Digifort – Interface ActiveX

ActiveX Controls Interface for simple HTML page integration

For Digifort 7.1.0.0

This document presents information about implementation of ActiveX controls in an HTML page.

Digifort makes it possible for the user to create his own Internet page or incorporate the visualization of cameras in his softwares. For this purpose, there are two plugins which communicate with the Digifort server, the live visualization plugin and the video playback plugin.

These plugins are available in all versions of Digifort, with exception of Explorer.

The technology used for the development of these plugins is based on the ActiveX controls, property of Microsoft. For this reason, these plugins may be incorporated only into Internet pages which are displayed by Microsoft Internet Explorer or built into softwares on the Windows platform.

This document has the purpose of specifying the commands which are necessary for incorporating the plugins only into Internet pages and it is not our responsibility to describe the necessary tools or methods for development or the the mode in which they are incorporated. The incorporation of the plugins in softwares depends on the development tools to be used.

For a thorough understanding of the functions presented here, we request that you consult Digifort's Surveillance Client and Administration Client Manuals.

Live Visualization Control

To incorporate the live visualization control, use the base code shown below.

```
<script language="javascript">
document.write('<DEFINITION OF THE PLUGIN>');
document.write('<PROPERTIES>');
document.write('<ERROR MESSAGE>');
document.write('</object>');
</script>
```

Definition of the Plugin

In this section, we inform the data of the plugin:

Syntax:

```
<object classid="clsid: D161F057-0007-0001-0000-AC714E603001" codebase="XDigiLive.OCX"
width=780 height=600 align=center hspace=0 vspace=0>
```

Description of the parameters:

Only the parameters described below may be customized:

- **Width:** Desired width of the plugin
- **Height:** Desired height of the plugin
- **Align:** Alignment of the plugin
- **Hspace:** Horizontal spacing
- **Vspace:** Vertical spacing

Properties

The properties affect the manner in which the visualization plugin will be displayed on the screen and how it will behave. The properties must be defined in the section "Properties" of the code in the above example, and can be used in any order or combination.

Syntax:

```
<param name="ParamName" value="ParamValue">
```

- **ParamName**: Name of the parameter

- **ParamValue**: Value of the parameter

See the following properites that can be used.

Error Message

Here you insert the HTML code with the error message to be displayed when the plugin has not yet been installed.

Error Message

ConnectionString

The visualization plugin can connect to several servers simultaneously, displaying the cameras of all servers in a transparent manner. This parameter must be used to inform the plugin to which servers it is to connect.

Syntax:

```
<param name="ConnectionString" value="ServerData1;[n...;]">
```

ServerData1:

```
NA:Name,AD:Address,PO:Port,US:Username,PW:Password,CM:MODE
```

- **NA:** Server name
- **AD:** Server address
- **PO:** Server port
- **US:** User Name in BASE64
- **PW:** User password in BASE64
- **CM:** Connection mode:
  - o 1: Internal connection (local networks)
  - o 2: External connection (external networks, for example internet)

Example of use:

```
<param name="ConnectionString" value="NA:Digifort
Server,AD:192.168.10.12,PO:8600,US:YWRtaW4=,PW:S7sdHsd=,CM:2;
NA:Entrance,AD:192.168.10.45,PO:8600,US:YWRtaW4=,PW:Yhsd8s7==,CM:1;">
```

In the above example, we are connecting into two servers, as shown in the table below:

Parameters	Server 1	Server 2
Name	Digifort Server	Entrance
IP	192.168.10.12	192.168.10.45
Port	8600	8600
User	YWRtaW4=,	YWRtaW4=,
Password	S7sdHsd=	Yhsd8s7==
Connection Method	2	1

Language

The Plugin offers two language options: English and Portuguese. Use this command to inform which language will be displayed.

Syntax:

```
<param name="Language" value="1">
```

Description of the parameters:

- **1**: Portuguese
- **2:** English

HideControls

Use this comand to hide or display the plugin controls. With the controls hidden, the user cannot carry out any operation in the system, being able only to visualize the images.

With controls	Without controls

Syntax:

```
<param name="HideControls" value="1">
```
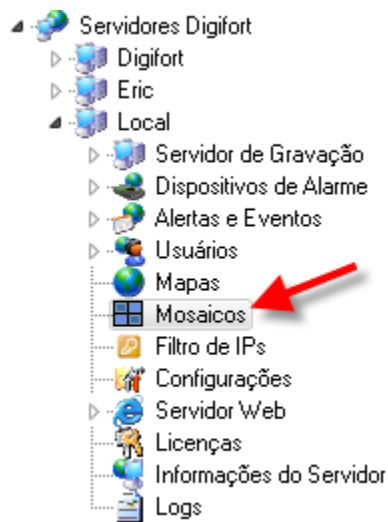
Description of the parameters:

- **0:** Display the controls
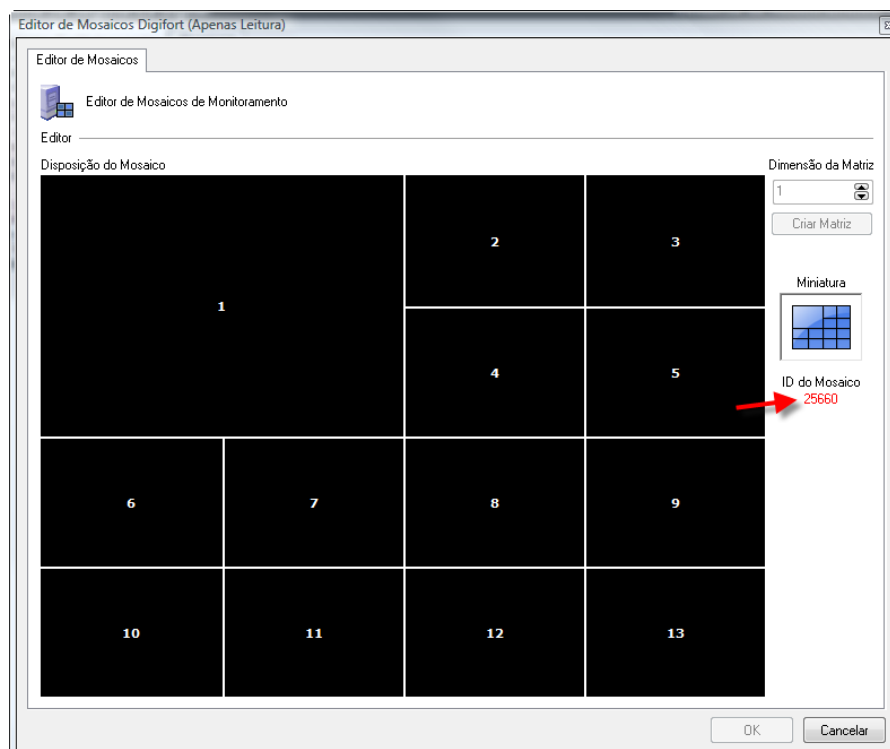- **1**: Hide the controls
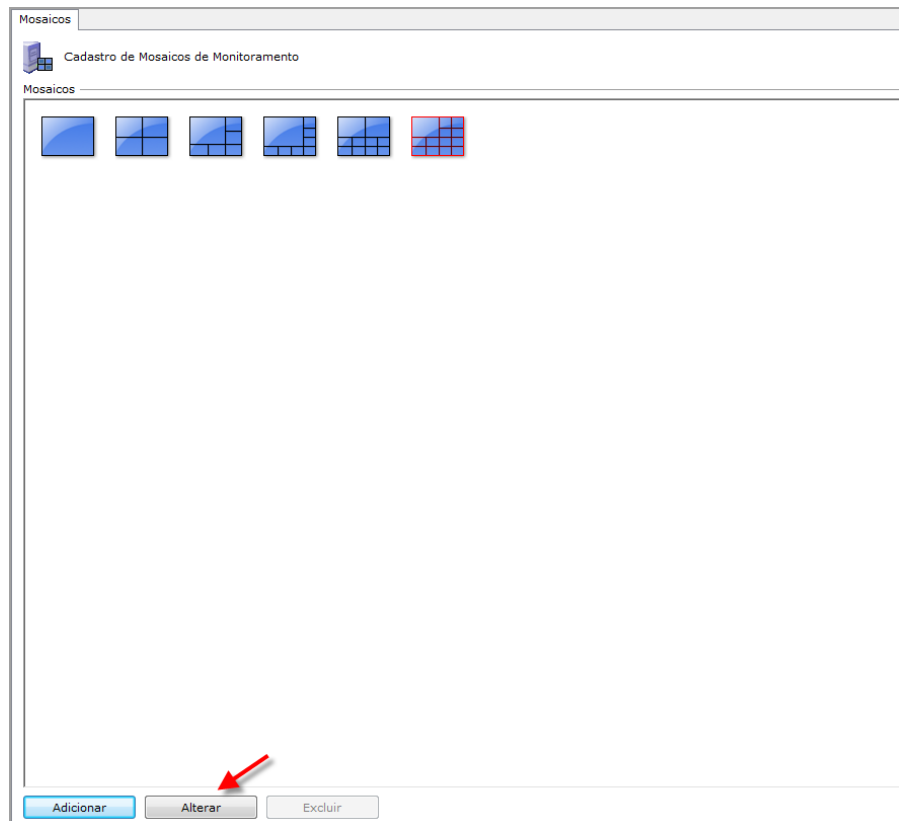
AutoLoadScreenStyleID

Use this parameter to inform which screenstyle will automatically be displayed when the plugin is displayed on the screen.

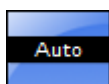This parameter must be used together with the parameters *AutoLoadObjectType* and *AutoLoadObjectID.*

In the Professional and Enterprise versions of Digifort, it's possible to create new screenstyles via the Administration Client. To recover the screenstyle ID, double-click on the desired screenstyle, as shown in the figures below:

In the Standard version only the standard screenstyles may be used, according to the table below:

    Automatic screenstyle – ID: 0

Sequencing screenstyle – ID: 1

1 camera - ID: 1399

4 cameras - ID: 6278

6 cameras -ID: 9983

8 cameras - ID: 13538

10 cameras - ID: 18393

13 cameras -ID: 25660

Syntax:

```
<param name="AutoLoadScreenStyleID" value="1399">
```

Description of the parameters:

Value: Screenstyle ID.

AutoLoadObjectType

Use this parameter to inform the type of object to be loaded automatically into the informed screenstyle.

This parameter must be used only when you wish to display only one camera or map in the screen and must be together with the parameters *AutoLoadScreenStyleID* and *AutoLoadObjectID.*

Syntax:

```
<param name="AutoLoadObjectType" value="0">
```

Description of the parameters:

- **0**: Live camera
- **2**: Map

AutoLoadObjectID

Use this parameter to inform the name of the object to be loaded automatically.

If you wish to display only one camera or map on the screen, this parameter must be used together with the parameters *AutoLoadScreenStyleID* and *AutoLoadObjectType* .

If you wish to display a screenstyle on the screen, this parameter must be used together with the parameter *AutoLoadScreenStyleID*.

Syntax:

```
<param name="AutoLoadObjectID" value="NA:Entrance,SV:Digifort Server">
```

Description of the parameters:

If the object to be loaded is a screenstyle, the value may be only the name of the screenstyle.

If the object to be loaded is a camera or map, the value must obey the syntax below:

```
NA:ObjectName,SV:ServerName
```

- **NA:** Name of the camera or object to be loaded
- **SV:** Name of the server to which the object belongs. This name is defined in the parameter *ConnectionString*.

Examples of use

Display automatically one camera on the screen

```
<script language="javascript">
document.write('<object classid="clsid:3867152B-383F-47C6-9628-
91C8B013A54E" codebase="XDigiLive.OCX#6,0,0,0" width=780 height=600
align=center hspace=0 vspace=0>');
document.write('<param name="ConnectionString" value="NA:Digifort
Server,AD:192.168.10.12,PO:8600,US:YWRtaW4=,PW:S7sdHsd=,CM:1;');
document.write('<param name="AutoLoadScreenStyleID" value="1399">');
document.write('<param name="AutoLoadObjectType" value="0">');
document.write('<param name="AutoLoadObjectID"
value="NA:Entrance,SV:Digifort Server">');
document.write('Os controles ActiveX não foram instalados.');
document.write('</object>');
</script>
```

Display automatically a screenstyle on the screen

```
<script language="javascript">
document.write('<object classid="clsid:3867152B-383F-47C6-9628-
91C8B013A54E" codebase="XDigiLive.OCX#6,0,0,0" width=780 height=600
align=center hspace=0 vspace=0>');
document.write('<param name="ConnectionString" value="NA:Digifort
Server,AD:192.168.10.12,PO:8600,US:YWRtaW4=,PW:S7sdHsd=,CM:1;');
document.write('<param name="AutoLoadScreenStyleID" value="6278">');
document.write('<param name="AutoLoadObjectID" value="Quad">');
document.write('Os controles ActiveX não foram instalados.');
document.write('</object>');
</script>
```

ConfigGeneralRememberLastSelection

Use this parameter to make the plugin display the last selected camera or screenstyle when opened.

This parameter only works the auto-load parameter is not specified.

Syntax:

```
<param name="ConfigGeneralRememberLastSelection" value="1">
```

Description of the parameters:

- **0**: Do not automatically load the last selected camera or screenstyle
- **1**: Automatically load the last selected camera or screenstyle

ConfigGeneralLocalRecordingDirectory

Use this parameter to inform the location where local recorded images will be stored. If this parameter is not informed, the plugin will use the default directory which is the directory where the plugin file (XDigiLive.ocx) is found.

Syntax:

```
<param name="ConfigGeneralRememberLastSelection" value="C:\Tmp\Recordings">
```

Description of the parameters:

Value: Storage directory of the local recording.

ConfigSurveillanceShowDescription

Use this parameter to inform the plugin if the description of the cameras is to be displayed at the top.

Syntax:

```
<param name="ConfigSurveillanceShowDiscription" value="0">
```

Description of the parameters:

- **0**: Hide the description of the cameras
- **1**: Display the description of the cameras

ConfigSurveillanceShowLocalRecordingControl

Use this parameter to inform if the plugin is to display the control of local recording in the lower left of the image of the cameras.

Syntax:

```
<param name="ConfigSurveillanceShowLocalRecordingControl" value="0">
```

Description of the parameters:

- **0**: Hide the control of local recording
- **1**: Display the control of local recording

ConfigSurveillanceShowReconnectionMessage

Use this parameter to inform if the plugin is to display a message of reconnection if the plugin loses connection with the camera.

Syntax:

```
<param name="ConfigSurveillanceShowReconnectionMessage" value="0">
```

Description of the parameters:

- **0**: Hide the message of reconnection
- **1**: Display the message of reconnection

ConfigSurveillanceShowFrameRateInfo

Use this parameter to inform the plugin if the frames-per-second information is to be displayed on the image of the cameras.

Syntax:

```
<param name="ConfigSurveillanceShowFrameRateInfo" value="0">
```

Description of the parameters:

- **0**: Hide the frames-per-second information
- **1**: Display the frames-per-second information

ConfigSurveillanceShowTransferRateInfo

Use this parameter to inform the plugin if the bandwidth information is to be displayed on the image of the cameras.

Syntax:

```
<param name="ConfigSurveillanceShowTransferRateInfo" value="0">
```

Description of the parameters:

- **0**: Hide the bandwidth information
- **1**: Display the bandwidth information

ConfigSurveillanceShowDecoderInfo

Use this parameter to inform the plugin if the information about the decoder used to decode the camera images is to be displayed.

Syntax:

```
<param name="ConfigSurveillanceShowDecoderInfo" value="0">
```

Description of the parameters:

- **0**: Hide the decoder information
- **1**: Display the decoder information

ConfigSurveillanceResizeType

Use this parameter to inform the plugin as to the type of resizing of the camera images.

Syntax:

```
<param name="ConfigSurveillanceResizeType " value="0">
```

Description of the parameters:

- **0**: Do not resize the images
- **1**: Resize to fill all of the space
- **2**: Resize maintaining the image's proportions

ConfigSurveillanceBilinearResize

Use this parameter to inform the plugin if the images are to undergo the process of bilinear resizing, giving the images higher quality.

Syntax:

```
<param name="ConfigSurveillanceResizeType " value="0">
```

Description of the parameters:

- **0**: Do not use bilinear resizing
- **1**: Use bilinear resizing

ConfigVideoRender

Use this parameter to inform the plugin as to the method of renderizing of the images on the screen.

Syntax:

```
<param name="ConfigVideoRender " value="1">
```

Description of the parameters:

- **1**: GDI
- **2**: DirectDraw 7

ConfigMotionActivate

Use this parameter to inform the plugin if motion detection filters are to be displayed.

Syntax:

```
<param name="ConfigMotionActivate " value="0">
```

Description of the parameters:

- **0**: Hide the motion detection filters
- **1**: Display motion detection filters

ConfigMotionSensitivity

Use this parameter to inform the plugin as to the sensitivity of the motion detection filters.

This parameter mut be used together with the *ConfigMotionActivate* parameter.

Syntax:

```
<param name="ConfigMotionSensitivity" value="80">
```

Description of the parameters:

- **0~100**: Value of the sensitivity of the motion detection filters which may vary between 0 and 100.

ConfigMotionColor

Use this parameter to inform the plugin as to the color of the motion detection filter.

This parameter mut be used together with the *ConfigMotionActivate* parameter.

Syntax:

```
<param name="ConfigMotionColor" value="16711680">
```

Description of the parameters:

The value must be calculated, converting the hexadecimal value of the color to an integer in the BGR format. Example:

Color	Hexadecimal value	Integral Value
Red	0000FF	**255**
Green	00FF00	**65280**
Blue	FF0000	**16711680**
Orange	0099FF	**39423**

Video playback control

To incorporate the video playback control, use the base code shown below.

```
<script language="javascript">
document.write('<DEFINITION OF THE PLUGIN>');
document.write('<PROPERTIES>');
document.write('<ERROR MESSAGE>');
document.write('</object>');
</script>
```

Definition of the Plugin

In this section, we inform the data of the plugin:

Syntax:

```
<object classid="clsid: D161F057-0007-0001-0000-AC714E603003"
codebase="XDigiPlayback.OCX" width=410 height=185 align=center
hspace=0 vspace=0>
```

Description of the parameters:

Only the parameters described below may be customized:

- **Width:** Desired width of the plugin
- **Height:** Desired height of the plugin
- **Align:** Alignment of the plugin
- **Hspace:** Horizontal spacing
- **Vspace:** Vertical spacing

Properties

The properties affect the manner in which the visualization plugin will be displayed on the screen and how it will behave. The properties must be defined in the section "Properties" of the code in the above example, and can be used in any order or combination.

Syntax:

```
<param name="ParamName" value="ParamValue">
```

- **ParamName**: Name of the parameter
- **ParamValue**: Value do parametero

See the following properites that can be used.

Error Message

Here you insert the HTML code with the error message to be displayed when the plugin has not yet been installed.

ConnectionString

The visualization plugin can connect to several servers simultaneously, displaying the cameras of all servers in a transparent manner. This parameter must be used to inform the plugin to which servers it is to connect.

Syntax:

```
<param name="ConnectionString" value="ServerData1;[n...;]">');
```

ServerData1:

```
NA:Name,AD:Address,PO:Port,US:Username,PW:Password,CM:MODE
```

NA: Name of the server
AD: Address of the server
PO: Port of the server
US: Name of the user in BASE64
PW: Password of the user in BASE64
CM: Connection Mode:
  - 1: Internal connection (local networks)
  - 2: External connection (external networks, for example Internet)

Example of use:

```
<param name="ConnectionString" value="NA:Digifort
Server,AD:192.168.10.12,PO:8600,US:YWRtaW4=,PW:S7sdHsd=,CM:2;
NA:Entrance,AD:192.168.10.45,PO:8600,US:YWRtaW4=,PW:Yhsd8s7==,CM:1;">
```

In In the above example, we are connecting into two servers, as shown in the table below:

Parameters	Server 1	Server 2
Name	Digifort Server	Entrance
IP	192.168.10.12	192.168.10.45
Port	8600	8600
User	YWRtaW4=,	YWRtaW4=,
Password	S7sdHsd=	Yhsd8s7==
Connection Method	2	1

Language

The Plugin offers two language options: English and Portuguese. Use this command to inform which language will be displayed.

Syntax:

```
<param name="Language" value="1">
```

Description of the parameters:

- **1**: Portuguese
- **2:** English

AutoLoadCameras

Use this parameter to inform which cameras will automatically be displayed when the plugin is displayed on the screen.

This parameter can be used together with the *ScreenStyleID* parameter to determine in which screenstyle the cameras will be loaded. If the *ScreenStyleID* parameter is not specified, the cameras will be loaded into the automatic screenstyle.

Syntax:

```
<param name="AutoLoadCameras" value="CameraData1,[n...,]">
```

CameraData1:

```
NA:CameraName,SV:ServerName
```

- **NA:** Name of the camera
- **SV:** Name of the server to which the camera belongs. The name of the server is defined in the parameter *ConnectionString.*

PlaybackInitialDateTime

Use this parameter to inform the plugin as to the starting date and time of video playback.

This parameter must be used together with the *PlaybackFinalDateTime* parameter.

Syntax:

```
<param name="PlaybackInitialDateTime" value="11/12/2008
10:00:00">
```
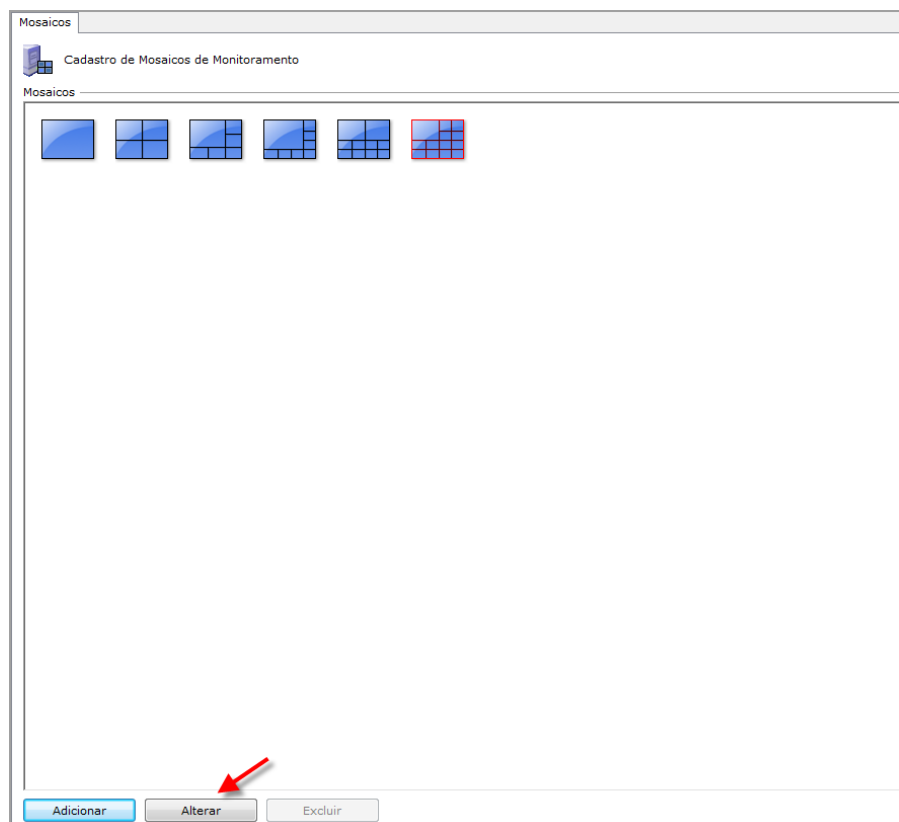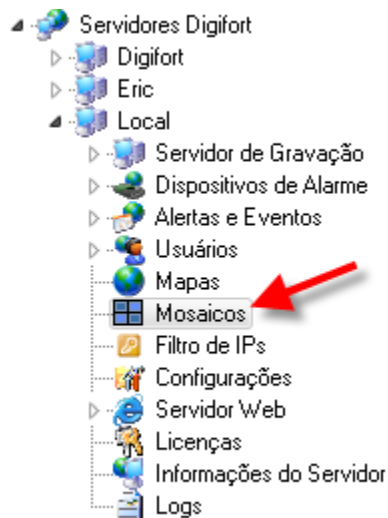
Description of the parameters:

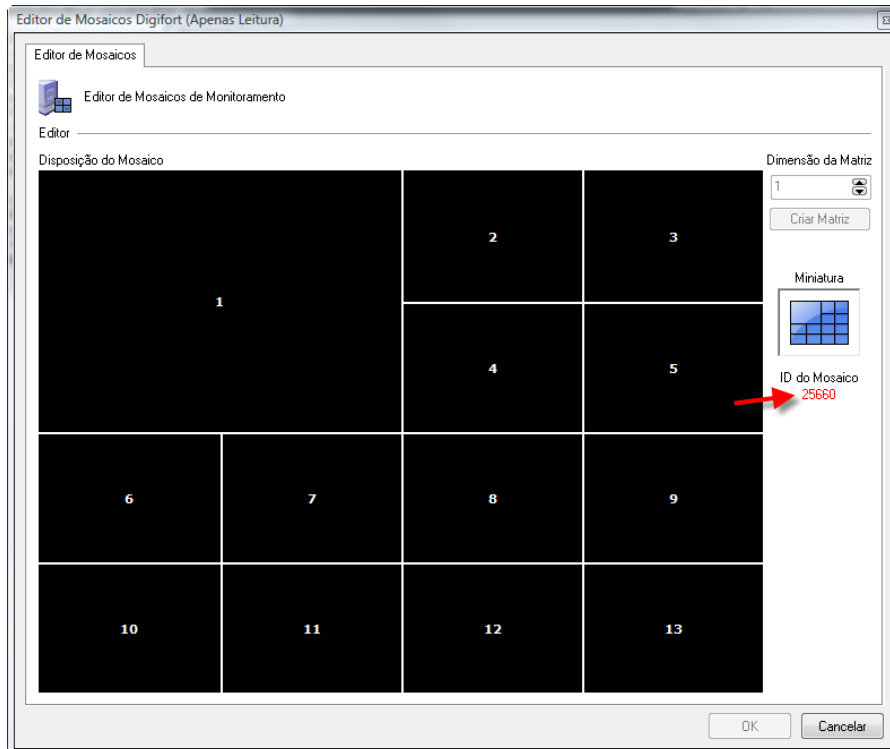**Value:** Starting date and time of the video (In the date and time formats of the computer in which the plugin is executing)

PlaybackFinalDateTime

Use this parameter to inform the plugin as to the final date and time of video playback.

This parameter must be used together with the *PlaybackInitialDateTime* parameter.

Syntax:

```
<param name="PlaybackFinalDateTime" value="11/12/2008
11:00:00">
```

Description of the parameters:

Value: final date and time of video (In the date and time formats of the computer in which the plugin is executing)

ScreenStyleID

Use this parameter to inform the plugin as to in which screenstyle the cameras for synchronized playback will be loaded.

In the Professional and Enterprise versions of Digifort, it's possible to create new screenstyles via the Administration Client. To recover the screenstyle ID, double-click on the desired screenstyle, as shown in the figures below:

In the Standard version only the standard screenstyles may be used, according to the table below:

  Automatic screenstyle – ID: 0

  Sequencing screenstyle – ID: 1

  1 camera - ID: 1399

  4 cameras - ID: 6278

  6 cameras -ID: 9983

  8 cameras - ID: 13538

  10 cameras - ID: 18393

  13 cameras -ID: 25660

Syntax:

<param name="AutoLoadScreenStyleID" value="1399">

Description of the parameters:

Value: Screenstyle ID.