

# DISelect & DIAL 2.0

## Input from Telefónica I+D

TELEFÓNICA I+D

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*Believing is seeing*  
*Creer para ver*



# Introduction and Context

- DISElect 1.0 shortcomings
  - Only an expression language is allowed (XPath)
  - Complexity through AVTs, is that really needed?
  - No interoperability with the DDR Simple API
  - Selection instructions are spread over the markup of the host language
    - Difficult to validate
  - Not specified how to use it in existing markups ex. XHTML or HTML5
- DIAL 1.0 shortcomings
  - XHTML 2 R.I.P.
- We are focusing now on DISElect 2.0
  - As a future component of DIAL 2.0
  - Main target: Simplification and fostering developers adoption

# DISelect 2.0 Discussion

## Expression Language

- Can we specify a minimal E.L. not bound to EcmaScript or XPath?
  - Minimal syntax and operations
  - Easy to be processed at the client and server side, without requiring an XPath processor

# DISelect 2.0 Discussion

## Integration with the DDR Simple API (Proposal)

- Through a namespaced function, `propertyValue` , that will allow to obtain the value of properties in a vocabulary
- Example:
  - `ddr:propertyValue('vendor', 'webBrowser')`
  - `ddr` would have been declared within the markup as  
`xmlns:ddr=http://www.w3.org/2008/01/ddr-core-vocabulary`
- Other variants
  - `namespace:propertyValue (String localPropertyName)`
- References:
  - [http://forge.morfeo-project.org/wiki\\_en/index.php/EL\\_Functions\\_%28DDR\\_%26\\_Convenience\\_functions%29](http://forge.morfeo-project.org/wiki_en/index.php/EL_Functions_%28DDR_%26_Convenience_functions%29)
- A harmonization of Delivery Context convenience functions might be needed

# DISelect 2.0 Discussion

## Integration with the DDR Simple API (Proposal)

### XHTML 1.1 as host language

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html SYSTEM "http://www.w3.org/2007/uwa/editors-drafts/DIAL/sel-attr-module/xhtml1-selection-attrs-1.dtd" [
<!ENTITY % SELATTRIBUTES.prefixed "INCLUDE">
]>
<html xmlns:ddr="http://www.w3.org/2008/01/ddr-core-vocabulary"
xmlns:sel="http://www.w3.org/2005/sel" xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>XHTML + Selection Attributes Module Example</title>
  </head>
  <body>
    <div>
      <p id="p1"
          sel:expr="ddr:propertyValue('webBrowser','vendor') == 'Opera'"
          >
        This browser is Opera
      </p>
      <p id="p2"
          sel:expr="ddr:propertyValue('webBrowser','vendor') == 'OpenWave'"
          >
        This Browser is OpenWave
      </p>
    </div>
  </body>
</html>
```

# DISelect 2.0

## Integration with host languages

- A minimal integration can be done with an additional attribute of every element in a host language that allow its selection according to the Delivery Context
  - In XHTML it would be the “Selection Attribute Module”
  - An implementation of such a module is at <http://www.w3.org/2007/uwa/editors-drafts/DIAL/sel-attr-module/>
  - For SVG this is also possible
    - <http://www.w3.org/TR/SVG11/extend.html>
- Issue: HTML 5 extensibility
  - <http://lists.w3.org/Archives/Public/public-html/2008Apr/0205.html>
- Cons:
  - The “Selection Attributes Module” will allow only very simple selections and not complex conditional statements
- Pros:
  - Simplicity
  - Markup can be validated, which it is an advantage

# DISelect 2.0

## Separation between markup and selection

- It would be nice to have a mechanism that separates markup from selection
- The mechanism will allow to reference from an authoring unit another authoring unit with selection instructions
- The concept is similar to a style sheet but in this case would be a “DI Sheet”
- TI+D proposal
  - See examples at

<http://www.w3.org/2007/uwa/editors-drafts/DIAL/diselect2-examples/>

# DISelect 2.0

## Separation between markup and selection

```
<html>
  <head>
    <title>Example 2</title>
    <link rel="DISheet" href="mydisheet.xml" />
  </head>
  <body>
    <div class="article">
      <h3>Boscastle Devastated by Floods</h3>
      <p class="abstract">
        The tiny Cornish village of Boscastle was devastated yesterday,
        by serious flooding caused by torrential rain.
      </p>
      <p class="summary">
        Properties were seriously damaged and vehicles were washed into the sea by the floods,
        which followed unprecedentedly heavy rain
        in the hills just inland of the village itself. Several buildings collapsed and many
        residents were rescued by helicopter.
      </p>
      <p class="body">
        In addition to houses and cottages, a number of shops in the village center have been
        badly damaged. It is likely to be months if not years before they will be able to
        reopen. Residents are fearful of the damage that may be caused to economy of the
        village. The floods struck at the height of the tourist season, which is
        crucial for the financial viability of many businesses in the village.
        ....
      </p>
    </div>
  </body>
</html>

----- mydisheet.xml -----

<?xml version="1.0"?>
<diSheet xmlns="http://www.w3.org/2009/diselect2">
  <diRule selector="div.article">
    <select selector="p.summary"
              expr="eg:getGroupName() = 'high' or eg:getGroupName() = 'medium'" />
    <select selector="p.body" expr="eg:getGroupName() = 'high'"/>
  </diRule>
</diSheet>
```

# DISelect 2.0

## Separation between markup and selection

```
<html>
  <head>
    <title>Example 1</title>
    <link rel="DISheet" href="mydisheet.xml" />
  </head>

  <body>

    <div class="company_item">
      <h3 class="company_header" role="longTitle">
        New York - July 19: Jive Announces New, High-performance Soccer Boot</h3>
      <h3 class="company_header" role="shortTitle"> New, Soccer Boot</h3>

      <p> New research from Jive Sports Research Labs on soccer boot technology has ...</p>
    </div>
  </body>
</html>

----- mydisheet.xml -----

<?xml version="1.0"?>
<diSheet xmlns="http://www.w3.org/2009/diselect2">
  <diRule selector="div.company_item">
    <select selector=".company_header" targetrole="title">
      <when expr="dcn:ssmq-width('px') > 200" role="longTitle" />
      <otherwise role="shortTitle" />
    </select>
  </diRule>
</diSheet>
```

# DISelect 2.0

## Separation between markup and selection

```
<html>
  <head>
    <title>Example 1</title>
    <link rel="DISheet" href="mydisheet.xml" />
  </head>
  <body>
    <div id="mainContent">
      <div id="div1">
        <object src="image1"/>
        <p>Many people had to be evacuated.</p>
      </div>
      <p>Another paragraph</p>
    </div>
  </body>
</html>

----- mydisheet.xml -----

<?xml version="1.0"?>
<diSheet xmlns="http://www.w3.org/2009/diselect2">
  <diRule selector="#div1">
    <select expr="dcn:cssmq-width('px') > 200" />
  </diRule>
</diSheet>
```

# DISelect 2.0

## Separation between markup and selection

```
<html>
  <head>
    <title>Example 1</title>
    <link rel="DISheet" href="mydisheet.xml" />
  </head>

  <body>

    <div class="personFiche">
      <div class="picture">
        </img>
        </img>
        </img>
        </img>
      </div>
      <div class="personalData">
        <span id="name">Name: Jose Manuel</span>
        <span id="familyName">Surname: Cantera</span>
        <span id="address">Spain</span>
      </div>
    </div>
  </body>
</html>

----- mydisheet.xml -----

<?xml version="1.0"?>
<diSheet xmlns="http://www.w3.org/2009/diselect2"
          xmlns:ddr="http://www.w3.org/2008/01/ddr-core-vocabulary">
  <diRule selector="div.personFiche">
    <select selector="div.picture" targetid="photo">
      <when expr="ddr:propertyValue('supportedImageFormats')['jpeg']" selector="#i1" />
      <when expr="ddr:propertyValue('supportedImageFormats')['png']" selector="#i2" />
      <when expr="ddr:propertyValue('supportedImageFormats')['gif87a']" selector="#i3" />
      <otherwise selector="#i4" />
    </select>
    <select selector="#address" expr="ex:belongsTo('PDADevice')"></select>
  </diRule>
</diSheet>
```

# DISelect 2.0

## Separation between markup and selection

```
<html>
  <head>
    <title>Example 5</title>
    <link rel="DISheet" href="mydisheet.xml" />
  </head>
  <body>
    <div class="newsArticle">
      </img>
      </img>
      <object src="avideo.avi" role="video"></object>
      <object src="asound.wav" role="audio"></object>
      <p role="longText">
        This is a very, very, very, long text
      </p>
      <p role="shortText">
        This is a short text
      </p>
    </div>
    <div class="newsArticle">
      </img>
      </img>
      <object src="avideo.avi" role="video"></object>
      <object src="asound.wav" role="audio"></object>
      <p role="longText">
        Other, very, very, long textttttttt
      </p>
      <p role="shortText">
        short text
      </p>
    </div>
  </body>
</html>

----- mydisheet.xml -----

<?xml version="1.0"?>
<diSheet xmlns="http://www.w3.org/2009/diselect2">
  <diRule>
    <select selector=".newsArticle">
      <when expr="ex:belongsTo('iPhone')"
              role="bigImage video longText" />
      <when expr="ex:belongsTo('FeaturePhone') and don:cssmq-color() &gt; 4"
              role="smallImage shortText" />
      <when expr="ex:propertyValue('soundFormatSupport')['wav']" role="bigImage sound longText" />
      <otherwise role="smallImage shortText" />
    </select>
  </diRule>
</diSheet>
```

# DISelect 2.0

Separation between markup and selection

- Simplification proposals
  - Drop AVTs
  - Drop Variables
  - Drop the if tag as it is no longer necessary
  - Use CSS selectors and the @role attribute for selecting the elements subject to selection rules

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