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|  | **imotion** |
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|  | Infomedia Xml to im2 |
|  |  |
|  | Conversion |
|  |  |
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**Modification management**

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| 0.2 | 2013-06-19 | RAN | SW | Changes to entire document based on WES inputs | draft |
| 0.3 | 2013-06-26 | RAN | SW | Updated sections 2.2.2.7, 2.2.3, 2.2.10, 2.2.11 | draft |

**Review**

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**Release**

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# Introduction

## Scope

This document is a description of the conversion of Infomedia xml to im2 file format. This document is currently valid only for the Arriva project.

This document is not intended to be a user manual.

## Intended Audience

This document is written to be understood by Gorba staff familiar with Gorba products.

# Conversion of Infomedia Xml to im2 format

## Fixed conversions

The fixed conversions are the sections of im2 file which do not have an equivalent in the xml file.

### <PhysicalScreens> in im2

The tag <PhysicalScreens> holds the configuration of the physical screen for the device. The configuration parameters required for the Physical screen is obtained from the following section in the Infomedia xml file

<DataPreferencesListItem>

<Name>XSizeContent</Name>

<Value>1440</Value>

</DataPreferencesListItem>

<DataPreferencesListItem>

<Name>YSizeContent</Name>

<Value>900</Value>

</DataPreferencesListItem>

The im2 configuration obtained is as follows:

<PhysicalScreens>

<PhysicalScreen Name="TftScreen" Type="TFT" Width="1440" Height="900"/>

</PhysicalScreens>

### <VirtualDisplays> in im2

The tag <VirtualDisplays> holds the configuration of the virtual display for the device. The configuration parameters required for the Virtual display is obtained from the following section in the Infomedia xml file

<DataPreferencesListItem>

<Name>XSizeContent</Name>

<Value>1440</Value>

</DataPreferencesListItem>

<DataPreferencesListItem>

<Name>YSizeContent</Name>

<Value>900</Value>

</DataPreferencesListItem>

The im2 configuration obtained is as follows:

<VirtualDisplays>

<VirtualDisplay Name="TftDisplay" CyclePackage="TftPackage" Width="1440" Height="900"/>

</VirtualDisplays>

### <CyclePackages> in im2

For an infomedia xml file converted to im2 file, there is only one cycle package.

<CyclePackages>

<CyclePackage Name="TftPackage">

</CyclePackage>

</CyclePackages>

### <MasterPresentation> in im2

For an infomedia xml file converted to im2 file, there is only one master presentation with one master cycle and one master layout. The configuration for im2 is default and fixed as is as seen below.

<MasterPresentation>

<MasterCycles>

<MasterCycle Name="MasterCycle">

<MasterSection Duration="86400" Layout="StandardMasterLayout" />

</MasterCycle>

</MasterCycles>

<MasterEventCycles />

<MasterLayouts>

<MasterLayout Name="StandardMasterLayout">

<PhysicalScreen Ref="TftScreen">

<VirtualDisplay X="0" Y="0" Ref="TftDisplay" />

</PhysicalScreen>

</MasterLayout>

</MasterLayouts>

</MasterPresentation>

## Conversion of existing tags in xml to im2

This section describes the conversion of Infomedia xml tags to im2.

### Conversion of tag <Cycles>

All the items under the tag <Cycles> in Infomedia xml are converted to <StandardCycles> in im2.

<Cycles>

<Cycle>

<List>

<DataCycleBaseList>

<Name>MainCycle</Name>

</DataCycleBaseList>

</List>

</Cycle>

</Cycles>

Gets converted to the following in im2 configuration

<StandardCycles>

<StandardCycle Name="MainCycle">

</StandardCycle>

</StandardCycles>

### Conversion of different <DataCycleBaseListPart>

Each <DataCycleBaseListPart> under the tag <Cycle> in Infomedia xml is converted to an equivalent section in im2 configuration based on the tag <MediaType> within <DataCycleBaseListPart>. The tags ignored for conversion to im2 are <FileName /> and <HiddenFileName />.

#### <MediaType> WEB conversion

Themedia type WEB in Infomedia xml seen below

<DataCycleBaseListPart>

<Name>Commercial</Name>

<FileName />

<Duration>10</Duration>

<Fullscreen>1</Fullscreen>

<MediaType>WEB</MediaType>

<HiddenFileName />

<InfomediaFileName />

</DataCycleBaseListPart>

is converted to Web Section in im2 file as seen below

<WebmediaSection Filename="webmedia.wm2" Layout="Commercial" />

The webmedia.wm2 is the resultant converted configuration from webmedia.xml. Information regarding the conversion of webmedia.xml to webmedia.wm2 file is provided in the chapter 3.

#### <MediaType> INFO conversion

Themedia type INFO in Infomedia xml seen below

<DataCycleBaseListPart>

<Name>MessageFromASL</Name>

<FileName />

<Duration>10</Duration>

<Fullscreen>0</Fullscreen>

<MediaType>INFO</MediaType>

<HiddenFileName />

<InfomediaFileName />

</DataCycleBaseListPart>

is converted to Multi Section in im2 file as seen below

<MultiSection Duration="10" Langauge="0" Table="20" RowsPerPage="1" MaxPages="-1" Mode="OnePage" Layout="MessageFromASL" />

#### <MediaType> BREAK conversion

Themedia type BREAK in Infomedia xml seen below

<DataCycleBaseListPart>

<Name>NextStop</Name>

<FileName />

<Duration>8</Duration>

<Fullscreen>0</Fullscreen>

<MediaType>BREAK</MediaType>

<HiddenFileName />

<InfomediaFileName />

</DataCycleBaseListPart>

is converted to Standard Section in im2 file as seen below

<StandardSection Duration="8" Layout="NextStop" />

#### <MediaType> PIC conversion

Themedia type PIC in Infomedia xml seen below

<DataCycleBaseListPart>

<Name>Commercial</Name>

<FileName />

<Duration>10</Duration>

<Fullscreen>1</Fullscreen>

<MediaType>PIC</MediaType>

<HiddenFileName>Data\Managed\OVCvergeetNietUitTeChecken.jpg</HiddenFileName>

<InfomediaFileName>D:\Infomedia\Data\Managed\OVCvergeetNietUitTeChecken.jpg</InfomediaFileName>

</DataCycleBaseListPart>

is converted to Image Section in im2 file as seen below

<ImageSection Duration="10" Filename="D:\Infomedia\Data\Managed\OVCvergeetNietUitTeChecken.jpg" Frame="0" Layout="Commercial" />

#### <MediaType> MOVIE conversion

Themedia type MOVIE in Infomedia xml seen below

<DataCycleBaseListPart>

<Name>Commercial</Name>

<FileName />

<Duration>10</Duration>

<Fullscreen>1</Fullscreen>

<MediaType>MOVIE</MediaType>

<InfomediaFileName>D:\Infomedia\Data\Managed\Wildlife.wmv</InfomediaFileName>

</DataCycleBaseListPart>

is converted to Video Section in im2 file as seen below

<VideoSection Duration="10" VideoUri="D:\Infomedia\Data\Managed\Wildlife.wmv" Frame="0" Layout="Commercial" />

#### <MediaType> POOL conversion

Themedia type POOL in Infomedia xml seen below

<DataCycleBaseListPart>

<Name>Commercial</Name>

<Duration>10</Duration>

<Fullscreen>1</Fullscreen>

<InfomediaFileName />

<MediaType>POOL</MediaType>

</DataCycleBaseListPart>

is converted to Pool Section in im2 file as seen below

<PoolSection Pool="Pool" Duration="10" Frame="0" Layout="Commercial" />

#### <MediaType> CONNECTION conversion

Themedia type CONNECTION in Infomedia xml seen below

<DataCycleBaseListPart>

<Name>BusDeparturesZHN</Name>

<Duration>5</Duration>

<FileName />

<Fullscreen>0</Fullscreen>

<HiddenFileName />

<InfomediaFileName />

<MediaType>CONNECTION</MediaType>

</DataCycleBaseListPart>

is converted to Multi Section in im2 file as seen below

<MultiSection Duration="5" Langauge="1" Table="13" RowsPerPage="6" MaxPages="-1" Mode="AllPages" Layout="BusDeparturesZHN" />

The <DataCycleBaseListPart> with name “TrainDeparturesZHN” as seen below

<DataCycleBaseListPart>

<Name>TrainDeparturesZHN</Name>

<Duration>6</Duration>

<Fullscreen>1</Fullscreen>

<InfomediaFileName />

<MediaType>CONNECTION</MediaType>

</DataCycleBaseListPart>

is converted to Multi Section in im2 file as seen below

<MultiSection Duration="6" Langauge="0" Table="13" RowsPerPage="6" MaxPages="-1" Mode="AllPages" Layout="TrainDeparturesZHN" />

The language attribute in im2 for this conversion is decided based on the <Name> tag. If the name tag contains the word “TrainDepartures” then the language is set to 0 during the conversion process. If the name tag contains the word “BusDeparture” then the language is set to 1 during the conversion process.

### Conversion of tag <EventCycles>

All the items under the tag <EventCycles> in Infomedia xml are converted to <EventCycles> in im2.

<EventCycles>

<Cycle>

<List>

<DataCycleBaseList>

<Name>AdHoc</Name>

</DataCycleBaseList>

</List>

</Cycle>

</ EventCycles>

Gets converted to the following in im2 configuration

<EventCycles>

<EventCycle Name="AdHoc">

</EventCycle>

</EventCycles>

The event cycles in the im2 file have a trigger which decides the condition to start the event cycle. The criteria under event cycle with type “HasChangedCompare” is converted into a trigger. The detailed description of the conversion is given in section 2.2.4.1.

### Conversion of tag <Criterias>

#### Conversion of criteria with <Type> HasChangedCompare

The criteria in Infomedia xml as seen below

<Criteria>

<Table>1</Table>

<Column>10</Column>

<RowPosition>0</RowPosition>

<Type>HasChangedCompare</Type>

<Conditions />

</Criteria>

Is converted to a <Trigger> tag in im2 configuration as seen below

<Trigger>

<Generic Lang="0" Table="1" Column="10" Row="0" />

</Trigger>

#### Conversion of criteria with <Type> IntegerCompare

The criteria in Infomedia xml as seen below

<Criteria>

<Addressing description="Values admitted: DIRECT or INDIRECT (case insensitive)">DIRECT</Addressing>

<Column>2</Column>

<Conditions>

<Condition>

<ValueBegin>92</ValueBegin>

<ValueEnd>92</ValueEnd>

</Condition>

</Conditions>

<RowPosition>0</RowPosition>

<Table>10</Table>

<Type>IntegerCompare</Type>

</Criteria>

Is converted to a <IntegerCompare> tag in im2 configuration as seen below

<IntegerCompare Begin="92" End="92">

<Generic Lang="0" Table="10" Column="2" Row="0" />

</IntegerCompare>

Multiple <IntegerCompare> tags are combined with the <DayOfWeek> tag with the <And> tag and is evaluated under the <Enabled> tag.

### Conversion of tags <Mo /> to <So />

The tags for days of the week in Infomedia xml as seen below

<Mo />

<Tu />

<We />

<Th />

<Fr />

<Sa />

<So />

Is converted to <DayOfWeek> tag in im2 configuration as seen below

<DayOfWeek Mon="true" Tue="true" Wed="true" Thu="true" Fri="true" Sat="true" Sun="true" />

### Conversion of tag <Priority>

The tag <Priority> for cycles present under <EventCycles> tag are converted by sorting the event cycles listed according to the priority and placed in the im2 configuration file in the order of priority from highest to lowest.

### Conversion of different <DataLayoutListItem>

Each <DataLayoutListItem> under the tag <Layout> in Infomedia xml is converted to an equivalent layout in im2 configuration. Some specific conversions are done based on the tag <Name> within <DataLayoutListItem>.

### Conversion of tag <Name>

The tag <Name> conversion from Infomedia xml to im2 is as seen below

<Layout Name="AdHocMessage">

</Layout>

### Conversion of tags <ResX> and <ResY>

The tags <ResX> and <ResY> conversion from Infomedia xml to im2 is as seen below

<Resolution Width="1440" Height="900">

### Conversion of tag <Type>

If the tag <Type> is MEDIA an ImageElement is created.

<Image X="0" Y="0" Width="1440" Height="900" ZIndex="1" Filename="filename" />

### Conversion of <DataLayoutListItemPart> based on the <Name> tag

If the tag <Name> is “Commercial”, then the conversion to im2 is frame element with the frame id = 1 as seen below

<Frame X="30" Y="30" Width="500" ZIndex="3" Id="1" />

If the tag <Name> is “Video”, then the conversion to im2 is frame element with the frame id = 2 is as seen below

<Frame X="30" Y="30" Width="500" ZIndex="3" Id="2" />

The default conversion for any other value for the tag <Name> in im2 is as seen below

<Text X="75" Y="236" Width="1300" Height="144" ZIndex="1" Align="Left" Overflow="Scale" Value="Header text1">

<Font Face="Arial" Height="72" Weight="200" Italic="false" Color="#FFFFFFFF" />

<Value>

<Generic Lang="0" Table="20" Column="1" Row="0" />

</Value>

</Text>

The details of the conversion common to all <DataLayoutListItemPart> is as given below.

This is an example of the <DataLayoutListItemPart>

<DataLayoutListItemPart>

<Name>Header text1</Name>

<Active>1</Active>

<Addressing>DIRECT</Addressing>

<Blink>0</Blink>

<ColA>255</ColA>

<ColB>255</ColB>

<ColG>255</ColG>

<ColR>255</ColR>

<Column>5</Column>

<FadeSpeed>255</FadeSpeed>

<Filename />

<Font>Arial</Font>

<Fontsize>72</Fontsize>

<Functionlist />

<HiddenFileName />

<InfomediaFileName />

<InfomediaFilePosX>0</InfomediaFilePosX>

<InfomediaFilePosY>0</InfomediaFilePosY>

<Italic>0</Italic>

<Orientation>0</Orientation>

<PosX>75</PosX>

<PosY>236</PosY>

<PostText />

<PreText />

<RowPosition>0</RowPosition>

<RunningDelta>0</RunningDelta>

<Table>900</Table>

<TestText>header</TestText>

<Type>TEXT</Type>

<Visible>1</Visible>

<Weight>200</Weight>

<Width>1300</Width>

<XCenter>0</XCenter>

<XSize1>100</XSize1>

<XSize2 />

<XSymbolSpace>0</XSymbolSpace>

<YCenter>0</YCenter>

<YSize1>100</YSize1>

<YSize2 />

<YSymbolDiff>0</YSymbolDiff>

</DataLayoutListItemPart>

It is mapped for conversion to im2 configuration as follows,

|  |  |
| --- | --- |
| Xml | im2 |
| <ColA>255</ColA>  <ColB>0</ColB>  <ColG>0</ColG>  <ColR>0</ColR> | Font Color="#FFFFFFFF" |
| <Font>Arial</Font> | Font Face="Arial" |
| <Fontsize>60</Fontsize> | Font Height="60" |
| <Weight>200</Weight> | Font Weight="200" |
| <Italic>0</Italic> | Font Italic="false" |
| <PosX>30</PosX> | Text X="30" |
| <PosY>30</PosY> | Y="30" |
| <XSize1>100</XSize1> | Width="100" |
| <Fontsize>60</Fontsize> \* 2 | Height="120" |
| Set in incremental levels for each element | ZIndex="1" |
| <Orientation>0</Orientation> | Value = 0 -> Align="Left"  Value = 1 -> Align="Center"  Value = 2 -> Align="Right" |
| <Blink>0</Blink> | The value of the element, Value is formatted with the blink property using BBCode |
| <FadeSpeed>255</FadeSpeed> | FadeSpeed says by how much the fade value (0 to 255) should change for every rendered frame; we assume 20 FPS (= 50 ms per frame) for this calculation. |
| <RowPosition>0</RowPosition>  <Column>5</Column>  <Table>10</Table> | <Value>  <Generic Lang="0" Table="10" Column="5" Row="0" />  </Value>  The “Lang” attribute is set to “0” by default during conversion, except in specific cases mentioned like Slide show messages and bus departures in connections. |

### Conversion of layout items of Slide show message

In infomedia.xml, slide show message is configured in table 900 of dictionary.xml. The layout items for slide show are mapped to table 20 with language 1.

### Conversion of BusDepartures to generic for im2

If the layout with name containing “BusDepartures” in infomedia xml contains layout items in non-generic format, then they are converted to generic form for im2 configuration as follows. The <DataLayoutListItemPart> with the <Name> tag containing the letter “F” is mapped to table 14 column 0. The <DataLayoutListItemPart> with the <Name> tag containing the letter “G” is mapped to table 14 column 3.

If the <DataLayoutListItemPart> with the <Name> tag contains any of the following letters: A, B, C, D, E or I it is mapped as follows

|  |  |  |
| --- | --- | --- |
| <DataLayoutListItemPart> with <Name> | Table | Column |
| Contains letter A | 13 | 3 |
| Contains letter B | 13 | 9 |
| Contains letter C | 13 | 4 |
| Contains letter D | 13 | 7 |
| Contains letter E | 13 | 0 |
| Contains letter I | 13 | 1 |

The row position is calculated for each <DataLayoutListItemPart> by the number present in the <Name> tag and subtracting it by 1.

The <DataLayoutListItemPart> with the <Name> tag value “InfoPageNo” is converted to have the format evaluation in im2 configuration as seen below

<Text X="540" Y="40" Width="100" Height="96" ZIndex="28" Align="Left" Overflow="Scale" Value="InfoPageNo">

<Font Face="Arial" Height="48" Weight="200" Italic="false" Color="#FFFFFFFF" />

<Value>

<Format Format="{0} / {1}">

<Generic Lang="0" Table="1" Column="1" Row="0" />

<Generic Lang="0" Table="1" Column="0" Row="0" />

</Format>

</Value>

</Text>

# Conversion of webmedia.xml to webmedia.wm2

The configuration file webmedia.xml is converted into webmedia.wm2. The converted webmedia.wm2 is placed in the same location as the webmedia.xml. A brief description of the conversion to webmedia.wm2 is given below.

All the items under the tag <Cycles> in webmedia xml are converted to <Cycles> in wm2 file.

All the criteria for a cycle are converted and combined under the tag <Enabled> for each cycle.

<Cycles>

<Cycle Name="Keukenhof">

<Enabled>

<And>

<Not>

<IntegerCompare Begin="1" End="1">

<Generic Lang="0" Table="0" Column="6" Row="0" />

</IntegerCompare>

</Not>

<Or>

<IntegerCompare Begin="854" End="854">

<Generic Lang="0" Table="10" Column="0" Row="0" />

</IntegerCompare>

</Or>

</And>

</Enabled>

</Cycle>

</Cycles>

The items in webmedia.xml are converted to their respective elements as seen below in an example

Item in webmedia.xml:

1. Video item:

<Item name="Kh2013-video.mpg" datagroup="1002" duration="6" frame="0">

<ImageVideoFilename original="Kh2013-video.mpg">content\_389\_.mpg</ImageVideoFilename>

</Item>

Is converted to the following in webmedia.wm2

<Video Name="Kh2013-video.mpg" Frame="0" Duration="6" VideoUri="content\_389\_.mpg" OriginalVideoUri="Kh2013-video.mpg" />

1. Image Item:

<Item name="Kh2013\_Dia1.jpg" datagroup="1001" duration="20" frame="0">

<ImageVideoFilename original="Kh2013\_Dia1.jpg">content\_373\_.jpg</ImageVideoFilename>

</Item>

Is converted to the following in webmedia.wm2

<Image Name="Kh2013\_Dia1.jpg" Frame="0" Duration="20" Filename="content\_373\_.jpg" OriginalFilename="Kh2013\_Dia1.jpg" />