MAPPING EVENTS

DRAFT 8 JUNE 2011
# The Aus-e-Stage Services: Mapping Events

## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping Events: The Mapping Events Interface</td>
<td>3</td>
</tr>
<tr>
<td>Mapping Events: Search</td>
<td>3</td>
</tr>
<tr>
<td>Example Mapping Events Search</td>
<td>4</td>
</tr>
<tr>
<td>Mapping Events: Browse Venues</td>
<td>6</td>
</tr>
<tr>
<td>Browse Venues Example</td>
<td>6</td>
</tr>
<tr>
<td>Browse drill down to Country or State level</td>
<td>6</td>
</tr>
<tr>
<td>Browse drill down to City, Suburb or Locality level</td>
<td>7</td>
</tr>
<tr>
<td>Browse drill down to Venue level</td>
<td>8</td>
</tr>
<tr>
<td>Geocoordinate Venue Information</td>
<td>9</td>
</tr>
<tr>
<td>Mapping Events: Search History</td>
<td>9</td>
</tr>
<tr>
<td>Mapping Events: Map controls and functions</td>
<td>10</td>
</tr>
<tr>
<td>About Maps</td>
<td>10</td>
</tr>
<tr>
<td>View</td>
<td>10</td>
</tr>
<tr>
<td>Clustering</td>
<td>10</td>
</tr>
<tr>
<td>Save</td>
<td>11</td>
</tr>
<tr>
<td>Google Map controls</td>
<td>11</td>
</tr>
<tr>
<td>Map Display Mode</td>
<td>11</td>
</tr>
<tr>
<td>Timeline</td>
<td>11</td>
</tr>
<tr>
<td>Reset Map</td>
<td>11</td>
</tr>
<tr>
<td>Mapping Events: Working with Mapping Events Map Data</td>
<td>12</td>
</tr>
<tr>
<td>Record Summary</td>
<td>12</td>
</tr>
<tr>
<td>Deleting items from the map</td>
<td>13</td>
</tr>
<tr>
<td>Information Windows</td>
<td>14</td>
</tr>
<tr>
<td>Hyperlinks to AusStage records</td>
<td>16</td>
</tr>
<tr>
<td>Mapping Events: Advanced</td>
<td>17</td>
</tr>
<tr>
<td>KML Downloads</td>
<td>17</td>
</tr>
<tr>
<td>Google Earth Overlays</td>
<td>19</td>
</tr>
<tr>
<td>Historical and Contemporary Maps</td>
<td>19</td>
</tr>
<tr>
<td>Tours</td>
<td>21</td>
</tr>
<tr>
<td>Creating Custom Overlays</td>
<td>21</td>
</tr>
</tbody>
</table>
Mapping Events: The Mapping Events Interface

The Mapping Events service enables researchers to search, display and visually analyse information about live performance on a map. It introduces new cartographic capabilities to extend research applications of the AusStage dataset. It is one of three NeAT funded services developed by the Aus-e-Stage project.

The home page for the Aus-e-Stage Mapping Events service (*Figure 1*) is at: [http://beta.ausstage.edu.au/mapping2/](http://beta.ausstage.edu.au/mapping2/).

![Figure 1: The Mapping Events interface](image)

Mapping Events: Search

The Mapping Events Search retrieves Contributors, Organisations, Venues and Events that match all your search terms. Records with matching alternate or previous names will also be retrieved.

1. **Contributors** – an individual, usually a person, who contributes in some capacity to the conception, production or presentation of an event.

2. **Organisations** – a group or company involved in the conception, production or presentation of an event.

3. **Venues** – a place where an event happens.

4. **Events** – a distinct happening defined by title, date/s and venue; typically, a performance or series of performances at a venue.

Type inverted commas (""") around search terms for exact phrase searching.

Please wait for the search to complete before exploring the results.

A maximum of 25 search results will retrieved for each type of record. If you don't see what you're looking for, try refining your search terms. You could also try searching the main AusStage website.
Example Mapping Events Search

In the example below a simple search for “george” has been used to yield results over all four categories. Figures are provided for each step.

*Figure 2:* As can be noted in the figure below this search resulted in 25+ Contributors and Venues. This means that there are more than 25 “george” results available in each of these categories (if a more specific result is expected narrower search criteria are needed such as adding a first name, more venue name details or an or exact phrase in inverted commas).

Results also included 14 Organisations and 20 Events.

![Mapping Events Search](image)

*Figure 2: Mapping Events Search*

*Figure 3:* Expansion of the tabs on the search screen will reveal the summarised results for each category.

Select items by ticking the box next to the individual names or select all by selecting the top left tick box in the section header. Click the Add to Map button to add the selected items to the map. The map will be displayed when the items have been added.

Switch between the Search, Browse and Map tabs across the top to continue searching, browsing and adding items to the map. To add a combination of contributors, organisations, venues and events this process needs to be repeated for each section.

The map will reload after each selection or group of items is added.
The map above shows four different icon markers (in varying colours) depicting

- **Contributors**
- **Organisations**
- **Venues**
- **Events**
Mapping Events: Browse Venues

An alternative way of adding AusStage venue data onto maps is available via the **Browse** tab. This method offers a way to drill down through a geographical hierarchy, to browse by specific areas (ranging from country to state to suburb) to venues that can be added to the map.

Browse for venues by clicking on the countries or states to reveal cities, suburbs and localities. Click on cities, suburbs and localities to reveal venues. Tick the box next to a name to select items at the next level down.

Click the **Add to Map** button to add venues to the map. The map will be displayed when the venues have been added.

**Browse Venues Example**

**Browse drill down to Country or State level**

As an example, a search and resulting map display for all venues in Tasmania is shown in **Figure 5**.

![Figure 5: Browse for all venues in Tasmania](image)
Browse drill down to City, Suburb or Locality level

Click on the name (but not check the box) of the desired Country or State selection in the first column to reveal the Cities, Suburbs and Localities listings in the second column for a narrower browse result. Select specific location names in this middle column to reveal individual Venues for that location in the right hand column.

*Figure 6* shows this using the Tasmanian example to randomly choose six locations. Note that in this example the Venues shown in the right column reflect the last tick box selected City, Suburb and Locality from the middle column (in this case Launceston) but clicking **Add to Map** will add all Venues for the selected Cities, Suburbs and Localities checked.

*Figure 6: Browse for Venues in selected Cities, Suburbs and Localities in Tasmania*
Browse drill down to Venue level

Click on the name of the City, Suburb or locality (not the checkbox) and then individually check the boxes of the Venues of interest and click Add to Map (with each selection) to drill down to select specific Venues.

Figure 7 shows "Town Hall" venues in Burnie, and Devonport by individually selecting Venues and adding to the map (one by one). Note that boxes in the left hand Country and State column and middle City, Suburb and Locality column are not checked.

Figure 7: Browse for specific Venues in Tasmanian Cities, Suburbs or Localities

Note that data and page refreshing by use of Reset Browse and Reset Map buttons is advisable before doing a new Browse search as former display results will remain on the map, often compounding the expected results.
Geocoordinate Venue Information

Bracketed numbers after the Cities, Suburbs and Localities listings refer to the geocoordinate information (latitude and longitude coordinates) available for associated Venues. The first number reflects the number of Venues that do have this information attached (and can therefore be reflected on the map) while the second number relates to the total number of Venues listed in AusStage for that City, Suburb or Locality.

Note, for example, that in the Tasmanian instance Launceston has 27/32 next to it (see Figure 8). This means that 27 of the venues in Launceston have geocoordinate information attached but there are 32 in total in the AusStage database (therefore 5 have not been geocoded). Likewise, Hobart has 43 out of 49 Venues with geocoordinate information attached.

![Figure 8: Browse Geocoordinate Venue Information](image)

At times it has not been possible to geocode some venues – in some cases venues are historical and no longer exist (and cannot or have not been tracked to date), many relate to performances (such as Indigenous performances) in unknown outdoor locations and in some cases new data entry does not yet include the geocoordinate information (this is being constantly updated but some gaps do occur from time to time).

Mapping Events: Search History

Search history is available on the Mapping Events **Search** tab. Use this function to return to previous current session search results for viewing and re-mapping as desired. This option is located at the bottom of the page as shown in Figure 9.
Mapping Events: Map controls and functions

Controls and functions are available for use with the map and are located in the left hand menu (About Maps, View and Save), on the map interface (Google Map controls, Map display mode) or below the map (Timeline, Reset Map).

About Maps

The About Maps tab in the main menu offers a clear and concise key to map functions and attributes including descriptions of icons, colours and instruction on how to use the view and save menu options.

View

Use the View menu functions for specific and quick focus to particular regions of interest ranging from capital city to state level or even out to a worldwide scale.

Select one of the options and the map will automatically zoom to the region of interest. To return to default view either use the mouse wheel to scroll back out or click on a larger View area (eg Australia).

Clustering

Clustering is a special option found under the View menu. Markers are clustered together to make the map easier to read. When two or more markers are close to each other, they may be replaced by a gray icon representing a cluster. The number indicates how many markers are clustered together.

Click on a cluster marker to zoom in and reveal the individual markers contained in the cluster. Clustering is automatically enabled when there are 100 or more markers on the map and cannot be disabled.
Save

The **Save** menu offers two options:

1. Bookmark a simple map (with less than 100 markers) in the internet browser. The bookmark will retrieve the latest data from AusStage each time you reload your map.

2. Download the map for viewing in other map software such as Google Earth. Map files are formatted in Keyhole Markup Language (KML) and can be directly opened and viewed in Google Earth.

**Google Map controls**

Change your view of the map by using the pan and zoom controls on the map. Zoom by mouse wheel scroll or zoom and pan by using the Google Map map slider and panning interface controls.

Click on the Street view symbol or drag it to the point of interest on the map for an alternative view. To exit street view the x in the top right corner is used.

**Map Display Mode**

View the map in several modes. The default **AusStage** view has been designed in a relatively simple monochrome style to offer maximum visualisation of the varied AusStage data. Google style Map, Satellite, Hybrid and Terrain views are also available modes.

**Timeline**

Filter based on time by using the timeline located underneath the map interface and simply sliding the bars at either end to adjust the time period. The map will automatically adjust to the revised time period for the set of results in use. Beginning and end dates of the selected period are shown above the timeline.

**Reset Map**

Reset the map by removing all icons and data by use of the **Reset Map** button located adjacent to the timeline. A confirmation message will appear on selection of this button to ensure that you do not inadvertently use it without realising the consequences.
Mapping Events: Working with Mapping Events Map Data

Record Summary

The left hand menu summarises and lists the contributors, organisations, venues and events on the map. Items can be independently expanded to reveal summary detail:

**Contributors** show the contributor name and their function. Each one is represented with a different coloured icon in the legend which is shown on the map (sometimes zooming in on the map is required to see all icons as they may be overlayed when concentrated in a particular area). Refer to example in Figure 10 below.

**Organisations** show the organisation name and location and are also coloured individually in the legend and on the map.

**Venues** and **Events** are unique as there is only one of each (Events are linked to Venues which have specific location geocodes attached) and are therefore only reflected in one colour (Venues are yellow, Events are blue). Clicking on individual icons in the menu zoom you directly to these Venues / Events on the map.

From this menu, you can show and hide icons and delete icons from the map. Clicking on a venue or contributor will reveal the icon on the map.

All items contain links (hyperlinked) to the AusStage database for textual information.

![Figure 10: Mapping Events data set with expanded contributors](image-url)
Deleting items from the map

Check the tick box next to each item to show/hide the item on the map. Select the x to remove the item altogether (confirmation to remove message will appear).

As an example using the previous “george” search, to remove Venue George Town Memorial Hall in Tasmania:

Original

Temporary deletion (deselecting checkbox)

Permanent deletion (clicking on the x)

Figure 11: Temporary and permanent removal of venues from the map
**Information Windows**

Information Windows have been created to display AusStage information on the map. All icons on the map have a number attached to them. This number reflects the number of records of that type at that particular location.

Click on an icon with a number 1 on it to reveal a simple info window. For example:

![Figure 12: Mapping Events information window](image)

Select an icon with number 2 or more on it to show more complex data in the Info window. Multiple items are listed across the top of the Info Window, as shown in the Figure 13 example.

![Figure 13: Mapping Events information window with multiple contributors](image)
Multiple icons may be linked to the one location.

For example, the icons in Figure 14 show that there are 3 Contributors, 3 Organisations and 4 Events all at the same location.

![Figure 14: Mapping Events information window with multiple contributors, organisations and events at the same location](image)

Note that in the Event Information Windows data is displayed chronologically in reverse order (newest at top) but other items are displayed alphabetically.

Adjust the screen view by simply clicking the mouse, holding and dragging (down) whilst on the map interface if the Information Window does not fully display (due to the amount of data contained).

Click on the x at the top right corner of the pop up box to close an Information Window Info Window.
Hyperlinks to AusStage records

Each info window contains hyperlinks to the Contributors, Organisations or Venues (the top line of the info window next to the icon) and to the actual Event (hyperlinked in the lower part of the info window). These link directly to the textual AusStage database record (opens in another window) as shown in the example in Figure 15 and Figure 16.

Figure 15: Mapping Events example organisation record

Figure 16: AusStage links to Organisation and associated Event records
Mapping Events: Advanced

Advanced use of the Mapping Events interface can be achieved by use of the KML Download function and incorporation of Mapping Overlays.

KML Downloads

The Download this Map as KML selection found under the Save menu offers advanced map usage options.

Select this download option to either open with a program such as Google Earth or to save the file for future use.

Choose the option Open with Google Earth to automatically open the selection in Google Earth. The KML file will be shown under the Temporary Places tab and can be renamed or moved as required.

Click the check box next to this file to turn the layer on and off and select Google Earth options to suit your viewing needs.

Figure 18 shows the “george” search as previously used downloaded as a KML layer and viewed on the standard Google Earth interface.
Click on the map icon in the area of interest to explode the icon group then select individual icons as required to view associated information. This is shown in Figure 19 and Figure 20.

Figure 19: View of exploded icon group in Google Earth (note highlighted red line to organisation selected for example in Figure 20)

Figure 20: Information window for selected Figure 19 Organisation
Google Earth Overlays

Historical and Contemporary Maps

A range of map overlays have been produced during the Aus-e-Stage project. These are available on the Aus-e-Stage Downloads page at [http://code.google.com/p/aus-e-stage/downloads/list](http://code.google.com/p/aus-e-stage/downloads/list) and include various historical and contemporary maps. Note that by nature these map files are very large and may take some time to download but only need to be downloaded once for active use.

Historical maps have been sourced for various Australian Capital cities and encompass a time range from early Western settlement to the 1900’s. Contemporary maps include data (for example 2006 ABS census data) and other pertinent information of current value to AusStage researchers.

To view these overlays:

1. Download the desired overlay and Open with Google Earth
2. Adjust Google Earth controls and use the transparency slider to view overlays in varying depths over current Google Earth imagery
3. View multiple overlays by downloading additional files as required

For example, to view results from the “george” search with an 1854 historical map of central Sydney add the Sydney download file to the Google Earth view and use the transparency slider and check boxes to turn layers on and off (Figure 21).
Contemporary overlays incorporating data such as the Australian Bureau of Statistics 2006 Census data contain information boxes with hyperlinks to relevant data sources.

Figure 22 demonstrates this for the SA ABS data map with focus on the Loxton Waikerie area. It is simple to overlay these data maps with AusStage and historical data for analysis and comparisons.
Tours

Selected tour data found in AusStage can also be saved in a downloadable KML overlay format and viewed in Google Earth.

An example of this uses Circus Oz tour data found at http://code.google.com/p/aus-e-stage/downloads/detail?name=circus-oz-tour.kmz&can=2&q=.

To use this:

1. Download the overlay and Open with Google Earth
2. Click the play tour icon
3. Use the Google Earth controls to adjust play speed and other attributes as desired

![Figure 23: Snapshot from the animated Circus Oz tour](image)

Creating Custom Overlays

You are able to create your own overlays by following these simple instructions:

1. Open Google Earth and position the 3D viewer in the location where you want to place the overlay image file.

   Try to position the viewer so that it corresponds in viewing altitude to the overlay. If the overlay is of a detailed view, zoom into the subject area so that you don't have to make large adjustments later. By contrast, if the overlay covers a large area, make sure the entire area is encompassed in the 3D viewer with some margins for adjusting the imagery.
2. Click **Add > Image Overlay** or click the highlighted button in the following image.

   The 'New Image Overlay' dialog box appears.

3. Provide a descriptive name in the **Name** field.

4. In the **Link** field, enter the location of the image file you want to use as an overlay or use the **Browse** button to locate it on your computer or network. The image appears in the 3D viewer, with anchor points that you use to position it.

5. Specify the descriptive information for the overlay.

6. Move the **Transparency slider** to the left to make the image a little transparent, which will assist you in placing the image in the correct location.

7. Once you have inserted the overlay image into the viewer, you can use the green markers to stretch and move the image in a number of ways to get the most exact positioning required.

   - Use the **center cross-hair marker** to move the image overlay on the globe and position it in the right location.
   - Use the **triangle marker** at the left to rotate the image for better placement.
   - Use any of the **corner or edge anchors** to stretch or skew the selected corner or side. If you press the Shift key when selecting this marker, the image is scaled from the center.

8. Click **OK** when you are finished. The map is now listed in the **Places** panel, and can be saved to a KML file.

Mapping: Application Programming Interfaces

The Mapping Service exposes an API for the retrieval of data related to building a map on a web page and the export of data in the KML format.

Data exported in the KML format can be used with a wide variety of GIS based applications including the popular Google Earth application.

Four core API’s are in use:

- Marker Data API - retrieve data used to build markers
- Search API - search for organisations / contributors etc.
- Lookup API - lookup various data elements in the system
- Events API - lookup details of events at Venues to use in populating infoWindows

Marker Data

Components of the Mapping Events Service are exposed as an API. The intention of the API is to make it easier for developers to customise their own front end interfaces and to split the work equitably amongst the software engineers working on the Aus-e-Stage project.

The Marker Data API exposes methods and data elements that can be used to construct a map on a web page.

Base URL

http://beta.ausstage.edu.au/mapping2/markers?

Combining the base URL with the parameters outlined below constructs a call to the API.

Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Possible Values</th>
<th>Optional</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>state, suburb, venue, organisation, contributor, event</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>id</td>
<td>Unique contributor or organisation id</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>callback</td>
<td>function name to use for a JSONP request</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

The type parameter specifies whether the call to the API is for data on venues at the state, suburb or specific venue. As well as data on venues associated with an organisation or a contributor.
**id for states**

Valid State Identifiers are:

<table>
<thead>
<tr>
<th>id</th>
<th>State / Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SA</td>
</tr>
<tr>
<td>2</td>
<td>WA</td>
</tr>
<tr>
<td>3</td>
<td>NSW</td>
</tr>
<tr>
<td>4</td>
<td>QLD</td>
</tr>
<tr>
<td>5</td>
<td>TAS</td>
</tr>
<tr>
<td>6</td>
<td>VIC</td>
</tr>
<tr>
<td>7</td>
<td>ACT</td>
</tr>
<tr>
<td>8</td>
<td>NT</td>
</tr>
<tr>
<td>99</td>
<td>Australia</td>
</tr>
<tr>
<td>999</td>
<td>Outside Australia</td>
</tr>
</tbody>
</table>

**id for suburbs**

If the task type is set to suburb the parameter is is expected to be encoded as follows:

`state-id_suburb-name`

For example:

1_Adelia

**id for contributors, organisations, venues and events**

For all other task types the id parameter is a comma separated list of unique identifiers.

*Note: It is not possible to mix types of ids in a single call to the API. Therefore if the type is set to venue only venue ids must be specified, conversely if the type is set to contributor only contributor ids must be specified.*
callback

The name of the callback function used when a request is made for JSONP encoded data

Sample Output

state

Retrieve markers for all venues in SA:


```
[ { "id" : "184",
   "latitude" : "-34.922921",
   "longitude" : "138.614116",
   "name" : "The Fringe Club",
   "postcode" : "5000",
   "street" : null,
   "suburb" : "Adelaide",
},
 { "id" : "11899",
   "latitude" : "-34.921044",
   "longitude" : "138.60502",
   "name" : "Unknown, The University of Adelaide",
   "postcode" : "5005",
   "street" : "The University of Adelaide",
   "suburb" : "Adelaide",
},
...]
```  

```
suburb

Retrieve markers for all venues in Adelaide, SA:


```
[ { "id" : "184",
   "latitude" : "-34.922921",
   "longitude" : "138.614116",
   "name" : "The Fringe Club",
   "postcode" : "5000",
   "street" : null,
   "suburb" : "Adelaide",
},
 { "id" : "11899",
   "latitude" : "-34.921044",
   "longitude" : "138.60502",
   "name" : "Unknown, The University of Adelaide",
   "postcode" : "5005",
```
Retrieve a marker for "Her Majesty's Theatre" in Adelaide

organisation

Retrieve markers for venues where an event occurred involving the Australian Dance Theatre
URL: http://beta.ausstage.edu.au/mapping2/markers?type=organisation&id=102
Retrieve markers for venues where an event occurred involving Geoffrey Rush


```
[ { "id" : 482,
  "venues" : [ { "id" : "302",
    "latitude" : "-34.919681",
    "longitude" : "138.597095",
    "name" : "The Space",
    "postcode" : "5000",
    "street" : "Adelaide Festival Centre, King William Street",
    "suburb" : "Adelaide",
  },
   { "id" : "106",
    "latitude" : "-33.751108",
    "longitude" : "150.696716",
    "name" : "Q Theatre",
    "postcode" : "2750",
    "street" : "Railway Street",
    "suburb" : "Penrith",
  },
   { "id" : "98",
    "latitude" : "-37.810308",
    "longitude" : "144.970033",
    "name" : "Comedy Theatre",
    "postcode" : "3000",
    "street" : "240 Exhibition Street",
    "suburb" : "Melbourne",
  }
  ]
}
```

Retrieve markers for venues where an event occurred involving Geoffrey Rush or Cate Blanchett


```
[ { "id" : 4921,
  "venues" : [ { "id" : "302",
    "latitude" : "-34.919681",
    "longitude" : "138.597095",
    "name" : "The Space",
    "postcode" : "5000",
    "street" : "Adelaide Festival Centre, King William Street",
    "suburb" : "Adelaide",
  },
   { "id" : "3",
    "latitude" : "-37.8214040",
    "longitude" : "144.9687240",
    "name" : "Playhouse",
    "postcode" : "3004",
    "street" : "Victorian Arts Centre. 100 St Kilda Rd",
  }
  ]
}
```
"suburb": "Melbourne",
"url": "http://www.ausstage.edu.au/indexdrilldown.jsp?xcid=59&amp;f_venue_id=3"
},
...
{"id": "33",
"latitude": "+37.827082",
"longitude": "+144.96654",
"name": "CUB Malthouse",
"postcode": "3006",
"street": "113 Sturt Street",
"suburb": "Southbank",
"url": "http://www.ausstage.edu.au/indexdrilldown.jsp?xcid=59&amp;f_venue_id=33"
}
},
{"id": 482,
"venues": [{
"id": "302",
"latitude": "+34.919681",
"longitude": "+138.597095",
"name": "The Space",
"postcode": "5000",
"street": "Adelaide Festival Centre, King William Street",
"suburb": "Adelaide",
"url": "http://www.ausstage.edu.au/indexdrilldown.jsp?xcid=59&amp;f_venue_id=302"
},
{"id": "106",
"latitude": "+33.751108",
"longitude": "+150.696716",
"name": "Q Theatre",
"postcode": "2750",
"street": "Railway Street",
"suburb": "Penrith",
"url": "http://www.ausstage.edu.au/indexdrilldown.jsp?xcid=59&amp;f_venue_id=106"
}
},
...
{"id": "98",
"latitude": "+37.810308",
"longitude": "+144.970033",
"name": "Comedy Theatre",
"postcode": "3000",
"street": "240 Exhibition Street",
"suburb": "Melbourne",
"url": "http://www.ausstage.edu.au/indexdrilldown.jsp?xcid=59&amp;f_venue_id=98"
}
}
]]

**Search API**

Components of the MappingService are exposed as an API. The intention of the API is to make it easier for developers to customise their own front end interfaces and to split the work equitably amongst the software engineers working on the Aus-e-Stage project.

The Search API exposes methods and data elements that can be used to search for contributors, organisations, etc.

**Base URL**

Combining the base URL with the parameters outlined below constructs a call to the API.

**Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Possible Values</th>
<th>Optional</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>task</td>
<td>organisation, contributor, venue, event</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>type</td>
<td>name, id</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>query</td>
<td>the search query</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>format</td>
<td>json</td>
<td>Yes</td>
<td>json</td>
</tr>
<tr>
<td>limit</td>
<td>an integer between 5 and 25</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>callback</td>
<td>function name to use for a JSONP request</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**task**

The type of search task to undertake for example a search for organisation or contributor data

**type**

The type of search to undertake either by name or by id number

**query**

The search query, either a list of search terms that must be present in the name or the id number to search for

*Note:* If a name search is undertaken the query is sanitised by:

- removing white-space at the start and end of the query
- remove all occurrences of the words and, or, not

Records containing all of the search terms are returned within the record limit specified

**format**

The type of data format used to prepare the search results. At the time of writing only JSON is a supported format

**limit**

The maximum number of result records to be returned. By default only 5 records are returned
callback

The name of the callback function used when a request is made for JSONP encoded data

Sample Output

The search result is formatted as a JSON array with zero, one, or more result objects.

Organisation ID Search

Conduct a search for the organisation with id 102

URL:


Organisation Name Search

Conduct a search for organisations that contain the words "australian" and "dance" in their name using the default record limit

URL:

"name": "Australian Dance Theatre",
"totalEventCount": 408,
"address": "126 Belair Road"
},
{
"id": "32347",
"mapEventCount": 1,
"name": "Australian Dance Theatre Academy",
"totalEventCount": 1,
"address": null
}
]

Contributor ID Search

A search for the contributor with id 482

URL: http://beta.ausstage.edu.au/mapping2/search?task=contributor&type=id&query=482

[ {
"eventDates": "1970 - 2010",
"firstName": "Geoffrey",
"functions": ["Actor",
"Director",
"Adaptor",
"Performer" ],
"id": "482",
"lastName": "Rush",
"mapEventCount": 70,
"totalEventCount": 81,
} ]

Contributor Name Search

A search for any contributors with "cate" in their name, specifying a limit of 10 records returned


[ {
"eventDates": "1980",
"firstName": "Anthony",
"functions": ["Set and / or Property Maker" ],
"id": "402671",
"lastName": "Mascatello",
"mapEventCount": 1,
"totalEventCount": 1,
},
{
"eventDates": "1935",
"firstName": "B.W.",
"functions": ["Conductor",
"Musical Director" ],
"id": "405906",
"lastName": "Caten",
"mapEventCount": 1,
"totalEventCount": 1,
} ]
{ "eventDates" : "1989 - 2010",  
"firstName" : "Cate",  
"functions" : [ "Actor",  
              "Director"  
              ],  
"id" : "4921",  
"lastName" : "Blanchett",  
"mapEventCount" : 24,  
"totalEventCount" : 31,  
},  
{ "eventDates" : "1984",  
"firstName" : "Cate",  
"functions" : [ "Actor" ],  
"id" : "227811",  
"lastName" : "Brennan",  
"mapEventCount" : 1,  
"totalEventCount" : 1,  
},  
{ "eventDates" : "1996",  
"firstName" : "Cate",  
"functions" : [ "Actor" ],  
"id" : "246522",  
"lastName" : "Crowe",  
"mapEventCount" : 0,  
"totalEventCount" : 2,  
},  
{ "eventDates" : "2003",  
"firstName" : "Cate",  
"functions" : [ "Director" ],  
"id" : "258170",  
"lastName" : "Dunn",  
"mapEventCount" : 1,  
"totalEventCount" : 1,  
},  
{ "eventDates" : "1968 - 2008",  
"firstName" : "Cate",  
"functions" : [ "Producer" ],  
"id" : "245256",  
"lastName" : "Fowler",  
"mapEventCount" : 34,  
"totalEventCount" : 38,  
},  
{ "eventDates" : "2001",  
"firstName" : "Cate",  
"functions" : [ "Playwright" ],  
"id" : "6900",  
"lastName" : "Furey",  
"mapEventCount" : 0,  
"totalEventCount" : 1,  
},  
{ "eventDates" : "1994",  
"firstName" : "Cate",  
"functions" : [ "Dancer" ],  
"id" : "252341",  
"lastName" : "Handley",  
"mapEventCount" : 1,  
"totalEventCount" : 1,  
},  
{ "eventDates" : "1987",  
"firstName" : "Cate",  
"functions" : [ "Producer" ],  
"id" : "245256",  
"lastName" : "Fowler",  
"mapEventCount" : 34,  
"totalEventCount" : 38,  
}
Venue ID Search

A search for the venue with id 815


Venue Name Search

A search for any venue with the words "her" and "majesty's" and "theatre" specifying the maximum record limit

[document content]
"longitude" : "138.597007",
"name" : "Prince of Wales Theatre",
"postcode" : "5000",
"street" : "58 Grote Street",
"suburb" : "Adelaide",
"totalEventCount" : 3,
},

{ "id" : "2965",
"latitude" : "-34.92832",
"longitude" : "138.597007",
"name" : "Tivoli Theatre",
"postcode" : "5000",
"street" : "58 Grote Street",
"suburb" : "Adelaide",
"totalEventCount" : 68,
}
]

Event ID Search

Conduct a search for the event with the id 71254

URL:

[ { "firstDate" : "2007-06-17",
"firstDisplayDate" : "17 June 2007",
"id" : "71254",
"latitude" : "-34.919681",
"longitude" : "138.597095",
"name" : "Shane Warne: the Musical",
"venueid" : "10806"
} ]

Event Name Search

Conduct a search for events with the word "shane" and "warne" in the event name

URL:
http://beta.ausstage.edu.au/mapping2/search?task=event&type=name&query=shane+warne

[ { "firstDate" : "2008-03-21",
"firstDisplayDate" : "21 March 2008",
"id" : "85842",
"latitude" : "-37.814725",
"longitude" : "144.965902",
"name" : "Shane Warne The Musical: A Work In Progress",
"venueid" : "655"
} ],

{ "firstDate" : "2008-12-10",
"firstDisplayDate" : "10 December 2008",
"id" : "80487",
"latitude" : "-37.815039",
"longitude" : "144.967359",
"name" : "Shane Warne: the Musical",
"venueid" : "83"}
Components of the MappingService are exposed as an API. The intention of the API is to make it easier for developers to customise their own front end interfaces and to split the work equitably amongst the software engineers working on the Aus-e-Stage project.

The Lookup API exposes methods that can be used to lookup a variety of data elements.

**Base URL**

http://beta.ausstage.edu.au/mapping2/lookup?

Combining the base URL with the parameters outlined below constructs a call to the API.

**Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Possible Values</th>
<th>Optional</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>task</td>
<td>state-list, suburb-list, suburb-venue-list, organisation, contributor, venue, map-colour-list</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>id</td>
<td>unique identifier use with the lookup task</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>format</td>
<td>json</td>
<td>Yes</td>
<td>json</td>
</tr>
<tr>
<td>callback</td>
<td>function name to use for a JSONP request</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Note: id is not required for a state-list or map-colour-list lookup task

**task**

The type of lookup task to undertake for example a lookup of organisation or contributor data

**state-list**

A list of objects that can be used to construct UI elements that allow the user to select a state or other geographic area in which to narrow their browse activity

**suburb-list**

A list of objects that can be used to construct UI elements that allow the user to select one of the suburbs that are located in the state or country as identified by the id parameter.
suburb-venue-list

A list of venues that are located in the state and suburb combination as identified by the id parameter

organisation

The details of an organisation

contributor

The details for a contributor

venue

The details for a venue

id

The unique identifier used to lookup the data as identified by the task parameter

State identifiers

Valid State Identifiers are:

<table>
<thead>
<tr>
<th>id</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SA</td>
</tr>
<tr>
<td>2</td>
<td>WA</td>
</tr>
<tr>
<td>3</td>
<td>NSW</td>
</tr>
<tr>
<td>4</td>
<td>QLD</td>
</tr>
<tr>
<td>5</td>
<td>TAS</td>
</tr>
<tr>
<td>6</td>
<td>VIC</td>
</tr>
<tr>
<td>7</td>
<td>ACT</td>
</tr>
<tr>
<td>8</td>
<td>NT</td>
</tr>
</tbody>
</table>

Suburb identifiers

The id parameter is expected to be encoded as follows:

state-id_suburb-name

For example:
1_Adelaide

format

The type of data format used to prepare the search results. At the time of writing only JSON is a supported format

callback

The name of the callback function used when a request is made for JSONP encoded data

Sample Output

state-list

Retrieve a list of state objects.

URL: http://beta.ausstage.edu.au/mapping2/lookup?task=state-list

suburb-list

Retrieve a list of suburb objects.

URL: http://beta.ausstage.edu.au/mapping2/lookup?task=suburb-list&id=1

The field "mapVenueCount" indicates the number of venues that can be put on a map. The field "venueCount" indicates the number of venues in the suburb

[ { "mapVenueCount" : "3", "name" : "Aberfoyle Park", "venueCount" : "3" }, { "mapVenueCount" : "332", "name" : "Adelaide", "venueCount" : "360" }, { "mapVenueCount" : "1", "name" : "Adelaide University, North Terrace", "venueCount" : "1" }, { "mapVenueCount" : "1", "name" : "Alberton ", "venueCount" : "1" }, { "mapVenueCount" : "1", "name" : "Aldinga Beach", "venueCount" : "1" }, ...

{ "mapVenueCount" : "1", "name" : "Wynn Vale", "venueCount" : "1" }, { "mapVenueCount" : "1", "name" : "Yorketown", "venueCount" : "1" } ]

suburb-venue-list

Retrieve a list of venues in Adelaide, SA:

URL: http://beta.ausstage.edu.au/mapping2/lookup?task=suburb-venue-list&id=1_Adelaide

[ { "eventCount" : "1", "id" : "3793", "mapEventCount" : "1" } ]
organisation

Lookup information on the organisation with id: 102


[ { "id" : "102", 
  "mapEventCount" : 303,
  "name" : "Australian Dance Theatre",
  "totalEventCount" : 408,
]

contributor

Lookup information on the contributor with id: 482

[ { "firstName" : "Geoffrey",


} ]

venue

Lookup information on the venue with id: 815


[ { "id" : "815",

"latitude" : "-34.92832",

"longitude" : "138.597007",

"name" : "Her Majesty's Theatre",

"postcode" : "5000",

"street" : "58 Grote Street",

"suburb" : "Adelaide",

"totalEventCount" : 314,


} ]

Event API

Components of the MappingService are exposed as an API. The intention of the API is to make it easier for developers to customise their own front end interfaces and to split the work equitably amongst the software engineers working on the Aus-e-Stage project.

The Event API exposes methods that can be used to retrieve details of events that occurred at a venue for use in populating infoWindows on a map.

Base URL

http://beta.ausstage.edu.au/mapping2/events?

Combining the base URL with the parameters outlined below constructs a call to the API.

Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Possible Values</th>
<th>Optional</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>task</td>
<td>organisation, contributor, venue</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>id</td>
<td>unique identifier use with the task</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
**venue**  
Specify the unique identifier of the venue when undertaking an organisation or contributor lookup  
Yes

**format**  
json  
Yes  
json

**callback**  
function name to use for a JSONP request  
Yes

### task

The type of search task to undertake for example a search for events that occurred at a venue, or the events associated with an organisation that occurred at the specified venue.

**organisation**  
A list of events that occurred at a venue associated with the specified organisation

**contributor**  
A list of events that occurred at a venue associated with the specified contributor

**venue**  
A list of events that have occurred at the specified venue

**id**  
The unique identifier of for a record matching the type specified by the task parameter

**venue**  
The unique identifier of a venue when undertaking a lookup for events associated with an organisation or contributor

**format**  
The type of data format used to prepare the search results. At the time of writing only JSON is a supported format

**callback**  
The name of the callback function used when a request is made for JSONP encoded data

### Sample Output

**Events at a Venue**

Retrieve details of events that occurred at venue with id: 815

08/06/11 - 44 - Mapping Events

Events that include an organisation at a venue

Events that include the contributor with id 102 at the venue identified by the id 815

URL:


Events that include a contributor at a venue

Events that include the contributor with id: 482 at the venue with id: 36

URL:
