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# **bw2-rest-api Documentation**

***Release 1.2***

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March 06, 2015



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This is documentation for version **1** of the Brightway2 REST API.



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## URLS

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- `/api/database/`: Get list of available databases. Method: GET.
- `/api/database/<database>/`: CRD for databases and database metadata. Database metadata sent as JSON. Methods: GET, POST, DELETE.

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**Note:** To create a database with the JSON backend, the POST request body defining database metadata (which is a hash table) should include the following: `{"backend": "json"}`.

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- `/api/database/<database>/activity/`: Get list of activities for database database. Method: GET.
- `/api/database/<database>/activity/<activity>/`: CRUD for activities. Methods: GET, POST, PUT, DELETE.





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### Running the API

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Installation will create a script `bw2-restapi` that can be invoked to run the API. See `bw2-restapi -h` for script options.



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## Database API

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**class** `bw2restapi.database.DatabaseAPI`

The base URL for activities is:

*/api/database/<database name>/*

The following REST methods are available: GET, POST, DELETE.

**delete** (*database*)

Delete an existing database.

Response codes:

- 200: Resource delete succeeded
- 404: Resource not found

**get** (*database*)

Get database metadata.

Response codes:

- 200: Resource retrieved
- 404: Resource not found

**post** (*database*)

Create a new database.

Post data is optional, and should be a JSON hash table with values to be passed to the `.register()` method. To create a database with a JSON backend, send `{"backend": "json"}`.

Response codes:

- 201: Database created
- 400: Can't decipher post data to valid JSON hash table
- 409: Conflict - resource already exists



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## Activity API

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**class** `bw2restapi.activity.ActivityAPI`

The base URL for activities is:

*/api/database/<database name>/activity/<activity key>/*

The following REST methods are available: GET, POST, PUT, DELETE.

**delete** (*database, activity*)

Delete an existing activity dataset.

Response codes:

- 200: Resource delete succeeded
- 404: Resource not found

**get** (*database, activity*)

Get an activity dataset.

Response codes:

- 200: Resource retrieved
- 404: Resource not found

**post** (*database, activity*)

Create a new activity dataset.

Response codes:

- 201: Activity dataset created
- 400: No JSON body could be decoded
- 404: Database not found
- 409: Conflict - resource already exists

**put** (*database, activity*)

Update an existing activity dataset.

Response codes:

- 200: Resource update succeeded
- 400: No JSON body could be decoded
- 404: Resource not found



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