--                                      -->
    <add key="MAP_Label_Font_Ratio" value = "0.9"/>
<!--              ,
      -->
    <add key="MAP_Label_Repeat_Ratio" value = "0.8"/>
```

```xml
<!--                                                          (          ) -->
    <add key="MAP_Label_Cut_Tolerance" value = "15"/>
<!--                                       MAP_Label_Draw_Type="cut" -->
    <add key="MAP_Label_Cut_Ratio" value = "0.1"/>
<!--                                 (            ,             ) along, cut.
         "cut" -->
    <add key="MAP_Label_Draw_Type" value = "cut"/>
<!--          x,y                         (           ) -->
    <add key="MAP_Label_Offset" value = "0"/>
<!--                                            -->
    <add key="GPS_Track_Limit" value="500"/>
<!--                               ,                              GPX-      -->
    <add key="Table_Max_Export" value="1000"/>

                                                    ,

<!--                  (            ) -->
<add key="MAP_Legend_Width" value = "190"/>
<!--                                1-                             .
 . (                 ),                         GEO
       -->
<add key="MAP_First_Diagram_Offset" value = "7"/>
<!--                        ,                  ,                 .    . (
     ),                   GEO                                      -->
<add key="MAP_Diagram_Offset" value = "3"/>

    <Models>
<!-- canRaster -        ,                  ,
                        .-->
          <model  name="COSMETIC"  descr="                          "  onTaskChanged="delete"
onUserChanged="delete"/>   <!--               ,
               -->
    </Models>
<!--             -->
<overviewMap>
     <height>100</height><!--       -->
     <width>150</width><!--       -->
     <baseLayers>baseRasterLayers.xml</baseLayers><!--     ,
            .                1-                  -->
     <showOverviewMap>true</showOverviewMap><!--  true|false .      ,               ,
                               -->
</overviewMap>

<!--                               -->
    <isMaximaized>true</isMaximaized> <!--                             -->
<!--                 .                 : id -                         , default -      ,
                 -        , title -              (                 ),
topFilterId -                           (          ). -->
     <tree    id="PODS_EQUIP_LIST"    default="true"    title="                         "
topFilterId="lpuFilter">
          <templateUrl>Public/Modules/Tree/PODS_EQUIP_TREE.xml</templateUrl> <!--
                   -->
          <brokenImageSkin>Public/assets/NaN.png</brokenImageSkin>       <!--              ,
               ,                        ,            -->
          <iconWidth>16</iconWidth> <!--               ,           -->
          <iconHeight>16</iconHeight> <!--               ,           -->
     </tree>
     <tree    id="PODS_ILI_LIST"    default="true"    title="                  ,        "
topFilterId="iliFilter">
          <templateUrl>Public/Modules/Tree/PODS_ILI_TREE.xml</templateUrl>
          <brokenImageSkin>Public/assets/NaN.png</brokenImageSkin>
          <iconWidth>16</iconWidth>
          <iconHeight>16</iconHeight>
     </tree>
     <topFilter id="lpuFilter" dataSource="WEB50_TOP_FILTER"/> <!--
             . dataSource -              -->
     <topFilter id="iliFilter" dataSource="TOP_FILTER_ILI"/>
<!--                             -->
```

```xml
<!--                                    -->
    <requestTrackPoints>LIB_DOC_GEO.xml#LIB_DOC_GEO_VIDEO</requestTrackPoints> <!--
                        -->
    <title>                    </title> <!--                    -->
    <x>5</x> <!--                                              -->
    <y>540</y> <!--              y                      -->
    <width>300</width> <!--                              -->
    <height>200</height> <!--                          -->
    <enableEmbed>true</enableEmbed> <!--
(      false,                              )-->
    <displayLayer>COSMETIC_Layers.xml#LIB_DOC_GEO_VIDEO_OBJECT</displayLayer> <!--
              ,                              (                          )
-->
<!--                                    -->
    <position  x="30.3654628"  y="59.9"  zoom="10"/>  <!—
                -->
    <label   text="                       "  font=""  font-size=""  left="10"  right=""
top="10" bottom=""/> <!--                    ,          ,                      . Font –      ,
font-size-              ,              left, right, top, bottom –
                                    .                              2
                    \n (для xml - \n ; для json - \\n)   -->
  </settings>
</panel>
```

                ,   :
1.
2.   **showInfoEmptyMap**   *.json
                        showInfoEmptyMap:

1)   ,   ,

2)   -   :
```json
"_comment":"                        ",
 "ppanel":{
  "showSystemInfo":false,
  "_comment":"                                              ",
  "showInfoEmptyMap":false
 },
```
                        :
- true -   ,

- false -   .
                        ,   - true
                                    :

    : map_tech_schema_vtd.json, map_tech_schema.json, sto_shurf_schema.json, sto_forecast.json

                    OpenScale   /   :
```xml
<panel id="MAPSERVICE" percentWidth="100" percentHeight="70" reload="false">
    <settings>
        <layersUrl>baseLayers.xml</layersUrl> <!--                              -->
        <showPipeLineButton>true</showPipeLineButton>  <!--
                        -->
        <requestSource>SYS_SEM.xml</requestSource>
        <Models>
          <model  name="COSMETIC"  descr="                    "  onTaskChanged="delete"
onUserChanged="delete"/>
          <model name="POI" descr="                        " onUserChanged="delete"/>
        </Models>
     </settings>
   </panel>
```

«openLayers»

( )

«type»

.

- «top» - ,
- «middle» - (–
  « »)
- «top,middle» - ,

```xml
<startupScenario openLayers="          _       _1,        _        _2,...">
    <filter    type="top,middle"    topDataSource="          _       _       _       "
middleDataSource="           _        _        _            " />
<!—                                    <OpenTables> -->
    <openTables>
        <!—                                    .    <OpenTable> -->
        <!—            «title»
                   .    .                                                  -->
        <openTable            title="{descr}"            gridId="       _       _         "
levelParams="layerId=          _LAYERS_        #                       _       ">
                <query      source="COMMON_TREE.xml#LAYER_STYLE_BASE"      LAYER_ID="
         _         " FILE_NAME="        _          " />
        </openTable>
    </openTables>
</startupScenario>
```

" / "	EditGeometryChooser
	EditGeometryControl
	MoveGeometry
/	CopyPasteGeometry
	LinkGeometry
	AddObject
	MapLayers
" "	MeasureChooser
" "	ShareChooser
" , "	ExportImageChooser
	PrintImage
" "	MapViewChooser
	UserMenu
	MeasureLine
	MeasurePolygon
	PipeLength
	PipeDirection
	LinkMap
	SendMail
	ExportImage
	ClearCosmetic
	FullMap
	History
	History
(	BufferZoneAll
,)	
/	PrevSite
	ZoomSlider
	NavigateRoute

	MapCenterPoint
,	MapCentering
	MapInfo
" "	DSP
" "	OverviewMap
	FindRoute
	SearchAddress
	SearchOnMap

2.6.3.2

.

```
<panel        id="GRID"         url="Public/SWF/modules/WidgetGridM.swf"        percentWidth="50"
percentHeight="100">
          <settings>
            <rendererStyle>Public/css/default/gridStatus.css</rendererStyle>   <!--  css
                          -->
            <template>POI_POINT</template>
            <data source="POI_GRID.xml#POI_POINT"> <!--                             -->
             <params FILTER="ID = 2"/> <!--                                  -->
            </data>
          </settings>
        </panel>
```

2.6.3.3

.

```
<panel id="PROP" url="Public/SWF/modules/PropertiesM.swf" width="0" percentHeight="100">
          <settings>
            <title> </title>
            <width>790</width> <!-- ширина окна, опционально -->
            <height>250</height> <!-- высота окна, опционально  -->
            <dataSource>SYS_PROP.xml#PROP_LIST</dataSource>   <!--  id-запроса   на    получение
списка дополнительных вкладок  -->
          <add key="Show_System_Info" value="false" /> <!--флаг отображения системных полей-->
            <empty>false</empty> <!-- флаг отображения пустой формы для создания объекта   -->
            <template>POI_POINT</template>
            <data source="POI_SEM.xml#POI_POINT"> <!-- идентификатор запроса на данные -->
             <params FILTER="ID = 2"/> <!-- дополнительные параметры в запрос -->
            </data>
          </settings>
        </panel>
```

2.6.3.4   HTML(Flash)
```
<functional    id="SHOW_HELP"    url="Public/SWF/modules/Help_FM.swf"    percentWidth="0"
percentHeight="0">
    <settings>
      <navigateURL>Public/Help/index.html</navigateURL> <!--
url           -->
    </settings>
  </functional>
```

2.6.3.5   HTML(JS)

                          HTML   B_ROLE_TO_TASKS.xml
```
<task name="CMN_HELP" mdl="Public/Help/help_JS/index.html" descr="           _JS" order="1"
type="user" newWnd="true" auth="false" />
```
mdl -   url

2.6.3.6

```
<functional id="DOCUMENT_PREVIEW" url="Public/SWF/modules/DocumentPreview_M.swf"
reload='true' percentWidth='0' percentHeight='0'>
    <settings>
       <requestLibDoc>LIB_DOC_SEM.xml#LIB_DOC</requestLibDoc> <!--
                           -->
    </settings>
  </functional>
```

2.6.3.7   GPX

```
<functional  id="EXPORTGPX"  url="Public/SWF/modules/ExportGPX_FM.swf"  percentWidth="0"
percentHeight="0">
    <settings>
<!--                                                  -->
    <add key="GPS_Track_Limit" value="500"/>
<!--                                  ,                              GPX-      -->
    <add key="Table_Max_Export" value="1000"/>
    </settings>
  </functional>
```

2.7   (PRELOAD.xml)

,

.   ,   ,
.

,

WebSite\Core\Query\PRELOAD.xml

:

```
<root version="5.4.0.4">
  <data name="LPU_ACCESS_FILTER" provider="PODS_POLICY.xml#PODS_LPU" />
</root>
```

data   ,   . .   ,
.

data   :

name –   ,   ;

provider –   ,   .

,   ,
CODE
.   :
.

2.8 C   JS

2.8.1 C   JS

JS   (js   css   )
gulp   node.js
gulpfile.js.
build.bat

2.8.2

JS .

lang.js. , ,

,.. WebSite/ui/js/.

( ) WebSite/ui/build/js/

js .

: gis_ js_ = ' ';

var gis_postloader_1 = ' .';

, lang.js,

*.html WebSite/ui/html.

2.9

2.9.1 .

.

15 EmailChecker.exe.

. ,

. ,

,

.

( )

WebSite\Public\Data\ROSREESTR\COL_DICT.xml

WebSite\Public\Data\TAB\

. WebSite \Public\Data\UploadedFiles

, 2 .

( ) : " |12:02:17

06.03.17

c:\GIS_WEB60\\Log 2 :

- rosreestr.log
- rosreestr_session.log

2.9.2 .

, 6.1.0.0

, , C:\GIS_WEB60\Tasks\Rosreestr\:

check_email.bat
COL_DICT.xml
emailchecker.config
EmailChecker.exe
EmailChecker.pdb
EmailChecker.vshost.exe
EmailChecker.vshost.exe.manifest
FlexCel.dll
Newtonsoft.Json.dll
rosreestr.xls

EmailChecker.exe -
rosreestr.xls -
Newtonsoft.Json.dll - JSON
FlexCel.dll - excel
check_email.bat - :
 - "c:\GIS_WEB60\" -
 - "http://127.0.0.1/web55/servertaskservice.asmx/SendMailWithAttachment?" -

1)   15   .
                    check_email.bat

2)   emailchecker.config   ,

3)
            web.config
                   baseLayers.xml

2.9.3   emailchecker.config

```
<!--                                . -->
<add key="Send_Mail_Service_Url"
value="http://127.0.0.1/web55/servertaskservice.asmx/SendMailWith2Attachments?" />
<!--                        . -->
<add key="App_Path" value="c:\GIS_WEB60\" />
<!--                                . -->
<add key="Data_Path" value="Public\Data\" />
<!--          pop3                                                -->
<add key="ROSREESTR_POP3_Server" value=" " />
<!--                        ,                            -->
<add key="ROSREESTR_POP3_Login" value=" " />
<!--                        ,                              -->
<add key="ROSREESTR_POP3_Pass" value=" " />
<!--                                            -->
<add key="ROSREESTR_OBJECTS_LIMIT" value="2" />
<!--                                                (                              )
                                    ROSREESTR_Error_Message,      --
>
<add key="ROSREESTR_TEST_REQUEST_TIMEOUT" value="15000" />
<!--                                    ,                                    -
                    (            )-->
<add key="ROSREESTR_Interval" value="15" />
<!--                                                        -->
<add key="ROSREESTR_Test_Url" value="http://pkk5.rosreestr.ru/api/features/1" />
<!--              -                                            -->
<add key="ROSREESTR_Proxy_Url" value="https://proxy.anonymster.com/browse.php?u=" />
<!--                                    -->
<add key="ROSREESTR_Callback_Title" value="                              {0} " />
<add key="ROSREESTR_Callback_Message" value="                  {0},
                            " />
<add key="ROSREESTR_Error_Message" value="
                    .                                                              ." />
```

2.10 /

(,)

, .NET Framework
4.0

dotNetFx40_Full_x86_x64.exe

2.10.1

!

.

TilesCleanerTool.exe delete -q "   _ _   "   _   _
delete
-q   ,   "[y/n]"

   _ _   ,
      _   (   ),
         _   ,

TilesCleanerTool.exe delete -q "e:\Mapnik\17\" 1710 .png
TilesCleanerTool.exe delete "e:\Mapnik\17\" 1710 .png

.

TilesCleanerTool.exe merge -q "   _ _   1" "   _ _   2"
merge
-q   ,   "[y/n]"

   _ _   1   ,   "   _ _   2"
   _ _   2

TilesCleanerTool.exe merge -q "e:\Mapnik\17\" "e:\MapnikNew\17\"
TilesCleanerTool.exe merge "e:\Mapnik\17\" "e:\MapnikNew\17\"

2.10.2   .   100

2.10.3

               :
)   17(1 500 000   ) - 900 000   8
                        :
)

300 000   - 22
1 500 000   -   110
)   :
20 000   - 2
140 000   - 20
320 000   - 41
1 500 000 -   150-220

2.11   ,

:

-

URL:

```
const FORM_GEOINF = 'main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1';
const FORM_EXPIMG = 'main.html?task=EXPORT_IMG&mdl=Public/SWF/WidgetExportIMG_55.swf';
const FORM_EXPWRL = 'main.html?task=EXPORT_WRL&mdl=Public/SWF/WidgetExportWRL_55.swf';
const FORM_CAS = 'cas_js.html?task=CAS_JS&mdl=cas_js.html&w=1';
const FORM_MAPSPB = 'main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&ll=30.2882,59.938&z=12';
const FORM_TRCLTG = 'main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&ll=28.8912,58.206&z=6';
const FORM_REPVTD = 'main.html?task=ILI_WIDGET&mdl=main_js.html&w=1';
const FORM_MAPAERO = 'main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&mapId=AeroPhoto';
```

C#   -   WebBrowser,
.Navigate(new Uri(configText.Text)).   javascipt-
.

-        .   C#-   javascript c
: webBrowser1.Document.InvokeScript(functionName,
paramsArr);

C#-   javascript   :

window.external.SomeMethod('Hello');

(   ):
webBrowser1.Document.InvokeScript("findExternalObject", ["ASMO"," 17716223985201"]);
id.

javascipt-

.   .

.   1.2.2.1 «   ».

2.11.1

:   ,   ,

2.11.1.1

:
-
-                    window.external.taskReady('mapReady', true)
-                    js-   webBrowser1.Document.InvokeScript("findExternalObject",
["ASMO","17716223985201"]);
:
-                              (, FORM_GEOINF)
...main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&**func=findExternalObject&systemId=A
SMO&objectId=17716223985201**

2.11.1.2   ,   ,

:
-
-                    window.external.taskReady('mapReady', true)

- js- webBrowser1.Document.InvokeScript("findExternalObject", ["ASMO","17716223985201"]);

:

- (, FORM_GEOINF)

...main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&**func=findExternalObject&systemId=ASMO&objectId=17716223985201&beginKm=177.4&endKm=803&lineId=17716223985222&needBind=true**

2.11.1.3 , ,

:

-

- window.external.taskReady('mapReady', true)

- js- webBrowser1.Document.InvokeScript("findExternalObject", ["ASMO","17716223985201"]);

:

- (, FORM_GEOINF)

...main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&**func=findExternalObject&systemId=ASMO&objectId=17716223985201&needBind=true**

2.11.2

2.11.2.1

:

-

- window.external.taskReady('mapReady', true)

- js- webBrowser1.Document.InvokeScript("findExternalPipeKm", ["ASMO"," 18002106738001"," 177.4"]);

:

- (, FORM_GEOINF)

...main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&**func=findExternalPipeKm&systemId=ASMO&lineId= 18002106738001&beginKm=177.4**

2.11.2.2

:

-

- window.external.taskReady('mapReady', true)

- js- webBrowser1.Document.InvokeScript("findExternalPipePart", ["ASMO"," 18002106738001"," 177.4","803"]);

:

- (, FORM_GEOINF)

...main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1&**func=findExternalPipePart&systemId=ASMO&lineId=18002106738001&beginKm=177.4&endKm=803**

2.11.3

: .

:

-

- window.external.taskReady('mapReady', true)

- js- webBrowser1.Document.InvokeScript("refreshLayer", ["PODS_ILI_DATA","<data SYSTEM_ID="ASMO" OBJ_ID="90401210643975" TOP_FILTER="ILI_INSP_FILTER"/>"]);

:

- (, FORM_REPVTD)

...main.html?task=ILI_WIDGET&mdl=main_js.html&w=1&**func=refreshLayer&systemId=ASMO&objectId=90401210643975&layerName=PODS_ILI_DATA&topFilter=ILI_INSP_FILTER**

2.11.4 **docId** **videoUrl**

:

-

- window.external.taskReady('mapReady', true)

- js- webBrowser1.Document.InvokeScript("showVideo", ["671012","rtmp://hq-gis-1/vod/mp4: .mp4","101", " ", "11111"]);

:

- (, FORM_GEOINF)

...main.html?task=MAIN_WIDGET&mdl=main_js.html&w=1**&func=showVideo&docId=671012&videoUrl='rtmp://hq-gis-1/vod/mp4: .mp4'&videoName=' '&lineId=11111**

2.12

2.12.1

1)
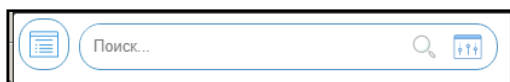
2)
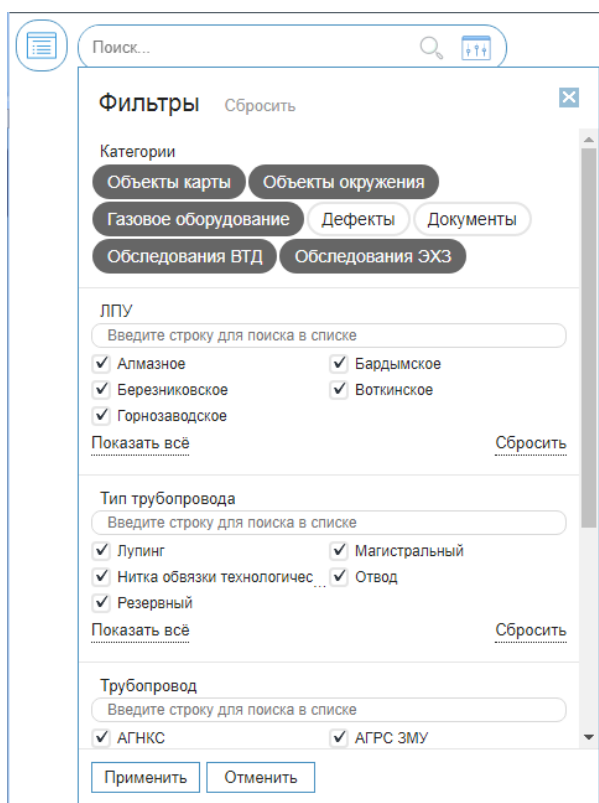
2.12.2 :

1) /home/websys53/gis_web77/website/Core/Query/search_engine.xml.

web50.search_idx_common, web50.search_idx_gas

2) /home/websys53/gis_web77/website/Core/UITasks/mult_main.json

.

01.02.21:

2.1   "search_engine":

```
"search_engine":{ //
  "show": true, //
  "input": {},//
  "results": 20, //
  "sorting": "asc", //                    (                    )
  "requests:[], //
  "filters":[], //                    .
  "templates": {} //                                    .

}
```

2.2   "input".

               CSS

```
  "input": {
    "width":"179px" //
  }
```

2.2   "requests   ".

       _   #   _   :

```
  "requests":["search_engine.xml#search_idx_common", "search_engine.xml#search_idx_gas"]
```

2.3   "templates"

         .

```
"templates": //
 {
   "TEMPLATE_NAME": { //                     –                     CATEGORY_ID

     "html": "                 ",
     "icon": "                   ",
     "title": "                       ", //
     "priority": 0 //                             .                    ,
     "scenario": {} //
   },
```

2.3.1   "scenario".

       .   .

```
"scenario": { //
     "openLayers":[], //
     "filter": {
     "type": "top|middle", //
     "topDataSource":"                              ",   //
                       mxml
     "middleDataSource":  "                                "//
                       mxml
   },
     "openTables":[]//                          ,
 }
```

2.4   "filters".   ,   .

```
"filters":[ //                    .
  {
  "id": "                       ",
  "title": "                   ",
  "type": "boolean|enum|plain|bounds|date", //
  "fieldName":  "                     ",  //             boolean.                    ,
```

boolean -   (/   /   ).
date -   .   ,   ,   .
      –   (01.01.1900   01.01.2100) .
   .   4.

<u>enum</u> -   с   .
                                                    IN   sql-
<u>bounds</u> -   XMIN, XMAX, YMIN, YMAX
<u>plain</u> -   ,   .   to_tsvector
   "values":[] //
   "source": "   "   //   (type="enum")

}
2.4.1   "values".   ,   type="boolean".
                    :
   {
    "id": "   ",
    "name": "   ",
    "selected": true|false, //   .
<u>true</u> –
<u>false</u> –
                            true
    "disabled": true|false //   .
<u>true</u> –
<u>false</u> –
                            false
   }

01.02.21:
```
"search_engine":{
 "show": true,
 "input": {
  "width":"179px"
 },
 "results": 20,
 "sorting": "asc",
 "requests":["search_engine.xml#search_idx_gas", "search_engine.xml#search_idx_common"],
 "filters":[
  {
  "id": "categories",
  "name": "            ",
  "type": "boolean",
  "values":[
   {
    "id": "MAP",
    "name": "                ",
    "selected": true,
    "disabled": false
   },
   {
    "id": "GAS",
    "name": "                ",
    "selected": true,
    "disabled": false
   },
   {
    "id": "EQUIPMENT",
    "name": "                ",
    "selected": true,
    "disabled": false
   },
   {
    "id": "INSPECTION",
```

```json
      "name": "              ",
      "selected": true,
      "disabled": false
    },
    {
      "id": "DOCUMENT",
      "name": "              ",
      "selected": false,
      "disabled": false
    },
    {
      "id": "ILI_INSP",
      "name": "                    ",
      "selected": true,
      "disabled": false
    },
    {
      "id": "CP_INSP",
      "name": "                  ",
      "selected": true,
      "disabled": false
    }
  ]
},
{
  "id": "top_filter_id",
  "disabled": false,
  "name": "                    ",
  "type": "enum",
  "source": "search_engine_filter.json"
}
],
"templates":
{
  "NOT_FOUND": {
    "html": "ui/html/templates/NotFoundSearchSnippetTemplate.html",
    "title": "            '          '"
  },
  "COORDS": {
    "html": "ui/html/templates/CoordsSearchSnippetTemplate.html",
    "icon": "/ui/images/sight.png",
    "title": "          '            '",
    "priority": 0
  },
  "MAP": {
    "html": "ui/html/templates/MapSearchSnippetTemplate.html",
    "icon": "/ui/images/map.png",
    "title": "          '              '",
    "priority": 7
  },
  "GAS": {
    "html": "ui/html/templates/GasSearchSnippetTemplate.html",
    "icon": "/ui/images/gas.png",
    "title": "          '                '",
    "priority": 5
  },
  "EQUIPMENT": {
    "html": "ui/html/templates/EquipmentSearchSnippetTemplate.html",
```

```
    "icon": "/ui/images/equipment.png",
    "title": "                    '                                  '",
    "priority": 4
},
"INSPECTION": {
    "html": "ui/html/templates/InspectionSearchSnippetTemplate.html",
    "icon": "/ui/images/equipment.png",
    "title": "                '              '",
    "priority": 6
},
"DOCUMENT": {
    "html": "ui/html/templates/DocumentSearchSnippetTemplate.html",
    "icon": "/ui/images/document.png",
    "title": "              '              '",
    "priority": 1
},
"ILI_INSP": {
    "html": "ui/html/templates/IliSearchSnippetTemplate.html",
    "icon": "/ui/images/ili_insp.png",
    "title": "              '                          '",
    "priority": 2,
    "scenario": { //
        "openLayers":["PODS_ILI_DATA", "PODS_ILI_DATA_FEATURE"],
        "filter": {
        "type": "top",
        "topDataSource":"TOP_FILTER_ILI",
        "middleDataSource": "middle_ili_filter"
    },
    "openTables":[
        {
        "title": "                .              ",
        "gridId": "PODS_ILI_DATA_LIST",
        "levelParams": "layerId=PODS_INSP_Layers.xml#PODS_ILI_DATA;"
        },
        {
        "title": "                .                      ",
        "gridId": "PODS_ILI_DATA_FEATURE_LIST",
        "levelParams": "layerId=PODS_INSP_Layers.xml#PODS_ILI_DATA_FEATURE;"
        }
    ]
    }
},
"CP_INSP": {
    "html": "ui/html/templates/CpSearchSnippetTemplate.html",
    "icon": "/ui/images/cp_insp.png",
    "title": "              '                      '",
    "priority": 3,
    "scenario": {}
},
"GRID": {
    "html": "ui/html/templates/GridSearchSnippetTemplate.html",
    "icon": "/ui/images/document.png",
    "title": "              'GRID'",
    "priority": 100
},
"default": {
    "html": "ui/html/templates/DefaultSearchSnippetTemplate.html",
    "icon": "/ui/images/default.png",
```

```
        "title": "                   'DEFAULT'"
      }
    }
  }
```

3)   (   )
    /home/websys53/gis_web77/website/Public/Modules/Form/search_engine_filter.json

3.1
```
{
  "code": 200, //
  "filters": [] //
}
```
3.1.1   "filters".   :
```
{
    "id":"                              ",
    "title":"                      ",
    "type": "bounds|plain|enum", //                .   .                        2.4
    "dataProvider":"        _             #                       _           ",  //

    "selectAllElements":true|false, //
    "mixCnt":-1,//                                                      .  -1  -
          .                         «-1»
    "maxCnt":-1,//                                                      .  -1  -
          .                         «-1»
    "columns":1|2, //                                    : 1      2
    "staticValues":[]//
}
```

3.1.1.1   "staticValues" .
              :
```
{
    "code": "      ", //
    "descr": "                " //        ,
}
```

```
{
  "code": 200,
  "filters": [
    {
      "id":"LPU_ACCESS_FILTER",
      "title":"        ",
      "type": "bounds",
      "dataProvider":"PODS_POLICY.xml#PODS_LPU",
      "selectAllElements":true,
      "mixCnt":-1,
      "maxCnt":-1,
      "columns":2,
      "staticValues":[
        {
          "code": "-1",
          "descr": "             "
        }
      ]
    },
    {
```

```
    "id":"LINE_ID_FILTER",
    "title":"                ",
    "type": "enum", //                                        ,                        IN
    "dataProvider":"PODS_POLICY.xml#PODS_LINE_ID",
    "selectAllElements":true,
    "mixCnt":-1,
    "maxCnt":-1,
    "columns":2
  },
  {
    "id":"ILI_INSP_FILTER",
    "title":"                    ",
    "type": "plain",
    "dataProvider":"PODS_SEM_DICT.xml#PODS_ILI_INSPECTION",
    "selectAllElements":false,
    "mixCnt":0,
    "maxCnt":10,
    "columns":1
  }
 ]
```

4)   :

05.07.21:

```
{
    "id": "                    _        ", //
    "title": "                    ", //
    "type": "date",  //
    "beginDateField": "                                ",  //
    ,
    "endDateField": "                            " //                                             ,

},
```

05.07.21:

```
{
    "id": "search_date_filter",
    "title": "                    ",
    "type": "date",
    "beginDateField": "BEGIN_DATE",
    "endDateField": "END_DATE"
},
```

5)

html   ,
.

«   .   .xlsx»

/home/websys53/gis_web77/website/ui/html/search
    01.02.21   7   ("MAP", "GAS", "EQUIPMENT", "INSPECTION",
"DOCUMENT", "ILI_INSP", "CP_INSP")   2   ("NOT_FOUND", "COORDS").

html
        :

```
<div id="searchId_{postId}" class="se-template-category-wrapper">
   <div class="se-template-category__body">
      <div class="se-template-category__header">
         <div class="se-template-category__favicon" style="background: url(/ui/images/map.png) center no-repeat" />
         <a href="#" onclick="SearchEngineViewForm.showOnMap('{owner}_{tableName}:{keyValue}','{categoryId}');return false;">
            <div class="se-template-category__title" title="{title}">{title}</div>
         </a>
      </div>
      <div class="se-template-category__content">{content}</div>
   </div>
</div>
```