User guide to the Pacific Islands Data Portal
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1. Frequently Asked Questions

1. How do I become a new user to the portal?
   You have to register first. New users can be added by a Site Manager or Administrator using the ‘People’ menu. Read more in Adding New Users.

2. I forgot my password, what do I do now?
   A Site Manager or Administrator can change your password. Once logged in with the new password, click your username on the blue panel and then change the password to your own choice via the ‘Edit’ button.

3. How do I upload new data on the portal?
   New data can be added to the portal by selecting ‘Dataset’ under the ‘Add content’ menu. Read more in Adding a Dataset.

4. How do I delete data on the portal?
   Data can be deleted by the Site Manager or the Content Creator who added the dataset. Click on the dataset, then click the ‘Edit’ button and scroll down to find the ‘Delete’ button. To delete a resource, click the dataset then the individual resource, click ‘Edit’ then scroll down to find ‘Delete’ button. Read more in Editing or Deleting a Dataset.

5. What types of files can I store on the portal?
   A large range of file types can be uploaded to the portal or zipped folders can be uploaded for multiple files (e.g. shapefiles). Uploading spreadsheet data in CSV format and spatial data in GeoJSON format enables you to create charts and maps from these data in the portal. Read more in Adding a Dataset.

6. Can I produce graphs from the portal?
   Yes, the portal has a chart builder accessed under the ‘Visualizations’ menu. Read more in Creating Visualizations.

7. Does the portal have analysis capacities?
   No, the data portal is a place to store, access and visualize datasets. Analysis is done by the user in other applications and there are excellent free ‘opensource’ options available (e.g. R statistics platform, QGIS). However, the portal is a great place to store analysis results!

8. How can I link existing online data to the portal?
   Resources can be files held on remote server and linked to the portal. When adding a resource, select the ‘Link to Remote File’ option and paste in the website URL (e.g. http://example.com/gold-prices-jan-2011.csv). Read more in Step 3: Adding Resources.
9. Can I add audio or video to the portal?
   Audio and video files can be uploaded to the portal in zipped folders. Video and audio displayed on an external website can be opened in the portal by adding a resource, selecting the ‘Embed External Resource’ and pasting in the website URL. Read more in Step 3: Adding Resources.

10. What is metadata?
    Metadata is information about the data. Read more in Step 4: Adding Additional Metadata.

11. Why tag datasets?
    Tags are keywords that help portal users locate a particular dataset. Read more in Tagging Datasets.
2. Data portal structure

Each Pacific Island Country has its own data portal and there is also a Regional data portal. The regional portal contains regional-scale datasets and also sources datasets from the different country portals into one place. These are automated links: if you change or delete a dataset in a country portal, it will also be deleted in the regional portal and vice versa.

All portals are setup with the following building blocks: **Groups** which contain **Users**, and **Datasets** which contain **Resources**. The diagram below illustrates the different levels of these building blocks. Understanding this terminology will help you when uploading data to the portal.

- A **Group** is a collection of **Users** from the same organization, department, agency, etc. Only users from a group are able to upload and edit datasets on the data portal. Users have to be registered to become part of a Group.
- A **Dataset** is a folder or container that holds **Resources**, the actual data itself. You have to create a dataset first, before you are able to upload data (resources).
- A **Resource** can be any type of data, like Word or pdf-reports, csv or Excel files, maps or gis-files etc.

Symbology used in the portal to distinguish between a dataset and a resource:
3. Managing Users and Groups (for Site Managers and Administrators only)

Introduction

What you can do on the portal depends on the permissions given to the role assigned to you. User roles and permissions maintain the security of your site.

Roles and Permissions

The following is a list of each role used in the data portal, with a description of its purpose and a general description of what the role is able to do. Multiple roles can be assigned to a user, but generally they are in a hierarchy where any higher level role has equal and greater permissions of a lower level role.

Anonymous User
This is any site visitor accessing the site who is not logged in. Anyone who is not authenticated is an anonymous user. It is sometimes useful to log out of your account to view pages as an anonymous user will see them.

Permissions:
- View and search published content

Content Creator
Content Creators are the most common users who will have access to login and provide datasets to be published on the environmental data portal. These users should also be members of a group, which would typically be the government agency they are employed by.

Permissions:
- Create datasets and resources
- Edit datasets and resources related to their group.
- Create visualizations (charts)
- Edit own visualizations
Site Manager
This role is the highest level possible for non-technical users. A Site Manager performs administrative functions, and is a role best suited for a supervisor, manager, or other trusted upper-level employee. The Site Manager is provided with a sweeping overview of the site as well as its content and users. However, they do not deal with the technical back-end configuration or code.

Permissions:
- Create, edit and delete datasets and resources associated with any group.
- Create, edit and delete visualizations (charts).
- Create, edit and delete standard webpages, dashboards and stories.
- Create and manage groups
- Change menu structure
- Administer users
- Configure Harvests

Administrator
Administrators hold the highest level of all roles and permissions and have no restrictions. Administrators are able to modify settings of the underlying Drupal platform, and can modify most things of the site to meet user needs. This role is for a web professional with high technical competency and a good understanding of how Drupal works.

Permissions:
- Modify themes and layouts, and enable or disable modules.
- Modify Drupal settings

Adding New Users
As a Site Manager, a core piece of your role involves adding users to the site.

You can add new users by clicking on the People link and choosing the Create user menu item for quick access or the main People page.
Add user

People

List Permissions

Username *
Spaces are allowed; punctuation is not allowed except for periods, hyphens, apostrophes, and underscores.

E-mail address *
A valid e-mail address. All e-mails from the system will be sent to this address. The e-mail address is not certain news or notifications by e-mail.

Password *

Confirm password *

Provide a password for the new account in both fields.

Status
- Blocked
- Active

Roles
- authenticated user
- administrator
- editor
- site manager
- content creator

New user form
Key information when adding a new user

**Username:** Create a unique username to create a new user account. The user can change their username once they’re logged in as long as it’s still unique, but you’ll have to choose a name to begin with for the user to first access the site.

**Email address:** This is how the user will be contacted with notifications about their account and how they can recover a lost password. Choose an email that they are likely to check on a regular basis.

**Password:** The user should change whatever you originally enter for the password, but you’ll need to choose the initial password so that the user can login to their account and change the profile information.

**Roles:** As you’re adding a new user you’ll choose which role that person should have from the list of user types detailed in another section. Choosing a role might be obvious in some cases, but in other cases it may be less clear. The role you assign will depend on how much a person needs to do with the site. Higher-level access roles automatically have all the permissions of lower-access roles, but in general we recommend erring on the side of lower-access.

Once you click the Create new account button at the bottom the page, the account is created and can now be managed with other existing user accounts.

**Adding Users to a Group**

New and existing user must be manually added to a group(s) in order for them to use them to add data to the portal. Site managers can add users to groups through the group section.

*Access the Groups page*
Select the group to add a user to

Click ‘Group’ button

Click ‘Add people’ button

Start typing a username and a matching list of existing user names will pop-up. Select the user you want to add. You can also add a message to be sent to group administrators (e.g. informing them of a new group member). When complete, click green Add users button below to add the user.
Managing Existing Users

Site managers can manage users by clicking ‘People’ in the Admin Menu. From this screen you can see all existing users, their roles, and details about their account, and by clicking on individual users you can additionally see all the content the user has created. You can also edit their account to change details, add or remove a role, add them to Groups or cancel an account.
The User Management Page

Editing an existing user’s account

The displayed list of users on the User Management page can be filtered and sorted using the filters at the top of the page. Once you’ve found the user you wish to edit in the user table, click the “edit” link at the end of that user’s row.

On the resulting “edit user” page, you can edit the user’s username, email, or profile information. You can also set a new password for the user. Click the “Save” button at the bottom of the page to save your changes.
Blocking a User or Cancelling an Account

At some point, a user account may need to be deleted or blocked. Typically this is for internal employees who move on from the organization, but there are occasions involving external users. There are a number of options for canceling an account or blocking a user to meet a number of scenarios.

**Block an account**

Blocking an account is the most simple and straightforward way to suspend an account. Blocking a user account keeps a user from logging in, and accounts can easily be unblocked. A blocked account only means that a user cannot login to their account and access your DKAN site. All of their content and profile details will remain, so nothing is lost if you want to unblock an account and restore access.

By blocking an account, you keep users from creating a new account with the same details and avoid repeating the blocking process.
Cancel an account

Canceling an account can be a permanent action, and there are several options to choose from. Some of the actions cannot be reversed, so you should be careful when deciding which option to choose. Below are the options for canceling an account and the implications of selecting the option. While Site Managers can cancel the account of any user on the site, users may also cancel their own accounts.

Are you sure you want to cancel the account tempuser?

When cancelling the account

- Disable the account and keep its content.
- Disable the account and unpublish its content.
- Delete the account and make its content belong to the Anonymous user.
- Delete the account and its content.
- Require e-mail confirmation to cancel account.

When enabled, the user must confirm the account cancellation via e-mail.

Select the method to cancel the account above. This action cannot be undone.

Cancel account options

Disable the account and keep its contents:

If you disable the account, the details of the profile remain in tact but the user is blocked from accessing the site with their user login. By keeping the contents, any content that the user published will remain on the live site. Because the account is only disabled (blocked) the user remains as the
author of the content and the profile details may still be accessed. This option is similar to just blocking an account, and it’s a good temporary measure in most cases.

**Disable the account and unpublish its contents:** This option blocks the user from accessing the site and all the content that the user has published will be unpublished. This means that their content will not appear on the live site, but it will still exist behind the scenes. It can be managed out of public view and in the mean time, the user cannot do anything else on the site. This is a good option if you need to review the content a user has published and need it to be off the site but still need to access it.

**Delete the account and make its contents belong to the Anonymous User:** This is a permanent action. Once you delete an account, you cannot recover any of the details that were associated with the user profile. With this option you can delete the entire account as well as keep its contents. Because the account associated with the user who was the original author no longer exists, the content must be assigned to a different author. This option quickly changes the author so that the content remains on the live site, and you can change the author at any time. Again, this is a permanent option so be careful before making this selection.

**Delete the account and its contents:** This is a permanent action and the most severe choice when canceling an account. This options not only deletes the user account and all the profile details, it also deletes all the content the user added. Neither the account nor the content can be recovered with this selection. As a general best practice, we recommend never deleting content if it can be edited or simply unpublished.

**Require email confirmation:** For any option you choose when canceling an account, you can make sure the user is aware by requiring email confirmation. An email will be sent to the email address provided in the user’s profile details. When you check the Require email confirmation box, the account won’t be canceled until the user confirms through the email.

### Group Roles and Permissions

With large sites there is often a need to have a subset of the content managed by a specific list of users. Think of a large agency or department with sub-departments or programs that produce content. With Groups, you can silo content and users so that the different departments can easily manage and control only the content they are producing.

To keep content organized and in the hands of its owners, and without introducing the risk of inadvertent (and sometimes irreversible) actions, Group-level permissions give users the ability to do things they couldn’t necessarily do on the site outside of the Group.

**About Group roles and permissions**

After adding a new Group, Site Managers can assign Datasets (and their Resources) to that Group. You can also manage the members of a Group, adding new members and giving certain members different roles.
Members of a Group are bound by the permissions of their role and restricted to the content in their Group. As a Site Manager you have access to all Groups and are not limited by the permissions of the Group.

Within Groups there are different levels of access a user can have, which determines another level of permissions. Any user who belongs to a group falls into one of two types: Member or Administrator. Users not in the group are considered Non-members.

Nonmember
A Nonmember is any user on the site who does not belong to the Group.

Permissions:
- Request membership in the Group
- View Group members and content.

Member
A Member is a basic user within the Group who is mostly adding and editing their own content for the Group.

Permissions:
- Add content to the Group
- Edit own content within a Group (Content assigned to a Group can only be edited by members of that Group)

Administrator
An Administrator of a Group plays a similar role to that of an editor. They manage the team of users associated with the Group, and can edit any of the content. It’s good practice to have only 1 or 2 users in this role for any given Group.

Permissions:
- Edit all content assigned to the Group (Cannot modify content in other Groups)
- Add Group members and assign group roles

Add Group Members
For basic members of a Group, there are two ways that you can add a user to a Group: from the user profile and from the Group page.

Add a user by editing their user profile:
This way of adding users to a Group is preferred if you are the Site Manager but not the Group Administrator. The Group Administrator should be aware and approve of incoming members. You can submit a request for a user to a Group by selecting the Groups on the user’s profile page.
By adding a user to a Group from the user’s profile page, a request is sent to the Group Administrator on their behalf for the Administrator to approve.

Edit the user’s profile who you want to add to the Group and scroll to the bottom of the page. In the section Group membership section there are two fields, Your groups and Other groups.

**Your groups**: These are Groups that you are a member of. Users are not automatically added to Groups, so Groups won’t appear in this field unless you add yourself to a Group.

**Other groups**: These are simply Groups that you are not a member of. As a Site Manager, you can add any user to a Group regardless if you are a member yourself. But the Group names will not automatically appear like in the Your groups field, so you will have to know the name of the Group to enter it in the Other groups field.

Once the right Groups have been selected, click the Save button at the bottom to submit the requests.
Add a user from the Group page:
This option is best if you are the Site Manager and the Group Administrator. You can add user members directly from the main Group page by clicking the Group button and clicking the Add people link. On the next page, you can add users by pulling up an existing user and optionally choose if a member should be an Administrator member.

Navigating to ‘Add people’ on the Group Page
**Adding People on the group page**

Begin typing an existing a user and a list of autocomplete options will appear to select from. A user must already have an account to be added to a Group, so if a person needs to be added you should first create a site account for them with the appropriate role.

By default a user will only have a Member role in the Group. To give the user an Administrator role and permissions, check the administrator member box. To finally create the user, click the Add users button at the bottom of the page.

**Managing Group Members**

You can manage Group members directly from the main Group page by clicking the Group button. From this page you can manage existing members by clicking the People link. The Group overview page lists all the members of a Group including pending members. From this page you can see how many members are in the group overall, the number of Datasets associated with the Group, access and edit individual member profiles, perform bulk actions and manage membership requests.
Find members: All the members of a Group, including pending members, appear on the members list. There are two ways to find members: by State and by Name.

State: State refers to the status of a member. Active members are users who regularly add Datasets to the Group. Blocked members are unable to add Datasets to the Group and are not able to request membership. Pending members have requested to join the Group and are waiting for approval from the Group administrator. Use the State drop-down menu to find users who fit a common state. This is helpful when you want to perform bulk actions on multiple users at the same time.

Name: Finding a member by name is a much more specific type of search. You can search for multiple members at the same time by entering the user names in the Name search field separated by commas. This type of search is helpful if you know which specific member you’re looking for or if there is a specific group of members that don’t have a common state but you want to perform a bulk action on that group of members.
4. Adding a Dataset

Introduction

Datasets are “Containers” or “Folders” that hold resources, the actual data itself. Datasets are given metadata such as author, license type etc, and they can be assigned to Groups. One dataset record may contain multiple resource records, which are used to provide multiple file formats, data variations or related information such as reports.
Step 1: Creating a Dataset

From the Admin Menu, hover over the Add Content menu link.

On the drop-down menu, select the Dataset option.

Add values for the basic metadata fields such as title, description, tags, groups and topics.

Specify a license to clarify reuse limitations.

Click ‘Next: add data’ to continue
Step 2. Setting the license level

Access Control and Licensing

Dataset names and their descriptive metadata will be publicly available. However, access to the actual resource files can be restricted using the License Options and Access Control field.

There are 3 license levels for a dataset to choose from:

1) **Public**: For access to high level, sensitive data not in the public domain (e.g. commercially sensitive).
2) **Inter-agency**: For access and use of data not in the public domain.
3) **Private**: For data which is publicly accessible.

For all license levels, the existence of a dataset and the metadata describing a dataset will be visible to the public. This means that everyone (all users, even if they are not logged into the portal), will be able to see that the dataset exists. If you want to restrict access and download of the resources (the actual data), you can use the license level ‘Inter-agency’ (to share between the user groups registered on the portal) or ‘Private’ (to share only between users of the same group). If you use the level ‘Public’, all users will be able to access and download the data resources from the dataset.

Note that license levels are set for the entire dataset (not per resource). If you need to use different license levels for the same dataset, you need to create separate datasets. For example: a final version of a public report can be put in one dataset, with a ‘Public’ license level. While working on a new version of the report, this draft version has to be uploaded into a new dataset with license level ‘Private’, to be shared only with the users of the group.
Step 3: Adding Resources

Resources are the actual files or references for the dataset being published. Multiple resources can be added to one dataset, which can be useful for publishing multiple formats or variations of the dataset. Resources can also be used to publish other related references such as a copy of a report that a dataset was used for.

Three methods are provided for adding a reference file:

Upload
Drag and drop a file into the upload area or select Browse to choose the file to upload.

Embed Resource
Provide a URL to a file provided on an external website and the data portal will attempt to embed and display that resource directly on the page. This is useful when referencing external images so that they are visible on the resource page directly in the data portal. Note however that some website block their resources from being embedded.

Link to Remote File
Provide URL link to resource provided by an external website. The link will be published as a standard hyperlink.

The data portal supports many file types, including: csv, html, xls, json, xlsx, doc, docx, rdf, txt, jpg, png, gif, tiff, pdf, odf, ods, odt, tsv, geojson and xml.
Add a Resource

If providing a data format that DKAN can parse (CSV, GeoJSON), DKAN can generate grid, graph or map visualisations of the dataset. Enable the desired data preview options where appropriate for your dataset.

Provide a title and description for the dataset. If providing multiple resources for one dataset, it is a good idea to include in the title how the resources are different. E.g.
● ‘Rainfall data - Monthly’
● ‘Rainfall data - Yearly’

After completing the fields or a resource, select Save to save the view the resource page, Save and add another to add another resource record to the same dataset or Next: additional information to continue to step 3 where more metadata can be provided.

Next: Additional Info  Save  Save and add another

Additional resources can be added to a dataset at a later point in time by navigating to the dataset and selecting Add Resource.

CSV Format - Comma Separated Values

CSV format is a common, simple format for producing a machine-readable spreadsheet of data. Wherever possible, it is recommended that published datasets are made available in CSV format. DKAN is capable of reading CSV formatted data and provides visualisation options for generating tables, graphs and maps, making the dataset easily accessible and browsable to users. See Working with CSV Files in the Tips and Tricks section of this document for further details on working with CSV files.

Data from CSV files can also be imported into the DKAN Datastore. Doing this allows the data to be queried via the DKAN APIs, allowing the data to be integrated directly into other applications such as for generating charts.
To make CSV data available via the DKAN API, import it into the datastore by going to Manage Datastore and clicking Import.

GeoJSON Format

GeoJSON is a common format used for spatial datasets and can be generated using GIS software such as ArcGIS and QGIS. DKAN is capable of reading GeoJSON files in order to present spatial datasets directly onto a map. Ensure that geojson is selected in the format field when providing a GeoJSON resource. See Working with GIS Files in the Tips and Tricks section of this document for further details.
DKAN can provide map visualisations from GeoJSON files, or CSV file that contain latitude and longitude values.
Step 4: Adding Additional Metadata

Metadata is **information about the dataset** or resource you are adding to the Data Portal. Entering metadata can be done while uploading your dataset and resources, in the “**Additional Info**” section. The additional metadata fields can be populated by clicking **Next: Additional Info** after creating a resource record, or by selecting **Edit** from a dataset page.

This step is not mandatory in the upload process of adding new data, but we highly recommend to add as much additional information (metadata) as possible. This helps users to find datasets and determine if it is useful to them.

You can fill out the following fields in the Additional Info section:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>The author of the dataset (individual or organization).</td>
</tr>
<tr>
<td>Spatial / Geographical Coverage Area</td>
<td>The area that the dataset relates to. Drop a pin or draw a polygon on the map to specify the area.</td>
</tr>
<tr>
<td>Spatial / Geographical Coverage Location</td>
<td>The name of the area that the dataset relates to (address, city, state,... any description).</td>
</tr>
<tr>
<td>Frequency</td>
<td>How often a dataset is published.</td>
</tr>
<tr>
<td>Temporal Coverage</td>
<td>The temporal period that the dataset covers (date, or start and end date range encompassing the dataset).</td>
</tr>
<tr>
<td>Contact Name</td>
<td>The name of the person who can be contacted regarding the dataset.</td>
</tr>
<tr>
<td>Contact Email</td>
<td>The email address of the person who can be contacted regarding the dataset.</td>
</tr>
<tr>
<td>Homepage URL</td>
<td>The URL of the homepage where more information about the dataset can be found. This field is not intended for an agency’s homepage (e.g. <a href="http://www.agency.gov">www.agency.gov</a>), but rather if a dataset has a human-friendly hub or landing page that users can be directed to for all resources tied to the dataset.</td>
</tr>
<tr>
<td>Data standard</td>
<td>The name of the data standard (if any) that the dataset conforms to.</td>
</tr>
<tr>
<td>Language</td>
<td>The language used in the dataset.</td>
</tr>
<tr>
<td>Resources</td>
<td>List of resources that you added to the dataset (or want to add to the dataset).</td>
</tr>
<tr>
<td>Related content</td>
<td>An internal link or link to an outside resource that provides additional context to the dataset.</td>
</tr>
<tr>
<td>Revision information</td>
<td>Provide an explanation of the changes you are making in the Revision log message box. This will help other authors understand your motivations.</td>
</tr>
</tbody>
</table>
5. Editing or deleting a dataset

To edit/delete a dataset click on the dataset and then click the ‘Edit’ button. All sections of the dataset can be edited.

To delete the dataset scroll down to the bottom of the page and press the ‘Delete’ button.
To edit/delete a resource click on the resource itself.

Click the ‘Edit’ button.

To delete the resource scroll down to the bottom of the page and click ‘Delete’.
6. Creating Visualizations

Introduction

The DKAN data portal software allows for visualizations (i.e. charts) to be created from dataset resources, where that resource is machine-readable. Machine-readable resources are typically resources that have been uploaded in CSV format and have been loaded into the **Dataset**. For more details on loading CSV files into the datastore, see the *Adding a dataset* quick start guide.

Step 1. Choose a Resource

- Enter a title for the chart.
- Enter a description if needed.
- Then start typing the title of a resource that you would like to use as the data source. A list will appear, select the resource from the list.
- OR, if the data you want to use is not on your site, click the Upload Data tab to upload a CSV data file.
- Click the Next button.

Add Chart

1. Load Data
2. Define variables
3. Choose chart type
4. Preview and adjust

**Title**

**Description**

<table>
<thead>
<tr>
<th>Internal Data</th>
<th>Upload Data</th>
</tr>
</thead>
</table>

*To create a chart using data from a resource that already exists on the site, start typing the title of the resource here. Select the resource from the list that appears.*

*Type the title of the resource to use for the data.*

*Or, if the data is in a file that is not on your site, click the Upload Data tab to upload a file.*

**Load Data**

**Source Type** *(Experimental: Backends other than DKAN are still a work in progress.)*

**CSV**

Click next
Step 2. Define Variables

- **Series**: Add all the columns you would like to plot along the y-axis, the value axis.
  A collection of related values is what makes up a ‘series’.
- **Y-Field Data Type**: The data type will be auto-detected but if you see issues you can manually select the data type here.
- **X-Field**: Choose a single column for the x-axis, the category axis.
- **X-Field Data Type**: The data type will be auto-detected but if you see issues you can manually select the data type here.

---

Define Variables

**Source**
inode/e0e42cb1-e515-431f-b762-86ac46909784/download

<table>
<thead>
<tr>
<th>Series</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Eligible to Retire</td>
<td>Percent Retirements</td>
<td></td>
</tr>
</tbody>
</table>

**Y-Field Data Type**

- Number
- String
- Date
- Auto

**X-Field**

- Fiscal Year

**X-Field Data Type**

- Number
- String
- Date
- Auto
Step 3. Choose Chart Type

Select the chart type that will best represent your data. **NOTE:** X and Y Axis Fields are not supported by the Pie Chart type.

Choose Chart

- **Source**
  /node/4d6d64b8-5c1d-49b6-a222-65264a7c0b35/download

- **X Field**
  date

- **Series Fields**
  price
Step 4. Preview and Adjust

You can adjust colors, margins, include a goal, labels, tick values, and more. Click the question mark icons if you need help understanding the configuration options.

By default the chart will use the first 100 records of your data source. To use all records, click the Dataset tab to reveal the data pager, edit the max range value from 100 to the total number of records present.
Preview and Adjust

* Chart Preview: Note that by default the preview only displays up to 100 records. Click on the Dataset tab below to review the data in use. Adjust the start and end fields of the pager to set the number of records you wish to use.

1. Chart: Dataset
2. Start: 1
3. End: 100

Click the Dataset tab to see the data used to create the chart.

The pager shows how many records are being used to create the chart (default is 100).

2969 records

The total number of records in the source

---

Query Editor

Click the ‘+’ on the query editor to see the query input field. Enter text to query the data. Returned rows will contain data matching your text (including partial text matches). Click on the Dataset tab to better see how the data is modified by your query.

---

Use the Query Editor to drill down to a specific portion of your data.
Filter Editor

Click the ‘+’ on the filter editor to add one or more filters to limit the data used for the chart. Multiple filters will be applied with the AND operator (all criteria must be met for the data to be included in the chart).

1. Create a filter
   - Select the field you would like to filter by.
   - Select filter type: Select Value to filter by strings (labels), select Range to filter by numerical values, and select Geo distance to filter by geographical data.
   - Click Add
   - Value filters check for exact matches (no partial text matches; use the Query Editor instead if you need to search for partial text matches)

1. Configure the filter
   - Fill in the fields to complete the filter.
   - Click **Update** to reload the chart.

To remove a filter, click the trash can icon next to the filter name.
Chart Configuration

X Axis
- **Format** Select an appropriate format for the X Axis labels.
- **Axis Label** will provide a custom label for the x axis.
- **Note:** Axis labels do not display for Pie Charts.
- **Label rotation** will change angle of label values.
- **Tick Values** Enter a numerical range to set the start and end values to display.
- **Step:** Use the Step field to define the value between each tick within the range.
  **NOTE:** If the range set for tick values is smaller than the range of complete data represented, the chart will be abbreviated.

Y Axis
- **Axis Label** Provides a custom label for the y axis.
- **Note:** Axis labels do not display for Pie Charts.
- Adjust the *distance* field if your axis label overlaps the y-axis data labels. You can move the label left with positive values, and right with negative values. You may need to adjust the left margin of the chart as well.
- **Tick Values** Enter a numerical range to set the start and end values to display.
- **Step:** Use the Step field to define the value between each tick within the range.
  **NOTE:** If the range set for tick values is smaller than the range of complete data represented, the chart will be abbreviated.

General
- **Color:** Set the color the chart is drawn in. Use either a [HEX color code](#) or a [valid css color name](#). Separate multiple colors with commas.
- **Goal:** Overlay a goal or target line on the chart.
Margin: Enter value of margin in the order: top, right, bottom, left

Show Title: Display the title you entered on step 1.

Show Controls: Whether to show extra controls or not. Extra controls include things like making multiBar charts stacked or side by side.

Show Legend: Display a legend for the chart.

Show Tooltips: Shows data and label on hover.

Group By X Field:

If there are two or more rows that have the same value in the column assigned to the x-axis field, those rows will be combined and display as a single data point. This is only relevant for combining numerical data.

Fewer X-axis Labels:

Reduces the number of labels displayed along the x-axis.

Step 5. Saving the chart
Remember to click Finish to save your configuration changes.

Step 6. Embedding the chart
Once configured and saved, a chart can be embedded into other webpages, such as within the data portal in the description field of a dataset and also into external websites.

When viewing a visualization page, click on the < Embed button and copy the Embed code text. Paste this code into the webpage where you want to display the chart. Note that some website content management systems will require this code to be pasted while editing in Source mode.
Copy and paste the embed code to embed the chart into other webpages.

The embedded chart will be generated dynamically, which means that if the dataset resource is updated and imported into the datastore then the chart will automatically update to reflect the new data. Depending on configured caching rules there may be a delay before the chart re-generates with new data.
Example of a chart embedded into the description of the related dataset.
7. Stories and Dashboards

**Stories** provide a narrative that uses data in the portal to engage with other users and the public. Stories can be created by Content Managers through the ‘Add content’ tab and completed stories can be accessed by all users via the ‘Stories’ tab.

**Story on plastics ban from PNG data portal**

**Dashboards** provide a web page layout to bring content together. You can create different dashboards for different topics. While most web layouts require knowledge of computer code, portal layouts have several templates to choose from. Once the Dashboard itself is added, content is added to the layout of the Dashboard in panes. Visualizations, media, text, etc can then be added to the panes.
8. Social media

There are several public sharing options built into the Data Portal, on the level of a dataset. You can tweet, link or publish directly to Facebook or other channels.

When you click on a dataset, the bottom left of the overview page gives you several options to share the dataset on Social media (Twitter, LinkedIn, Reddit, Google+ and Facebook).

Note that you are sharing the dataset as a whole, including all resources that are contained within the dataset. It is not possible to share separate resources.

Be aware of which login you are using for your social media. If you are logged in with your personal account, the dataset will be shared on your personal page. Datasets are preferably shared on the page of an organization.
9. Tips and tricks

Good practices

GOOD PRACTICES WHEN UPLOADING A DATASET

1) **Avoid double data.** Before uploading a dataset, check the portal to see if no other user has already uploaded the same dataset. It is also possible that you are uploading a new resource, that could be best placed under an already existing dataset (containing similar data or older versions of the same data for example).

2) **Consider grouping your data resources** under one dataset, when relevant. Be aware of not grouping too much, and only grouping resources when they are strongly related. Avoid that other users are not able to find your data. A good example of grouping different resources would be: three State of the Environment (SOE) reports for the same country, but from a different year, can be grouped under de dataset “SOE reports”. This dataset will contain all three reports as resources. Read more in the [Grouping Datasets](#) section.

3) **Use a good title.** A good title is a description that is not too short, not too long, and that contains the most relevant information on the dataset or resource. The title alone should be able to guide users if they need the dataset or not. Put more details into the Description field.

4) **Tagging is crucial.** Take the time to think of good tags or keywords, so other users can find your datasets easily. Read more in the [Tagging Datasets](#) section.

5) **Metadata are crucial.** It is not mandatory, but really good practice to take the time to add additional data about the dataset. Like this, other users will know who can be contacted, when the dataset was collected, what to be aware of when using the dataset etc.

6) **Same file, different format:** when you upload the same file (RESOURCE), but in a different format, both files need to have the exact same name, and need to be in the same DATASET!

Example: when you upload a GIS file as a shapefile and a geojson file, put them both in the same dataset and use the same filename.

7) **Same file, different version:** when you upload the same file (RESOURCE), but a different version, both files need to have the exact same name with the date or version at the end of the name. In this case, the files also need to be in the same DATASET.

Examples of good versioning practices:

- **Forest_cover_v1.xls**: first version of forest cover dataset
- **Forest_cover_v2.xls**: second version of forest cover dataset
- **Forest_cover_2015.xls**: forest cover dataset of the year 2015
- **Forest_cover_2018.xls**: forest cover dataset of the year 2018
- **Forest_cover_20150120.xls**: forest cover dataset of 20th January 2015
- **Forest_cover_20180515.xls**: forest cover dataset of 15th May 2018

TIP: If you put the date “backwards” (year-month-day), the latest version will always appear at the bottom of your filing system.
Finding data

The Data Portals do not have the structure of a “classic” relational database. The way you upload and find data is by organizing it in themes and tagging it with keywords.

THEMES
The standard environmental themes that are part of the portal are:

- Atmosphere and Climate
- Land
- Biodiversity
- Built Environment
- Coastal and Marine
- Culture and Heritage
- Inland Waters
- Nuclear Legacy

These themes are flexible, in the sense that, if relevant for the country, new specific themes can be added. For example, for Marshall Islands a “Nuclear Legacy” theme was added to the theme list.

KEYWORDS
By using the search box (top right corner of the portal), you can search for specific datasets in the portal, based on tags or keywords that other users have used when uploading datasets and resources.

OTHER WAYS TO FIND DATA
When you click “Datasets” in the menu bar, the left part of the screen shows the following items, which can be opened separately by pressing the arrow button on the right.

- **Content Types**: shows all datasets in the portal.
- **Topics**: shows a list of all portal themes with the number of available datasets per theme. You can click each theme to get an overview of the datasets it contains.
- **Tags**: shows a list of all keywords or tags that have been entered by users, with the number of available datasets per keyword. Allows for specific keyword searches.
- **Format**: shows all the data formats (pdf, png, zip, csv, dot, jpeg, xls, geojson,...) that have been uploaded to the portal with the number of available datasets per format. Allows to search for images, gis files etc.
- **Publisher**: shows an overview of all the Groups that have published data on the portal with the number of available datasets per group. Allows you to see all datasets per group.
- **License**: shows the 3 license levels with the number of available datasets per level. Allows you to search for public data.
Grouping Datasets

Datasets. When adding a new dataset to the portal ensure you select at least one ‘Topic’. Each topic covers a major environmental theme (e.g. Atmosphere and Climate) which defines the subject area which the dataset belongs to and assists portal users to find data. In the event that your dataset does not fit into an existing topic, a new topic can be created.

Resources. Each dataset contains resources comprising all relevant data files. In the Tuna Fishery Yearbook 2016 example below the resources include: the original report in pdf format, as well as a csv file and an excel spreadsheet (with graphs) that we derived from the report.

A poor example of grouping resources would be to include both Inshore and Offshore fisheries in the same dataset – this would make the dataset too broad and potentially make locating resources difficult.
Tagging Datasets

It is important to tag datasets appropriately when adding them to the portal. Tags are keywords that help portal users locate a particular dataset. In the example below we have tagged a tuna fishery dataset with the words ‘SOE’, ‘by-catch’ and ‘longline’ to help users locate this dataset for their State of Environment reporting or more generally for environmental information related to the tuna industry.

Demo at bottom, type search box

Think of tags as an extra way of categorizing datasets or filtering down your search when looking for datasets. You can also use a set of fixed or predefined tags like ‘SOE’, ‘Indicator’, or the name of the indicator, to easily find the datasets related to SOE reports, or a specific indicator.

For example: you can use the following keywords to tag datasets related to the following SOE-indicators: “reef fish”, “forest cover”, “rainfall”.

Tags have to be short and simple. Try to imagine what other users would type in the search box when trying to find the dataset you are uploading. For example: ‘rainfall’ is a better tag then ‘rainfall patterns’ or ‘rainfall analysis’.
Working with CSV Files

The format of your data makes a big difference to how it can be viewed and used.

Some data formats are *machine-readable*, allowing the data portal to process the files, so they are easier to find and can be published as graphs and charts.

*You can make your data machine-readable* by uploading it in the CSV format.

**Formatting data as CSV**

*Most data-crunching software allows you to simply go ‘File >> Save As’ and choose the CSV format.*

Each CSV file is like a single sheet in a spreadsheet document, so you may need more than one CSV file to hold all your data.

**Handy checklist**

- If you have many ‘tables’ of data on one sheet, copy each table to its own spreadsheet page and export each sheet as a CSV. That will be a better format for your spreadsheet too.
- In a CSV file, each record must be contained on a single row or column.
- Ensure there are clear and succinct headings for all the data. You can have headings for the columns and for rows, using the first cell at the top of left in each. It is not necessary to have both sets of headings, but it is usually necessary to have one.
- Merged cells are not possible in CSV:
  - Flatten your headings into a single cells in which each cell fully describes the content of that column or row.
  - Split any merged cells in your data, otherwise the rows will not line up properly.
  - If one record spans more than one row, you will need to flatten out the values into columns of a single row.
- If the data contains dates and times or specific units, ensure they are presented consistently. Provide another CSV (data dictionary) which describes the type of data present, its specific formatting and meaning.
- Formulas should be rendered out to their calculated values.
- It is good to include your spreadsheet or database files as additional resources for others who may want to manipulate the data in that format.
- Making CSV files from relational data is a bit more nuanced. You can export results from a query or report as a CSV. Focus on creating a few CSV files which highlight the important aspects of your data.
GIS FILE FORMATS
Geographical Information System (GIS) files come in a lot of different formats. To name just a few: Shapefile (.shp), Geojson file (.geojson), Google Earth file (.kml, .kmz), Raster files (.geotiff).

GeoJSON is a common format used for spatial datasets and can be generated using GIS software such as QGIS and ArcGIS. DKAN is capable of reading GeoJSON files in order to present spatial datasets directly onto a map. Creating a map on the fly, within the DKAN software of the portal is only possible with geojson files; it will not work with other formats like shapefiles.

UPLOADING GIS FILES
- **Uploading a geojson file:** When uploading a geojson file, ensure that geojson is selected in the format field when providing the resource.
- **Uploading a shapefile:** Since a shapefile consists of several different files, the best way to upload is by first zipping the shapefile.

DIFFERENCE BETWEEN SHAPEFILE AND GEOJSON FILE

<table>
<thead>
<tr>
<th>Shapefile</th>
<th>GeoJSON</th>
</tr>
</thead>
<tbody>
<tr>
<td>a shapefile is a collection of files</td>
<td>single, compact format</td>
</tr>
<tr>
<td>Mandatory files</td>
<td>open standard format</td>
</tr>
<tr>
<td>• .shp — shape format; the feature geometry itself</td>
<td>data can be read by a greater number of software packages</td>
</tr>
<tr>
<td>• .shx — shape index format; a positional index of</td>
<td>• More on <a href="http://geojson.org/">http://geojson.org/</a></td>
</tr>
<tr>
<td>the feature geometry to allow seeking forwards</td>
<td></td>
</tr>
<tr>
<td>and backwards quickly</td>
<td></td>
</tr>
<tr>
<td>• .dbf — attribute format; columnar attributes</td>
<td></td>
</tr>
<tr>
<td>for each shape, in dBase IV format</td>
<td></td>
</tr>
<tr>
<td>Other common files</td>
<td></td>
</tr>
<tr>
<td>• .prj — projection format; the coordinate system</td>
<td></td>
</tr>
<tr>
<td>and projection information, a plain text file</td>
<td></td>
</tr>
<tr>
<td>describing the projection using well-known text</td>
<td></td>
</tr>
<tr>
<td>format</td>
<td></td>
</tr>
<tr>
<td>• .sbn and .sbx — a spatial index of the features</td>
<td></td>
</tr>
</tbody>
</table>
CONVERTING A SHAPEFILE TO A GEOJSON FILE

In QGIS 2.18

1) Open QGIS.
2) Add your shapefile. A shapefile is a vector file format, so use the 'Add Vector Layer' button. The Add Vector Layer window will open.
3) Everything in the Source type dialogue can be left as is. Use the Browse button to navigate to the location of your shapefile. A shapefile consists of different file types, so pick the file with extension .shp. Click open to load the shapefile into QGIS.
4) In a new QGIS project, a great first question is what map projection is the shapefile in? Double click on the shapefile in the Table of Contents to pull up the Layer Properties Dialogue Box. In the General tab, under 'Coordinate reference system' you will see a value representing the map projection. Decide if the shapefile is in the correct coordinate system for your specific purpose. If you want, you can change the projection in the next step.
5) Right click on the shapefile in the Table of Contents and click Save as.
6) In the Save As dialogue, switch the Format to GeoJson (first drop-down list).
7) If you want to change the projection, click the small globe-ish icon to the right of the CRS drop down option. EPSG is a coded value that is used to identify certain projections, which in this case is 4326, a suitable web mapping projection. Pick a different projection if needed.
8) Click OK.
9) Browse to your location and save the file.

Online conversion of shp to geojson via MyGeodata Converter:
https://mygeodata.cloud/converter/shp-to-geojson
10. Video tutorials

The SPREP YouTube channel has a separate playlist for the Inform project, containing a series of video tutorials on the use of the Data Portal:

- Inform project: Data Portal Tutorial 1 - How to add a dataset
- Inform project: Data Portal Tutorial 2 - How to add a resource
- Inform project: Data Portal Tutorial 3 - How to add additional information
- Inform project: Data Portal Tutorial 4 - How to create a visualization

Go to https://www.youtube.com/user/SprepChannel/playlists to access the videos.