Stage 3 proposal: #277 Change specialization base for <imagemap>

Change the specialization base for `<imagemap>` to enable image maps to be treated as images.

Champion

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Tracking information

Event	Date	Links
Stage 1 proposal accepted	16 July 2019	Minutes, 16 July 2019
Stage 2 proposal submitted	17 July 2019	DITA PDF
Stage 2 proposal discussed	06 August 2019	Minutes, 06 August 2019
Stage 2 proposal approved	13 August 2019	Minutes, 13 August 2019
Stage 3 proposal submitted to reviewers	13 August 2019	Scott Hudson Eliot Kimber Zoe Lawson
Stage 3 proposal (this document) submitted to TC	18 August 2019; updated 20 August with link to minutes when stage 2 proposal approved	

Approved technical requirements

Change the specialization base of `<imagemap>` and `<area>` to `<div>`

Dependencies or interrelated proposals

None

Modified grammar files

The following files must be modified:

DTDs

- `basemap.dtd`
- `basetopic.dtd`
- `utilitiesDomain.ent`
- `utilitiesDomain.mod`

RNG
`utilitiesDomain.rng`

In the content below, the following conventions are used:

- Bold is used to indicate code to be added, for example, **addition**.
- Line-through is used to indicate code to be removed, for example, ~~removal~~.
- Ellipses (…) indicate where code is snipped for brevity.

Figure 1: Changes to basemap.dtd

```
...
<!-- ============================================================ -->
<!--                       DOMAIN EXTENSIONS                    -->
<!-- ============================================================ -->
<!--                       One for each extended base element, with
                           the name of the domain(s) in which the
                           extension was declared               -->

<!ENTITY % topicref     "topicref |
                         %mapgroup-d-topicref; |
                         %ditavalref-d-topicref;
                         ">
<!ENTITY % keywords     "keywords |
                         %delay-d-keywords;
                         ">
<!ENTITY % index-base   "index-base |
                         %indexing-d-index-base;
                         ">
<!ENTITY % note         "note |
                         %hazard-d-note;
                         ">
<!ENTITY % ph           "ph |
                         %hi-d-ph;
                         ">
<!ENTITY % fig          "fig |
                         %ut-d-fig;
                         ">
<!ENTITY % data         "data |
                         %ut-d-data;
                         ">
<!ENTITY % div          "div |
                         %ut-d-div;
                         ">
...
```

Figure 2: Changes to basetopic.dtd

```
...
<!-- ============================================================ -->
<!--                       DOMAIN EXTENSIONS                    -->
<!-- ============================================================ -->
<!--                       One for each extended base element, with
                           the name of the domain(s) in which the
                           extension was declared               -->

<!ENTITY % index-base   "index-base |
                         %indexing-d-index-base;
                         ">
<!ENTITY % note         "note |
                         %hazard-d-note;
                         ">
<!ENTITY % ph           "ph |
                         %hi-d-ph;
                         ">
<!ENTITY % fig          "fig |
                         %ut-d-fig;
                         ">
<!ENTITY % data         "data |
                         %ut-d-data;
                         ">
<!ENTITY % div          "div |
                         %ut-d-div;
```

```
                                    ">
...
```

Figure 3: Changes to utilitiesDomain.ent

```
...<!-- ============================================================ -->
<!--                  ELEMENT EXTENSION ENTITY DECLARATIONS      -->
<!-- ============================================================ -->

<!ENTITY % ut-d-fig
  "imagemap"
>
<!ENTITY % ut-d-div
  "imagemap"
>
<!ENTITY % ut-d-data
  "sort-as"
>
...
```

Figure 4: Changes to utilitiesDomain.mod

```
...
<!-- ============================================================ -->
<!--              SPECIALIZATION ATTRIBUTE DECLARATIONS          -->
<!-- ============================================================ -->

<!ATTLIST  imagemap     %global-atts;  class CDATA "+ topic/fig ut-d/imagemap ">
<!ATTLIST  imagemap     %global-atts;  class CDATA "+ topic/div ut-d/imagemap ">
<!ATTLIST  area         %global-atts;  class CDATA "+ topic/figgroup ut-d/area ">
<!ATTLIST  area         %global-atts;  class CDATA "+ topic/div ut-d/area ">
<!ATTLIST  shape        %global-atts;  class CDATA "+ topic/keyword ut-d/shape ">
<!ATTLIST  coords       %global-atts;  class CDATA "+ topic/ph ut-d/coords ">
<!ATTLIST  sort-as      %global-atts;  class CDATA "+ topic/data ut-d/sort-as ">

<!-- ================== End of DITA Utilities Domain ==================== -->
```

Figure 5: Changes to utiltiesDomain.rng

```
...
  <div>
    <a:documentation>Define domain extension patterns</a:documentation>
    <define name="ut-d-fig">
      <ref name="imagemap.element"/>
    </define>
    <define name="fig" combine="choice">
      <ref name="ut-d-fig"/>
    </define>
    <define name="ut-d-div">
      <ref name="imagemap.element"/>
    </define>
    <define name="div" combine="choice">
      <ref name="ut-d-div"/>
    </define>
    <define name="ut-d-data">
      <ref name="sort-as.element"/>
    </define>
    <define combine="choice" name="data">
      <ref name="ut-d-data"/>
    </define>
  </div>
...
  <div>
    <a:documentation>SPECIALIZATION ATTRIBUTE DECLARATIONS</a:documentation>

    <define combine="interleave" name="imagemap.attlist">
      <ref name="global-atts"/>
      <optional>
        <attribute a:defaultValue="+ topic/fig ut-d/imagemap " name="class"/>
```

```
            <attribute a:defaultValue="+ topic/div ut-d/imagemap " name="class"/>
      </optional>
    </define>
    <define combine="interleave" name="area.attlist">
      <ref name="global-atts"/>
      <optional>
        <attribute a:defaultValue="+ topic/figgroup ut-d/area " name="class"/>
        <attribute a:defaultValue="+ topic/div ut-d/area " name="class"/>
      </optional>
    </define>
    <define combine="interleave" name="shape.attlist">
      <ref name="global-atts"/>
      <optional>
        <attribute a:defaultValue="+ topic/keyword ut-d/shape " name="class"/>
      </optional>
    </define>
    <define combine="interleave" name="coords.attlist">
      <ref name="global-atts"/>
      <optional>
        <attribute a:defaultValue="+ topic/ph ut-d/coords " name="class"/>
      </optional>
    </define>
    <define combine="interleave" name="sort-as.attlist">
      <ref name="global-atts"/>
      <optional>
        <attribute a:defaultValue="+ topic/data ut-d/sort-as " name="class"/>
      </optional>
    </define>

  </div>
...
```

Modified terminology

None

Modified specification documentation

The following table lists the changes that need to be made to element reference topics.

Topic	Current GitHub source	Post-accepted proposal DITA source
`<area>`	The `<area>` element is specialized from `<figgroup>`. It in defined in the utilities-domain module.	The `<area>` element is specialized from `<div>`. It is defined in the utilities-domain module.
`<imagemap>`	The `<imagemap>` element is specialized from `<fig>`. It in defined in the utilities-domain module.	The `<imagemap>` element is specialized from `<div>`. It is defined in the utilities-domain module.

Migration plans for backwards incompatibilities

See the "Migration plan" section of the stage two proposal.