Version 3.0.1 – July. 26, 2012

Significant change since version 3.0* new tags added in xml see page 8.

The widget and configuration file have changed to eSearchWidget (was SearchWidget).

The configuration file for the enhanced search widget allows for the configuration of the enhanced search widget without changes to the source code. Below is a list of the xml elements (tags) and what they do.

The following section pertains to all child elements of the layers element.

```
<layer>
     <definitionexpression></definitionexpression>
    <enableexport>true</enableexport>
    <name>Louisville Zoning</name>
    <url>http://sampleserver1.arcgisonline.com/ArcGIS/rest/services/Louisville/LOJIC_LandRecords_Louisville/MapServer/2</url>
    <expressions>
         <expression alias="Zoning Code" textsearchlabel="Search Zoning Code:">
              <values>
                   <value prompt="Example: OR1" userlist="OR1,C2,OTF">upper(ZONING_CODE) = upper('[value]')/value>
              </values>
         </expression>
         <expression alias="Zoning Type" textsearchlabel="Search Zoning Type:">
                   <value prompt="Example: RESIDENTIAL">upper(ZONING_TYPE) = upper('[value]')</value>
              </values>
         </expression>
         <expression alias="Zoning Name" textsearchlabel="Search Zoning Name [ Example: RES MULTI-FAMILY ]:">
              <values>
                   <value prompt="Example: RES MULTI-FAMILY">upper(ZONING_NAME) LIKE upper('%[value]%')
              </values>
         </expression>
    </expressions>
     <graphicalsearchlabel>Use one of the graphical search tools to select Zoning
    <spatialsearchlaver>true</spatialsearchlaver>
    <titlefield>ZONING_NAME</titlefield>
    <fields all="false">
         <field name="ZONING_CODE" alias="Zoning Code"/>
         <field name="ZONING_NAME" alias="Zoning Name"/>
         <field name="ZONING_TYPE" alias="Zoning Type"/>
         <field name="SALE_DATE" gridfield="true" dateformat="MM/DD/YYYY"/>
<field name="SALE_PRICE" gridfield="true" currencyformat="$|2|,|."/>
         <field name="URL" alias="Show Image" hyperlinkgridfield="true" hyperlinkaliastext="Get Image"/>
    </fields>
    ks>
         k alias="REST Services Directory">
              <![CDATA[{URL}]]>
              <icon><![CDATA[assets/images/i_camera.png]]></icon>
    </links>
    <zoomscale usegeometry="true" zoompercent="1.2"/>
     <autoopendatagrid>true</autoopendatagrid>
         <relate id="0" label="ABIMS Bridge" icon="assets/images/i_hydro.png">
            <fields all="true" />
         </relate>
         <relate id="1" label="Average Daily Traffic" icon="assets/images/i_folder.png">
            <fields all="false">
              <field name="Date" dateformat="MM/DD/YYYY" />
              <field name="Road_Name" />
              <field name="Road_ID" />
              <field name="Location" />
              <field name="ADT" />
              <field name="Percent Tr" />
            </fields>
```

```
</relate>
  </relates>
</layer>
<definitionexpression>Local_ID LIKE '%Z'</definitionexpression>
```

The definition expression element limits the query to a subset of the available features in the map service layer. It is similar to the definition query for a layer in ArcMap.

```
<enableexport>true</enableexport>
```

The enableexport element specifies whether or not this layer will have export data options on the data grid if one is configured. Default is false.

```
<name>Louisville Zoning</name>
```

The name element specifies the name of the configured layer and will appear in the layer combo box if more than one layer is configured.

<url>http://sampleserver1.arcgisonline.com/ArcGIS/rest/services/Louisville/LOJIC LandRecords Louisville/MapServer/2</url>

The url element specifies the REST End point url of the layer that will be queried.

The expressions parent element contains all the individual expression child elements that will be used for this particular layer. What this means is you can have multiple query expression elements that use different fields from this layer to query your map service.

The expression element specifies the actual sql query syntax that will be used against this layer as well as the other optional and required attributes. The alias attribute is required and will be the text that appears in the combo box if more than one expression child is specified. The textsearchlabel attribute is optional but HIGHLY recommended as this gives your user and idea of what value to enter into the input text box. The textsearchlabel should be a valid example value that a user would enter if they are unfamiliar with your data. The values parent element allows you to have multiple value child element which equates to multiple fields that will make up the expression. The value element has several attributes that specify if the individual value is a userlist, domain, etc. The field attribute is optional and only needs to be added if you want to use a field that has a coded value or Range domain associated with it and you specify the usedomain attribute as true. What this does is gets all

the valid coded value domain values and adds then to a combo box that replaces the text input box and forces the user to select a valid coded value for the search or sets validation on the text input box to warn you if the value entered is above the max range value or below the minimum value in the range domain. The field attribute needs to be the same field that is used in the sql expression. The usedomain attribute is either true or false and must be used in conjunction with the field attribute. The userlist attributes give you the ability to predefine your own list of search values that will be presented to the user in a dropdown instead of the user typing the value. If you use a userlist then you do not specify the field attribute.

<graphicalsearchlabel>Use one of the graphical search tools to select Zoning/graphicalsearchlabel>

The graphicalsearchlabel element specifies the label that instructs the user to use the graphical search tools to select feature in the specified layer.

<spatialsearchlayer>true</spatialsearchlayer>

The spatialsearchlayer element specifies if this particular layer will be included in the combo box for an available layer to use in conjunction with the spatial search option.

<titlefield>ZONING NAME</titlefield>

The titlefield element specifies the label that will appear at the top of the search widgets result for each feature that is returned and at the top of the info window for the feature.

The fields parent element contains all the individual field child elements that will be used for this particular layer. Everything for the field element is specified as an attribute of the element. The name attribute is the actual field name. If you are using a layer that contains a join than the full join field name should be used. The alias attribute is optional as this information can automatically be retrieved from the map service. If you want to specify an alias that is different than the alias specified in ArcMap than you can set this value. If you want this field to appear in the floating data grid than you specify true for the gridfield attribute, valid values are true or false, and the default is false. Just specifying the field will add the field to the widget results and the info window. The gridfieldonly attribute will change the default behavior and it will only be added to the floating data grid and not the widget results or the info window, valid values are true or false, and the default is false. The useutc attribute allows the difference, in minutes, between universal time (UTC) and the computer's local time to be added to the date. The dateformat attribute allows you to specify the format of an esri date field. See esri documentation for valid format strings. The currencyformat attribute allows you to format a numeric field that represents currency values.

currencyformat - is a string that is pipe delimited. The first-position is the currency symbol, second-number of decimal places, third-thousands separator, fourth-decimal separator. Example: "\$|2|,|." The numberformat attribute allows you to format a numeric field. numberformat - is a string that is pipe delimited. The first-position is the precision, second-thousands separator, third-decimal separator. Example: "2|,|." The hyperlinkgridfield attribute specifies that this field is a grid hyperlink field, valid values are true or false, and the default is false. So if you want a clickable link text in the data grid than you need to use this attribute. The hyperlinkaliastext attribute is the text to show instead of the url

in the data grid. So if you have a long url or just don't want the url to show in the data grid then you specify the alias that you do want to appear in the data grid using this attribute. The hyperlinkgridfieldonly attribute specifies that this particular field will only be used in the data grid as a hyperlink and not appear in the widget results or the info window, valid values are true or false, and the default is false. If linkprefix and/or linksufix is specified than the static text from the linkprefix and linksuffix field makes a complete url to a document, image, website, etc when it comes to the field being use as a hyperlinkgridfield. The sum attribute is a true or false attribute that can be added to a numeric field that is set to be shown in the data grid that will sum all the entries for this field and post this result in the data grid. The sumlabel attribute is the text label that will appear in front of the sum total on the data grid. The sort attribute is a string that is pipe delimited. The first-position specifies if the sort is ascending or descending (values are asc or dsc), second-is the sort order (i.e. the order in which this field is sorted), third-is the type of field (values are string, numeric, date). Example: "asc|1|string". The sort attribute only applies to grid fields in the fixed, float, and relate datagrid. Currently there is a limitation/issue with using date sorts. I hope to get this fixed soon.

```
k alias="REST Services Directory">
<![CDATA[{URL}]]>
<icon><![CDATA[assets/images/i_camera.png]]></icon></link>
```

The optional links parent element contains your desired links. Specify one or more links. The link is specified much th same way you configure a popup in the Flex Viewer. The alias attribute give you the ability to have a link like http://help.arcgis.com/en/webapps/flexviewer displayed in the popup as ESRI Website. The link must be wraped in a CDATA and is a string that contains a url or multiple fields wrapped in curly braces or when combined with the static text from makes a complete url to a document, image, website, etc.

The optional icon element is a string field that contains a url or when combined with the static text makes a complete url to an image (preferably small) that will replace the standard (icon. So example would be icon elements would have:

```
<icon><![CDATA[http://myserver/icons/{icofield }.jpg]]></icon</pre>
```

So if your icon has a value of "pdf" then the complete url would be "http://myserver/icons/pdf.jpg" and that image would be used. Possibly looking like this 📆 . It is important to use a small image around 20x20 pixels.

```
<zoomscale usegeometry="false" zoompercent="1.2">2400</zoomscale>
```

The zoomscale element is a numeric value that the maps scale will be set to when widget result is clicked or the data grid row is clicked. The usegeometry is false by default but if set to true then the results geometry will be used to zoom the map to the result. If the usegeometry value is false, than the specified scale will be used to set the scale of the map. If the usegeometry value is true than the zoompercent is used to set the percent of the geometries extent that will be used to set the maps extent. The default for the zoompercent is 1.2 which means 120 percent of the geometries extent, so the map will be zoomed to 120% of the returned geometry.

<autoopendatagrid>true</autoopendatagrid>

The <u>autoopendatagrid</u> element is a Boolean value that specifys if the datagrid will automatically be opened be a search is performed for this layer. The <u>autoopendatagrid</u> is false by default.

<relates>

The relates parent element contains all the individual relate child elements that will be used for this particular layer. Everything for the relate element is specified as an attribute of the element. The id attribute is the actual relate id number from the REST Services directory. The label attribute is a name that will be shown to the user to select this relate in the UI and used for messages concerning the relate. The icon attribute is a String that specifies the path to the image that is displayed for the relate icon button in the search results if only one relate is specified for that layer or if the layer has more than one relate the icon will appear in the choose relate dialog. The enable export attribute defines if the relates datagrid will display export options for the selected relate, (default is false). The fields parent element contains all the individual field child elements that will be used for this particular layer. Everything for the field element is specified as an attribute of the element. The name attribute is the actual field name. If you are using a layer that contains a join than the full join field name should be used. The alias attribute is optional as this information can automatically be retrieved from the map service. If you want to specify an alias that is different than the alias specified in ArcMap than you can set this value. The useutc attribute allows the difference, in minutes, between universal time (UTC) and the computer's local time to be added to the date. The dateformat attribute allows you to specify the format of an esri date field. See esri documentation for valid format strings. The currencyformat attribute allows you to format a numeric field that represents currency values. currencyformat - is a string that is pipe delimited. The first-position is the currency symbol, secondnumber of decimal places, third-thousands separator, fourth-decimal separator. Example: "\$|2|,|." The numberformat attribute allows you to format a numeric field, numberformat - is a string that is pipe delimited. The first-position is the precision, second-thousands separator, third-decimal separator. Example: "2|,|." The hyperlinkgridfield attribute specifies that this field is a grid hyperlink field, valid values are true or false, and the default is false. So if you want a clickable link text in the data grid, than you need to use this attribute. The hyperlinkaliastext attribute is the text to show instead of the url in the data grid. So if you have a long url or just don't want the url to show in the data grid then you specify the alias that you do want to appear in the data grid using this attribute. The sum attribute is a true or false attribute that can be added to a numeric field that is set to be shown in the data grid that will sum all the entries for this field and post this result in the data grid. The sumlabel attribute is the text label that will appear in front of the sum total on the data grid.

The following section pertains to all child elements of the tables element.

```
<definitionexpression></definitionexpression>
<enableexport>true</enableexport>
<name>SF Incidents</name>
<url>http://sampleserver3.arcgisonline.com/ArcGIS/rest/services/SanFrancisco/311Incidents/MapServer/1</url>
<expressions>
<expression alias="Agree with incident" textsearchlabel="Search Incidents that are agreed to:">
<values>
<values>
</values>
</values>
</expression>
```

```
<expression alias="Incident date" textsearchlabel="Search Incidents on or after date:">
              <values>
                    <value prompt="Example: 2012/04/16">datetime >= '[value] 00:00:00'</value>
              </values>
         </expression>
    </expressions>
    <titlefield>sf_311_serviceoid</titlefield>
    <fields all="false">
          <field name="sf_311_serviceoid" alias="Incident OID"/>
         <field name="agree_with_incident" alias="Website Link" hyperlinkgridfield="true"
                             hyperlinkaliastext="Go to Website"
                             linkprefix="http://someWebSite/aspx/web/details.aspx?p entity="
                             linksuffix=".aspx"/>
         <field name="cient_ip" alias="Client IP" gridfield="true"/>
          <field name="datetime" alias="Date" dateformat="MM/DD/YYYY" useutc="true" gridfield="true"/>
          <field name="notes" alias="Notes" gridfield="true"/>
    </fields>
    ks>
          k alias="">
              <![CDATA[]]>
               <icon><![CDATA[]]></icon>
    </links>
    <relates>
         <relate id="1" label="Incident Priority Service Request" enableexport="true" icon="widgets/eSearch/assets/images/i_relate.png">
               <fields all="true" />
         </relate>
    </relates>
    <queryattachments>false</queryattachments>
```

The table element is identical to the layer element except for those tags that pertain to geometry, graphical or spatial searches:

- 1. graphicalsearchlabel not applicable.
- 2. spatialsearchlayer not applicable.
- 3. zoomscale not applicable.

The following section pertains to spatialrelationships.

```
<spatialrelationships>
     <spatialrelationship>
           <name>esriSpatialRelContains</name>
           <label>entirely contained in</label>
     </spatialrelationship>
     <spatialrelationship>
           <name>esriSpatialRelIntersects</name>
           <label>interssected by</label>
     </spatialrelationship>
     <spatialrelationship>
           <name>esriSpatialRelEnvelopeIntersects</name>
           <label>intersected by envelop of</label>
     </spatialrelationship>
</spatialrelationships>
<buf><br/>deferunits></br>
     <buf><br/><br/>dufferunit></br>
           <name>UNIT_FOOT</name>
           <label>Feet</label>
     </bufferunit>
     <buf><br/><br/>dufferunit></br>
           <name>UNIT_STATUTE_MILE</name>
           <label>Miles</label>
     </bufferunit>
     <buf><br/><br/>dufferunit></br>
           <name>UNIT_METER</name>
           <label>Meters</label>
     </bufferunit>
     <buf><br/><br/>deferunit></br>
```

```
<name>UNIT_KILOMETER</name>
  <label>Kilometers</label>
  </bufferunit>
</bufferunits>
```

The spatialrelationships parent element contains all the individual spatialrelationship child elements that will be used for all layers.

The spatialrelationship element specifies the buttons and spatial operators that will be available for the spatial search portion of the widget.

<name>esriSpatialRelContains</name>

The name element is the esri constant that specifies the esri spatial relation operation that will be executed against the selected graphics. Possible values are:

- esriSpatialRelIntersects
- esriSpatialRelContains
- esriSpatialRelCrosses
- esriSpatialRelEnvelopeIntersects
- esriSpatialRelIndexIntersects
- esriSpatialRelOverlaps
- esriSpatialRelTouches
- esriSpatialRelWithin

Unsupported value is esriSpatialRelRelation.

<label>entirely contained in</label>

The label element is the tooltip that will be displayed when the user hovers their mouse over the button.

The bufferunits parent element contains all the individual bufferunit child elements that will be used for all buffer operations.

The bufferunit element specifies the buffer units that appear in the unit combo box on spatial search portion of the widget.

```
<name>UNIT FOOT</name>
```

The name element is the esri constant that specifies the esri unit type that will be used in the buffer operation on the selected graphics. Possible values are:

- UNIT FOOT
- UNIT_ACRES
- UNIT ARES
- UNIT HECTARES
- UNIT KILOMETER
- UNIT_METER

- UNIT NAUTICAL MILE
- UNIT_STATUTE_MILE
- UNIT_US_NAUTICAL_MILE

<label>Feet</label>

The label element is the text that will be displayed in the unit combo box on spatial search portion of the widget.

The following section pertains to several different configuration options.

<spatialReference>102003/spatialReference>

The spatialReference element is the WKID to use for the buffer operations and spatial operations.

<zoomscale>2400</zoomscale>

The zoomscale element is a numeric value that the maps scale will be set to when widget result is clicked or the data grid row is clicked.

<geometryservice>http://sampleserver3.arcgisonline.com/ArcGIS/rest/services/Geometry/GeometryServer</geometryservice>

The geometryservice element is the url of the geometry service to use for all geometry operations in this widget.

<csvseparator>,</csvseparator>

The csvseparator element is for internationalization of the data grid export data button functionality and only applies to the data grid export file.

<keepgraphicalsearchenabled>true</keepgraphicalsearchenabled>

The keepgraphicalsearchenabled element is a Boolean that specifies whether or not to keep the graphical selection tool that the user chooses active even after a selection has been made. This means that you will not have to clear your selection and re-choose a graphical selection tool in order to make another selection. To unselect/disable the current graphical search tool all you have to do is clear your selection. Default is false if not specified.

<autozoom>true</autozoom>

The <u>autozoom</u> element is a Boolean that specifies whether or not to automatically zoom to the selected features after a search is completed. The Default is false if not specified.

<enabledatagridinteractionwithwidget>true</enabledatagridinteractionwithwidget>

The enabledatagridinteractionwithwidget element is a Boolean that specifies whether or not to enable interaction between the widget results and the datagrid results. The default for this element is false. This interaction is seen when you hover the mouse over a record in the data grid the corresponding record in the widgets results are highlighted and vice versa. With large result datasets this interaction causes a delay that can affect the performance of the viewer.

<toleranceforpointgraphicalselection>3</toleranceforpointgraphicalselection>

The toleranceforpointgraphicalselection element is a number that is in screen pixels that represents the tolerance that will be added to the graphical point search when click on the map. The toleranceforpointgraphicalselection is for point on point selection. This option is unchecked by default.

<tolerancebydefault >false</tolerancebydefault>

The tolerancebydefault element is a Boolean that specifies whether to check the "Add search tolerance to point selection" checkbox in the User Interface by default or not. This option is unchecked (false) by default.

<disablebuttons></disablebuttons>

The disablebuttons element is a comma separated string. Possible values include one or more, but not all three search types text,graphic,spatial. The grid button can also be disabled by adding grid to the list and the datagrid button can also be disabled by adding datagrid to the list. (example text,graphic,grid,datagrid)

<defaultselectionoption>textInput</defaultselectionoption><!--possible values only one graphicalInput or textInput or spatialInput -->

The defaultselectionoption element is a string that specifies which search option (i.e graphicalInput or textInput or spatialInput) will be the default search option for the widget.

<enabledrawgraphicbutton>true</enabledrawgraphicbutton>

The enabledrawgraphicbutton element is a Boolean that specifies whether to show the graphical selection button for using existing draw/eDraw graphics.

<enablebuffergraphicbutton>true</enablebuffergraphicbutton>

The enablebuffergraphic button element is a Boolean that specifies whether to show the graphical selection button for using existing point buffer widget graphics.

<selectedgraphicaltool></selectedgraphicaltool>

The selectedgraphicaltool element is a string that specifies if and which graphical selection button is the default button selected when the widget is opened and the defaultselectionoption = graphicalInput. The default is to have nothing optional values are extent, polygon, mappoint, polyline.

<multipartgraphicsearch>true</multipartgraphicsearch>

The multipartgraphicsearch element is a Boolean that specifies whether if the graphical selection tools allow multiple similar geometries to be drawn and the search button to activate the search. The multipartgraphicsearch is true by default.

<floatorfixed disablerelatestabinfixed="false">float</floatorfixed>

The floatorfixed element is a String that specifies whether if the datagrid will be a floating datagrid or a fixed datagrid. The new fixed datagrid allows you to specify a permanent location of the datagrid in the Flex Viewer UI. Please refer to the Enhanced Search Widget Fixed Datagrid Setup.pdf for details on how to setup the fixed datagrid. The disablerelatestabinfixed attribute is a Boolean attribute that determines if the relates tab in the fixed datagrid is enabled or disabled. The fault is false which means the relates tab is NOT disabled.

<relatetooltip>Show Relates</relatetooltip>

The relatetooltip element is a String that specifies the tool tip that is displayed when you hover over the relate icon button in the search results.

<relateicon>widgets/eSearch/assets/images/i_relate.png</relateicon>

The relateicon element is a String that specifies the path to the image that is displayed for the relate icon button in the search results.

```
The following section pertains to labels.
```

```
<labels>
    <bufferusergraphics>Buffer Graphic/bufferusergraphics>
    <norelatesfound>No related features found for: </norelatesfound>
    <norelatesfoundalerttitle>No Results</norelatesfoundalerttitle>
    <addtolerance>Add search tolerance to point selection</addtolerance>
    <existingdrawgraphicslabel>Use Existing eDraw Widget Graphics</existingdrawgraphicslabel>
    <existingbuffergraphicslabel>Use Existing Point Buffer Widget Graphics</existingbuffergraphicslabel>
    <graphicalsearchlabel>Graphical Search/graphicalsearchlabel>
    <textsearchlabel>Text Search</textsearchlabel>
    <resultslabel>Results</resultslabel>
    <layerlabel>Search Layer:</layerlabel>
    <a>layerfieldlabel>Search Layer Field:</a></a>layerfieldlabel>
    <nolayerlabel>No search layer defined.</nolayerlabel>
    <submitlabel>Search</submitlabel>
    <pointlabel>Select by Point/pointlabel>
    linelabel>Select by Line</linelabel>
    <rectanglelabel>Select by Rectangle</rectanglelabel>
    <polygonlabel>Select by Polygon</polygonlabel>
    <clearlabel>Clear</clearlabel>
    <loadinglabel>Loading...</loadinglabel>
    <selectionlabel>Features Selected:</selectionlabel>
    <gridresultsLabel>Show Results in Grid</gridresultsLabel>
    <csvdefaultname>Selected Records</csvdefaultname>
    <relatescsvdefaultname>Related Records</relatescsvdefaultname>
    <exportbtnlabel>Export...</exportbtnlabel>
    <export2csvoptionlabel>Export to CSV...</export2csvoptionlabel>
    <export2txtoptionlabel>Export to Txt...</export2txtoptionlabel>
    <buf>distance:</bufferLabel>
    <spatialsearchLabel>Spatial search</spatialsearchLabel>
    <applybufferlabel>Apply buffer</applybufferlabel>
    <searchlayerlabel>Search entities of:</searchlayerlabel>
    <enablemultipartsearch>enable multi-part graphics</enablemultipartsearch>
    <zoomalllabel>Zoom</zoomalllabel>
    <zoomalltip>Zoom to all results</zoomalltip>
    <bufferalpha>Adiust buffer alpha/bufferalpha>
    <buffercolor>Select buffer color</buffercolor>
```

The following section pertains to symbols.

Default symbols can be set using syntax as above to set the default symbology for search results. For point data you can either use simplemarkersymbol **OR** picturemarkersymbol.