



DOMAIN MANAGER

USER MANUAL

The Domain Manager Guide Version 1.0

User Manual

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This product is developed by the United States CISA
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Introduction to Domain Manager

Domain Manager offers the following capabilities:

- Ability to manage the domain lifecycle from purchasing, making live, and taking down
- Generate nameservers
- Add and manage DNS records
- Retrieve a list of available domains, templates, and applications
- Use the GUI or CLI
- Setup S3 bucket, SSL certificate, CloudFront Distribution
- Categorize domains

Introduction

Over the last few years, Assessments recognized the need to better manage domains and created a new domain management process. We're sunsetting the old process of manually configuring and tracking domains and replacing it with the Domain Manager Tool. This tool provides Assessments with a centralized domain configuration environment and up-to-date domain availability. Within the new tool, Federal leads and operators will be able to establish reputable domains with appropriate categorization and website content. In addition to the DMT, Jennifer and Laura will be the administrative domain managers to help the branch purchase new domains, renew expiring domains, and manage the DMT by adding users, assigning domains to teams, working with your team's domain POCs, and more.

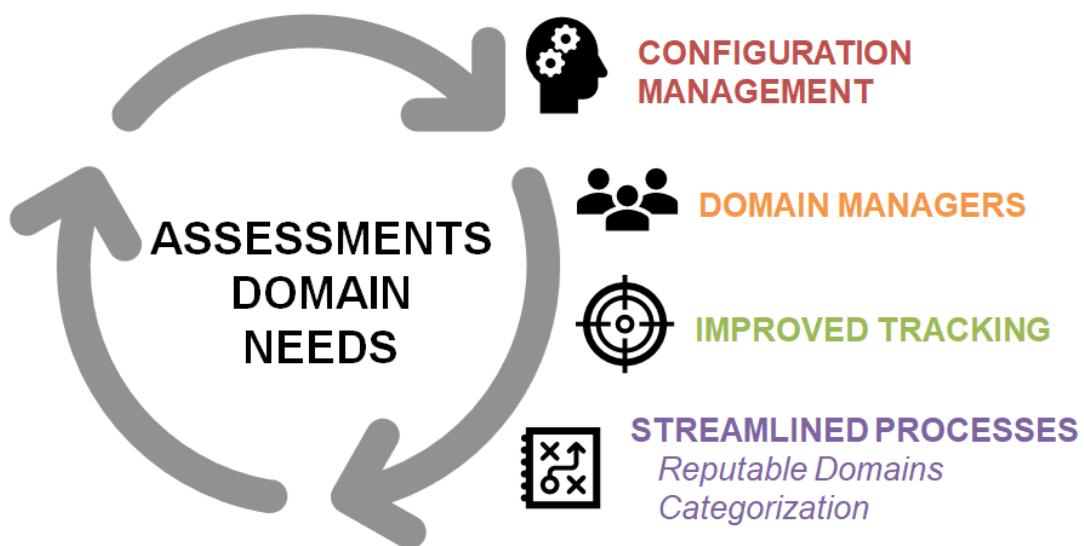


Figure: Domain Manager process

Domain Manager has several use cases. A user can:

- setup a domain
- upload templates
- choose from a selection of existing templates
- upload external web content
- launch and takedown websites
- categorize live websites on various categorization proxies
- manage DNS and Redirect records
- categorize websites that are not managed by Domain Manager

Overview

This section describes the common features in the Domain Manager application.

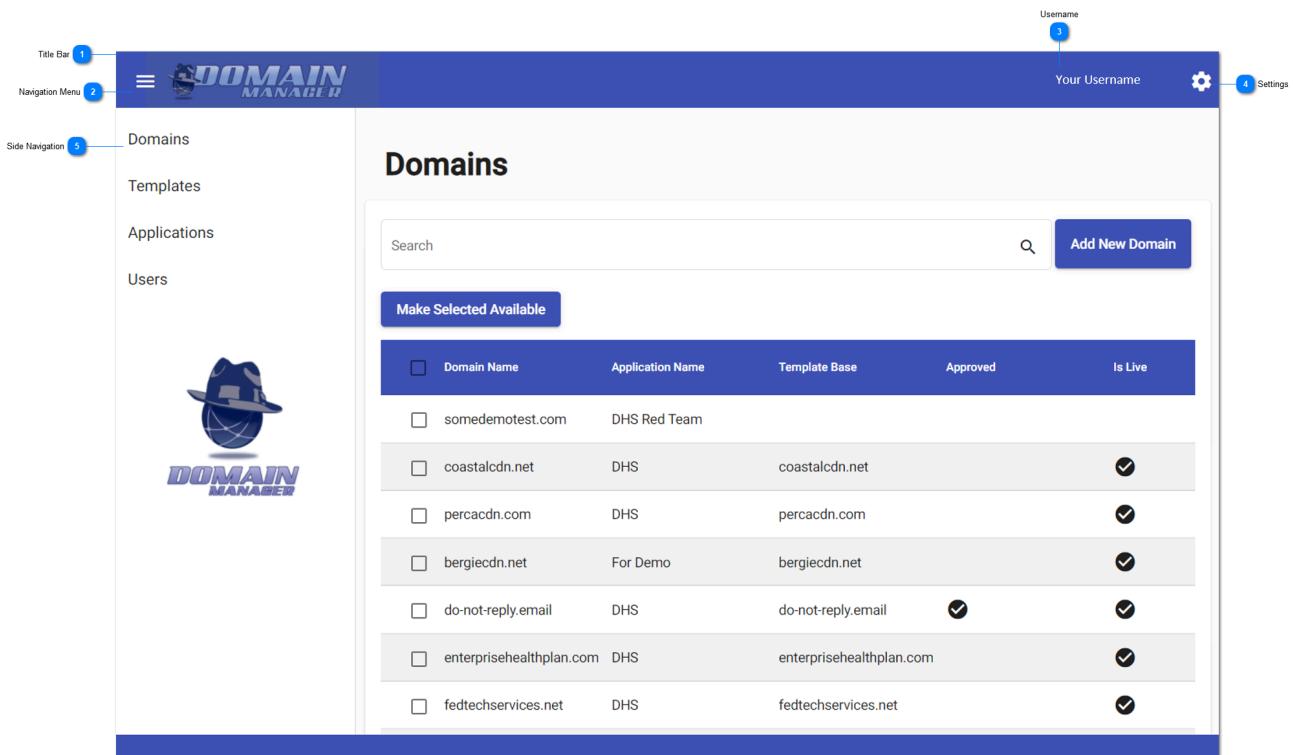


Figure: DM screen overview

1 Title Bar



The title bar contains the navigation menu, welcome identifier, and settings menu.

2 Navigation Menu



The navigation menu icon opens and closes the side navigation.

3 Username

Your Username

This will display the logged-in user's name.

4 Settings



The gear icon displays a light/dark toggle to change the layout mode, help link (opens an HTML user's guide), and logout option. To learn more about [Settings](#), see the help section.

5

Side Navigation

Domains

Templates

Applications

Users

Click on any of the links to be directed to the corresponding screens.

Domain Manager Workflow

The following image describes the Domain Manager workflow:

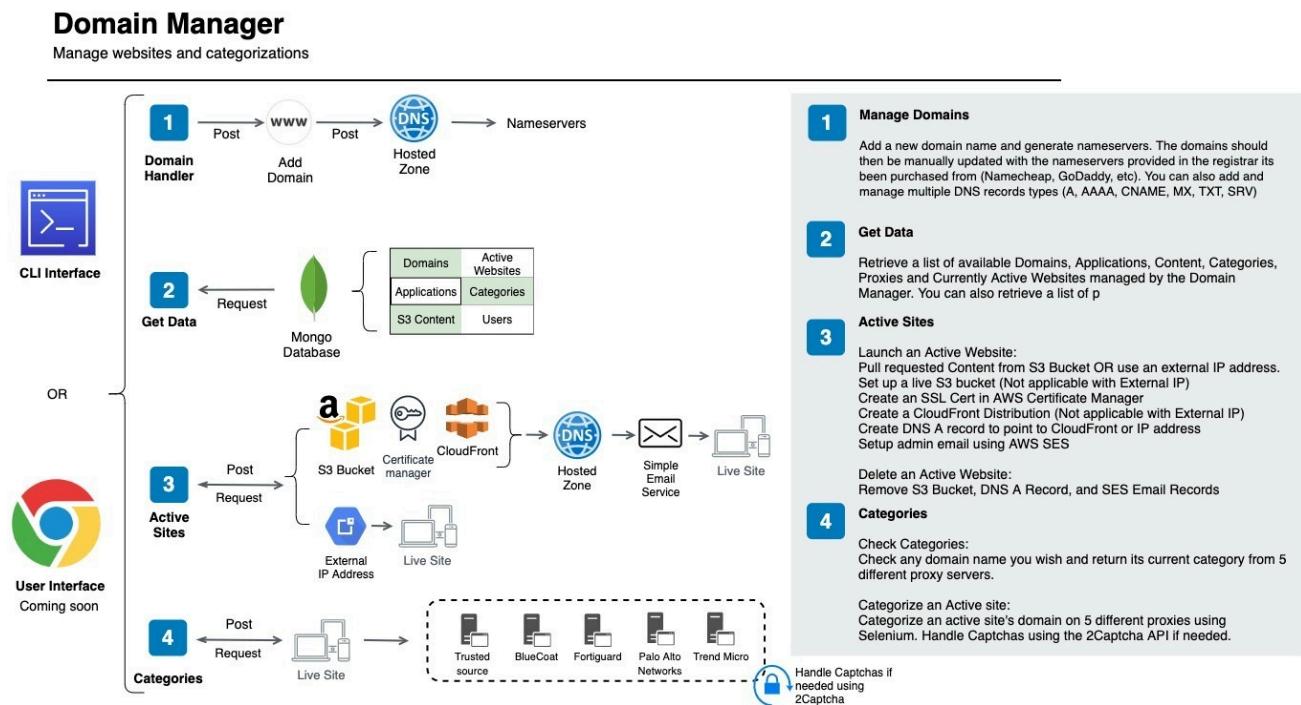


Figure: Domain Manager processes

Create Account/Login

To begin using the Domain Manager application, you first need to create an account.

Navigate to <https://domain-manager.cool.cyber.dhs.gov/login> to get started.

You'll see the Login screen.

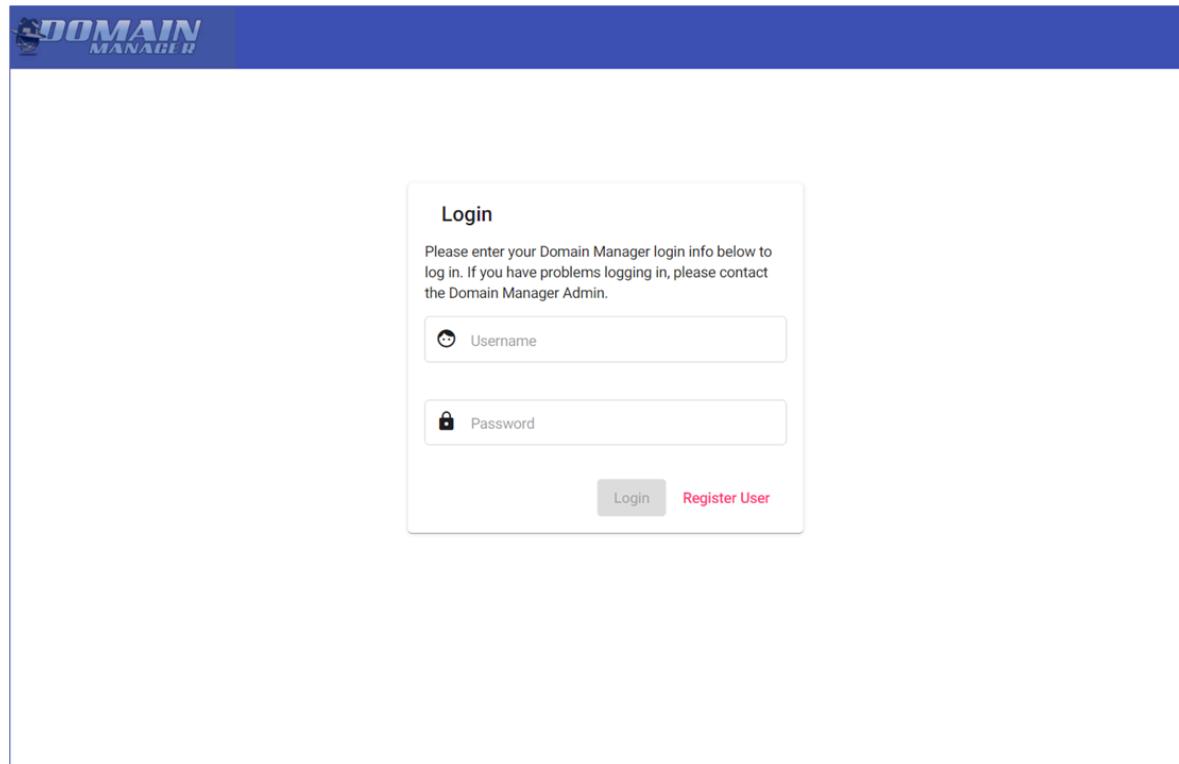


Figure: Domain Manager login

Enter your username and password to log in or select Register User to create an account.

The screenshot shows a registration form titled "Register User". It includes fields for First Name, Last Name, Email, and two Password entries. To the right of the form are "Username Instructions" and "Password Rules".

Register User

Username Instructions
Your resulting username will be **firstname.lastname** all in lowercase.

Password Rules

- Requires a length of at least 8 characters
- Requires upper case
- Requires lower case
- Requires special character
- Requires a number

First Name
Last Name
Email
Password
Password

Login Cancel

Figure: Register User

Add your username, email address, and password. Your password must satisfy the password rules.

If you are an admin user, you can find more about adding users in the [Users](#) section.

Access

There are two ways to access the Domain Manager tool. You can access via browser or Command Line Interface. To learn more follow below:

Access via the browser:

1. Connect to the COOL and visit: <https://domain-manager.cool.cyber.dhs.gov/>
2. Log in to the Domain Manager.
3. If you don't have an account, click **Register User** and an admin will approve your account and set your user role accordingly.

The screenshot shows a login form titled "Login". The instructions say: "Please enter your Domain Manager login info below to log in. If you have problems logging in, please contact the Domain Manager Admin." There are two input fields: "Username" with a user icon and "Password" with a lock icon. Below the fields are two buttons: "Login" (gray) and "Register User" (red).

Figure: Login via browser

Access via the Command line Interface (CLI):

1. Connect to the COOL and visit: <https://domain-manager.cool.cyber.dhs.gov/>
2. Log in to Domain Manager.
 - If you don't have an account, click **Register User** and an admin will approve your account
3. Click the cog on the top right 
 - In the dropdown, click on **My Profile**
4. Click on the **Options** button.
 - In the dropdown, click on **Generate API Key**

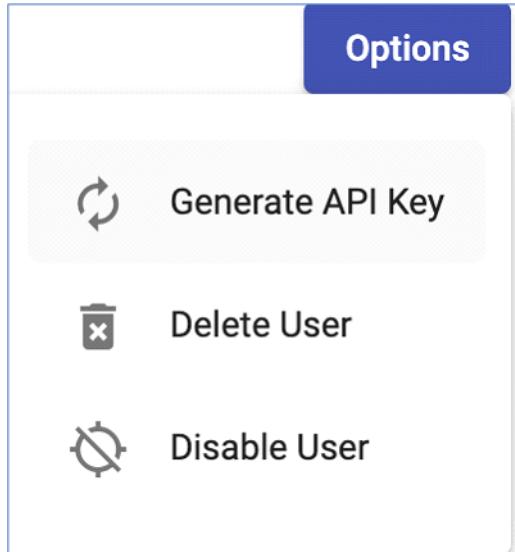


Figure: Options menu

5. Save your generated API Key as you'll need it to use the CLI.
6. Please proceed to [Case 2: Command Line Interface](#), within the Use Case section.

Use Cases

The Domain Manager application has several use cases. A user can:

- set up a domain
- set up email records for a domain
- manage static templates
- choose from a selection of existing templates
- upload external web content
- launch and takedown websites
- categorize live websites on various categorization proxies
- manage DNS and Redirect records
- categorize websites that are not managed by Domain Manager.

These functionalities can be done via a browser or the command line interface. Step-by-step instructions on each use case are detailed in the following sections.

Set up, Launch, and Categorize a Website

1. Log in to Domain Manager and click on **Domains** on the left.
2. Select a domain from the list.

For Admins:

- If you haven't already, purchase your domain at a registrar (i.e., NameCheap, GoDaddy, etc.).
- Click on **Add New Domain** button on the top right and type in the domain you've purchased.

For User Roles:

- Search for the domain you'd like to set up and launch. If the domain doesn't exist, reach out to an admin to add the domain into Domain Manager.

The above steps will create a hosted zone for your domain so that Domain Manager can manage your domain's DNS records and content.

The screenshot shows a modal dialog titled "Add New Domain". Inside the dialog, there is a text input field labeled "Domain URL" with the placeholder "Provide a domain and select submit to create a new domain". Below the input field are two buttons: "Submit" (gray) and "Cancel" (blue).

Figure: Add domain dialogue

3. Once your domain has been created, click on your domain and then click the **Hosted Zone** tab.

Hosted Zone

This domains associated hosted zones

testurl.com.
TTL: 172800
Type: NS
Resource Records:
ns-994.awsdns-60.net.
ns-488.awsdns-61.com.
ns-2034.awsdns-62.co.uk.
ns-1105.awsdns-10.org.

testurl.com.
TTL: 900
Type: SOA
Resource Records:
ns-994.awsdns-60.net. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400

Figure: Hosted Zone tab

- You'll find four nameservers (NS) similar to the ones highlighted in the picture above.
- Provide these nameservers, without the . (period) at the end of each line, to your team's domain POC to paste them into the registrar under the purchased domain.

4. Upload content:

Domain Summary Template Hosted Zone DNS Records

Select a Template For This Domain

Select your method to select a template

Upload from zip Select from templates

Figure: Upload content

As shown above, there are two ways to upload content for your website:

- You can upload your own web content in a zip file, or
- select from a list of existing templates.

Templates that have not yet been approved by an admin will not be displayed.

Notes:

- For your own custom web content, the homepage html file must be named **home.html**
- Custom content must be reviewed and approved by an admin

The following is an example of an admin's view for content review and approval. This can be found in a domain's detail section under the demo tab.

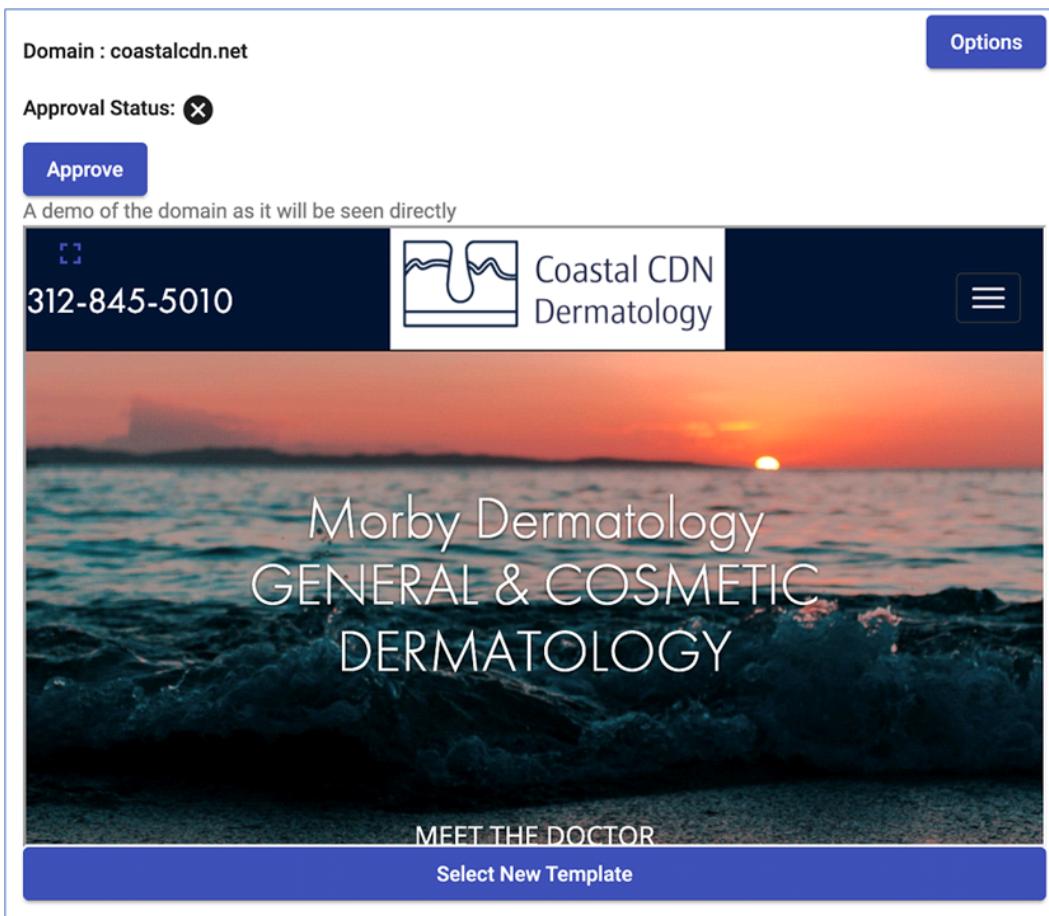


Figure: Content review screen

Once you have successfully upload web content, you'll be able to launch your website.

5. Launch website

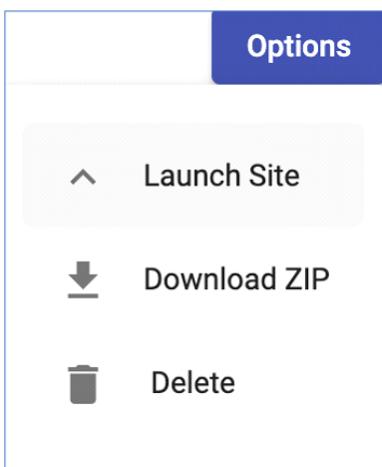


Figure: Option to Launch Site

Click on the options button.
In the dropdown, click **Launch Site**

This process may take up to a few minutes until your website is live.

6. Categorize live website

The screenshot shows a user interface for categorizing a live website. At the top, there are tabs: 'Summary' (with a left arrow), 'Demo', 'Hosted Zone', 'DNS Records', 'Proxy Category' (which is underlined in blue), and a right arrow. Below the tabs, the 'Proxy Categorization' section is visible, containing the text 'At least one proxy category must be selected.' A dropdown menu labeled 'Category One' contains the option 'Business'. To the right of the dropdown is a blue 'Options' button. Further down, a 'Submit' button is located next to the 'Manual Proxy Categorization' section. This section includes a note: 'Please fill and submit the categorization request forms below.' Below this note are several blue rectangular buttons, each representing a proxy source: 'Bluecoat', 'Cisco Talos', 'Fortiguard', 'IBM X-Force', 'McAfee Trusted Source', 'Palo Alto Networks', 'Trend Micro', and 'Websense Forcepoint'.

Figure: Proxy Category tab

On your Domain Details page, click **Proxy Category** tab.

There's a dropdown of Categories to choose from, choose the category that closely relates to your website content and click **Submit**.

If you encounter any errors when attempting to categorize your website, you can also manually submit categorizations yourself by clicking the available proxy buttons. These buttons will redirect you to the proxy's categorization page where you can fill out the forms manually.

In most cases, websites will be categorized within hours. However, keep in mind it might take up to a couple of days before they get categorized for each proxy.

Once submitted, check back later in the **Proxy Category** tab to check on the domain's categories.

Set up a Domain with Email Records

A user can utilize Domain Manager to set up a domain for sending emails.

1. Log in to Domain Manager and click on [Domains](#) on the left.

For Admins:

- If you haven't already, purchase your domain at a registrar (i.e. NameCheap, GoDaddy, etc.).
- Click on [Add New Domain](#) button on the top right and type in the domain you've purchased.

The screenshot shows a modal dialog titled "Add New Domain". Inside the dialog, there is a placeholder text "Provide a domain and select submit to create a new domain". Below this is a label "Domain" followed by a text input field with the placeholder "Domain URL". At the bottom of the dialog are two buttons: "Submit" (gray background) and "Cancel" (purple background).

Figure: Add New Domain dialogue

For User Roles:

- Search for the domain you'd like to set up. If the domain doesn't exist, reach out to an admin to add the domain into Domain Manager.

2. Once your domain has been created, click on your domain and then click the [Hosted Zone](#) tab.

Hosted Zone

This domains associated hosted zones

testurl.com.
TTL: 172800
Type: NS
Resource Records:
ns-994.awsdns-60.net.
ns-488.awsdns-61.com.
ns-2034.awsdns-62.co.uk.
ns-1105.awsdns-10.org.

testurl.com.
TTL: 900
Type: SOA
Resource Records:
ns-994.awsdns-60.net. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400

Figure: Hosted Zone tab

You'll find four nameservers (NS) similar to the ones highlighted in the picture above. Provide these nameservers, without the . (period) at the end of each line, to your team's domain POC to paste them into the registrar under the purchased domain.

This will create a hosted zone for your domain so that Domain Manager can manage your domain's DNS records and content.

3. You can now manage DNS records for the domain under the **DNS Records** tab.

Manage Record

Record Name *

Create & Close Cancel

Figure: Manage Record dialogue

You can add Email records that can be used in conjunction with other applications.

4. You will have to create redirects to the Landing Page URL:
gp.pr.somedomain.net -> con-pca.cool.cyber.dhs.gov

Manage External Websites

Domain Manager can submit categories and allow management of DNS records for websites with content set up externally, independent of Domain Manager.

DNS Records

For users interested in having DNS records controlled in Domain Manager:

1. Log in to Domain Manager and click on **Domains** on the left.

For Admins:

- If you haven't already, purchase your domain at a registrar (i.e. NameCheap, GoDaddy, etc.).
- Click on **Add New Domain** button on the top right and type in the domain you've purchased.

For User Roles:

- Search for the domain you'd like to set up. If the domain doesn't exist, reach out to an admin to create the domain for you.

The screenshot shows a modal dialog titled "Add New Domain". Inside the dialog, there is a text input field labeled "Domain URL" with the placeholder "Domain". Below the input field are two buttons: "Submit" (gray) and "Cancel" (purple).

Figure: Add New Domain dialogue

2. Once your domain has been created, click on your domain and then click the **Hosted Zone** tab.

The screenshot shows the AWS Route 53 console with the 'Hosted Zone' tab selected. At the top, there are tabs for 'Domain Summary', 'Template', 'Hosted Zone' (which is underlined), 'DNS Records', and 'Application History'. On the right, there is a blue 'Options' button. Below the tabs, the section title 'Hosted Zone' is displayed, followed by the text 'This domains associated hosted zones'. Underneath, there are two entries for 'testurl.com.':

- Resource Record Type: NS**
TTL: 172800
Resource Records:
ns-994.awsdns-60.net.
ns-488.awsdns-61.com.
ns-2034.awsdns-62.co.uk.
ns-1105.awsdns-10.org.
- Resource Record Type: SOA**
TTL: 900
Type: SOA
Resource Records:
ns-994.awsdns-60.net. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400

Figure: Hosted Zone tab

- You'll find four nameservers (NS) similar to the ones highlighted in the picture above.
- Provide these nameservers, without the . (period) at the end of each line, to your team's domain POC to paste them into the registrar under the purchased domain.

3. The user can now manage DNS records for the domain under the **DNS Records** tab.

The screenshot shows a modal dialog titled 'Manage Record'. It contains two input fields: 'Record Name *' and a dropdown menu above it. At the bottom, there are two buttons: 'Create & Close' and 'Cancel'.

Figure: Manage Record dialogue

Categorization

Currently, a user can have external sites submitted for categorization and categories checked using the CLI interface application. Please refer to the [Command Line](#) section for more information.

```
→ ~ dmcli external
Usage: dmcli external [OPTIONS] COMMAND [ARGS]...
      Manage categorization of external websites.

Options:
  -h, --help  Show this message and exit.

Commands:
  categorize  Categorize an unmanaged website.
  check        Check category on an unmanaged website.
```

Figure: Command Line Interface

When the CLI application is set up and ready to go, you can run the following commands:

Submit an external website for categorization

dmcli external categorize -d <domain-name>

Check an external website's categorization

dmcli external check -d <domain-name>

Admin vs. User Roles

General users will only see the domains of applications that they are assigned to. Admin users can see all domains.

Admin

- This role has access to all functionalities, including all capabilities for the User role.
- Admins can create and delete domains, applications, templates, content, and other users.
- Admins can review and approve template and website content.

The screenshot shows the 'Domains' section of the Domain Manager admin interface. On the left, there's a sidebar with links for Domains, Templates, Applications, and Users. The main area has a search bar and a button to 'Add New Domain'. Below that is a table titled 'Make Selected Available' with columns for Domain Name, Application Name, Template Base, Approved, and Is Live. The table lists several domains, each with a checkbox in the first column and a checkmark in the 'Approved' column.

	Domain Name	Application Name	Template Base	Approved	Is Live
<input type="checkbox"/>	somedemotest.com	DHS Red Team			
<input type="checkbox"/>	coastalcdn.net	DHS	coastalcdn.net	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	percacdn.com	DHS	percacdn.com	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	bergiecdn.net	For Demo	bergiecdn.net	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	do-not-reply.email	DHS	do-not-reply.email	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	enterprisehealthplan.com	DHS	enterprisehealthplan.com	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	fedtechservices.net	DHS	fedtechservices.net	<input checked="" type="checkbox"/>	

Figure: Admin view

User

- This role has a much more limited access
- Users can generate template content
- Upload and download website content
- Manage DNS and Redirect records
- Launch and categorize websites

The screenshot shows the 'Domain Management' section of a software application. On the left, there's a sidebar with 'Domains' and 'Templates' options. The main area is titled 'Domains' and contains a search bar and a table. The table has columns: 'Domain Name', 'Application Name', 'Template Base', and 'Is Live'. It lists three domains: 'conpca.xyz' (Application: DHS Con-PCA, Template: conpca.xyz, Is Live), 'basichealthservices.com' (Application: DHS Con-PCA, Template: home-appraisal, Is Live), and 'thisisreal.xyz' (Application: DHS Con-PCA, Template: pesticide-demo, Is Live). The 'Is Live' column for the last row contains a checked checkbox.

Domain Name	Application Name	Template Base	Is Live
conpca.xyz	DHS Con-PCA	conpca.xyz	
basichealthservices.com	DHS Con-PCA	home-appraisal	
thisisreal.xyz	DHS Con-PCA	pesticide-demo	<input checked="" type="checkbox"/>

Figure: User View

Note: For Users, the following will require approval from an admin:

- Uploading content to a website
- Uploading a newly created template

Admin users will see the [Applications](#) and [Users](#) screens, see those sections for more information.

Content Authorization

To prevent unapproved content from being used on Domain Manager, Admins will be able to review and approve website and template content that are uploaded by Users. Admins will have the ability to upload all content without any approval.

Templates

The Templates view will have a column to mark templates that are pending approval. An admin can click on a pending template, review the content and click an “Approve” button. This will allow the template to be available for use for all Domain Manager user roles.

Templates		
Template Name	Created Date	Uploaded By
pesticide-demo	02/19/21	
financial-planner	03/02/21	
computer-repair	03/02/21	
home-appraisal	03/03/21	

Figure: Template approval

Websites

For content upload directly to websites by Users, it will automatically be in the pending state. In the Website’s list view, a column marking websites with content pending for review will be added.

For Admins to review content, they can visit the website details page and click on the Demo tab. An Admin can then review the content and click an “Approve” button.

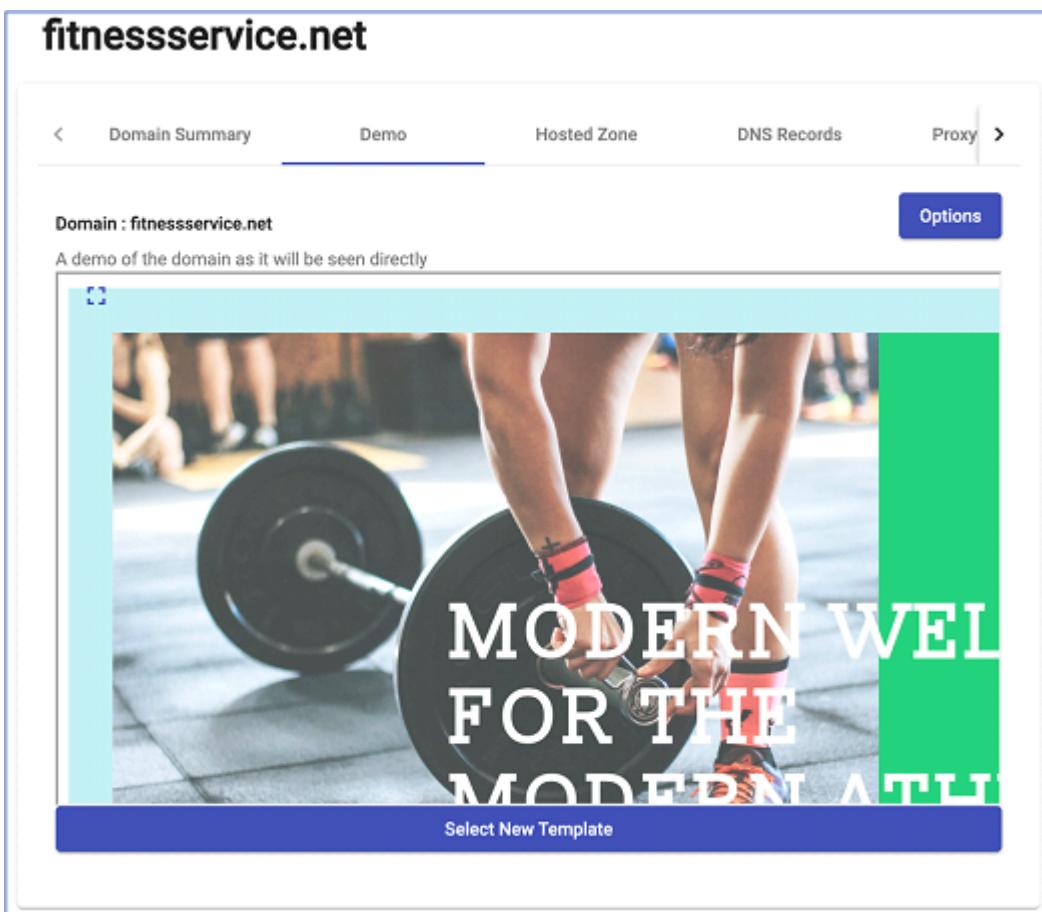


Figure: Review site content

Best Practices

The following section describes best practices related to using the Domain Manager tool.

Domain Manager Categorization

Most organizations have policies when it comes to web browsing. They will use a web content filter to block websites that are not business-related. Web content filters are provided by various providers that scan and categorize websites based on their content across the internet. In some cases, some websites are not yet discovered by the web content filter providers and will need someone to submit a request to have their website categorized. In most cases, simply submitting a request to categorize a website is sufficient. However, there are various things to look out for when categorizing your websites.

Domain Age

When submitting a categorization request for a newly registered domain, it may trigger an additional, manual review of the website's content before they decide to approve or deny the request. Unfortunately, there is no specified length of time that is optimal for a domain's age. But generally, the longer an owner has owned the domain, the better the chances of successful categorization.

Avoid "Typosquatting"

1. "Typosquatting" or what is sometimes called URL hijacking are domains that look very similar to big brands and popular websites. They consist of slightly modified letters and rely on mistakes when users are inputting the URL of a legitimate domain.
2. The following can be considered a form of typosquatting:
 - a. A common misspelling of the intended domain
 - b. Typographical error or other misspelling
 - c. A different top-level domain (.com instead of .org)
 - d. An abuse of country code top-level domains (.cm instead of .com)
 - e. Appending a period between letters in the brand name of a popular site (go.ogle.com)
3. In the US, the "Anticybersquatting Consumer Protection Act" contains a clause that is specifically aimed at combatting cybersquatting to protect legitimate brands.
4. In some cases, typosquatting domains will immediately be flagged as malicious or spam.

Avoid Previously Burned Domains

A domain's reputation may be compromised by a previous owner. If this happens, the purchased domain will have a higher risk of not being easily categorized successfully as it may have already been flagged.

- a. To check on a domain for any potential reputation issues before purchasing it:
 - i. Search for "site:domain.com" in Google's search bar. This will usually give you the results of any previous content used with that domain.
 - ii. Visit Archive.org and search for the domain of interest. This website will show you previous versions of what the site looked like and what it was used for. This can give a potential owner a good idea if the domain has a history of spamming or malicious activity.
- b. Keep in mind some web content filters may still allow you to categorize the domain after submitting a request for reconsideration. They will usually ask for more information relating to why you believe your website is legitimate.

Maintain the Same Category for a Domain

When using the same domain for different content over time, it's best to maintain the same category for that website. If the category changes, this may raise a flag for some content filter providers and will have the domain burned.

Web Content Should Match the Domain Name

The website content should match the domain name as close as possible. In case your website is selected for additional review, it may be reviewed by a human for categorization. If the logo, name, or content do not match the domain name, this may get your website flagged and your domain burned.

Mail Server Setup

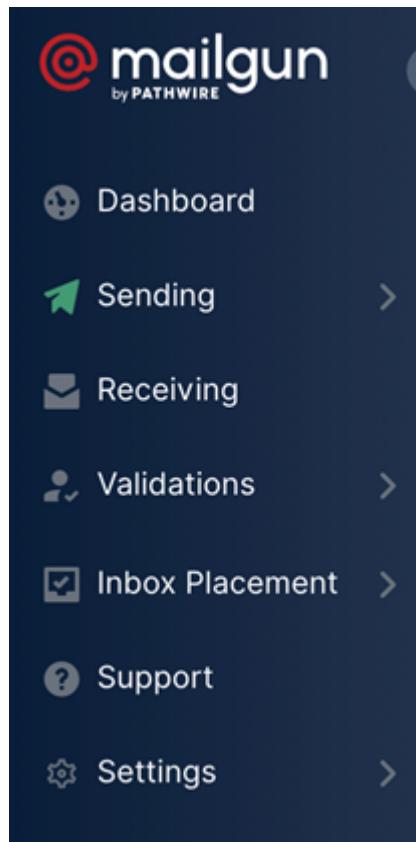
This is a step-by-step guide on how to setup your domain to send emails using Mailgun, mailgun.org.

Prerequisites:

- Mailgun account access
- A domain managed by Domain Manager

Setup your domain to send emails:

1. Login to your Mailgun Dashboard
2. Click on "Sending" on the left panel



3. Click on "Add New Domain" on the top right
4. Input your domain

[Back to all domains](#) [Add new domain](#)

Domain name*

Domain region [?](#)
 US
 EU

IP assignment option

Dedicated IPs to assign
 Select IPs

[Advanced settings \(DKIM\)](#)

Create DKIM Authority

DKIM key length [?](#)
 1024
 2048

- Add the domain you'd like to use for sending emails which is currently being managed by Domain Manager
 - i. It's highly recommended to use a subdomain. The common subdomain used with Mailgun is "mg".
- Select "US" for Domain region
- Select "Dedicated IP(s)" for IP assignment option
 - i. Mailgun will automatically assign an IP address available with your Mailgun account
 - ii. Dedicated IPs decrease the chances of the domain's reputation being damaged
 - iii. Reputability is important to ensure email deliverability
- Enable DKIM
 - i. DKIM adds additional protection to your domain's reputation
- Enable "Create DKIM Authority"
 - i. It's recommended to set the "DKIM key length" to 2048. This makes it more difficult for spammers to send emails that represent themselves as your domain.
- When finished, click the "Add Domain" button

Add email DNS records to your domain:

Once your domain is added on your Mailgun account, you'll be redirected to all domain's DNS records.

1. Go to your DNS provider Expand ▾

2. Add DNS records for sending Collapse ▾

Type	Hostname	Enter This Value	Current Value
TXT	mg.thisisanexample.com	v=spf1 include:mailgun.org ~all	None found
TXT	smtp._domainkey.mg.thisisanexample.com	k=rsa; p=MIIIBIjANBgkqhkiG9w0BAQEAAQCAQ8AMIIIBCgKCAQEAzxfNF0eyneS2LBexLbKtFyCAAaVvAB/06sjT6RQ1q7/Gvf4lGy0ILscPGsEusZmHrFsHnnuvyHtd3f071Gt7EiSzjhdpwYU0GgU0RkbhJ2ZTB/K9KyoY65wwBaF9MsJ5ko	None found
MX	mg.thisisanexample.co m	mxa.mailgun.org	None found
MX	mg.thisisanexample.co m	mxb.mailgun.org	None found

MX records are recommended for all domains, even if you are only sending messages. Unless you already have MX records for this domain pointing to another email provider (e.g. Gmail), you should update the following records. More info on MX records [\[?\]](#).

1. Ignore section 1 "Go to your DNS provider"

- You do not need to go to a provider as your DNS will be managed by Domain Manager

Add your domain's email DNS records to Domain Manager:

1. On Domain Manager, click [Domains](#) in the left-side navigation panel
2. Find and click on your domain in the Domain list
3. Click on the "[DNS Records](#)" tab in your [Domain Details](#) page
4. Click the "Add New DNS Record" button
5. Click on the corresponding DNS record type for each record on Mailgun and add them to your domain
 - Don't forget to add your subdomain (e.g. mg) to your subdomain field
 - You can keep the TTL at the default value 60
 - You can add both MX records that Mailgun provided for the values (mxa.mailgun.org and mxb.mailgun.org) as shown. Don't forget to add the priority value as well.

Manage Record

- A
- AAAA
- CNAME
- MX
- PTR
- NS
- SRV
- TXT
- REDIRECT

mg.thisisanexample.com

To route traffic without a subdomain, such as example.com, then leave this field blank.

TTL

60

Recommended values: 60 to 172800 (two days)

Value *

10 mx.a.mailgun.org.
10 mx.b.mailgun.org.



[priority] [hostname]

Create & Close

Cancel

6. Once all the DNS records for your domain have been created on Domain Manager, go back to your Mailgun dashboard.

Verify DNS on Mailgun:

1. Click on "Verify DNS Settings" button in your Mailgun dashboard account
 - If verified, the updated value will be displayed under the "Current Value" column for each DNS record.
 - In most cases, the DNS records will be updated immediately. However, keep in mind it may take up to a few hours for all DNS values to be updated.

Your domain is now setup to send emails.

API Documentation

API Reference

You can also view this information on the Domain Manager Github page at:

<https://github.com/cisagov/domain-manager-api/blob/develop/docs/api-documentation.md>

[Base URL: - <https://domain-manager.cool.cyber.dhs.gov/api/>]

Authentication

Domain Manager authenticates your API requests using an API key. You must login to the Domain Manager website and generate an API key in your Profile to make requests to this API.

- When making an API call, use your API key is used as a request header
 - {"api_key": "<your-api-key>"}

Protect your API key

- Your API key can make calls on behalf of your account. Do not share your key with anyone.
- Do not embed your API key directly in code. Instead save it to an environment variable stored separately from code that is committed to a repository or shared with others.
- If your API key has been compromised or you lose your key, you can regenerate a new API key in Domain Manager website. This will make your current API key obsolete.

Endpoints

You can make requests to the following list of API endpoints to interact with Domain Manager:

- /applications/
 - a. GET
 - i. Response: Array
- /categories/
 - a. GET
 - i. Response: Object
- /domains/
 - a. GET
 - i. Query Params
 - 1. ?name+<domain-name> optional
 - ii. Response: Array
- /domain/<domain-id>/
 - a. GET
 - i. Response: Object
- /domain/<domain_id>/launch/
 - a. GET
 - i. Response: Message
 - b. DELETE
 - i. Response: Message
- /domain/<domain_id>/generate/
 - a. POST

- i. Query Params
 - 1. ?template_name=<template_name>
 - ii. Post Body
 - {
 "CompanyName": "<CompanyName>",
 "Phone": "<Phone>",
 "StreetAddress": "<StreetAddress>",
 "City": "<City>",
 "State": "<State>",
 "ZipCode": "<ZipCode>",
 "Email": "<Email>"
 }
 - iii. Response: Message
- /domain/<domain_id>/records/
 - a. GET
 - i. Response: Array
 - b. POST
 - i. Post Body
 - {
 "record_type": "<record_type>",
 "name": "<record_name>",
 "ttl": "<ttl>",
 "config": "<config>"
 }
 - ii. Response: Message
 - c. PUT
 - i. Put Body
 - {
 "record_type": "<record_type>",
 "name": "<record_name>",
 "ttl": "<ttl>",
 "config": "<config>"
 }
 - ii.. Response: Message
 - d. DELETE
 - i. Response: Message
- /templates/
 - a. GET
 - i. Response: Array
 - b. POST
 - i. Post Body
 - {
 "zip": "<zip_file_content>"
 }
 - ii. Response: Message
- /templates/attributes/
 - a. GET
 - i. Response: Array

Command Line Interface

The Domain Manager Command Line Interface (DM CLI) allows you to access and manage the Domain Manager Application programmatically. The user can do much of the same operations that are done on the Graphical User Interface. The CLI also doubles as an example on how Domain Manager's available API endpoints are accessed and used. You can access the command line application here: <https://github.com/cisagov/domain-manager-cli>

CLI Requirements and Setup

Requirements

The following is a list of prerequisites to run the command line app. You may have to reach out to a Domain Manager Developer for some of these requirements:

- Python 3.8
- A virtual environment
 - a. We recommend using the built-in python tool: Venv
 - i. `python3 -m venv.venv`
- Domain Manager API URL
- Your DM user's API key

Setup

1. Install Option 1- Local Development

- a. Clone the repo to your local environment
 - i. Git clone <https://github.com/cisagov/domain-manager-cli.git>
 - ii. Install pip install .
 - iii. Run "dmcli"

2. Install Option 2- General Usage

- a. Install directly from repo
 - i. `pip install git+https://github.com/cisagov/domain-manager-cli.git`
 - ii. Run "dmcli"

3. Generate and copy your user API key

- a. Login to Domain Manager

Login

Please enter your Domain Manager login info below to log in. If you have problems logging in, please contact the Domain Manager Admin.

Username

Password

Figure: DM login

4. Click on the cog on the top right and then click My Profile

The screenshot shows the 'Domains' section of the Domain Manager application. At the top right, there is a user menu with options: 'Your Username', a gear icon, 'My Profile' (which is highlighted with a yellow border), 'Help', and 'Logout'. Below the menu is a search bar with the placeholder 'Search' and a magnifying glass icon. To the right of the search bar is a blue button labeled 'Add New'. A purple button labeled 'Make Selected Available' is positioned above the main table. The main table has columns: 'Domain Name', 'Application Name', 'Template Base', 'Approved', and 'Is Live'. Each row contains a checkbox in the first column. The data in the table is as follows:

Domain Name	Application Name	Template Base	Approved	Is Live
somedemotest.com	DHS Red Team			
coastalcdn.net	DHS	coastalcdn.net	✓	
percacdn.com	DHS	percacdn.com	✓	
bergiecdn.net	For Demo	bergiecdn.net	✓	
do-not-reply.email	DHS	do-not-reply.email	✓	
enterprisehealthplan.com	DHS	enterprisehealthplan.com	✓	
fedtechservices.net	DHS	fedtechservices.net	✓	

Figure: My Profile

5. Click on the Options button and then click Generate API key

The screenshot shows the 'User Details' page in the Domain Manager interface. At the top, there's a navigation bar with the 'DOMAIN MANAGER' logo, a 'Your Username' field, and a gear icon. Below the header, the title 'User Details' is displayed. A horizontal menu bar includes 'User Summary' (which is underlined), 'Groups', and 'History'. On the left, a 'User :' section provides account summary information:

User Status	Enabled
Confirmation Status	CONFIRMED
Email Address	test
Created Date	01/13/21
Last Modified Date	01/13/21
Admin Status	<input checked="" type="checkbox"/> Is Admin
API Key generated	False

To the right of this information is a 'Options' button, which is highlighted with a yellow box. The 'Options' menu contains three items:

- Generate API Key** (highlighted in yellow)
- Delete User
- Disable User

Figure: Generate API Key

5. Copy your API key

6. Run "dmcli" configuration command

- a. dmcli configure
- b. When prompted, enter the Domain Manager URL and your API key

If you see the returned text below, you're ready to go!

```
(.venv) ➜  script git:(develop) make run
python src
[REDACTED]
Usage: src [OPTIONS] COMMAND [ARGS]...
      Domain manager command line application.

Options:
  -h, --help  Show this message and exit.

Commands:
  categories      Manage proxy categorizations of active websites.
  external        Manage categorization of external websites.
  get-data        Get available data.
  manage-sites    Manage domains and websites.
  manage-templates Manage go templates.
```

Figure: command: dmcli

Commands

The following are commands within the CLI application.

You can access all commands by running this: python src [command] [subcommand]

There are 7 top-level commands in the CLI:

- application
- category
- configure
- domain
- external
- record
- template

Application

Application command contains one subcommand which returns all available applications.

```
➔ ~ dmcli application
Usage: dmcli application [OPTIONS] COMMAND [ARGS]...

    Manage applications CLI group.

Options:
    -h, --help  Show this message and exit.

Commands:
    all  Get applications from CLI.
```

Figure: CLI command: dmcli application

Category

Category command contains one subcommand which returns all available proxy categories for categorizing your website.

```
➔ ~ dmcli category
Usage: dmcli category [OPTIONS] COMMAND [ARGS]...

    Manage categories CLI group.

Options:
    -h, --help  Show this message and exit.

Commands:
    all  Get categories from CLI.
```

Figure: CLI command: dmcli category

Domain

Domain contains multiple subcommands to manage, launch, take down and categorize your domains. You can also upload content from the command line.

```
➔ ~ dmcli domain
Usage: dmcli domain [OPTIONS] COMMAND [ARGS]...

Manage domains CLI group.

Options:
-h, --help Show this message and exit.

Commands:
active      Get active sites.
all         Get all assigned domains.
categorize Categorize a domain.
checkcategory Get a domain's category.
generate    Generate static content from a template.
hostedzone  Get domain's hosted zone from route53.
inactive    Get inactive sites.
launch      Launch a domain.
nameservers Get domain's nameservers.
remove      Remove website content.
takedown    Takedown a domain.
upload      Upload a zipped website file.
```

Figure: CLI command: dmcli domain

External

External command contains multiple subcommands to check categories or actively categorize any domain that is not managed by Domain Manager.

```
➔ ~ dmcli external
Usage: dmcli external [OPTIONS] COMMAND [ARGS]...

Manage categorization of external websites.

Options:
-h, --help Show this message and exit.

Commands:
categorize Categorize an unmanaged website.
check       Check category on an unmanaged website.
```

Figure: CLI command: dmcli external

Record

Record command contains multiple subcommands that allow you to manage DNS records. You can add, update, delete various dns record types.

```
➔ ~ dmcli record
Usage: dmcli record [OPTIONS] COMMAND [ARGS]...

    Manage domain records group.

Options:
    -h, --help  Show this message and exit.

Commands:
    add      Add record from CLI.
    delete   Delete record from CLI.
    get      Return a domain's custom records.
    update   Update record from CLI.
```

Figure: CLI command: dmcli record

Template

Template command allow you to manage GO templates compatible for use in Domain Manager.

In order to upload a template content, you must place your zipped file at a specified location.

```
➔ ~ dmcli template
Usage: dmcli template [OPTIONS] COMMAND [ARGS]...

    Manage templates CLI group.

Options:
    -h, --help  Show this message and exit.

Commands:
    all      Get templates from CLI.
    upload   Upload a zipped template file.
```

Figure: CLI command: dmcli template

Domains

The Domains list shows all available domains, the template they're based on, created date, and whether or not they're live.

The screenshot shows the 'Domains' page of the Domain Manager tool. At the top, there's a blue header bar with the 'DOMAIN MANAGER' logo, a 'Your Username' field, and a gear icon. Below the header, the word 'Domains' is displayed in a large, bold, black font. Underneath, there's a search bar with a magnifying glass icon and an 'Add New Domain' button. A blue button labeled 'Make Selected Available' is visible. The main content area is a table with columns: 'Domain Name', 'Application Name', 'Template Base', 'Approved', and 'Is Live'. Each row contains a checkbox, the domain name, its application name, its template base, a status indicator for approval, and a status indicator for being live. The rows alternate in background color. The table has a blue header bar at the bottom.

<input type="checkbox"/>	Domain Name	Application Name	Template Base	Approved	Is Live
<input type="checkbox"/>	somedemotest.com	DHS Red Team			
<input type="checkbox"/>	coastalcdn.net	DHS	coastalcdn.net	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	percacdn.com	DHS	percacdn.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	bergiecdn.net	For Demo	bergiecdn.net	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	do-not-reply.email	DHS	do-not-reply.email	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	enterprisehealthplan.com	DHS	enterprisehealthplan.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	fedtechservices.net	DHS	fedtechservices.net	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	govfiles.org	DHS	govfiles.org	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure: Domains list

You can use the search bar to filter the Domains list on name, template base, and created date (the day the domain was added to the DM tool).

From the Domains page you can upload a domain and edit the domain's details.

Click the Add New Domain button to [upload a new domain](#).

Click a domain in the list to go to the [Domain Details](#) screen and edit.

Upload a New Domain

After selecting the Add New Domain button on the [Domains](#) page, you will see a dialogue.

The screenshot shows a modal dialog titled "Add New Domains". Inside, there is a text input field labeled "Domain" with the placeholder "Domain URL's" and a "Submit" button at the bottom right. At the very bottom left is a blue "Upload CSV List" button.

Add New Domains

Please enter one or more domains to add, separated by new lines.

Domain

Domain URL's

Upload CSV List Submit Cancel

Figure: Add Domain dialogue

Add the domain URL(s) (separated by new lines) and select Submit to add the new domain(s) to the [Domains](#) list.

You can also use the Upload CSV List button to upload multiple domains.

Note: Domains are added after they've been purchased. In the future this will be admin functionality.

Domain Details

To view the Domain Details screen, click the site you'd like to view/edit on the [Domains](#) page.

The screenshot shows the 'Domain Manager' interface with a blue header bar. On the left is a logo with three horizontal bars and the text 'DOMAIN MANAGER'. On the right are 'Your Username' and a gear icon. Below the header, the domain name 'conpca.xyz' is displayed in bold black text. A navigation bar below it includes tabs: 'Domain Summary' (which is underlined in blue), 'Demo', 'Hosted Zone', 'DNS Records', 'Proxy Category', and 'Application History' (with a right-pointing arrow). Under the 'Domain Summary' tab, there's a section titled 'Domain: conpca.xyz' with the subtext 'Detailed information for the domain'. It lists the following details:

Domain Name	conpca.xyz
Domain Is Launched	true
Domain Deployment Status	Deployed
Applications Using	DHS Con-PCA

On the far right of this section is a blue 'Options' button with a white gear icon. The rest of the page is mostly blank white space.

Figure: Domain Details

Domain Details begins with the Domain Summary tab. Here you will find the domain name, the template assigned (if there is one), and the applications that are using the site.

Click the Options button to make the domain live or take it down. You can also download a zip file which contains the template and all information associated with the site. Select delete to remove the domain from the list. This action will delete the site's history.

The following tabs are also associated with the Domain Details screen: [Template](#), [Hosted Zones](#), [Redirects](#), and [History](#).

Template/Demo

To edit templates associated with a domain, click the Template tab on the [Domain Details](#) screen.

Note: If the site isn't live you'll see "Template", if the site is live you'll see "Demo".

Template

The screenshot shows the 'Domain Details' interface. At the top, there's a blue header bar with the 'DOMAIN MANAGER' logo, a 'Your Username' field, and a gear icon. Below the header, the title 'Domain Details' is displayed. A navigation bar at the top of the main content area includes tabs for 'Domain Summary', 'Template' (which is underlined, indicating it's active), 'Hosted Zone', 'DNS Records', and 'History'. Under the 'Template' tab, the section title 'Select a Template For This Domain' is shown, followed by the instruction 'Select your method to select a template'. Two options are provided: ' Upload from zip' and ' Select from templates'. A blue 'Options' button is located in the top right corner of this section. The rest of the page is a large, empty white space.

Figure: Template tab

On the Template tab you can either upload a template from a zip file or select from the current list of [templates](#).

Upload from Zip

Clicking upload from zip opens a dialogue for you to select your files.

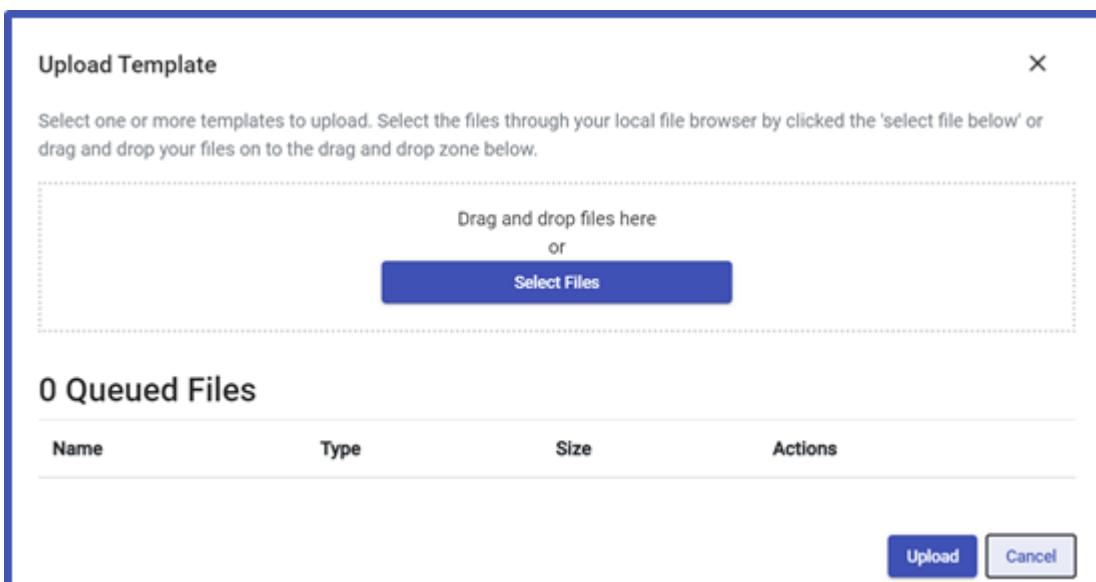


Figure: Template Upload dialogue

You can upload one or many files. View the Queued Files to check the status of your download.

Select from Templates

Domain Management Your Username

Domain Details

Domain Summary	Template	Hosted Zone	DNS Records	History												
Select a Template For This Domain <p>Select your method to select a template</p> <p><input type="radio"/> Upload from zip <input checked="" type="radio"/> Select from templates</p>																
Select a Template Base <p>Select a template base that will be used to generate your domain.</p> <div style="border: 1px solid #ccc; padding: 5px; display: flex; align-items: center;"> <input style="width: 200px; height: 30px; margin-right: 10px;" type="text" value="Search"/> 🔍 </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #005a9c; color: white;"> <th>Template Name</th> <th>Created Date</th> <th>Selected Template</th> </tr> </thead> <tbody> <tr> <td>TemplateTestOne</td> <td>01/22/21</td> <td style="text-align: center;"><button style="background-color: #005a9c; color: white; border: none; padding: 2px 5px;">Select</button></td> </tr> <tr style="background-color: #f0f0f0;"> <td>pesticide</td> <td>01/22/21</td> <td style="text-align: center;"><button style="background-color: #ff0000; color: white; border: none; padding: 2px 5px;">Selected</button></td> </tr> <tr> <td>pesticide-mostafa</td> <td>02/04/21</td> <td style="text-align: center;"><button style="background-color: #005a9c; color: white; border: none; padding: 2px 5px;">Select</button></td> </tr> </tbody> </table>					Template Name	Created Date	Selected Template	TemplateTestOne	01/22/21	<button style="background-color: #005a9c; color: white; border: none; padding: 2px 5px;">Select</button>	pesticide	01/22/21	<button style="background-color: #ff0000; color: white; border: none; padding: 2px 5px;">Selected</button>	pesticide-mostafa	02/04/21	<button style="background-color: #005a9c; color: white; border: none; padding: 2px 5px;">Select</button>
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pesticide-mostafa	02/04/21	<button style="background-color: #005a9c; color: white; border: none; padding: 2px 5px;">Select</button>														
<div style="display: flex; justify-content: space-between;"> Why Choose Us? Contact Us </div>																

Figure: Select from Template

Clicking select from templates will open the [Templates](#) screen for you to pick from. Select any template to view in a window. Click the select button for the template you want to associate with your domain.

Enter description, domain, email, name, and phone attributes to populate the fields within the template.

Select Create Website HTML to create the site with your entered attributes.

After a template is assigned the site is available to go live.

Demo

The screenshot shows the 'Domain Manager' interface with a blue header bar. On the left is a logo with three horizontal bars and the text 'DOMAIN MANAGER'. On the right are 'Your Username' and a gear icon. Below the header, the domain 'basichealthservices.com' is displayed in large bold letters. A navigation bar below the domain includes tabs for 'Domain Summary', 'Demo' (which is underlined), 'Hosted Zone', 'DNS Records', and 'Application History'. To the right of the tabs are back and forward arrows. Under the tabs, there's a section for 'Domain : basichealthservices.com' with an 'Options' button. Below this, 'Approval Status:' is shown with a crossed-out 'X'. There's a blue 'Approve' button. A note says 'A demo of the domain as it will be seen directly'. Below this, a preview window shows a website for 'rochester home health care' featuring a smiling elderly man and a woman. At the bottom of the preview window are links for 'HOME', 'SERVICES', and 'ABOUT US'.

Figure: Demo tab

This tab will display the domain with its assigned template and attributions in the window. If you'd like to change the template, click select new template.

A dialogue will come up to confirm the change. Changing the template will lose all the changes you made to the attributes. The Demo tab will revert to the Templates tab and you will need to start the process of selecting a template again. See the beginning of this section for more details.

Hosted Zone

To view hosted zones associated with a domain, click the Hosted Zone tab on the [Domain Details](#) screen.

The screenshot shows the 'basichealthservices.com' domain details page. At the top, there's a navigation bar with links for 'Domain Summary', 'Demo', 'Hosted Zone' (which is underlined, indicating it's active), 'DNS Records', and 'Application History'. To the right of the navigation are 'Your Username' and a gear icon. Below the navigation, the domain name 'basichealthservices.com' is displayed. Under the 'Hosted Zone' tab, the section title 'Hosted Zone' is shown, followed by the subtext 'This domains associated hosted zones'. There are two entries listed:

- basichealthservices.com.
TTL: 172800
Type: NS
Resource Records:
ns-380.awsdns-47.com.
ns-1410.awsdns-48.org.
ns-911.awsdns-49.net.
ns-1638.awsdns-12.co.uk.
- basichealthservices.com.
TTL: 900
Type: SOA
Resource Records:
ns-380.awsdns-47.com. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400

A blue 'Options' button is located on the right side of the 'Hosted Zone' section.

Figure: Hosted Zone tab

This tab displays a list of all DNS records associated with the domain. This output comes from AWS Route 53. Once hosted zones are populated, your domain POC can customize the DNS to specify how the domain's traffic is routed.

DNS Records

The DNS record tab gives you the ability to view existing DNS records and add custom DNS records to managed domains.

Once you create a new domain, you have two record types automatically generated for you:

- NS (Nameservers)
- SOA (State of Authority)

The initial generated nameservers (NS) are generated by AWS and are used to connect your website content to your domain URL. This is done by adding the nameserver values to your purchased domain.

The initial State of Authority (SOA) record provides admin information about your hosted zone.

You can find a list of existing DNS records under the [Hosted Zone](#) tab on your Domain's detail page.

You can also create custom records for your domain. Here are the current Record types supported:

- A (Address Mapping)
- AAAA (IP v6 Address)
- CNAME (Canonical Name)
- MX (Mail Exchanger)
- PTR (Reverse lookup Pointer)
- NS (Nameservers)
- SRV (Service Location)
- TXT (Text Record)
- REDIRECT (Redirect Record)

[Creating a DNS record](#)

To edit/add DNS records associated with a domain, click the DNS Records tab on the [Domains Details](#) screen.

The screenshot shows the 'Domain Manager' interface for the domain 'inltesting.xyz'. The top navigation bar includes links for 'Domain Summary', 'Demo', 'Hosted Zone', 'DNS Records' (which is the active tab), 'Proxy Category', and 'Application History'. The user's 'Your Username' is displayed at the top right, along with a gear icon for settings. The main content area is titled 'inltesting.xyz' and contains a table of DNS records under the 'Redirections' section. The table has columns for 'Name' and 'Type'. Each row includes a red trash can icon and a blue edit/pencil icon. An 'Options' button is located at the top right of the table. A blue 'Add New DNS Record' button is positioned at the bottom right of the table area.

Name	Type		
gp.inltesting.xyz	REDIRECT		
devgp.inltesting.xyz	REDIRECT		
gp.staging.inltesting.xyz	REDIRECT		
gp.pr.mg.inltesting.xyz	REDIRECT		
gp.staging.mg.inltesting.xyz	REDIRECT		
cool.test.inltesting.xyz	NS		
gp.dev.mg.inltesting.xyz	REDIRECT		

Add New DNS Record

Figure: DNS Records tab

The table shows all current DNS records associated with the site.

Click the Add New DNS Record button to open a dialogue.

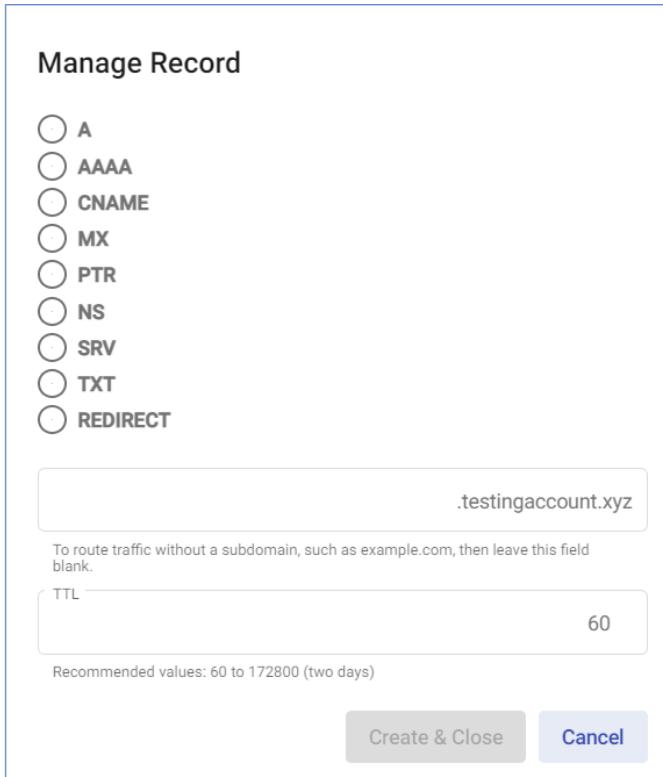


Figure: Manage Record dialogue

Select from the list to create a new DNS record. Each record type has unique custom inputs expected.

A Record:

- Record name
- IPv4 address

AAAA:

- Record name
- IPv6 address

CNAME:

- Record name
- Domain name

MX:

- Record name
- Record values
 - a. Add one hostname per line

PTR:

- Record name
- IPv4 address

NS:

- Record name
- Nameserver values

- a. Add one nameserver per line

SRV:

- Record name
- Values
 - a. Add each priority, weight, port, and hostname per line

TXT:

- Record name
- Text values
 - a. Can be multiple lines

Redirect:

- Record name
- Protocol
 - a. HTTP
 - b. HTTPS
- Domain name

Note: Redirect records can either direct you to an HTTP or HTTPS enabled target domain. However, Domain Manager does not provide support for HTTPS redirects at the moment and would have to be set up externally.

Click the trash icon to delete and the pen icon to edit current records. Clicking the pen will open a dialogue to manage the subdomain and URL.

Proxy Category

To view/edit proxy categorization associated with a domain, click the Proxy Category tab on the [Domain Details](#) screen.

Note: You will only see this if the domain is live.

The screenshot shows the 'Domain Manager' interface with a blue header bar. On the left is a logo with three horizontal bars and the text 'DOMAIN MANAGER'. To the right are 'Your Username' and a gear icon. Below the header, the domain name 'intesting.xyz' is displayed. A navigation bar below the header includes tabs for 'Domain Summary', 'Demo', 'Hosted Zone', 'DNS Records', 'Proxy Category' (which is underlined in blue), and 'Application History'. The main content area is titled 'Proxy Categorization' and contains a message: 'A proxy category must be selected.' Below this is a dropdown menu with a single item 'Low Risk' and a small downward arrow. To the right of the dropdown is a blue 'Options' button. At the bottom right of the content area is a grey 'Submit' button. The entire interface has a light grey background.

Figure: Proxy Categorization tab

When you initially get to the screen only one dropdown is available. You only need to select one category, but can choose up to 3.

The categorization will tell filters how to categorize the domain. This helps emails get through filters and firewalls and not end up in spam folders. It also helps domains maintain good reputation scores.

The process of categorization takes 2-3 days and is usually successful when checking the domain's categorization with Blue Coat, McAfee, Fortiguard, and Palo Alto. Check back on this page for updates.

If domain categorization is in process or has been categorized, you'll see the following table:

Domain Summary	Demo	Hosted Zone	DNS Records	Proxy Category	Application History
Proxy Categorization					
Domain categorization in process.					
The domain has had a category submitted and is in the process of applying the category to the multiple proxies. Please allow for 2-3 days for this process to complete. Check back on this page for any status updates.					
Categorization Status					
Proxy	Submitted Category	Status		Manually Categorize	
Trusted Source	Business	Success		Manually Categorize	
Blue Coat	Business/Economy	Success		Manually Categorize	
Fortiguard	Business	Manually Submitted		Manually Categorize	
Palo Alto Networks	Business and Economy	Error		Manually Categorize	
Trend Micro	Business / Economy	Error		Manually Categorize	
Cisco Talos		Auto Categorization Not Supported		Manually Categorize	
IBM X Force		Auto Categorization Not Supported		Manually Categorize	

Figure: Proxy categorization table

The Categorization table displays proxy, submitted category for the domain, and status. It also provides the ability to manually categorize a domain.

Domain Management			Check Categories
Domains	Check Results		
Templates	Proxy	Category	
Applications	Trusted Source	- Marketing/Merchandising	Manually Check
Users	Blue Coat	Health	Manually Check
	Fortiguard		Manually Check
	Palo Alto Networks		Manually Check
	Trend Micro	Newly Observed Domain	Manually Check
	Websense	Business	Manually Check
	Cisco Talos		Manually Check
	IBM X Force		Manually Check

History

To view a website's history, click the History tab on the [Domain Details](#) screen.

The screenshot shows the 'DOMAIN MANAGER' application interface. At the top, there is a blue header bar with the 'DOMAIN MANAGER' logo, a user placeholder 'Your Username', and a gear icon. Below the header, the domain name 'consultinghub.tech' is displayed. A navigation bar below the domain name includes links for 'Demo', 'Hosted Zone', 'DNS Records', 'Proxy Category', and 'Application History'. The 'Application History' link is underlined, indicating it is the active tab. To the right of the navigation bar is a 'Options' button. The main content area displays a table titled 'Domain : consultinghub.tech' with the subtitle 'A detailed list of the history of this domain'. The table has three columns: 'Application', 'Start Date', and 'Stop Date'. The data in the table is as follows:

Application	Start Date	Stop Date
DHS Con-PCA	03/30/21	03/30/21
DHS Red Team	03/30/21	03/30/21
For Demo	03/30/21	03/30/21
DHS Lie-PCA	03/30/21	03/30/21
Test Demo	03/30/21	03/30/21
put test	03/30/21	

Figure: Domain History

This tab will show any time the domain has been used, when it was used, which application used it, and when it was taken down. This information is helpful when selecting domains before you begin an assessment. For example, if the domain has been used multiple times for an assessment type that is more likely to burn a domain, a lead may not choose the domain since it may have a bad reputation.

Domain Emails

To enable the ability to receive emails for a domain click the Domain Emails tab on the [Domain Details](#) screen.

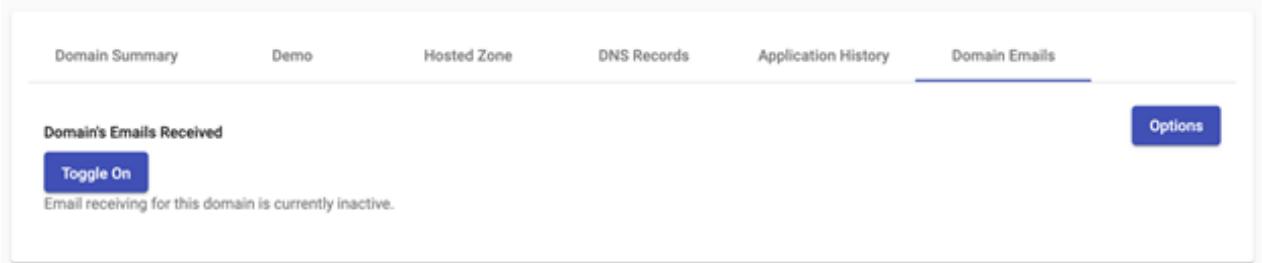
The purpose of enabling email receiving on domains is that some categorization proxies require an email for a domain that has been submitted for categorization. As such, it is recommended to use an email address using the domain of the website for the categorized domain.

Domain Email features:

- A user can enable or disable email receiving for a domain at anytime
- A user can use any username before the @ for a domain email address
- All emails can be accessed within Domain Manager
- All emails can also be forwarded to an email address set in the About page of Domain Manager

To Enable Email Receiving:

1. Navigate to the “Domains” page and select the domain you’d like to receive emails on
2. Click the "Domain Emails" tab



Domain Summary Demo Hosted Zone DNS Records Application History Domain Emails

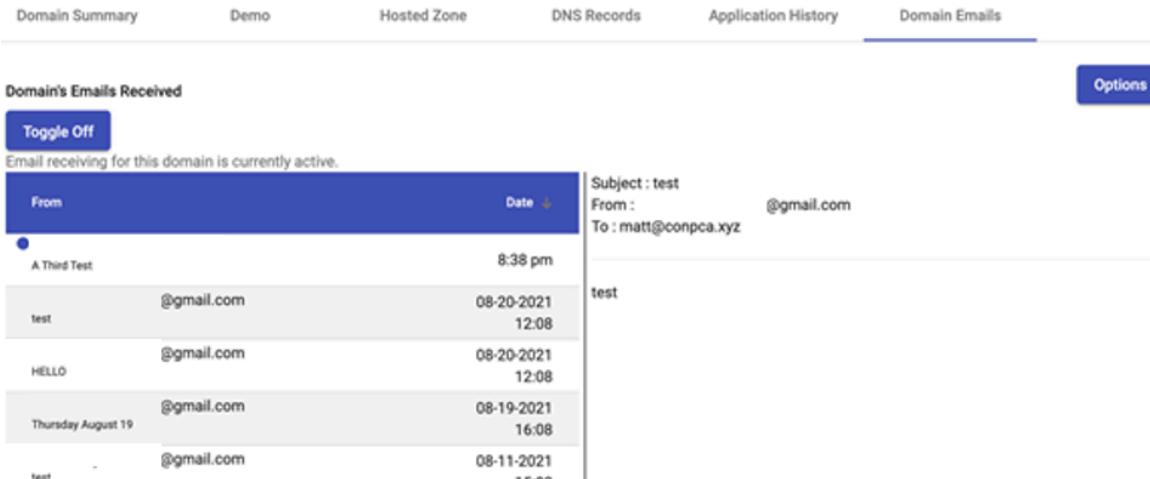
Domain's Emails Received

Toggle On

Email receiving for this domain is currently inactive.

Options

3. Click the "Toggle On" button (It will take a few minutes before it's enabled)
4. Once enabled, the tab will show an email inbox where a list of emails can be viewed.



Domain Summary Demo Hosted Zone DNS Records Application History Domain Emails

Domain's Emails Received

Toggle Off

Email receiving for this domain is currently active.

From	Date
A Third Test	8:38 pm
test	08-20-2021 12:08
HELLO	08-20-2021 12:08
Thursday August 19	08-19-2021 16:08
test	08-11-2021 15:08

Subject : test
From : @gmail.com
To : matt@conpca.xyz

test

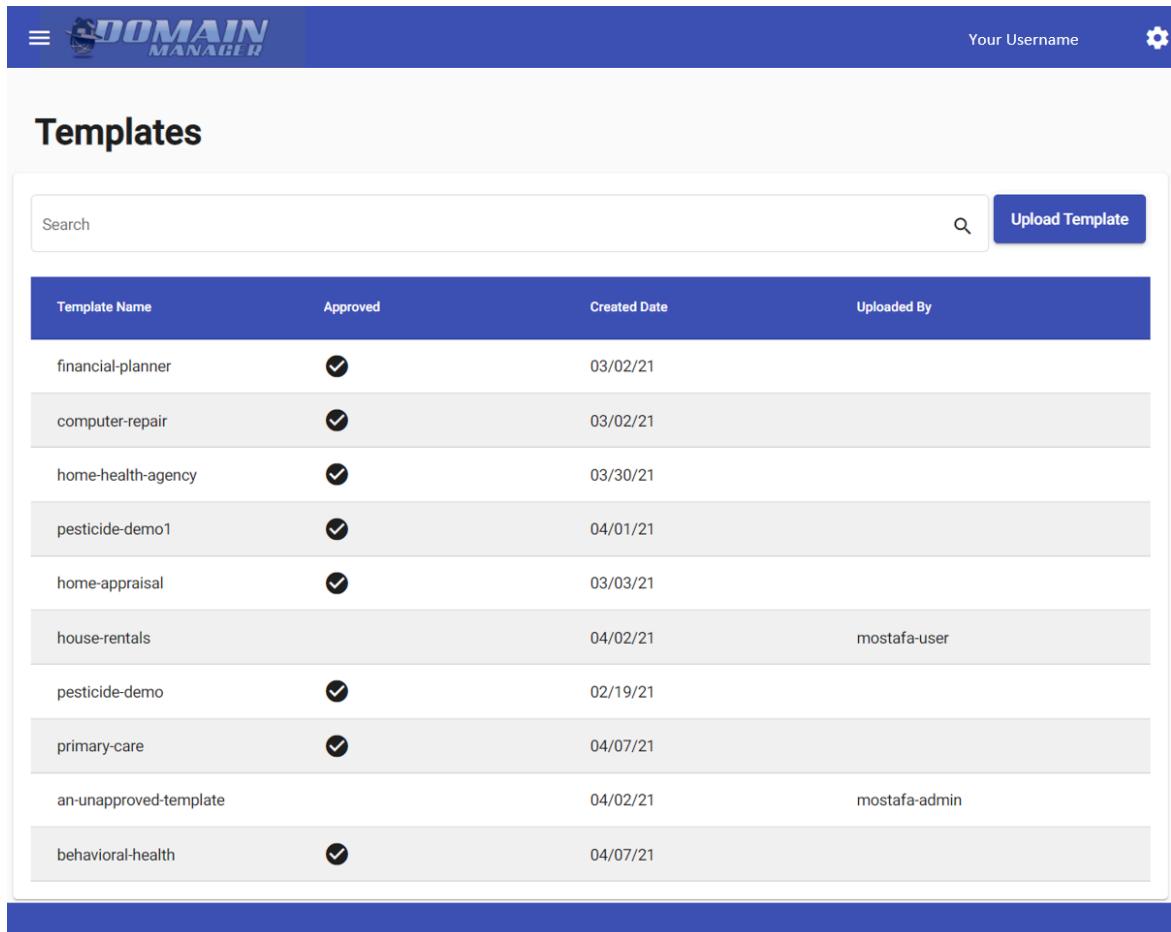
5. You can view the incoming emails by clicking on an email. The email details will show in the right column.

To Disable Email Receiving:

1. Navigate to the "Domains" page and select a domain you'd like disabled
2. Click the "Domain Emails" tab
3. Click the "Toggle Off" button
4. The domain will no longer receive emails

Templates

The Templates list shows all current templates, the created date, and the user who uploaded it.



The screenshot shows the 'Templates' section of the Domain Manager interface. At the top, there's a blue header bar with the 'DOMAIN MANAGER' logo, a search bar, and a 'Your Username' field. Below the header is a table titled 'Templates' with the following columns: 'Template Name', 'Approved', 'Created Date', and 'Uploaded By'. The table lists ten templates:

Template Name	Approved	Created Date	Uploaded By
financial-planner	✓	03/02/21	
computer-repair	✓	03/02/21	
home-health-agency	✓	03/30/21	
pesticide-demo1	✓	04/01/21	
home-appraisal	✓	03/03/21	
house-rentals		04/02/21	mostafa-user
pesticide-demo	✓	02/19/21	
primary-care	✓	04/07/21	
an-unapproved-template		04/02/21	mostafa-admin
behavioral-health	✓	04/07/21	

Figure: Template list

Templates contains the structure of your site. It will determine what styling and look the site has. For example: pest control, law, health industry.

Much like the [Domains](#) list you can use the search bar to filter the Template list based on all items listed on the screen.

Click the Upload Template to [upload a new template](#).

Click a template in the list to view/edit [Template Details](#).

Note: More on the template approval process can be found in the [Content Authorization](#) section.

Upload a New Template

After selecting the Upload Template button on the [Templates](#) page, you will see a dialogue.

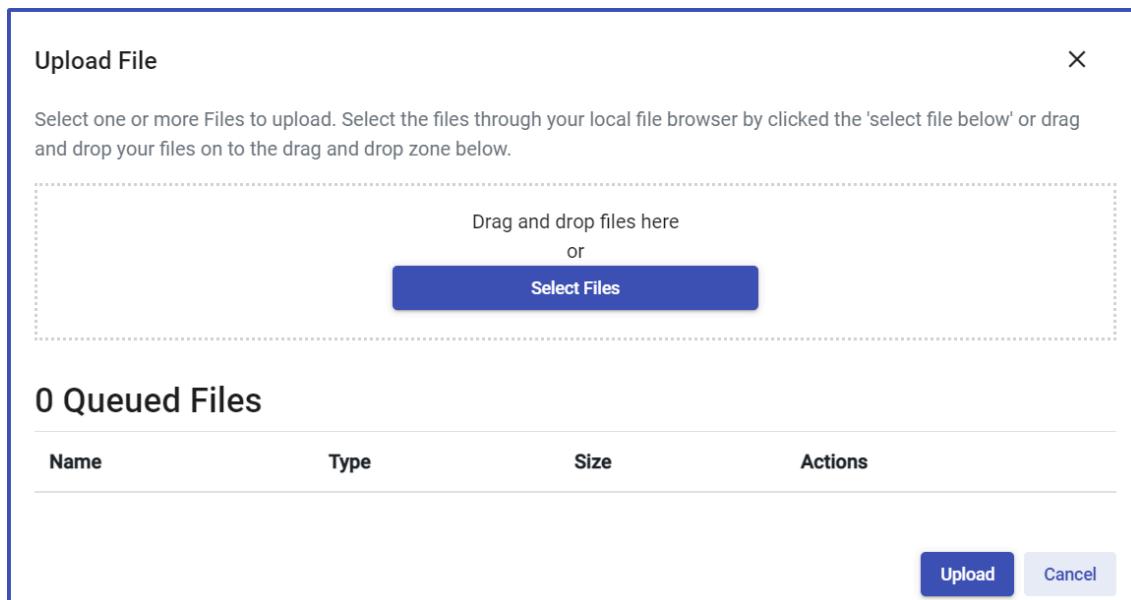


Figure: Template Upload dialogue

You can upload one or many files. View the Queued Files to check the status of your download.

Template Details

To view the Template Details screen, click the template you'd like to view/edit on the [Templates](#) page.

The screenshot shows the 'Template Details' screen in the Domain Manager application. At the top, there's a blue header bar with the 'DOMAIN MANAGER' logo on the left, a 'Your Username' field, and a gear icon on the right. Below the header, the main title 'Template Details' is displayed in bold black font. Underneath the title, there are two tabs: 'Template Demo' (which is currently selected) and 'Domains Using'. The main content area shows a preview of a template for 'CALE FINANCIAL Planning'. The preview includes a logo for 'CALE FINANCIAL Planning', a placeholder text 'Located in {{ .Address }} {{ .Phone }}', and a section titled 'We Are Here For You' with the subtext 'During these tough times, we're here to listen and help you navigate the volatile market to your financial goals.' To the right of this text is a large image of a pink piggy bank with a coin in its slot. In the top right corner of the preview area, there's a blue 'Options' button. The bottom of the screen has a dark blue footer bar.

Figure: Template Details screen

Template Details begins with the Template Demo tab. Here you will find a demonstration of what the template looks like prior to attribute substitutions.

Click the Options button to download a zip file which contains the template. Select delete to remove the template from the list. This action will delete the history.

The [Domains Using](#) tab is also associated with this screen.

Domains Using

To view which domains are using a template, click the Domains Using tab on the [Template Details](#) screen.

The screenshot shows the 'Template Details' page with the 'Domains Using' tab selected. The page header includes the 'DOMAIN MANAGER' logo, 'Your Username', and a gear icon. Below the header, the title 'Template Details' is displayed. Underneath the title, there are two tabs: 'Template Demo' and 'Domains Using', with 'Domains Using' being the active tab. A message 'Template : pesticide-demo' is shown, followed by a subtitle 'A list of all domains that are currently using this template'. A table then lists the domains:

Domain Name	Application Using	Download
thisisreal.xyz	Application	Download
aws-box.com	Application	Download

Figure: Domains Using tab

This tab will show which domains are currently using the template. Under Template Attributes you will see all assigned attributes. Within the table you will see the domain name displayed along with which application is using the site. Click the download button to download a zip file that includes the domain and template attribute information.

Template Resources

This section covers finding available templates and creating GO templates.

Available Templates

If you are looking for additional templates that are compatible with Domain Manager, you'll find them in a private repository on GitHub: <https://github.com/cisagov/domain-manager-templates>. In order to access this repo, you'll have to reach out to a Domain Manager admin.

Available templates are in the Templates folder of the repo. If you are interested in using any of the templates available, download and compress into a zip file. You can then upload your zipped template file on the [Templates](#) screen. See [upload a new template](#).

Creating a GO Template

Domain Manager utilizes GO Templates. You can find more information via the following links:

- <https://golang.org/pkg/text/template/>
- <https://golang.org/pkg/html/template/>

Refer to the Domain Manager templates repository for examples on Domain Manager-ready templates.

To create a GO template follow these steps:

1. Find or create website static files (HTML, CSS, JS)
2. Break up the files into a similar structure as the image below:

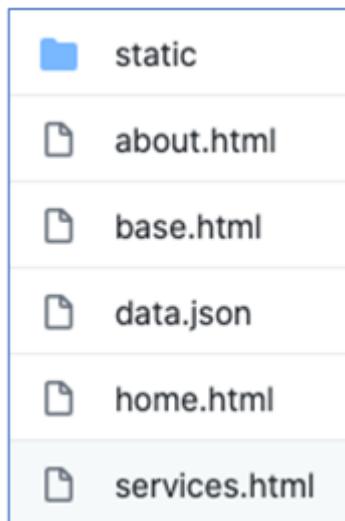


Figure: File structure example

3. Add required template file names.

[base.html](#)

- This file will contain the common elements that will be inherited in all or most of your website html pages. This includes the headers, footers, navigation bars, etc.
- You'll need define this as a base by adding `{{ define "base" }}` at the top of your file. You'll need to add an `{{ end }}` at the end of the file as well.
- To inherit html content from other files, you'll need to place `{{ template "content" . }}` anywhere in your base file that you plan to pull in dynamic content. This is usually in the body of your html.

[home.html](#)

- This file is intended to be the homepage of your website. It contains content that you plan to display on your homepage. It will be the only content file that will be required to have this name in every template.
- You'll need to define this home content file by adding `{{ define "content" }}` at the top of your file. Don't forget to add an `{{ end }}` at the end of your file as well.
- This file will be one of as many content files as you'd like that will be inherited into your base.html file.

4. Add any other additional HTML files (optional)

- You can add as many optional files (which can represent pages on your website) as you'd like. For example, these can be pages containing about us, contact, pricing, etc.
- All optional files will need `{{ template "content" . }}` placed at the top of the file just like the home file. Don't forget to add `{{ end }}` at the end of your file as well.

5. Create template tags

- You can pull dynamic data into your templates using a template tag. Domain Manager requires up to 5 specific tags:

1. Description: `{{ .Description }}`
2. Domain: `{{ .Domain }}`
3. Email: `{{ .Email }}`
4. Name: `{{ .Name }}`
5. Phone: `{{ .Phone }}`
6. Address: `{{ .Address }}`

- You can add these tags anywhere in your HTML template files that you'd like to display dynamic information.

6. Dealing with static files

- All static files (css, images, javascript) will be directly copied over when websites are generated from your GO template.
- It's recommended to place your static files into a folder called `static/`.

[Testing and Verifying Your New GO Template](#)

If you'd like to test out your template files, you'll need to download the latest executable file compatible with your OS in the domain-manager-templates repository. Create a `templates/` and place all your GO templates you wish to test in that directory. Place the executable file in the same directory where your `templates/` folder lives. Run your executable file with a `-t` tag followed by the name of your template.

Here's an example: **./main -t pest-services**

The program will generate a **public/** folder with your website content generated from your specified GO template.

Applications

Only admin users see the Applications screen. To learn more about roles, see the [Admin vs. User Roles](#) section.

The Applications list shows all current applications and how many domains they are using.

Application Name	Domain Used Count	
DHS Con-PCA	3	
For Demo	0	
DHS Red Team	1	
put test	2	
DHS Lie-PCA	0	
Test Demo	4	
New Testing App	0	
DHS	7	
Zach Testing	0	

Figure: Applications screen

You can use the search bar to search on name and number of domains used.

Click the Add New Application button, to [add a new application](#).

Click an application in the list to [manage the application](#).

Add a New Application

To add a new application, click the Add New Application button on the [Applications](#) screen. This will open a dialogue to manage applications.

The dialog box has a title bar 'Add New Application'. Below it is a instruction message: 'Fill in all required fields and hit submit to create a new application'. There are four input fields: 'Application Name *', 'Contact Name', 'Contact Email', and 'Contact Phone'. At the bottom right are two buttons: 'Create & Close' and 'Cancel'.

Application Name *
Contact Name
Contact Email
Contact Phone

Create & Close Cancel

Figure: Manage Application dialogue

Enter the application name and contact information, then click Create and Close.

This will add a new application to the list and allow for domains to be assigned.

Manage Application

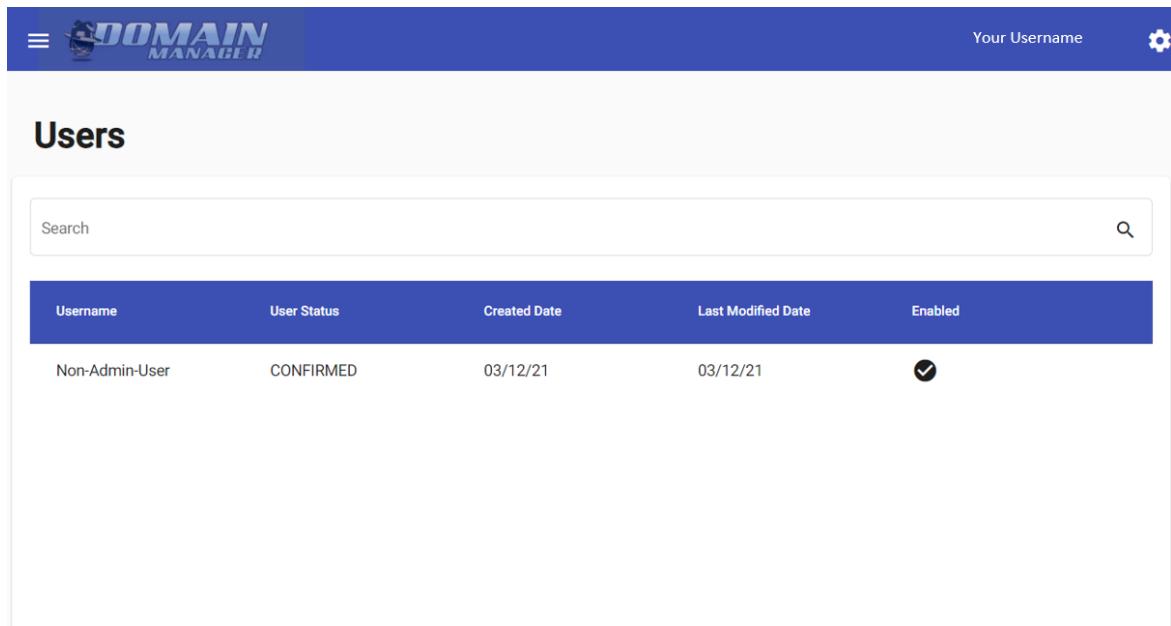
Click the application or the pencil icon to edit an existing application. This action opens the Manage Application dialogue, seen in the [Add New Application](#) section.

Make any changes required and hit Edit & Close to leave the dialogue and save changes.

Users

Only admin users see the Users screen. To learn more about roles, see the [Admin vs. User Roles](#) section.

The Users list shows all Domain Manager users, their status, when they were created/modified, and whether they are enabled.



The screenshot shows the 'Users' tab in the Domain Manager interface. At the top, there is a blue header bar with the 'DOMAIN MANAGER' logo, a search bar containing 'Search', and user information ('Your Username'). Below the header is a table with the following data:

Username	User Status	Created Date	Last Modified Date	Enabled
Non-Admin-User	CONFIRMED	03/12/21	03/12/21	<input checked="" type="checkbox"/>

Figure: Users tab

You can use the search bar to search on name and status.

Click a user in the list to [edit user details](#).

Confirm a User

A user that is registered will show up in the Users list. Users that have yet to be approved by an admin will show "unconfirmed" as their status. Select the user to open their details and click "Confirm User" to approve and give the user access to Domain Manager.

The screenshot shows the 'User Details' page of a Domain Manager application. At the top, there's a blue header bar with the 'DOMAIN MANAGER' logo on the left and 'Your Username' with a gear icon on the right. Below the header, the title 'User Details' is displayed in bold black font. Underneath the title, there are three tabs: 'User Summary' (which is underlined, indicating it's active), 'Groups', and 'History'. A horizontal line separates the tabs from the main content area.

In the main content area, the heading 'User : test.user' is shown, followed by a sub-heading 'A summary of the user's account.' To the right of this sub-heading is a blue 'Options' button. Below the sub-heading, there's a yellow warning icon with an exclamation mark, followed by the text 'User needs to be confirmed before the account can be used'. A blue 'Confirm User' button is positioned below this message.

Below the confirmation message, there's a table-like structure displaying various user details:

User Status	Enabled
Confirmation Status	UNCONFIRMED
Email Address	testuser@xyz.com
Created Date	04/07/21
Last Modified Date	04/07/21
Admin Status	<input checked="" type="checkbox"/> Is not an Admin
API Key generated	False

Figure: Confirm user

User Details

To view the User Details screen, click the user you'd like to view/edit on the [Users](#) page.

The screenshot shows the 'User Details' page from a software application. At the top, there's a blue header bar with the 'DOMAIN MANAGER' logo on the left and 'Your Username' with a gear icon on the right. Below the header, the title 'User Details' is centered. Underneath the title, there are three tabs: 'User Summary' (which is underlined, indicating it's active), 'Groups', and 'History'. The main content area is titled 'User:' followed by a descriptive note: 'A summary of the user's account.' Below this, several user details are listed in a table format:

User Status	Enabled
Confirmation Status	CONFIRMED
Email Address	test
Created Date	01/13/21
Last Modified Date	01/13/21
Admin Status	<input checked="" type="checkbox"/> Is Admin
API Key generated	False

On the far right of the table, there's a blue 'Options' button with a white gear icon. The bottom of the page has a solid blue footer bar.

Figure: User Details screen

User Details begins with the User Summary tab. Here you will find whether the user is enabled, status, when their account was created and modified, and whether they have admin privileges. Select the toggle to give or remove user admin privileges.

Click the Options button to delete or disable the user.

The following tabs are also associated with the User Details screen: [Groups](#) and [History](#).

Groups

To view/ edit the groups a user is assigned to, click the Groups tab on the [User Details](#) screen.

The screenshot shows the 'User Details' screen with the 'Groups' tab selected. At the top, there is a blue header bar with the 'DOMAIN MANAGER' logo, a 'Your Username' field, and a gear icon. Below the header, the title 'User Details' is displayed. The 'Groups' tab is underlined, indicating it is active. Below the tabs, there is a section titled 'User :'. A note says 'Groups the user is assigned to.' and a 'Save Users Groups' button is present. A list of applications follows, each with a checkbox next to its name. The applications listed are: Application (checkbox checked), DHS Con-PCA (checkbox unselected), DHS Red Team (checkbox unselected), For Demo (checkbox unselected), Test App Dylan (checkbox unselected), and DHS Lie-PCA (checkbox unselected).

Figure: Groups tab

To add a user to a group select the checkbox by the application. Then select Save Users Groups to commit the change.

History

To view a user's history, select the History tab on the [User Details](#) screen.

User Details				
User Summary	Groups	History		
User :				<button>Options</button>
A full history of the users actions				
Path	Method	Status Code	Created	
/api/users/	GET	200	Mar 2, 2021, 9:07:29 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/domains/	GET	200	Mar 2, 2021, 9:00:17 PM	
/api/applications/	GET	200	Mar 2, 2021, 9:00:17 PM	
	GET	200	Mar 2, 2021, 9:00:17 PM	

Figure: History tab

This screen provides a full list of user actions, the method, status code, and when they occurred.

Settings

To access the Settings menu, click the gear icon in the top-right.

You'll see the following menu:

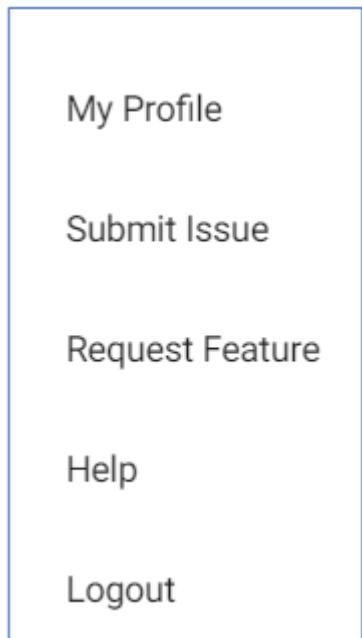


Figure: Settings menu

To learn more about [My Profile](#), [Submitting Issues](#), [Requesting Features](#), and [Help](#), see the linked sections.

My Profile

The My Profile link in the setting's menu directs to the User Details screen. See the [User Details](#) section, for more information.

Submit Issue

The Submit Issue button will redirect you to Github with an open bug report.

Add your title and description, steps to reproduce, expected behavior, and any other useful information to the bug report. If you're a project maintainer, you can [assign the issue to someone](#), [add it to a project board](#), [associate it with a milestone](#), or [apply a label](#).

Select the Submit New Issue button to add your bug report.

Issue: 🐛 Bug report

Create a report to help us improve. If this doesn't look right, [choose a different type](#).

The screenshot shows the GitHub 'New Issue' interface. At the top, there's a title field with a placeholder 'Title'. Below it is a toolbar with 'Write' and 'Preview' buttons, and various Markdown styling icons (H, B, I, etc.). The main text area contains the following content:

```
## 🐛 Bug Report

A clear and concise description of what the bug is.

## To Reproduce

Steps to reproduce the behavior:

## Expected behavior
```

Below the text area, there's a note: "Attach files by dragging & dropping, selecting or pasting them." A "Submit new issue" button is at the bottom right. A small note at the bottom left says "Styling with Markdown is supported".

ⓘ Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).

Figure: Bug Report

Request Feature

The Request Feature button will redirect you to Github with an open feature proposal.

Add your title and description, motivation for the request, an example, pitch, and any other useful information to the feature proposal. If you're a project maintainer, you can [assign the issue to someone](#), [add it to a project board](#), [associate it with a milestone](#), or [apply a label](#).

Issue: 🚀 Feature Proposal

Submit a proposal for a new feature. If this doesn't look right, [choose a different type](#).

The screenshot shows a GitHub issue creation interface. At the top, there's a placeholder for a profile picture and a 'Title' input field. Below the title is a toolbar with 'Write' (selected), 'Preview', and various rich text editing icons (H, B, I, etc.). The main content area has a heading '## 🚀 Feature Proposal' followed by a description: 'A clear and concise description of what the feature is.' Below that is a section '## Motivation' with the instruction 'Please outline the motivation for the proposal.' Another section '## Example' follows with the instruction 'Attach files by dragging & dropping, selecting or pasting them.' A note at the bottom left says 'M+ Styling with Markdown is supported'. On the right side, there's a green 'Submit new issue' button. At the very bottom, a small note says 'Remember, contributions to this repository should follow our [GitHub Community Guidelines](#)'.

Figure: Feature Proposal

Help

Clicking the Help button in the Settings menu redirects you to the Help Menu.

Help Menu

Below are some options to help you use the Domain Manager application.

User Guide

The Domain Management application user guide contains detailed instructions on how to use the application. The user guide is available through an in browser version as well as a downloadable pdf format.

[Open User Manual](#)

[Download User Manual](#)

Video Tutorials

Below is a link to a page with all the video tutorials for the Domain Manager application

[Video Tutorials](#)

Submit A Bug

Below is a link that will take you to the Github 'Submit Bug' page for the Domain Manager application. Bugs Submitted here will be seen by the team and administration and will be addressed as quickly as possible.

[Report Bug](#)

Request Feature

Below is a link that will take you to the Github 'Request Feature' page for the Domain Manager application. Features requested here will be seen by the administration and reviewed for possible future addition to the application.

[Request Feature](#)

Figure: Help menu screen

User Guide: Click the links below to open an HTML version of the guide or download a pdf.

Video Tutorials: Click the link to redirect to the Video Tutorial page.

Submit a Bug: Click "Report Bug" to submit an issue. For more information, see the [Submit Issue](#) section.

Request Feature: Click "Request Feature" to add a feature request to Github. For more information, see the [Request Feature](#) section.

Video Tutorials

The Video Tutorials page has tutorials for Domains, Templates, Applications, and Users. View the tutorials for short walkthroughs of the different Domain Manager features.

Video Tutorials

Below is a list of video tutorials to help you with using the Domain Manager application. Click one of the drop-down categories to view tutorial videos within the section. If the information you are looking for is not found in one of the videos below, please check the user guide by selecting the help option in the settings menu located in the upper right portion of all pages.

The screenshot shows a sidebar with four dropdown menus: 'Domain Tutorials', 'Template Tutorials', 'Application Tutorials', and 'User Tutorials'. Below the sidebar is a video player interface. The video player has a play button, a progress bar showing '0:00 / 0:55', and a control bar with volume and full-screen icons. The main content area is titled 'Domains' and contains a table with columns: 'Domain Name', 'Application Name', 'Template Base', 'Approved', and 'Is Live'. The table lists several domains with their respective details. At the top of the main content area, there is a search bar and a 'Add New Domain' button.

Domain Name	Application Name	Template Base	Approved	Is Live
fewais.com	RPT			
ovatori.com	RPT			
medutilities.com	RTA			
unitedconsult.org	RTA			
lometen.com	RPT		✓	✓
govannouncements.us	PCA			
outsourcedhealthsolutions.healthcare	PCA		✓	
basichealthservices.com	CON-PCA			
email-solutions.tech	PCA		✓	

Figure: Tutorial page

Glossary

Key Terms

Term	Explanation
Applications	A defined user group that identifies who is using particular domains.
DNS Record	DNS records are instructions for DNS servers, so that they can identify which domain name that IP addresses are associated with.
Domain	The location of a website.
Hosted Zone	A hosted zone is a container for records, and records contain information about how traffic should be routed.
Proxy Category	Proxy categorization will tell filters how to categorize the domain. This helps emails get through filters and firewalls and not end up in spam folders. It also helps domains maintain good reputation scores.
Template	Templates contain the structure of your site. It will determine what styling and look the site has. For example, pest control, law, health industry.
Template Attribute	Example: phone and email that can be substituted within a template.

Domain Manager Revision History

Document Revision	Date	Change Description
0	March 2021	Initial release

Bugs and Missing Features

Release 1: Bugs and Missing Features

Bugs:

- Proxy checking and categorizations aren't stable
 - All categorization actions rely on Selenium scripts which automate filling out and submitting to proxy websites.
 - Proxy websites actively try and make it difficult for a bot to fill out these forms.
 - Currently, in the process of purchasing IBM X-Force and Cisco Talos apis for a more stable process when checking website categories.
- UI/UX design improvements needed
- Improve existing approved GO templates

Missing Features:

- Authorization of template and website content generated by User roles
- Ability to TTL for DNS Records
- Data dictionary