
Performance Platform Documentation

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Performance Platform

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We expose a simple HTTP API for storing data in the Performance Platform.

There is one endpoint per data-set that can accept one or more JSON records being sent to it via a POST. We use [OAuth 2.0 Bearer tokens](#) to authenticate attempts to write to a data set.

You authorize each request by adding an Authorization header with the secret access token you should have been provided for each data-set.

The client request:

- should use a URL like `https://<write-host>/data/<data-group>/<data-type>`, where `<write-host>` could be something like `www.performance.service.gov.uk`
- must have an HTTP Content-Type header of `application/json`
- must have a valid [Authorization header](#)

The [backdropsend](#) tool provides a command line interface to the API. This adds support for retrying.

Adding data

POST `/data/` (string: `data_group`) /
string: `data_type`

Synopsis Insert data into a data set by sending a POST request with JSON in the body.

Example request:

```
POST /data/carers-allowance/transaction-count HTTP/1.1
Host: www.performance.service.gov.uk
Authorization: Bearer abcdefghijklmnopqrstuvwxyz0123456789abcdefghijklmnopqrstuvwxyz01
Content-Type: application/json
```

```
[
  {
    "_id": "unique-identifier-1",
    "_timestamp": "2015-01-01T00:00:00Z",
    "count": 123
  },
  {
    "_id": "unique-identifier-2",
    "_timestamp": "2015-01-02T00:00:00Z",
    "count": 456
  }
]
```

All of the above headers are important.

Example response:

```
HTTP/1.1 200 OK
Content-Type: application/json
```

```
{
  "status": "ok"
}
```

Request Headers

- **Authorization** – required OAuth token to authenticate the request
- **Content-Type** – type of the request body (only JSON is currently supported)

Request JSON Object

- **_timestamp** (*string*) – A datetime representing the start of the period that the data refers to. Required.
- **_id** (*string*) – A string that uniquely identifies that record. If a record with that identifier already exists, it will be overwritten. Optional.

Status Codes

- **200 OK** – data from the request body was stored in the data set

Emptying a data set

PUT `/data/` (string: `data_group`) /
string: `data_type`

Synopsis Empty a data set by sending an empty array as a PUT request.

Example request:

```
PUT /data/carers-allowance/transaction-count HTTP/1.1
Host: www.performance.service.gov.uk
Authorization: Bearer abcdefghijklmnopqrstuvwxyz0123456789abcdefghijklmnopqrstuvwxyz01
Content-Type: application/json
```

```
[]
```

Example response:

```
HTTP/1.1 200 OK
Content-Type: application/json
```

```
{
  "message": "carers_allowance_transaction_count now contains 0 records",
  "status": "ok"
}
```

Request Headers

- **Authorization** – required OAuth token to authenticate the request

Status Codes

- **200 OK** – data set now contains no records

Client implementations

We provide several implementations of client code to talk to the Performance Platform:

- Go
- [Java implementation](#) intended to periodically poll a JDBC data store and push data Performance Platform
- JavaScript
- Python

Glossary

- Aggregate** Applying a function to a Measure, such as summing, calculating the mean etc
- Backdrop** An application that is part of the performance platform. It provides the [read and write API](#) for data.
- Chart** A graphical representation of a Measure and a Dimension (eg number of applications by channel)
- Dashboard** A page showing multiple metrics, typically for a single *service*
- Dataset** A collection of data of a particular type. In relational terms, this is a table. In non-relational terms, this is a collection of documents.
- Data type** Each *Dataset* stores a particular type of data, eg current traffic volume
- Dimension** A non-numeric type of *Field* eg an operating system or browser
- Element** A component of a Visualisation such as a chart or aggregate summary
- Field** A ‘column’ in a dataset
- Measure** A numeric type of *Field*, eg number of applications. A Measure may be aggregated
- Metric** A specific data series, eg completion rate, user satisfaction, page load time, uptime etc
- Module** A module is a *metric* and a *visualisation* together, eg digital take-up shown as a line chart
- Observation** A ‘row’ in a dataset
- Service** A transactional service is a facility that enables users to exchange information, money, permissions, goods etc with government. For example: Renew you car tax, Apply for Carer’s Allowance, Apply for a fishing rod licence etc.
- Service Group** A group of closely related services, eg Carer’s Allowance service group includes applications, existing claims, appeals etc
- Spotlight** An application that is part of the performance platform. It is responsible for [rendering data](#) from the [Backdrop](#) API to display visualisations of service performance
- Stageprompt** A JavaScript library that provides an adapter over analytics software
- Transaction** An exchange of information, money, permissions, goods etc that takes place between government and users (individuals, businesses and other organisations). Examples include an application for a passport, a renewal of a patent, an update to the Organ Donation Register. A transaction will usually result in a new (or amended) government record.
- Visualisation** A set of Elements using the Measures and Dimensions from the Dataset

Get a Performance Platform dashboard

This page explains how to get a dashboard on the [Performance Platform](#).

A published dashboard is a requirement of the [Digital by Default Service Standard](#), which is required for all services with over 100,000 transactions per year. All services, regardless of size, need to provide data on transaction volumes every quarter.

5.1 Before you start

Please discuss your dashboard requirements with whoever will be signing off the publication of the dashboard as soon as possible.

5.2 How to get a dashboard

A standard dashboard for transactional services includes [four mandatory KPIs](#).

- Cost per transaction (the average cost to the government of each completed transaction)
- User satisfaction (how satisfied users feel after completing a transaction online)
- Completion rate (the percentage of users who complete a digital transaction once they have started it)
- Digital take-up (percentage of all transactions which are completed using digital channels)

5.3 How to get a transactional services dashboard

To get a dashboard, email the following information to performance@digital.cabinet-office.gov.uk. You can use the same address for further enquiries about dashboards and the Performance Platform.

<p>Your contact details</p>	<ul style="list-style-type: none"> • Your name • Your email address • Your phone number
<p>Service description</p>	<ul style="list-style-type: none"> • The name of your service • Short description of what the service does and who its intended users are • URL of the service start page (and the start page on GOV.UK if this is different)

We'll need access to the following data in a format that can be read by our database. Please send details of the data, but do not put the data itself in an email.

<p>Digital take-up</p> <p>Cost per transaction</p> <p>User satisfaction</p> <p>Completion rate</p>	<p>Send a completed copy of the transactions by channel spreadsheet</p> <p>We will take your costs data from the transactions data collection run every quarter by GDS. All services included in this exercise are listed on the Performance Platform's services page. If your service isn't listed, email Clifford Sheppard. If your service doesn't have cost information, here's how to calculate it.</p> <ul style="list-style-type: none"> • URL for your GOV.UK 'done' page. <p>You can get a 'done' page by clicking 'content change' on the GOV.UK support site. If you can't access this, please speak to the GDS point of contact in your department.</p> <p>If you capture user satisfaction in a different way please tell us and we'll try to include it.</p> <p>If you use Google Analytics we need:</p> <ul style="list-style-type: none"> • View and read permissions for googleapi@digital.cabinet-office.gov.uk • Details of at least one goal that allows us to calculate the completion rate • Your View ID <p>Let us know if you use a different analytics provider (e.g. Webtrends, Piwik).</p> <ul style="list-style-type: none"> • Name and email address of people who will upload the data on an ongoing basis <p>We can also use the digital take-up data to show transactions by channel.</p>
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If you would prefer to use our platform API to automate the upload of any data please let us know.

Once we have this information we can publish your dashboard to a non-linked, non-searchable URL.

When the dashboard is complete and signed-off, it will be made publicly available.

5.4 Keeping your dashboard up to date

You own the data in the dashboard and are responsible for maintaining its quality.

If your dashboard is supported by an API then this data will update automatically.

If your dashboard is supported by spreadsheet data you'll need to regularly upload current data which will then automatically display in the dashboard. You do this using a GOV.UK Sign on account, which we can create/update for you.

/data

POST /data/(string:data_group)/(string:data_type),
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PUT /data/(string:data_group)/(string:data_type),
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