



The image shows a Smart pi EYE Public Information Display System installed at a train station platform. The display shows a route map with stations: Woll Creek, Redfern, Central, Town Hall, Martin Place, Kings Cross, and Bondi Junction. Below the map, it lists 'Next Services' for T4 to Bondi Junction, with departure times of 24, 12, and 15 minutes. A blue train is visible on the tracks, and passengers are waiting on the platform.

Smart pi EYE
Public Information Display System

FEATURES INCLUDE:

- Customisable templates
- Easily scalable
- Supports GTFS/GTFS-R, SIRI and custom protocols
- Low power usage
- Embedded hardware (no PC required for each screen)
- Generates all views automatically
- Virtualised server infrastructure

e: info@smart-pi.info www.smart-pi.info

Smart pi EYE Server

USER GUIDE

Revision: August, 2026

Version: 1.27.3

CONTENTS

CONTENTS.....	2
1. INTRODUCTION	1
2. APPLICATIONS.....	2
2.1 Master	2
2.2 Ingester.....	2
2.3 Node(s)	4
2.4 Database	4
3. HARDWARE REQUIREMENTS.....	5
4. SYSTEM INSTALLATION	6
5. MASTER INTERFACE.....	7
5.1 Home.....	7
5.2 Clients.....	8
5.2.1 Overview.....	8
5.2.2 Details	9
5.2.3 Configuration	11
5.2.4 Provisioning.....	38
5.2.5 Groups.....	38
5.3 Messages	39
5.3.1 Create New message	39
5.3.2 Delete a message	42
5.3.3 Library.....	42
5.3.4 Real Time Text	44
5.3.5 Alert Messages.....	44

5.3.6 Alert Mapping	45
5.4 Modes.....	48
5.4.1 Add a Mode	48
5.4.2 Edit a Mode.....	49
5.4.3 User Interface	55
5.4.4 Add a Schedule	56
5.4.5 Edit a Schedule	56
5.5 Templates	58
5.5.1 Configuration	58
5.5.2 Common Styles.....	60
5.5.3 Manage.....	61
5.6 Ingestor	64
5.6.1 Overview.....	64
5.6.2 Data Providers.....	64
5.6.3 Timetable.....	65
5.6.4 RSS Feeds.....	66
5.6.5 Stop Names.....	67
5.6.6 Route Names.....	68
5.6.7 Platform Names.....	72
5.7 Nodes.....	75
5.8 Logs.....	76
5.9 Systems Tab	77
5.9.1 Branding.....	78
5.9.2 LDAP	79
5.9.3 LDAP Groups	80
5.9.4 Api Key	82
5.9.5 About.....	83

1. INTRODUCTION

The Smart pi EYE Server is the ultimate solution for your large-scale display needs. It is a powerful and versatile software solution that can handle thousands of screens and deliver real-time information and advertising to your customers. Whether you are a public transport provider, a large system operator, or any other business that needs to display dynamic and engaging information, the Smart pi EYE Server can meet your requirements and exceed your expectations.

The Smart pi EYE Server offers a range of features and benefits that make it stand out from the competition. It comes with three standard templates and has custom templates that can suit your brand and style. It can display different types of information, such as next service, following services, departure boards, arrival boards, clock, interactive wayfinding kiosks with 3D models and multiple path displays, LED based digital wayfinding with real-time information, multi-agency support and more. You can choose the type of information that best fits your needs and objectives.

The Smart pi EYE Server is written in dot net core and can run on either Windows or Linux. It can be deployed on-premises, on bare metal, virtualization, cloud, or hybrid cloud. You have the flexibility and control over your deployment and security. The Smart pi EYE Server is regularly updated with new features and security patches. You can rest assured that your software is always up to date and secure.

You can either use the Smart pi EYE-HD hardware or BYOD (limited provisioning and control options). The Smart pi EYE-HD hardware is a high-performance and reliable device that can support multiple resolutions including unusual stretched and LED tile requirements. It is easy to install and configure and comes with a warranty and support. The BYOD option allows you to use your own device, but with limited provisioning and control options.

The Smart pi EYE Server is the best choice for your large-scale display needs. It is a powerful, versatile, flexible, and reliable software solution that can deliver high-quality information and advertising to your customers. It can help you increase your customer satisfaction, loyalty, and revenue.

For the latest version information and downloads please visit the Smart pi portal.

<https://portal.smart-pi.info>

2. APPLICATIONS

2.1 Master

The Smart pi EYE Master application is a web interface that allows you to configure and monitor all the features of the smart pi eye system.

The Smart pi EYE Master application supports LDAP user authentication and permissions, which means you can use your existing user accounts and roles to access and use the application. You can also assign different permissions to different users, depending on their functions and responsibilities.

The Smart pi EYE Master application is designed to work with large numbers of clients and displays, which means you can easily scale up or down your smart pi eye system according to your needs and demands. You can group your clients and displays into logical units, such as locations, zones, or types, and apply different settings and templates to them.

You can also monitor the status and performance of your clients and displays, and troubleshoot any issues or faults that may arise.

The Smart pi EYE Master application is part of the smart pi ECOsystem, which has a familiar and consistent interface across the smart pi range, this means you can use the same skills and knowledge to operate and manage different Smart pi products,

2.2 Ingestor

The Smart pi EYE Ingestor application is a software solution that ingests all external feeds for the Smart pi EYE system. The Smart pi EYE Ingestor application allows you to integrate and process various types of external feeds for your Smart pi EYE system.

The Smart pi EYE Ingestor application supports multiple GTFS and GTFS-R feeds from many different agency types, including trains, buses, light rail, ferries, metro services, and more. GTFS and GTFS-R are standard formats for public transportation data that provide static and real-time information about schedules, routes, stops, and trips. The Smart pi EYE Ingestor application can ingest and display GTFS and GTFS-R data from different sources and agencies on your Smart pi EYE system.

The Smart pi EYE Ingestor application also supports RSS, which is a web feed format that provides updates and summaries of web content, such as news, blogs, podcasts, and more. The Smart pi EYE Ingestor application can ingest and display RSS data from different sources and topics on your Smart pi EYE system.

The Smart pi EYE Ingestor application is used to run any schedules and changes for your Smart pi EYE system.

The Smart pi EYE Ingestor application has a ReST API available for integration to other systems. ReST API is a software interface that allows communication and data exchange between different systems using standard web protocols and methods. You can use the ReST API of the Smart pi EYE Ingestor

application to integrate and interact with other systems, such as your own applications, databases, or third-party services.

You can run multiple instances of the Smart pi EYE Ingestor application to provide backup and failover for your Smart pi EYE system to ensure high reliability of realtime information.

The Smart pi EYE Ingestor application is an essential component of your Smart pi EYE system. It is a flexible and robust software solution that can ingest and process various types of external feeds for your Smart pi EYE system.

2.3 Node(s)

The Smart pi EYE Node application is a distribution and capacity node that can service any screen type for the Smart pi EYE system. The Smart pi EYE Node application allows you to scale up or down your Smart pi EYE system according to your needs and demands.

The Smart pi EYE Node application can be installed on premises, cloud, or hybrid cloud. You can add more nodes to add both redundancy and capacity to your Smart pi EYE system. Each node can run on either Windows or Linux. Each node can also be configured in different time zones for systems requiring multiple time zones.

The Smart pi EYE Node application is configured and managed from the Smart pi EYE Master application, which is a user-friendly, secure, and reliable web interface that can help you configure and monitor your Smart pi EYE system with ease and efficiency. All log and audit reports are available in the Smart pi EYE Master application.

The Smart pi EYE Node application is an essential component of your Smart pi EYE system. It is a flexible and robust distribution and capacity node that can support any screen type and any deployment option.

2.4 Database

The smart pi EYE system used the MariaDB server.

MariaDB is an open source relational database management system (RDBMS). MariaDB was developed as a software fork of MySQL in 2009 in response to Oracle's acquisition of MariaDB intends to remain free and open source software under the GNU General Public License.

MariaDB is good for large scale real-time applications because it offers a range of features and benefits that make it fast, reliable, and scalable. Some of these features and benefits are:

MariaDB has advanced clustering and replication features, such as Galera Cluster, MariaDB Replication, and MariaDB MaxScale, that can provide high availability, load balancing, and fault tolerance for large scale applications. MariaDB also supports multi-source and multi-master replication, which allow users to replicate data from and to multiple sources and masters.

•MariaDB has a rich set of security features, such as encryption, authentication, auditing, and firewall, that can protect data and prevent unauthorized access.

MariaDB is a great choice for large scale real-time applications, as it can handle massive amounts of data and deliver high performance, stability, and openness.

3. HARDWARE REQUIREMENTS

Each Smart pi Server application should be run on a separate machine / vm in production environments, this ensures resources are available to the application and allows ease of scalability.

For redundancy it is recommended to run a second instance on another set hardware infrastructure and use VRRP / Load balancing or similar to allow for online automatic failover.

The below table shows the typical representation for each application, please check with your integrator as these will vary depending on the Display Types, Templates, and other configuration parameters.

For development and staging / test systems all applications can be run on a single instance.

Application	CPU Cores	Memory	Storage	Connectivity
Master	4+	8GB+	50GB+	1gbit/sec
Ingestor	8+	16GB+	50GB+	1gbit/sec
Node	8+	16GB+	50GB+	1gbit/sec
Database	16+	32GB+	100GB+	1gbit/sec
Staging System	8+	16GB+	50GB+	1gbit/sec

4. SYSTEM INSTALLATION

The installation is essentially the same independent on the platform you install the Smart pi EYE server on.

Usually an integrator with experience will help with this process to ensure all items are configured correctly.

1. Build Servers and Install preferred Operating System.
2. Build Database Server
3. Run provided scripts to create database schema
4. Install the Latest Dot NET package (currently 8)
5. Copy Provided files into the preferred directory.
6. Configure application settings (appsettings.json)
7. Run applications (in production this should be run as a service that automatically restarts)
8. Configure requirements via Smart pi EYE master application.

5. MASTER INTERFACE

All Smart pi EYE server settings and management functions are facilitated via the Smart pi EYE Master using a web browser. Your network administrator will supply the address to point your browser to.

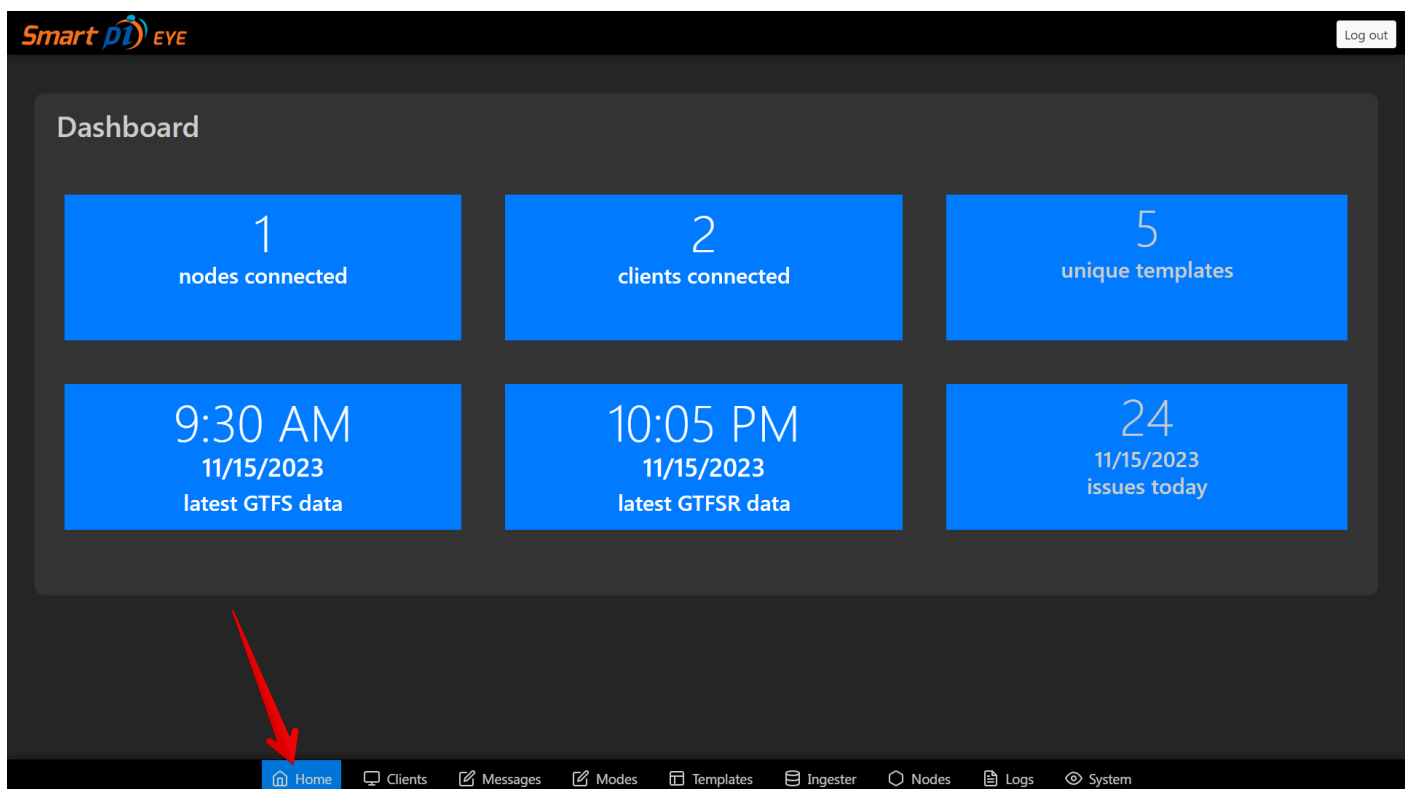
Smart pi EYE server features a responsive web interface. It will detect whether it is being accessed by a desktop or mobile device (due to the complexity it is recommended to use a desktop environment except for user modes) and configure the display to suit accordingly.

The General Operation instructions assume that the system has previously been setup and configured and provides a guide to reviewing and changing configuration settings.

5.1 Home

The home page displays a summary dashboard which can be used to easily see the status of the system.

Additionally, you are able to click through and see further information that is relevant.



The home tab provides a robust overview or summary of the running operations like nodes, clients, templates ingester jobs, and issues.

5.2 Clients

The Clients section is where all client-side configuration is managed, here you can choose which type of display you have and configure the base configuration for the client including any template requirements.

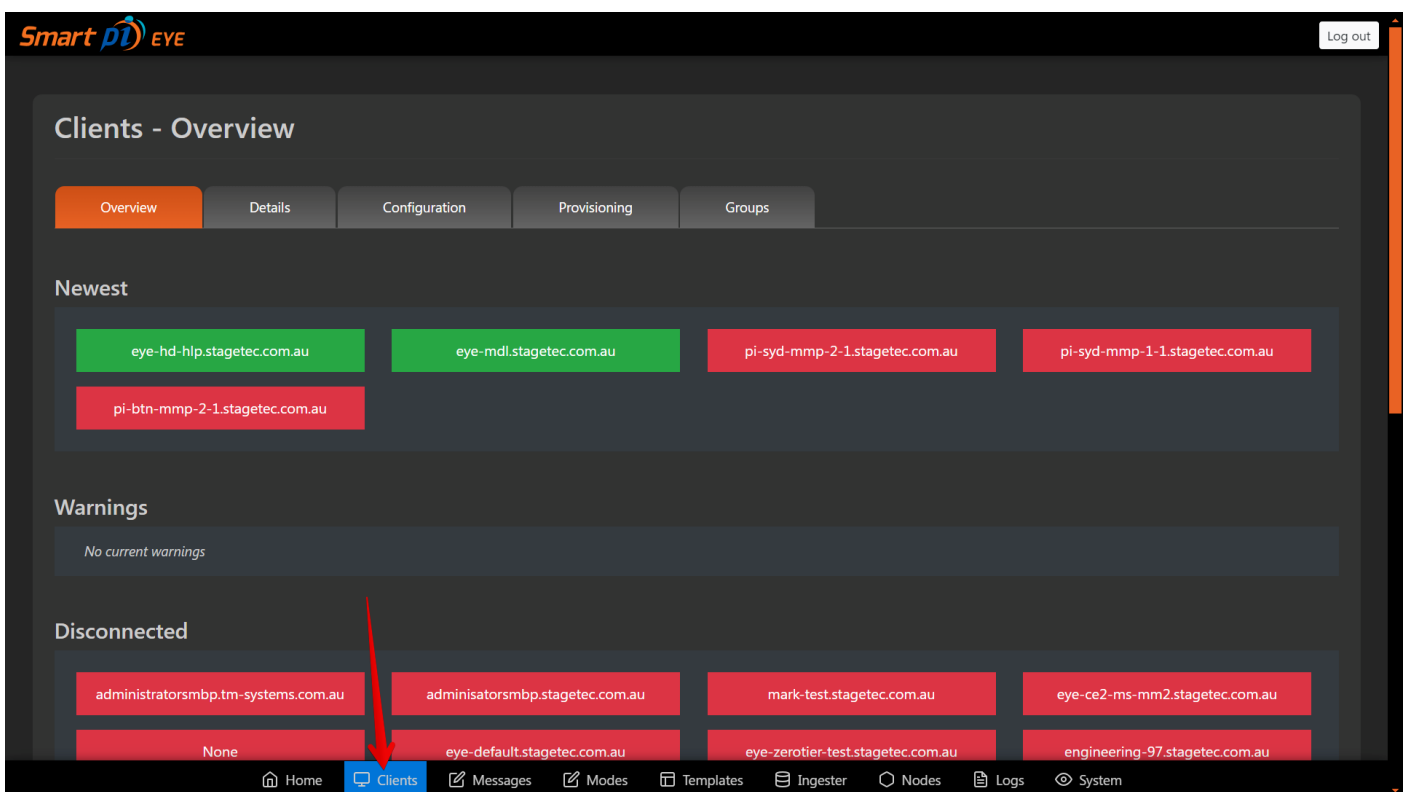
Different Display Types have different settings and requirements.

When an EYE-HD is connected to the network, it will automatically connect to the Smart pi EYE server and be displayed, the default configuration is the Clock on the “Default Template” which has been configured.

5.2.1 Overview

The overview page will show some basic information about recent changes within this system.

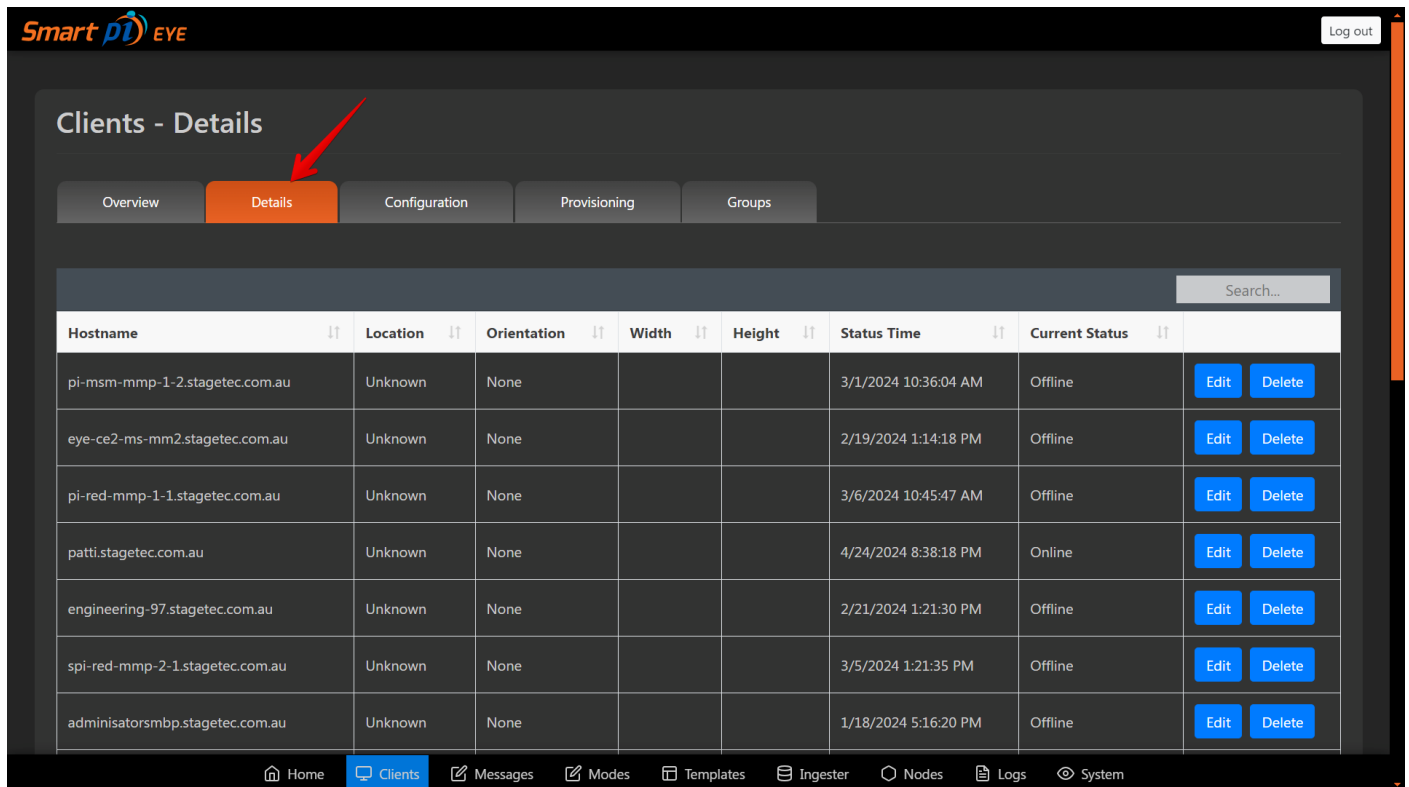
This includes the newest units connected to the system, the last 8 warnings and the last 8 units to disconnect from the system.



Click the **Clients** tab from the dashboard to access options like clients configuration, provision and more.

5.2.2 Details

Here you can see all the details of all the clients that you've set up. That includes hostname, location, orientation, width, height, status time and current status.



SmartPI EYE Log out

Clients - Details

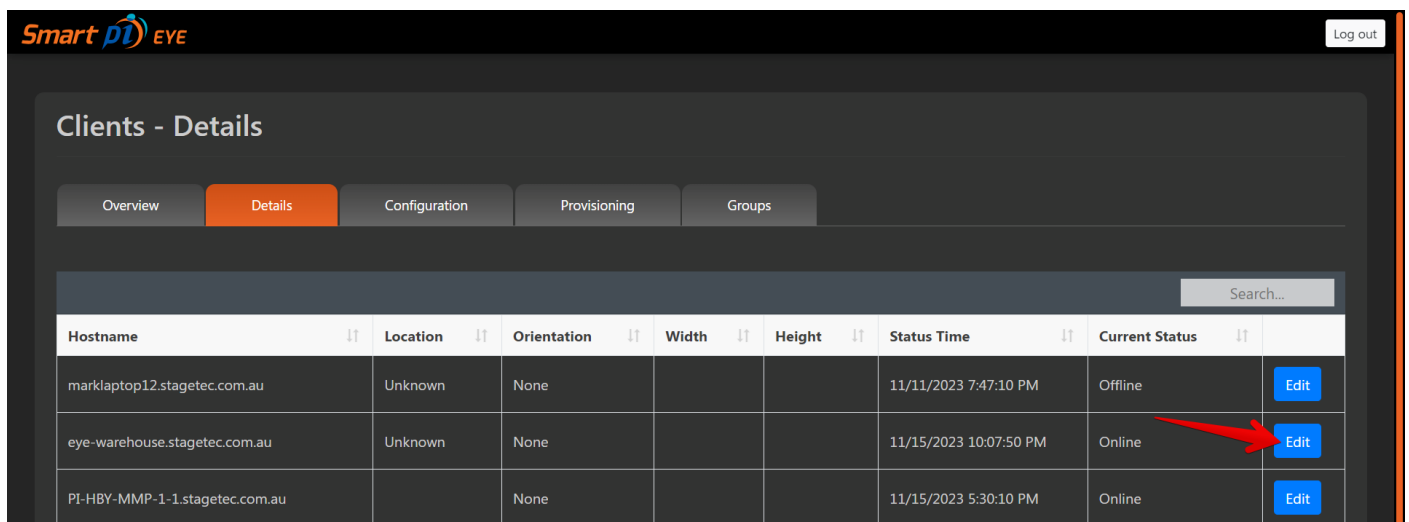
Overview **Details** Configuration Provisioning Groups

Search...

Hostname	Location	Orientation	Width	Height	Status Time	Current Status	
pi-msm-mmp-1-2.stagetc.com.au	Unknown	None			3/1/2024 10:36:04 AM	Offline	Edit Delete
eye-ce2-ms-mm2.stagetc.com.au	Unknown	None			2/19/2024 1:14:18 PM	Offline	Edit Delete
pi-red-mmp-1-1.stagetc.com.au	Unknown	None			3/6/2024 10:45:47 AM	Offline	Edit Delete
patti.stagetc.com.au	Unknown	None			4/24/2024 8:38:18 PM	Online	Edit Delete
engineering-97.stagetc.com.au	Unknown	None			2/21/2024 1:21:30 PM	Offline	Edit Delete
spi-red-mmp-2-1.stagetc.com.au	Unknown	None			3/5/2024 1:21:35 PM	Offline	Edit Delete
adminisatorsmbp.stagetc.com.au	Unknown	None			1/18/2024 5:16:20 PM	Offline	Edit Delete

Home Clients Messages Modes Templates Ingestor Nodes Logs System

Moreover, you can also edit the clients directly from this page by clicking [Edit](#).



SmartPI EYE Log out

Clients - Details

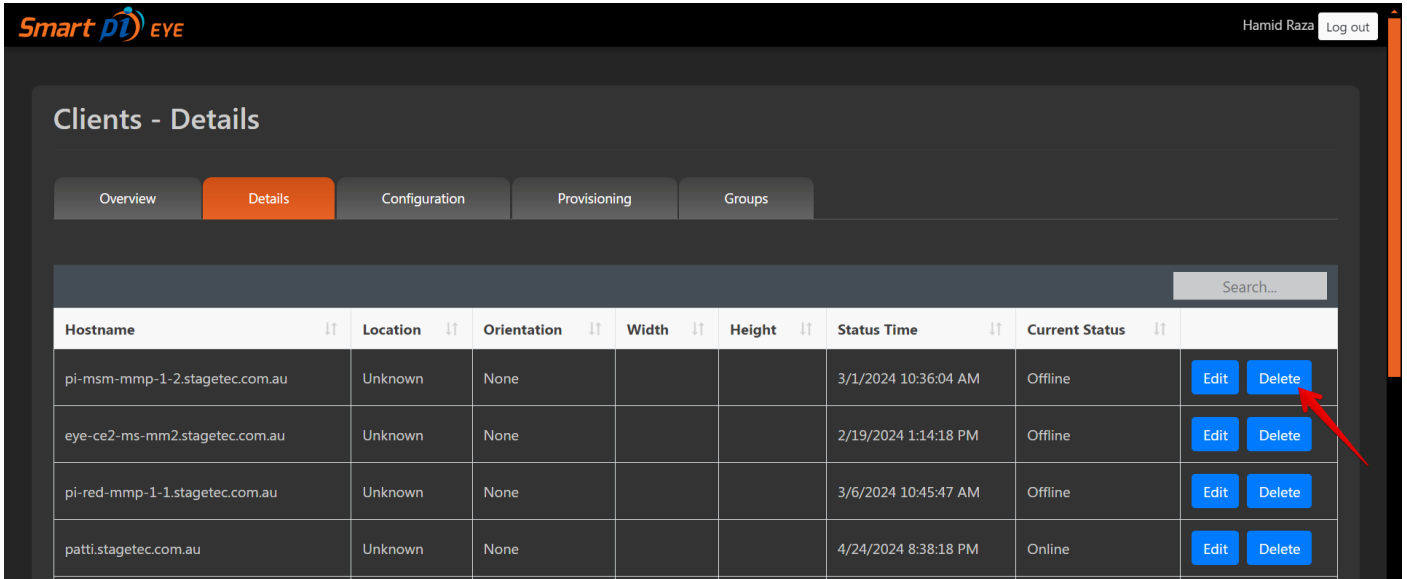
Overview **Details** Configuration Provisioning Groups

Search...

Hostname	Location	Orientation	Width	Height	Status Time	Current Status	
marklaptop12.stagetc.com.au	Unknown	None			11/11/2023 7:47:10 PM	Offline	Edit
eye-warehouse.stagetc.com.au	Unknown	None			11/15/2023 10:07:50 PM	Online	Edit
PI-HBY-MMP-1-1.stagetc.com.au		None			11/15/2023 5:30:10 PM	Online	Edit

You'll be taken to the edit page where you can set all the parameters as per your preferences.

To delete a client, simply click **Delete**.



Smart pi EYE Hamid Raza Log out

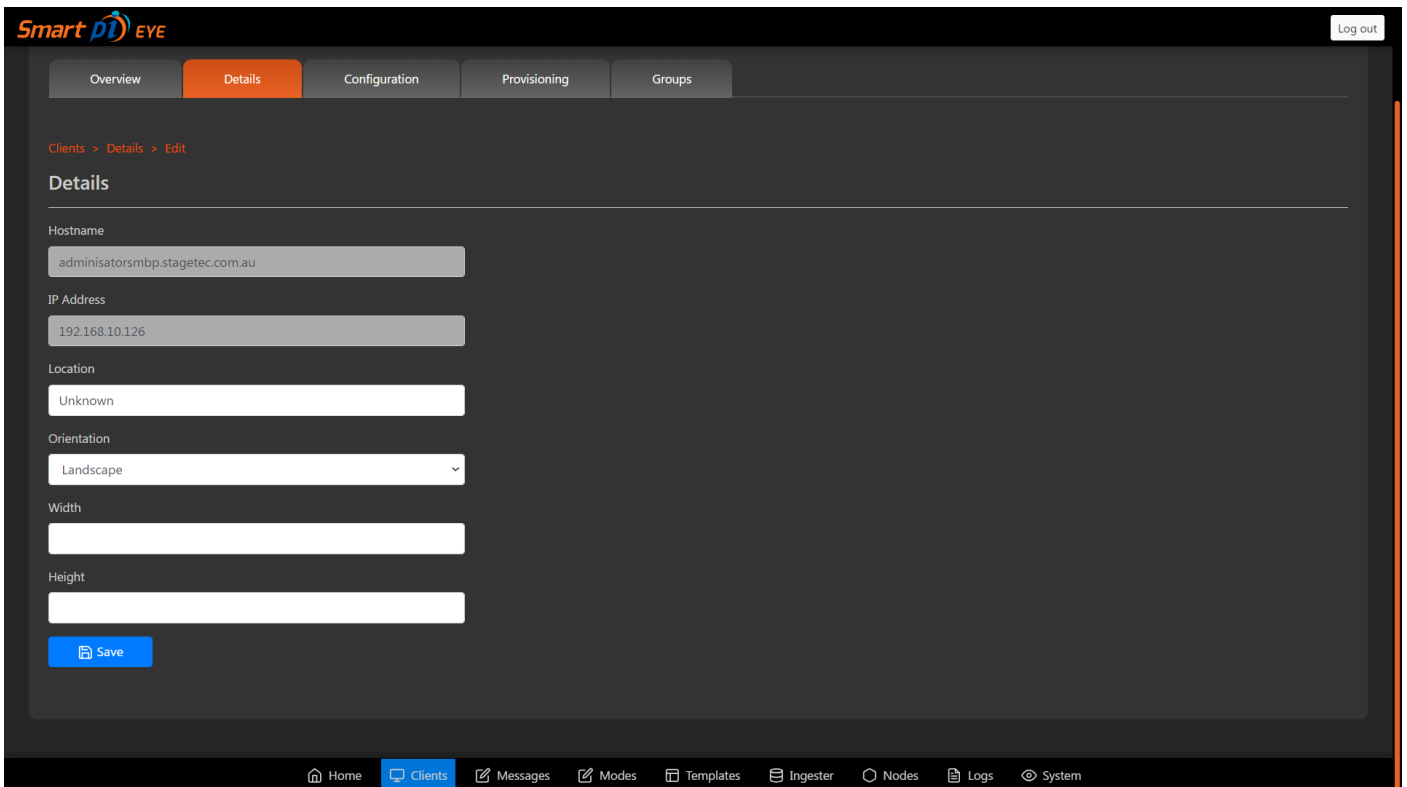
Clients - Details

Overview Details Configuration Provisioning Groups

Search...

Hostname	Location	Orientation	Width	Height	Status Time	Current Status	
pi-msm-mmp-1-2.stagete.com.au	Unknown	None			3/1/2024 10:36:04 AM	Offline	Edit Delete
eye-ce2-ms-mm2.stagete.com.au	Unknown	None			2/19/2024 1:14:18 PM	Offline	Edit Delete
pi-red-mmp-1-1.stagete.com.au	Unknown	None			3/6/2024 10:45:47 AM	Offline	Edit Delete
patti.stagete.com.au	Unknown	None			4/24/2024 8:38:18 PM	Online	Edit Delete

Don't forget to hit **Save** when done.



Smart pi EYE Log out

Overview Details Configuration Provisioning Groups

Clients > Details > Edit

Details

Hostname
administratorsmbp.stagete.com.au

IP Address
192.168.10.126

Location
Unknown

Orientation
Landscape

Width

Height

Save

Home Clients Messages Modes Templates Ingestor Nodes Logs System

Hostname and IP address are automatic from the Smart pi EYE Server Node.

Location can be used so you can easily store and search for information on where the device is installed.

Orientation, width, and height is used to configure the EYE-HD remotely and ensure correct display of the selected template.

5.2.3 Configuration

In this section you configure the main settings for the clients. This includes the client function, Realtime data settings and the templates you want to use, you can also configure messages which can override the Display type.

Hit the **Configuration** button to start configuring a client.

Smart Pi EYE Clients - Configuration

Overview Details **Configuration** Provisioning Groups

Search...

Hostname	Display Type	Template Override	Message	
None	Departure Board	Sydney Trains Multi Modal - 13 lines - Buses Only - 1080x1920	None	Configure
adminisatorsmbp.stagetc.com.au	Departure Board	Buses and Trains 1080x1920 - Flipped - Message	None	Configure
administratorsmbp.tm-systems.com.au	LED Display	Sydney Trains Concept D - Portrait - 1080x1920	None	Configure
eye-warehouse.stagetc.com.au	Departure Board	Buses and Trains 1080x1920 - Flipped - Message	None	Configure
engineering-32.stagetc.com.au	Departure Board	Buses and Trains 1080x1920 - Flipped - Message	None	Configure
marklaptop12.stagetc.com.au	Departure Board	None	None	Configure
EYE-DEFAULT	Clock	None	None	Configure

Home Clients Messages Modes Templates Ingester Nodes Logs System

Next, click **Configure** next to any client that you would like to configure. Note that the configuration options will vary depending on the display type.

Smart Pi EYE Clients - Configuration

Overview Details **Configuration** Provisioning Groups

Search...

Hostname	Display Type	Template Override	Message	
administratorsmbp.tm-systems.com.au	Departure Board	None	None	Configure
None	Departure Board	Default	None	Configure
eye-warehouse.stagetc.com.au	Departure Board	Smart Pi	None	Configure
adminisatorsmbp.stagetc.com.au	Departure Board	None	None	Configure
pi-bwd-mmp-1-1.stagetc.com.au	Clock	None	None	Configure

Here you can change the display type, template override and message besides modifying the display settings.

5.2.3.1 Display Types

There are 10 different display types available in Version 1.27.3

Display Type	Description
Clock	This display type will show a single clock with the current time from the node it is connected to. The clock is the default template if clients have not been pre provisioned or configured.
Next Service	This display type can show the Next Service in detail, as well as the next 2-3 services. If the stops will not fit on a single screen, this display type can scroll through a list to show all of the stops. The arriving indication has been refined. The "Arrive NOW" calculation now works in seconds rather than minutes, which improves the accuracy of the arriving and departing indication shown to passengers.
Following Service	This display type will show the next 2 -4 services and their destination, time, load data and more. Where occupancy is displayed, the system uses per carriage occupancy when it is available in the feed. When per carriage data is not available, it now falls back automatically to the occupancy reported in the GTFS Vehicle Position feed, so a loading indication can still be shown. You can choose the index offset to use this display type in conjunction with the Next Service display type if preferred.
Multi	This display type is a mixture of Next Service and Following Service display types in a single display. This is useful when using stretched format screens (IE 32:9 etc)
Departure Board	This display type is used to show multiple services on a single board, this is useful to show summaries of entire interchange locations and multiple agencies and transport types.
Showing Scheduled Time Without Realtime	A new option lets you show the scheduled time when real-time information is not available for a service. This keeps the display useful during a feed outage rather than leaving the

	time field blank. Enable the option in the display settings where required.
LED Displays	This display type is commonly used for digital wayfinding using LED Tiles and controllers where pixel perfect mapping is required. This allows for real time information to be overlayed on digital wayfinding signage as well as giving the ability to automate wayfinding based on the environmental changers (Escalators directions etc).
Kiosk	This display type is a fully interactive Kiosk. 3D models can be imported with multiple paths to different locations, the real-time information can also be used to give customers directions to other transport destinations.
URL	This display type can be used to allow any website, CMS or other digital signage to be displayed as an overlay in the Smart pi EYE System.

Template Override

Template override allows for a dedicated template to be used on this client rather than the selected default template.

Messages

Messages is where it is possible to configure custom overlay HTML, Graphical and Video messages.

Display Settings

Display settings changes depending on the selected Display Type.

Please see each display type section to learn about the different options.

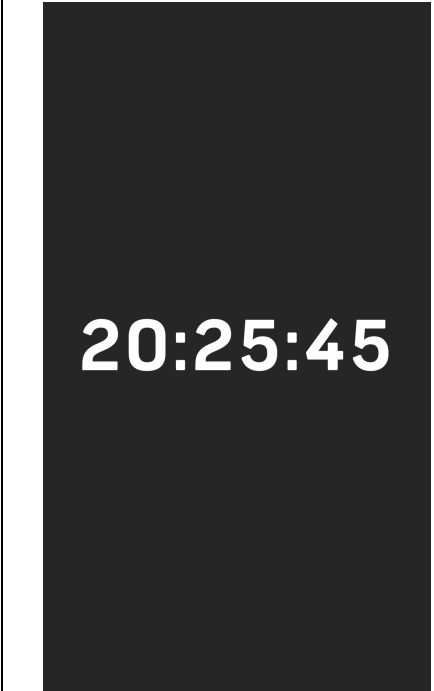
5.2.3.1 Display Settings

1. Clock

There are no Display Settings for the Clock, this time is sent from the node server and the configured time zone the server is in.

Templates are used to configure display preferences including Font, Size, Colors and 12/24 hour and second's display.

Template Examples

Default	Dark	Smart pi
		

2. Next Services

The Next Services Display type is mostly automatic, you can simply choose your Data Provider and the stop you would like to display the information for.

You can choose to display a message for Non-Stopping services if required.

When Non-Stopping services is available it is possible to configure the ICON and message that will be displayed.

Client Configuration - Edit Stop

Overview

Details

Configuration

Provisioning

Groups

Clients > Configuration > Configure > Screen Settings

Data Provider

Sydney Busses Area 6

Stop

118 Bourke Rd

☐ Include Non Stopping Services

Save

← Common Config

Template Examples

Default	Dark	Smart pi

3. Following Services

The Following Services Display type is mostly automatic, you can simply choose your Data Provider and the stop you would like to display the information for.

The template can be configured to display 1 – 4 following services.

You can choose to display a message for Non-Stopping services if required.

When Non-Stopping services is available it is possible to configure the ICON and message that will be displayed.

Additionally, you can add an index offset to show only the following services above this number.

Client Configuration - Edit Stop

[Overview](#)[Details](#)[Configuration](#)[Provisioning](#)[Groups](#)

[Clients](#) > [Configuration](#) > [Configure](#) > [Screen Settings](#)

Data Provider

RTA Sydney Trains

Stop

Central Station Platform 16

Following Service Index

1

☐ Include Non Stopping Services

 Save

 Common Config

Template Examples

Default	Dark	Smart pi
Connected Next Services21:00:45 T4Bondi Junction Platform24 Unknown position 8 carriagesLimited stops Departs 14 mins T4Bondi Junction Platform24 Unknown position 8 carriagesAll stops Departs 30 mins	Connected Next Services21:12:45 T4Bondi Jn Platform24 Unknown position 8 carriagesAll stops Departs 17 mins scheduled SCOBondi Jn Platform24 Unknown position 4 carriagesLimited stops Departs 23 mins scheduled	Connected Smart piEYE21:17:45 SCOBondi Jn Platform24 Departs 18 mins T4Bondi Jn Platform24 Departs 27 mins

4. Multi

The Following Services Display type is mostly automatic, you can simply choose your Data Provider and the stop you would like to display the information for.

You can choose to display a message for Non-Stopping services if required.

When Non-Stopping services is available it is possible to configure the ICON and message that will be displayed.

The multi template has the additional ability to show vehicle position if configured in the template.

Client Configuration - Edit Stop

Overview Details **Configuration** Provisioning Groups

Clients > Configuration > Configure > Screen Settings

Data Provider
Sydney Busses Area 6

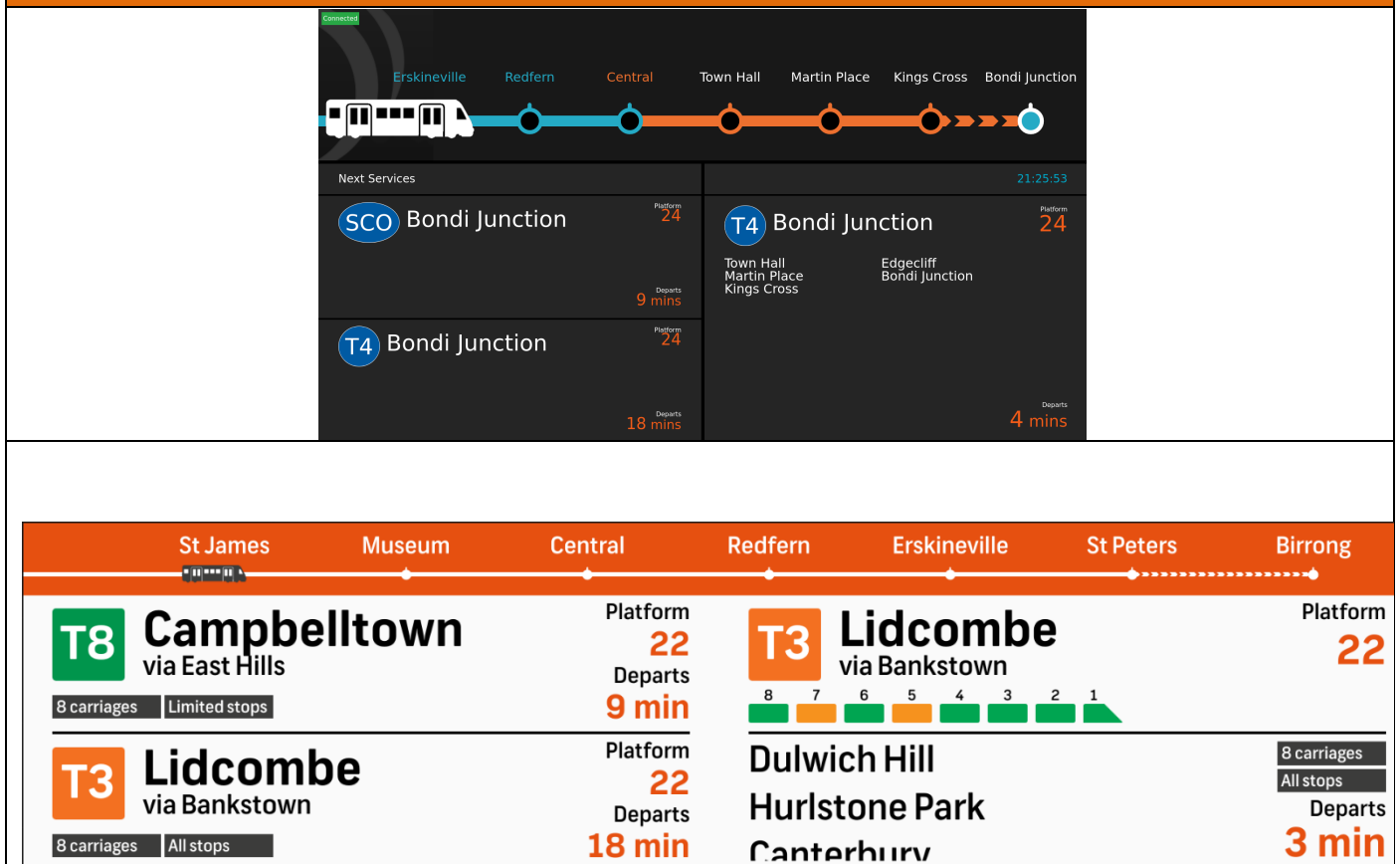
Stop
118 Bourke Rd

☐ Include Non Stopping Services

Save Common Config

Template Examples

Smart pi



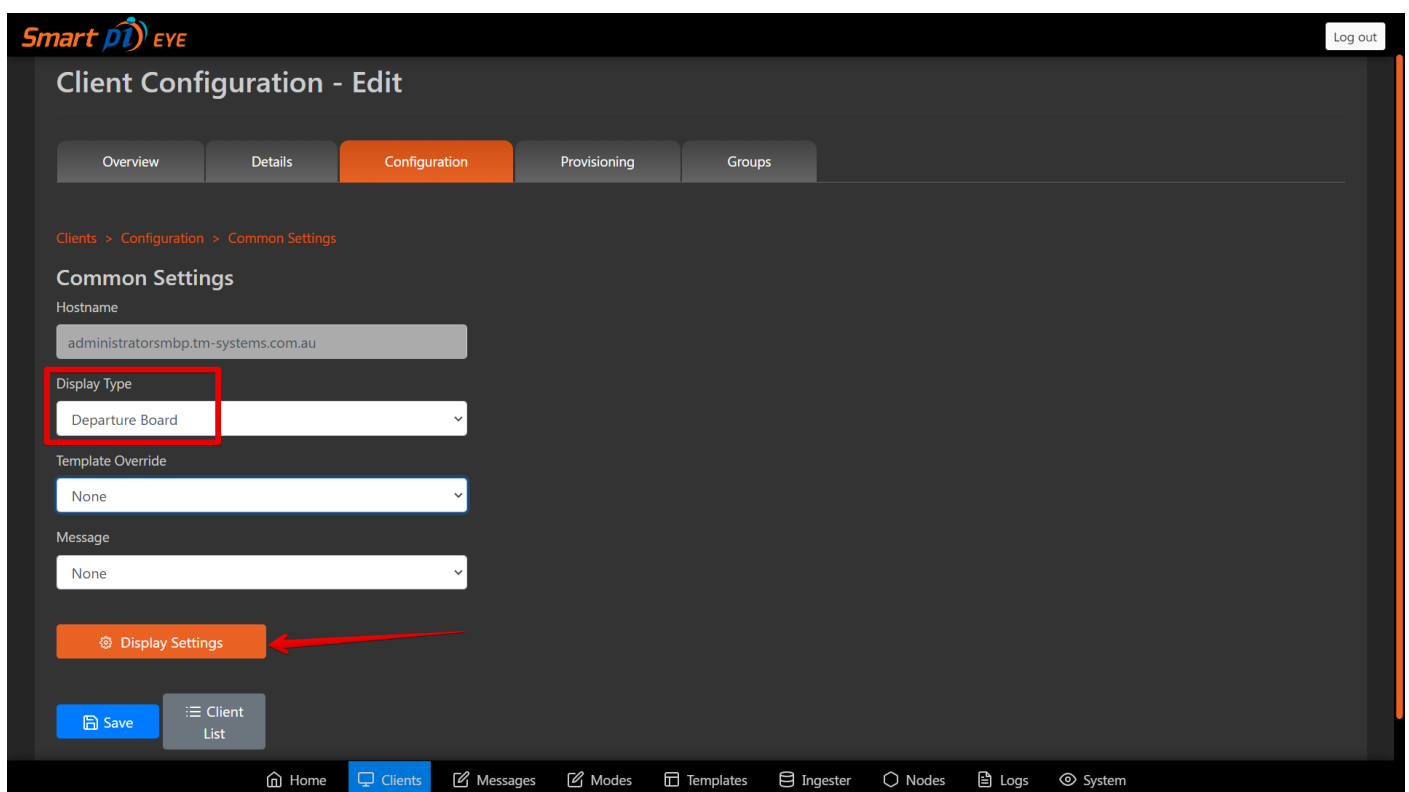
5. Departure Boards

The Departure Board Display type is very configurable, you can choose multiple agencies, stations and stops, filters and offsets.

It is possible to display up to four different sections in a single departure board screen depending on the template chosen and configured.

It is also possible to link a message to part of the screen for a departure board, this can be used for messaging, advertising, and wayfinding information.

Select **Departure Board** as the display type and then click **Display Settings**.



A message can be selected to display within the template as well as the ability to set the minimum departure time, this will stop the Departure Board from showing any upcoming services below this value in minutes.

Clients > Configuration > Configure > Screen Settings

Client Name

administratorsmbp.tm-systems.com.au

Message Display

None

Minimum Departure Time Threshold (mins)

0

Save

Once you have clicked on display options you can configure the departure board.

Select the Available Data Providers (these are usually your incoming GTFS feeds).

Available Data Providers

Search...

Name	↑↓
No providers found	

Current Data Providers

Search...

Name	↑↓	
Sydney Busses Area 6		Remove
Sydney Trains		Remove

«
<
1
>
»

Data Sections

Use the **Data Sections** button to edit the sections configured in your template, these are usually different agencies or services you would like to display.

Depending on the template you have selected depends on how many sections will be displayed.

You can name the Title and Subtitle here which will then dynamically be passed to the client and template selected, this allows for a single template to be used in many locations without the requirement to duplicate the template.

You can then allocate which feed will be displayed in each of the sections via the dropdown selector.

Clients > Configuration > Configure > Screen Settings > Data Sections

Sections

ID	Title	Subtitle	Index Offset
Section 1	BUS	Section 1 Subtitle	0
Section 2	Train	Section 2 Subtitle	0
Section 3	Spare 1	Section 3 Subtitle	0
Section 4	Spare 2	Section 4 Subtitle	0

Data Feeds

Name	Section
Sydney Busses Area 6	BUS
Sydney Trains	Train



Save

← Screen Config

Back on the Display Settings screen, you may scroll down to see further options like Departure Locations at available stops and current stops, use this to select the stops you would like to display on this client:

Departure Locations

Available Stops

Name	
Aberdeen Station	Add
Aberdeen Station Platform 1	Add
Allawah Station	Add
Allawah Station Platform 1	Add
Allawah Station Platform 2	Add
Allawah Station Platform 3	Add
Allawah Station Platform 4	Add
Albion Park Station	Add
Albion Park Station Platform 1	Add
Albion Park Station Platform 2	Add

[Data Sections](#)

Current Stops

Name	
Town Hall Station Platform 1	Remove
Albury Station	Remove
Albury Station Platform 1	Remove
QVB, Market St, Stand F	Remove
QVB, York St, Stand B	Remove
QVB, York St, Stand C	Remove
QVB, York St, Stand D	Remove

« < 1 > »

Click **Add** or **Remove** as per your own preferences.

Similarly, towards the bottom of the screen, you'll see **Destination Locations** at **Available Destinations** and **Current Destinations**. And you can add or remove any of these as it suits you best.

Custom Template Examples

Example 1

Services Only

B

Buses

Lidcombe Station, Stands A-C

Time now
13:53

Next service

Stand

Departs

920

Bankstown Stn

A

3 min

925

East Hills Stn

C

9 min

920

Parramatta Stn

B

11 min

920

Bankstown Stn

A

18 min

920

Parramatta Stn

B

26 min

920

Bankstown Stn

A

33 min

920

Parramatta Stn

B

41 min

920

Bankstown Stn

A

48 min

920

Parramatta Stn

B

56 min

920

Bankstown Stn

A

14:57

920

Parramatta Stn

B

15:05

925

Bankstown Stn

C

15:11

920

Bankstown Stn

A

15:12

Example 2

Services and Advertising

Olympic Park Services

Time now
8:36

Next train

Capacity

Departs

Platform

T4

Hurstville

Now

25

T8

City Circle

2 min

17

T2

City Circle

3 min

21

T1

Penrith

5 min

18

T1

Hornsby

6 min

16

T2

Leppington

6 min

19

T8

Revesby

6 min

23

T4

Bondi Junction

10 min

24

T8

City Circle

10 min

17

T2

Homebush

10 min

18

Cancelled Services

You can choose how cancelled services are handled on the display. Select the option that suits the location and click **Save**.

Option	Behaviour
Keep	The service remains in the list and displays as normal, with no visual change to indicate it has been cancelled.
Strikeout	The service remains in the list but is shown with a line through it, so passengers can see the service was scheduled but is no longer running.
Remove	The service is taken off the display entirely, so only running services are shown.

6. LED Displays

LED Displays can be used to pixel map content to any custom resolution for use on LED Tiled walls.

This is often used for wayfinding where custom signs can be created to direct people to the correct areas within public transport environments.

The LED Displays can display any web based graphical content and have the ability to allow for real-time information to be overlayed over the top of the other media. This can be used for instance to show an escalator is going down and when the next service is due to depart as well as its destination and the current time.

Multiple LED Displays can be managed from a single Smart pi EYE-HD as long as the resolution combine is less than 1920 x 1080.

Select the LED Display Type

Clients > Configuration > Common Settings

Common Settings

Hostname

eye-default.stagetec.com.au

Display Type

Departure Board

Next Service

Following Services

Clock

Multi

LED Display

Departure Board

Kiosk

Url

Dual Next Services

Dual Next With Departure

Save

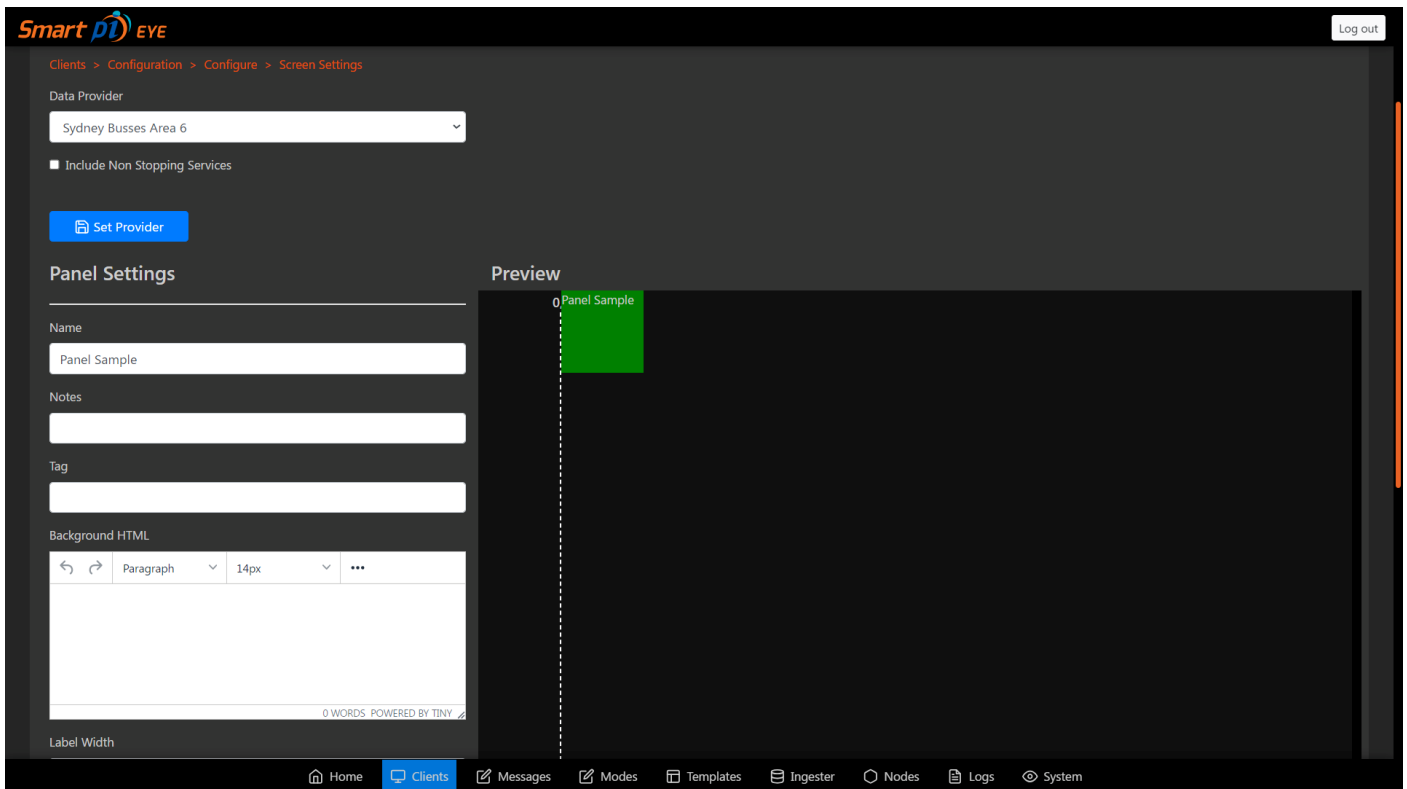
Client
List

Home

Clients

Messages

Once done, hit the **Display Settings** button to proceed. This one is for LED Display.

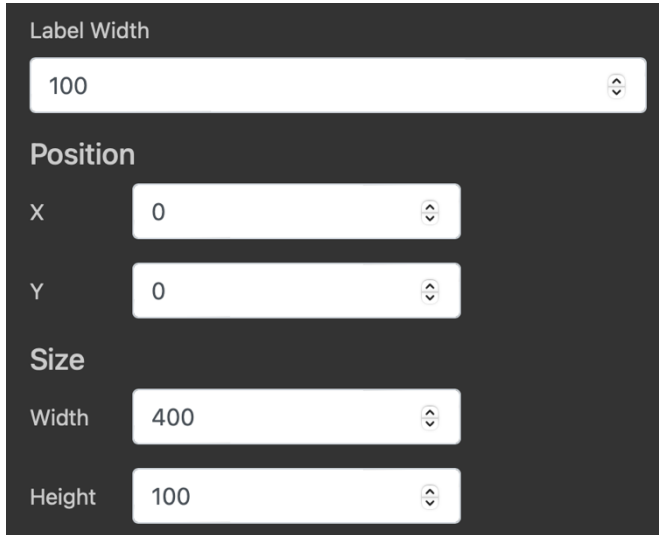
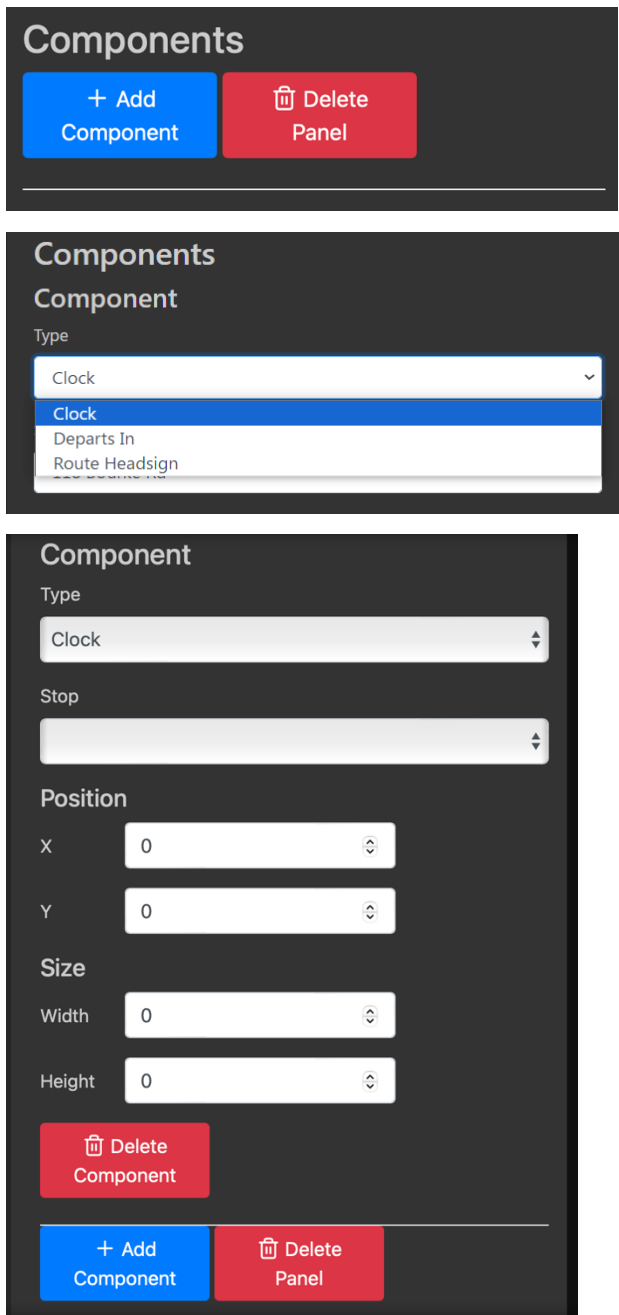


First you need to choose the Data provider that will be used for the real-time information.

You can choose if you would like to include information for not stopping services or not.

The preview on the right of the screen will display each of the Panels, and a static representation of what would be displayed in each “Panel”. Usually, the green section is used as a Label and would not be displayed on the panel, just used for testing and troubleshooting. If this feature is not required, you can set it to 0.

	Here are the general settings for the Panel. You can give each panel a unique name You can add some notes / information about the panel. Tags can be used for managing panels in modes and features. The background HTML is what will be displayed on the bottom layer of each panel. The real-time overlaid content will be put in front of this. Often this may be as simple as a jpeg or gif image.
--	--

	Label Width will show in the preview and on the webpage as a label with the Name Configured above, this is usually hidden from the real display and used for testing and troubleshooting. Position of the x and y position of the label and how many pixels high and wide the sign will be. The label is placed before the displayed content on the Panel.
	This is the section used to add the real-time and custom label components on the top layer. The options include. Clock: The current time from the node Departs In: When the next service departs. Route Headsign: The destination of the next service. Each component needs to be configured. Here you can select the stop / platform to display, its position and size. You can add multiple components per panel.

+ Add Panel

Save

← Common Config

Multiple panels can be configured in the system.

Don't forget to hit **Save** before quitting.

Below is an example of 3 differently configured signs.

Smart *pi* EYE
Log out

Panel Settings

☐ Apply as replacement

Name

Notes

Tag

Background HTML

This Train goes to:
This Train Departs in:

0 WORDS POWERED BY TINY

Label Width

Position

Preview

Screen1

This Train goes to:
This Train Departs in:

RouteHeadsign 1
DepartsIn 4

Clock

Screen2

This Train goes to:
This Train Departs in:

RouteHeadsign 2
DepartsIn 3

Clock

Screen3

This Train goes to:
This Train Departs in:

RouteHeadsign 1
DepartsIn 4

Clock

Home Clients Messages Modes Templates Ingester Nodes Logs System

Template Examples

Default



↑ B Stand C Bourke St

7. Kiosks

To access the display settings for Kiosk, click **Clients > Configuration**. Once done, you will have to select a display type as Kiosk and save first. Only then you'll be able to access the correct display settings.

Kiosks are the most complicated of the device types to configure as they support many features including the ability to include layered 3D models.

There are plenty of options for display settings for Kiosk:

The screenshot shows the 'Client Configuration - Edit Kiosk' interface with the 'Data' tab selected. The breadcrumb trail is 'Clients > Configuration > Display Settings > Data'. The form includes the following fields:

- Data Provider:** A dropdown menu with 'Sydney Buses Area 6' selected.
- Stop:** A dropdown menu with 'None' selected.
- RSS Source:** A dropdown menu with 'None' selected.
- Idle Timeout (seconds):** A text input field with '0'.
- Allow User 3D Interaction:** A checkbox that is currently unchecked.
- Auto Orbit 3D Model:** A checkbox that is currently unchecked.
- Auto Orbit Speed:** A text input field with '0'.

At the bottom of the form are 'Save' and 'Configure' buttons. The footer navigation bar includes links for Home, Clients, Messages, Modes, Templates, Ingestor, Nodes, Logs, and System.

In the **Data** tab, you may configure Data Provider, Stop, RSS Source and Idle Timeout.

In the **Scenes** tab, you can add or delete scenes as per your preferences:

The screenshot shows the 'Client Configuration - Edit Kiosk' interface with the 'Scenes' tab selected. The breadcrumb trail is 'Clients > Configuration > Display Settings > Scenes'. At the top right are 'Add Scene' and 'Back To Common Config' buttons. Below is a table with the following data:

Name	Model	Directional Light Intensity	Camera FOV	
Wynyard Concourse	assets/WYN_concourse_e3.glb	1	75	Delete Scene
Wynyard Platforms 3 & 4	assets/WYN_34_e2.glb	1	75	Delete Scene
Wynyard Platforms 5 & 6	assets/WYN_56_e2.glb	1	75	Delete Scene

A 'Save' button is located at the bottom left of the table area.

Similarly for the **Paths** tab, you can add a path, give it a name, select the accessibility, delete path or edit the steps.

Client Configuration - Edit Kiosk

Overview
Details
Configuration
Provisioning
Groups

Data
Scenes
Paths
Search Items
Search Map
Ticker Items
Advanced

Clients > Configuration > Display Settings > Paths

Add PathBack To Common Config

Name	Model	Accessibility	
To something on concourse		Standard	Delete Path Edit Steps
To Platform 3 & 4		Standard	Delete Path Edit Steps
To Platform 5 & 6		Standard	Delete Path Edit Steps

No Path selected

Save

Click **Edit Steps** to get more options where you can set the instructions or delete a step.

Clients > Configuration > Display Settings > Paths

Add PathBack To Common Config

Name	Model	Accessibility	
To something on concourse		Standard	Delete Path Edit Steps
To Platform 3 & 4		Standard	Delete Path Edit Steps
To Platform 5 & 6		Standard	Delete Path Edit Steps

Selected Path: To Platform 5 & 6

Index	Waypoint Name	Instruction	
1		Turn right	Delete Step
2		Leave the station towards the Harbour	Delete Step

Add Step

Save

In the **Search Items** tab, you can set a title, type, add keywords and add or delete items:

Smart pi EYE

Log out

Data Scenes Paths **Search Items** Search Map Ticker Items Advanced

Clients > Configuration > Display Settings > Search Items

Add Search Item Back To Common Config

Title	Type	Keywords	
Concourse	Point of Interest	concourse Delete Add	Delete Item
Platform 5	Point of Interest	platform Delete 5 Delete Platform 5 Delete Add	Delete Item
Platform 6	Point of Interest	platform Delete 6 Delete Platform 6 Delete Add	Delete Item
Platform 3	Point of Interest	platform Delete 3 Delete Platform 3 Delete Add	Delete Item
Platform 4	Point of Interest	platform Delete 4 Delete Platform 4 Delete Add	Delete Item

Home Clients Messages Modes Templates Ingestor Nodes Logs System

In the **Search Map** tab, you can select an item, scene and paths to add or delete.

Overview Details **Configuration** Provisioning Groups

Data Scenes Paths Search Items **Search Map** Ticker Items Advanced

Clients > Configuration > Display Settings > Search Map

Add Search Mapping Back To Common Config

Search Item	Scene	Paths	
Concourse	Wynyard Concourse	To something on concour Delete Add	Delete Map
Platform 5	Wynyard Platforms 5 & 6	To Platform 5 & 6 Delete Add	Delete Map
Platform 6	Wynyard Platforms 5 & 6	To Platform 5 & 6 Delete Add	Delete Map
Platform 3	Wynyard Platforms 3 & 4	To Platform 3 & 4 Delete Add	Delete Map
Platform 4	Wynyard Platforms 3 & 4	To Platform 3 & 4 Delete Add	Delete Map

The **Ticker Item** tab allows you to add or delete a ticker item.

Client Configuration - Edit Kiosk

Overview Details **Configuration** Provisioning Groups

Data Scenes Paths Search Items Search Map **Ticker Items** Advanced

Clients > Configuration > Display Settings > Ticker Items

Add Ticker Item Back To Common Config

Title	Content	
Temperature	25°C	Delete Ticker Item
Weather	Rain 80%	Delete Ticker Item

Save

Finally, in the **Advanced** tab, you can add a Json code to make full use of the customization.

Template Examples

Currently only custom templates are available.

Default	Dark	Smart pi
Free Template Coming Soon	Free Template Coming Soon	Free Template Coming Soon

8. URL

This display type can be used to allow any website, CMS or other digital signage to be displayed as an overlay in the Smart pi EYE System.

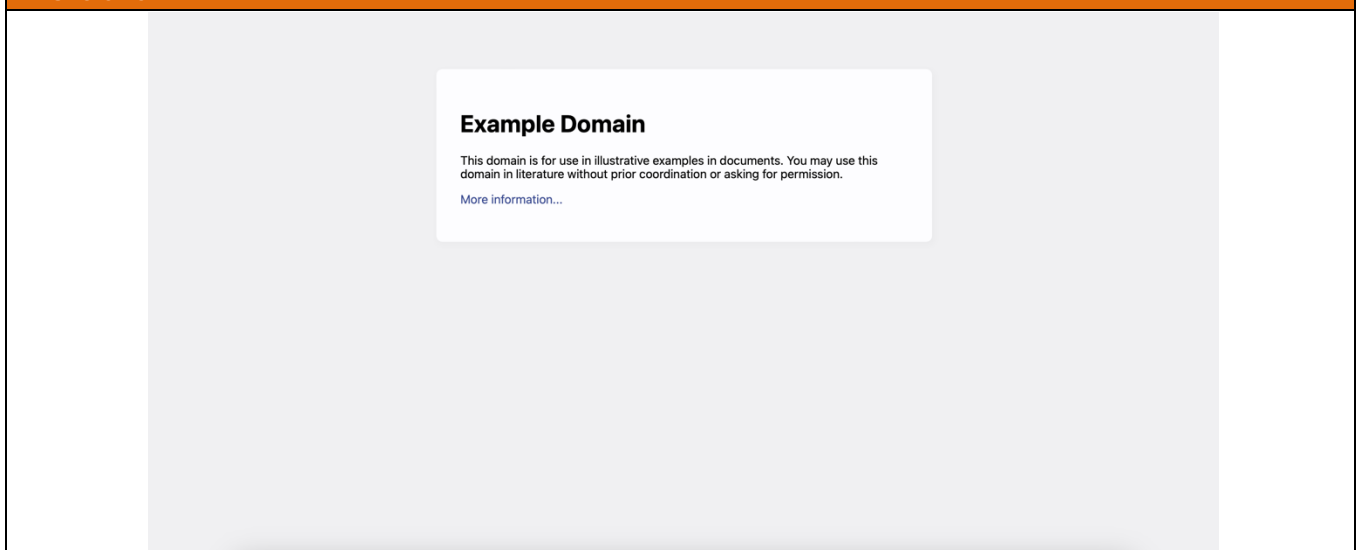
The Messages Overlay and other Smart pi EYE features can still be used.

Simply add in the web address of the URL you would like to display, and it will be displayed Fullscreen on the Client Endpoint.

Please note the **Client** will need access to the webserver serving the content.

Template Examples

Default



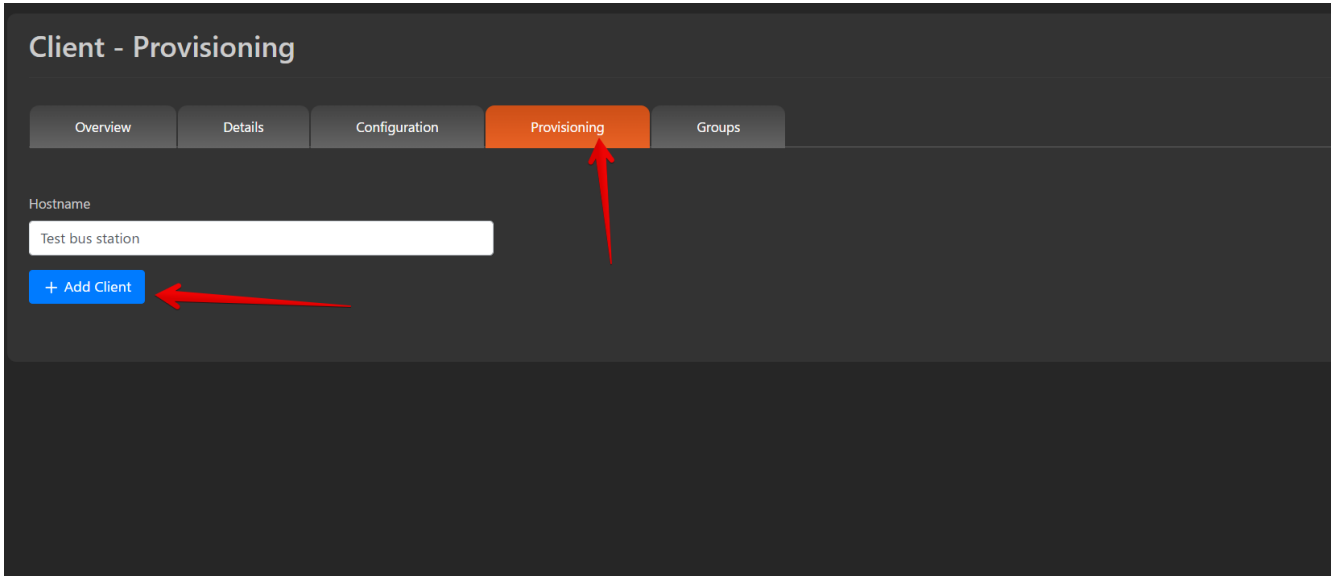
5.2.4 Provisioning

Provisioning can be used to pre provision / configure devices before they are available or have been connected to the Smart pi EYE server.

Once entered here, they will appear under the client section and can be configured.

Then first time the client connects it will display the configured settings and not the clock.

Hit the **Provisioning** tab, from the Clients main tab. Here you can add a new client by giving it a name.



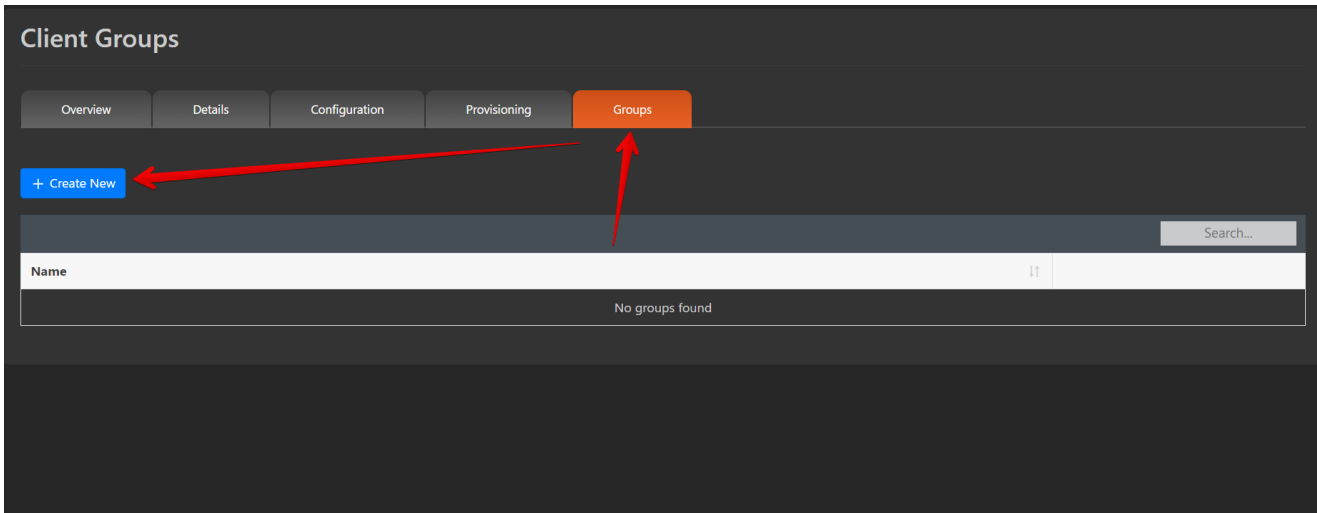
Click **Add Client** to add a client.

5.2.5 Groups

Groups are used to easily manage multiple clients (displays) that are in the same area.

This allows for messages, Real Time Text and other features to be grouped rather than individually setting up each client.

A client can be a member of more than 1 group.

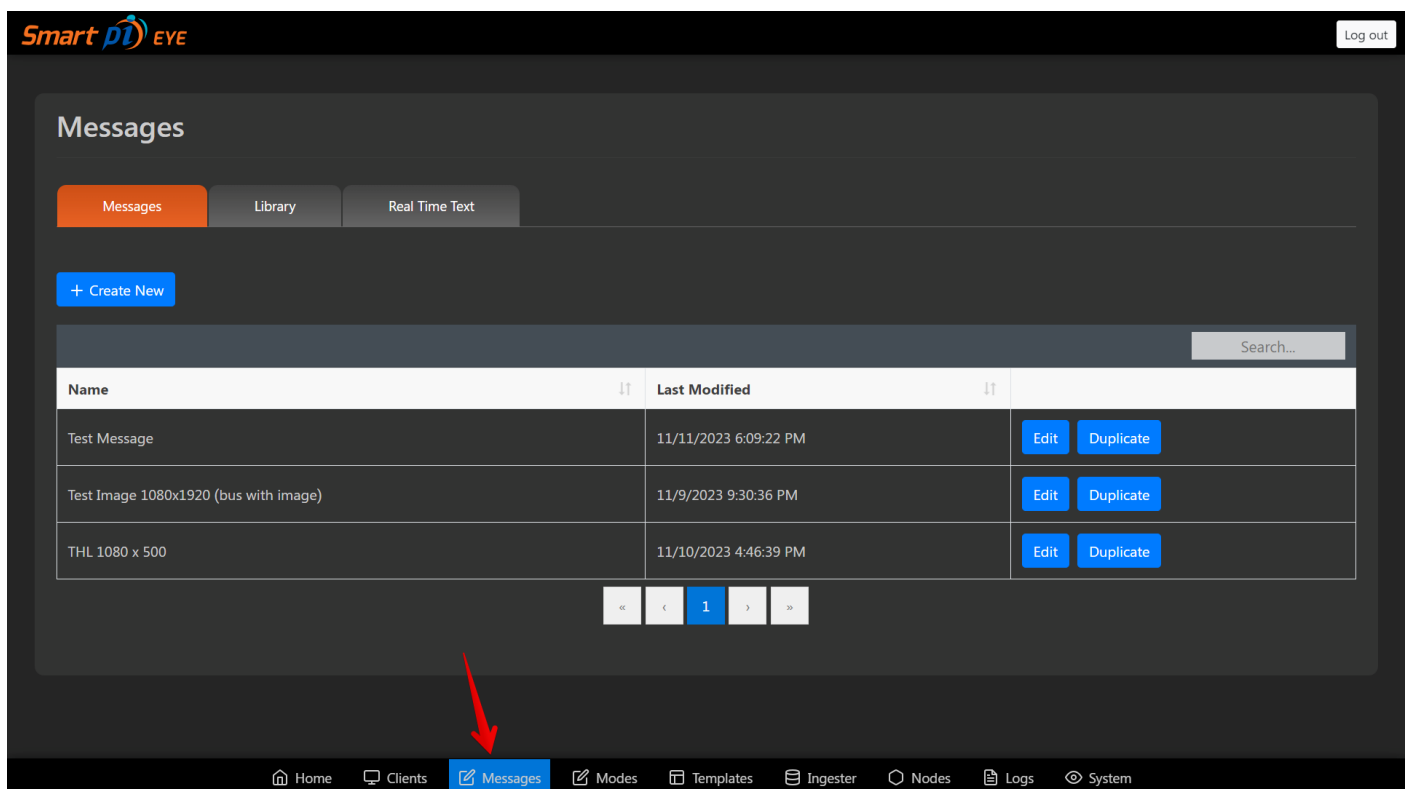


5.3 Messages

The Smart pi EYE server has a built in Messaging system, basic library and the ability to add Real Time Text Messages.

In the messages tab, you can send real-time messages, add media and create new messages.

Messages are layered over the top of the device type display or configured to only appear in sections of the display.

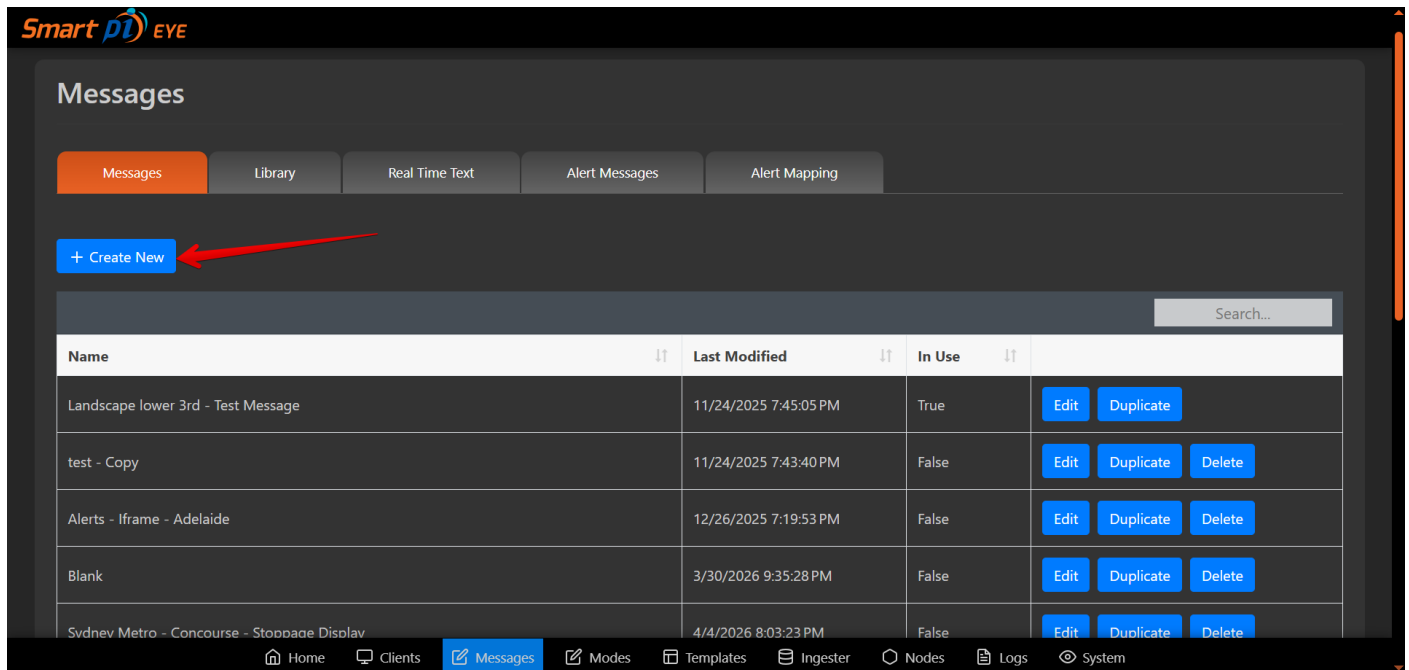


Videos can now be added to messages. Add a video in the same way as an image, either from the graphical editor or the library, and it will display within the message using the template styling.

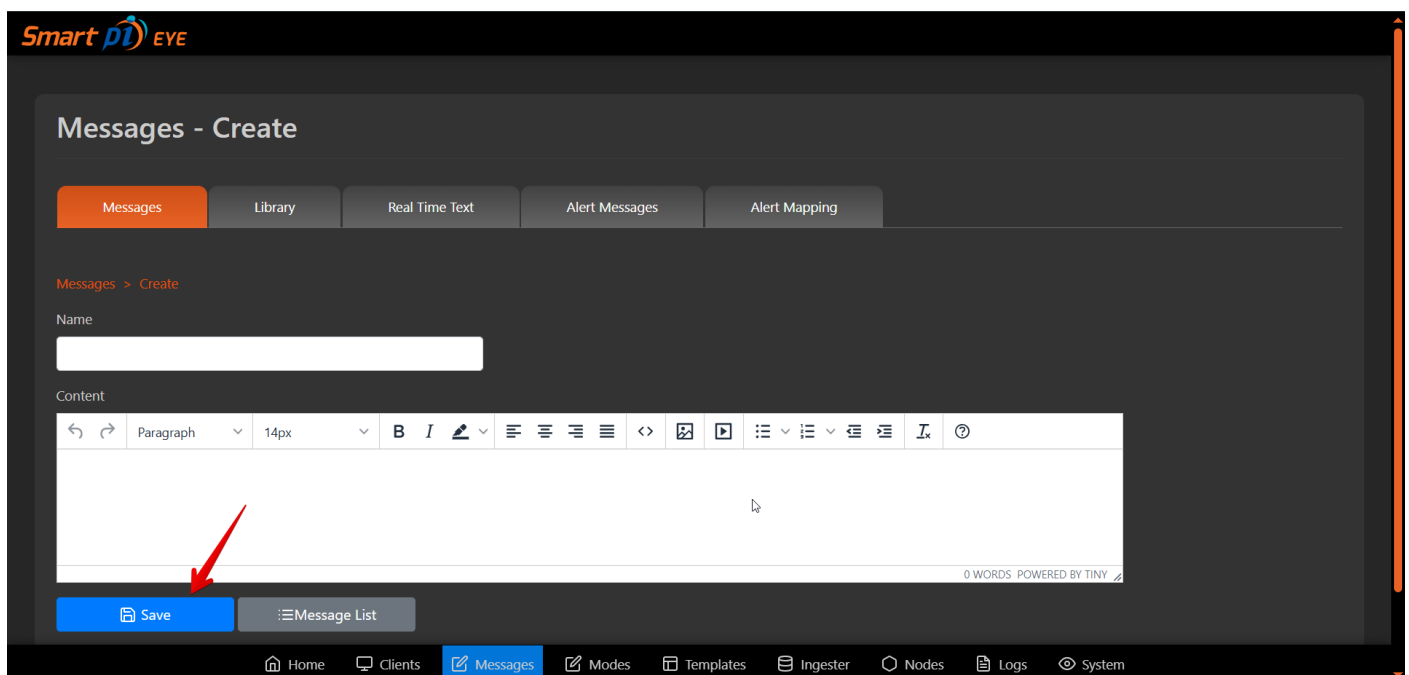
5.3.1 Create New message

New messages can be created in within the Master User Interface.

Simply click **Create New** to start creating a new message.



Enter your message Name in the textbox that opens and hit **Save** to save the progress.

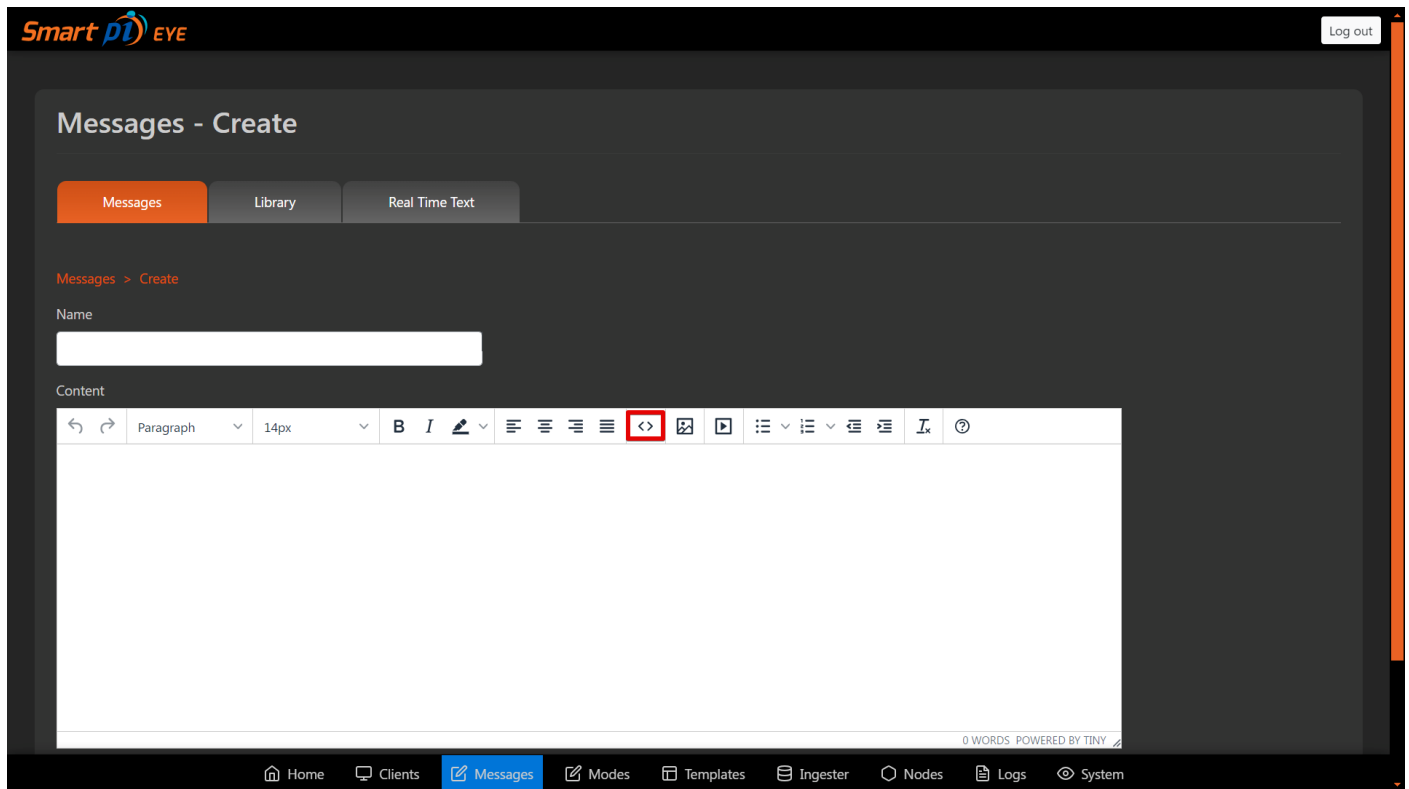


There are two ways to edit the message within the message editor.

By default, the message editor is in graphical mode, Images, text and other library content can be added and arranged within the editor. All messages will automatically have the templates CSS applied to ensure it follows the design required for each screen.

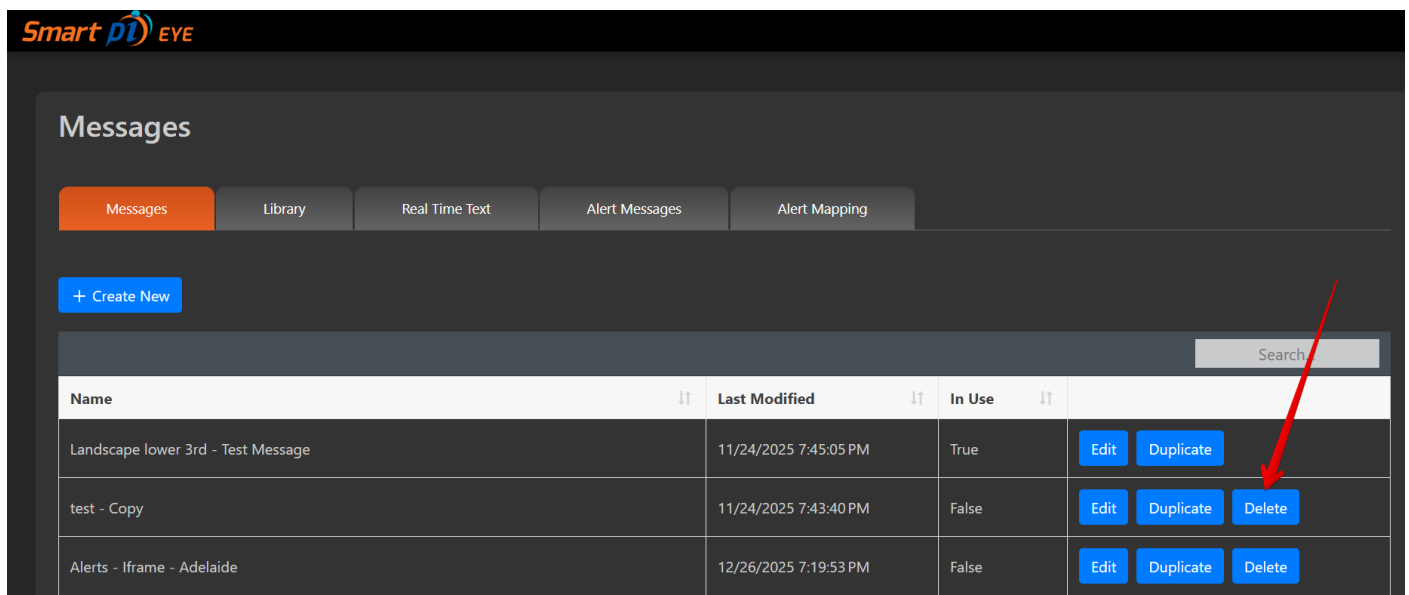
For advanced users you can hit the code “<>” icon and use html and inline CSS to generate any message desired.

Messages can also pull content from other http / https servers.



5.3.2 Delete a message

You can delete a message from the same screen by clicking the **Delete** button.



Smart pi EYE

Messages

Messages Library Real Time Text Alert Messages Alert Mapping

+ Create New

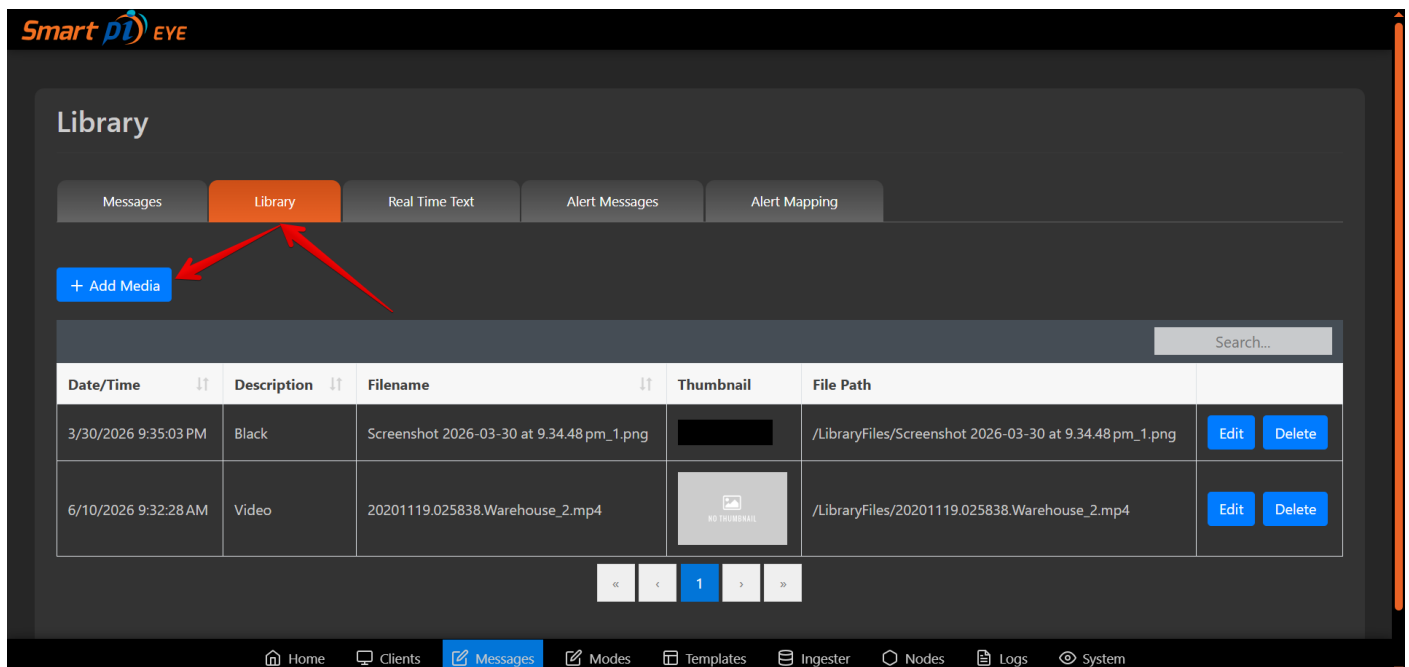
Search

Name	Last Modified	In Use	
Landscape lower 3rd - Test Message	11/24/2025 7:45:05 PM	True	Edit Duplicate
test - Copy	11/24/2025 7:43:40 PM	False	Edit Duplicate Delete
Alerts - Iframe - Adelaide	12/26/2025 7:19:53 PM	False	Edit Duplicate Delete

5.3.3 Library

The Smart pi EYE has a library engine to ensure it is easy to manage and use digital content within the Smart pi EYE system.

Choose **Library** from the top and hit **Add Media** button to start uploading media.



Smart pi EYE

Library

Messages Library Real Time Text Alert Messages Alert Mapping

+ Add Media

Search...

Date/Time	Description	Filename	Thumbnail	File Path	
3/30/2026 9:35:03 PM	Black	Screenshot 2026-03-30 at 9.34.48 pm_1.png		/LibraryFiles/Screenshot 2026-03-30 at 9.34.48 pm_1.png	Edit Delete
6/10/2026 9:32:28 AM	Video	20201119.025838.Warehouse_2.mp4	NO THUMBNAIL	/LibraryFiles/20201119.025838.Warehouse_2.mp4	Edit Delete

« < 1 > »

Home Clients Messages Modes Templates Ingestor Nodes Logs System

Select a file from your computer, add a short description and hit **Save**.

Media supported includes most web formats including:

Type	File Extension	Notes
------	----------------	-------

Image	.png	
Image	.jpg/jpeg	
Image / Animation	.gif	Gifs are great for LED Displays with animated content
Image	.svg	
Video	.mov	
3D model	.gltf	For Kiosk Display Types
3D model	.glb	For Kiosk Display Types

Other formats not mentioned may also be supported.

5.3.4 Real Time Text

Hit **Real Time Text** from the top, and add your message, priority, time to live and group (if any). Finally, hit **Send** to send your message.

Message: is the message text to be displayed

Priority: This is the priority of the message, the higher the number, the higher the priority, lower priority messages will be queued. Messages above a priority of 90 will override any current message.

Time to Live (secs): This is how long the message will be displayed for on the selected screens (group)

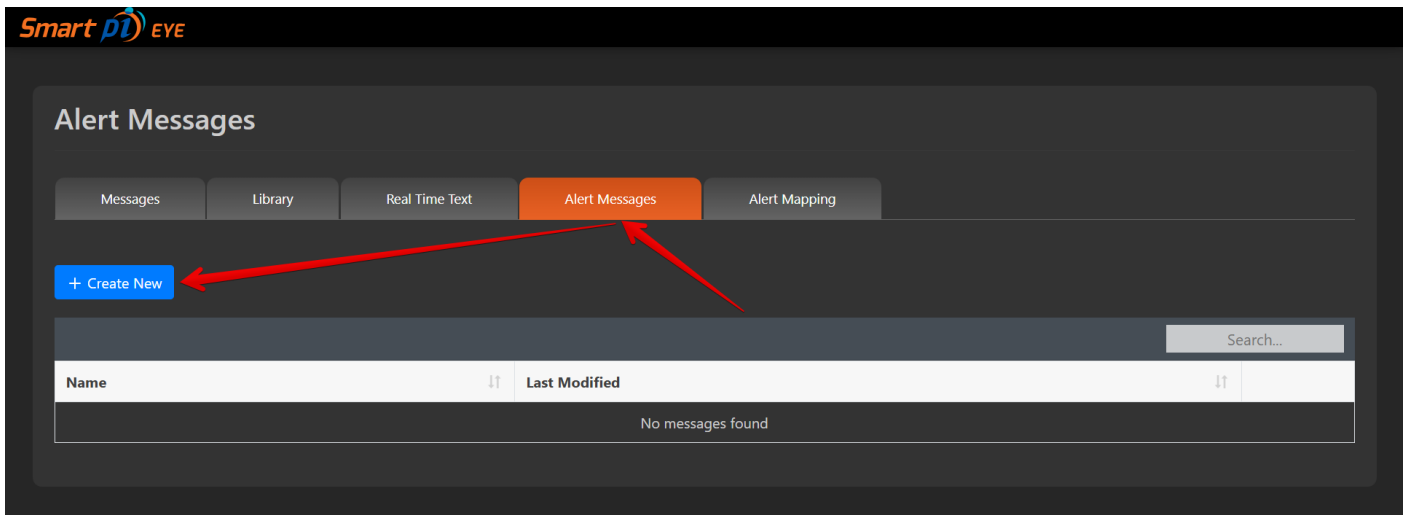
Group: This is the pre-configured group of screens to send the message to.

Note: This functionality is also available via the API.

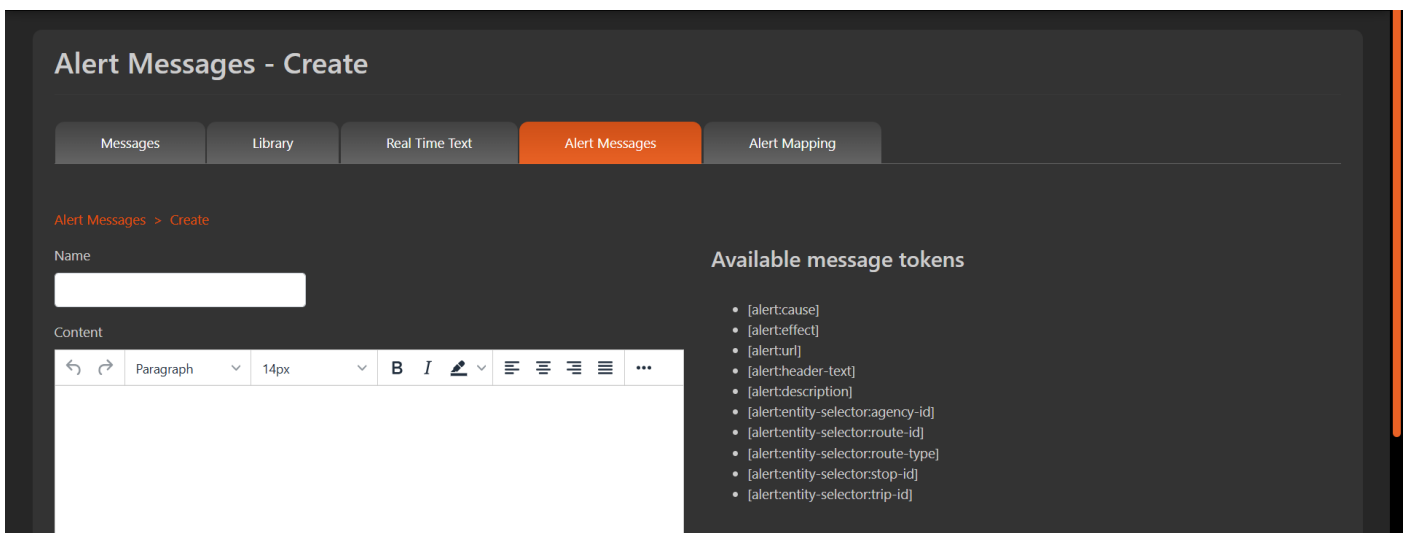
5.3.5 Alert Messages

Alert Messages let you prepare message content that is shown when a service alert is received. This works alongside the GTFS-R alert feed, so alert information carried in the real-time data can be presented on screen using a message you have set up in advance. Alerts can be shown across the different display modes.

Choose **Alert Messages** from the tabs at the top of the Messages section and click **Create New**.



Give the message a **Name** so it can be identified in the list and when mapping alerts to it later.



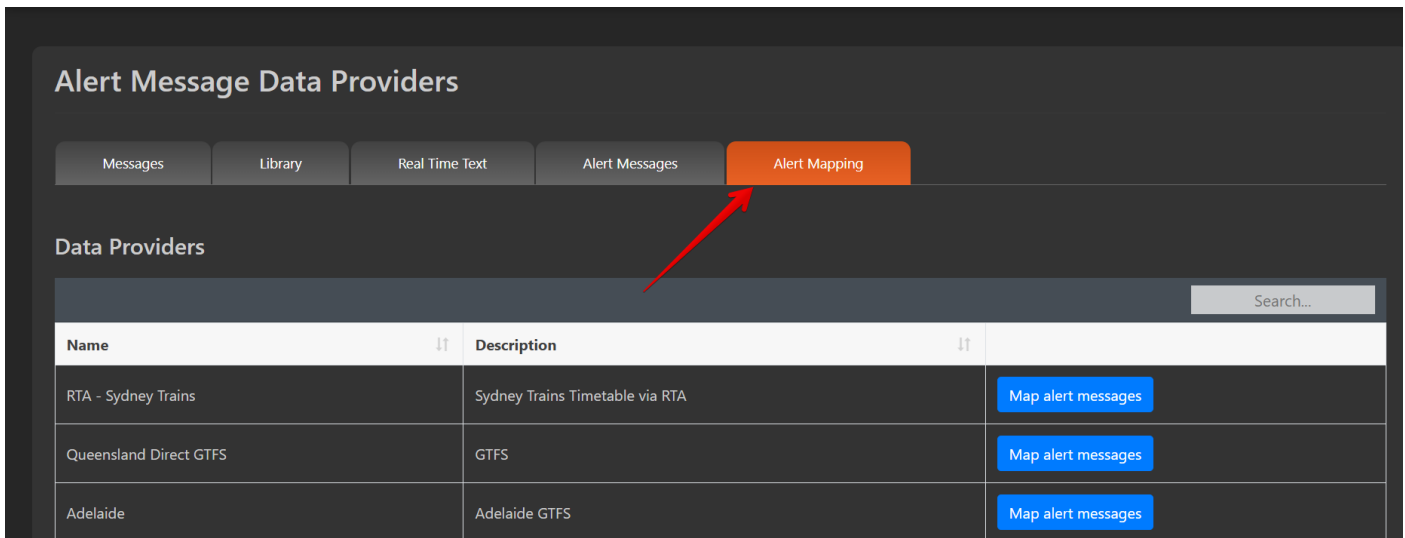
Use the **Content** editor to build the message that will appear on screen. The editor works the same way as the standard message editor, with controls for paragraph style, font size, bold, italic, text colour and alignment. Enter fixed text as needed, and insert tokens where you want live alert data to be filled in automatically when an alert is received.

The **Available message tokens** are listed to the right of the editor. Add a token to the content and it will be replaced with the matching value from the incoming alert.

5.3.6 Alert Mapping

Alert Mapping controls which alert messages are used for each data provider. Where Alert Messages holds the content, Alert Mapping decides which of those messages a given feed will draw on when an alert is received, so different agencies can use different alert content from the same system.

Choose **Alert Mapping** from the tabs at the top of the Messages section to open the page.



Alert Message Data Providers

Messages Library Real Time Text Alert Messages **Alert Mapping**

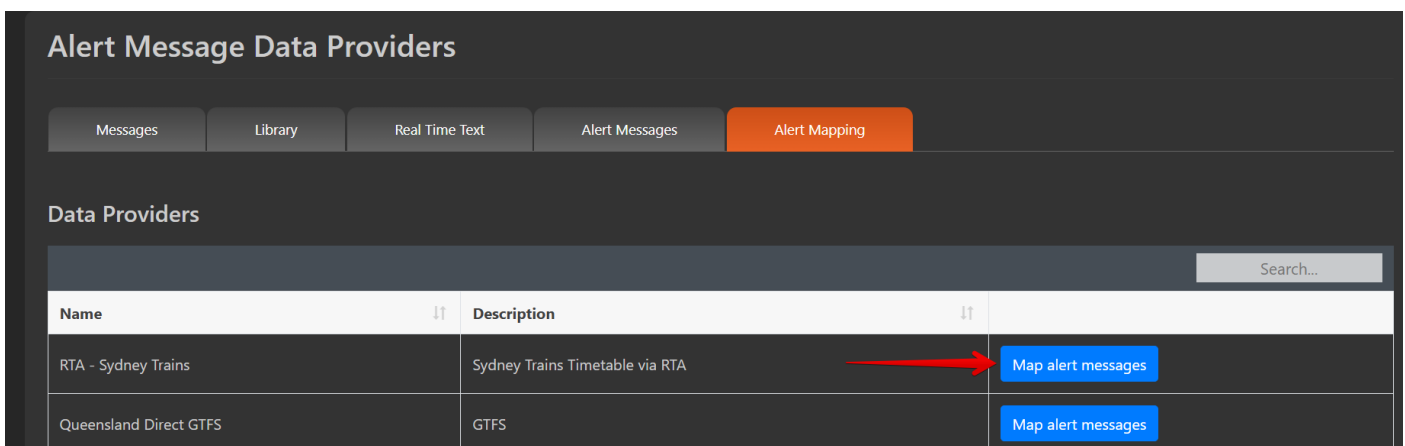
Data Providers

Search...

Name	Description	
RTA - Sydney Trains	Sydney Trains Timetable via RTA	Map alert messages
Queensland Direct GTFS	GTFS	Map alert messages
Adelaide	Adelaide GTFS	Map alert messages

The page shows the **Alert Message Data Providers** list. Each row is one of your configured data providers and displays its **Name** and **Description**, which are usually your incoming GTFS and GTFS-R feeds. Use the **Search** box to find a specific provider when the list is long.

To set up mapping for a provider, click **Map alert messages** on its row.



Alert Message Data Providers

Messages Library Real Time Text Alert Messages **Alert Mapping**

Data Providers

Search...

Name	Description	
RTA - Sydney Trains	Sydney Trains Timetable via RTA	Map alert messages
Queensland Direct GTFS	GTFS	Map alert messages

Mapping is handled through rules. Each rule matches an alert against an alert message, and the rules for a provider are evaluated in order to decide which message is used:

- Rules are evaluated in order, lowest weight first. Negative weights are allowed.
- The first rule that matches determines the message used.

Alert Message Mapping Rules

Messages
Library
Real Time Text
Alert Messages
Alert Mapping

Messages > Alert Mapping > Create

Rules for provider: Queensland Direct GTFS

- Rules are evaluated in order. Lowest weights first. Negative weights are allowed.
- First rule that matches determines the message used

[+ Add Rule](#)

Name	OrderingWeight
------	----------------

Existing rules are listed by **Name** and **OrderingWeight**. To add a rule, click **Add Rule**, set its details and ordering weight, then save. Set the ordering weights so that more specific rules are evaluated before general ones, since evaluation stops at the first match.

Repeat this for each provider that needs alert content. A provider with no matching rule will not display a prepared alert message, even if alerts are present in its feed.

5.4 Modes

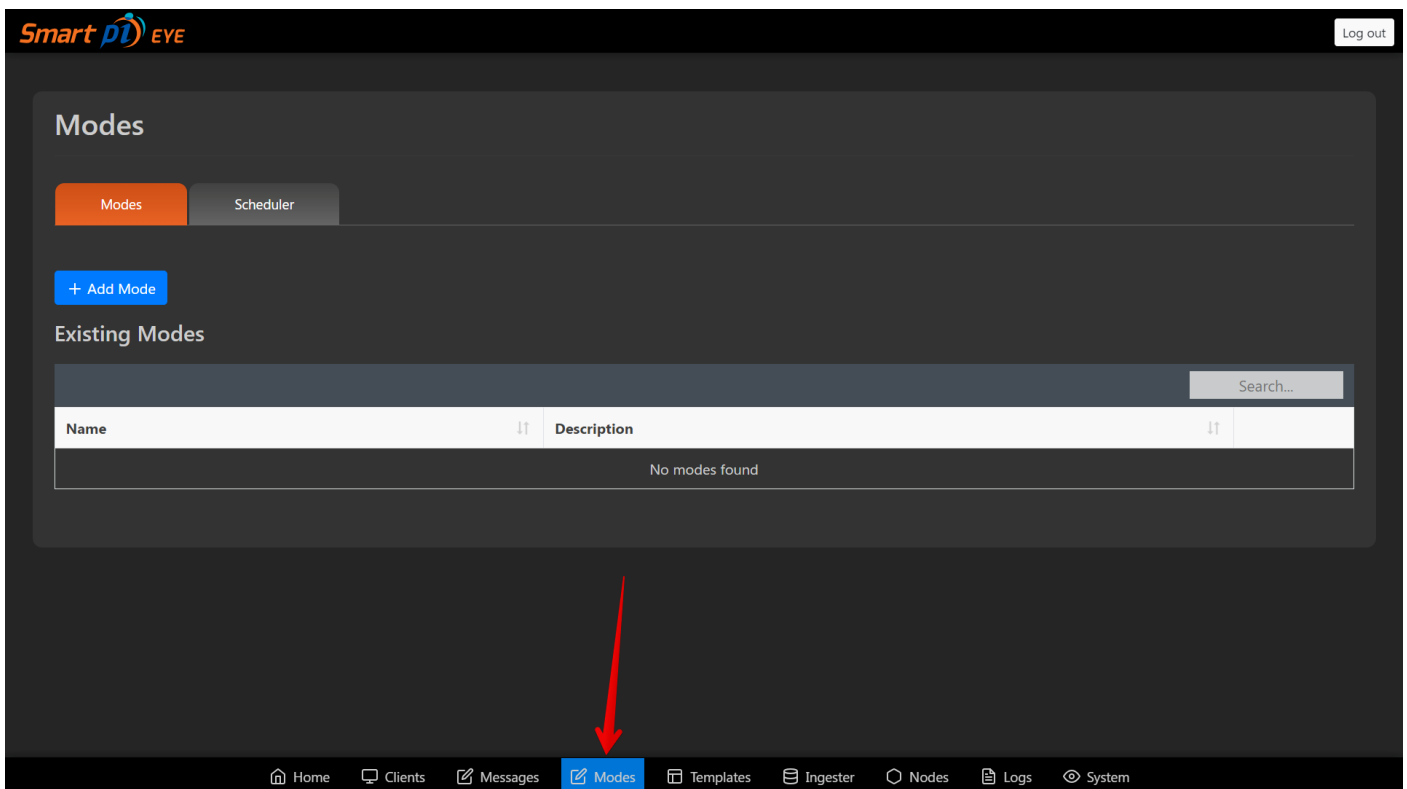
Modes can be used to configure all client-based parameters in the system group, them together and automate them.

Modes can be controlled via the; Master User Interface, User Logins (with group permissions), Scheduled via the built in scheduler or externally via the REST API.

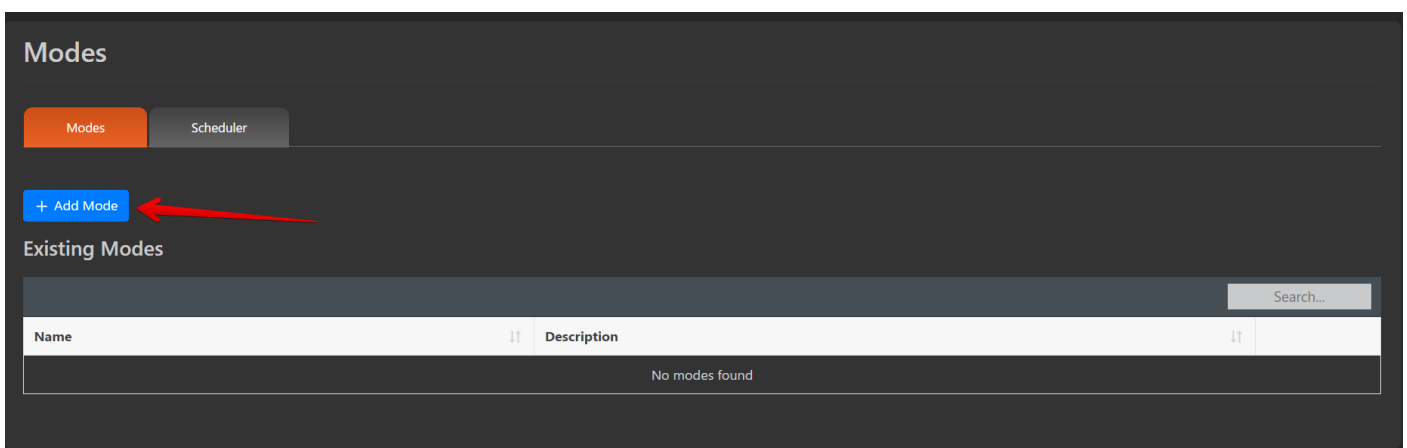
You configure a mode with the same parameters used to configure a client and can select 1 or more clients. Each Mode can be put into a group which can be linked via LDAP to allow users access via the User Interface.

5.4.1 Add a Mode

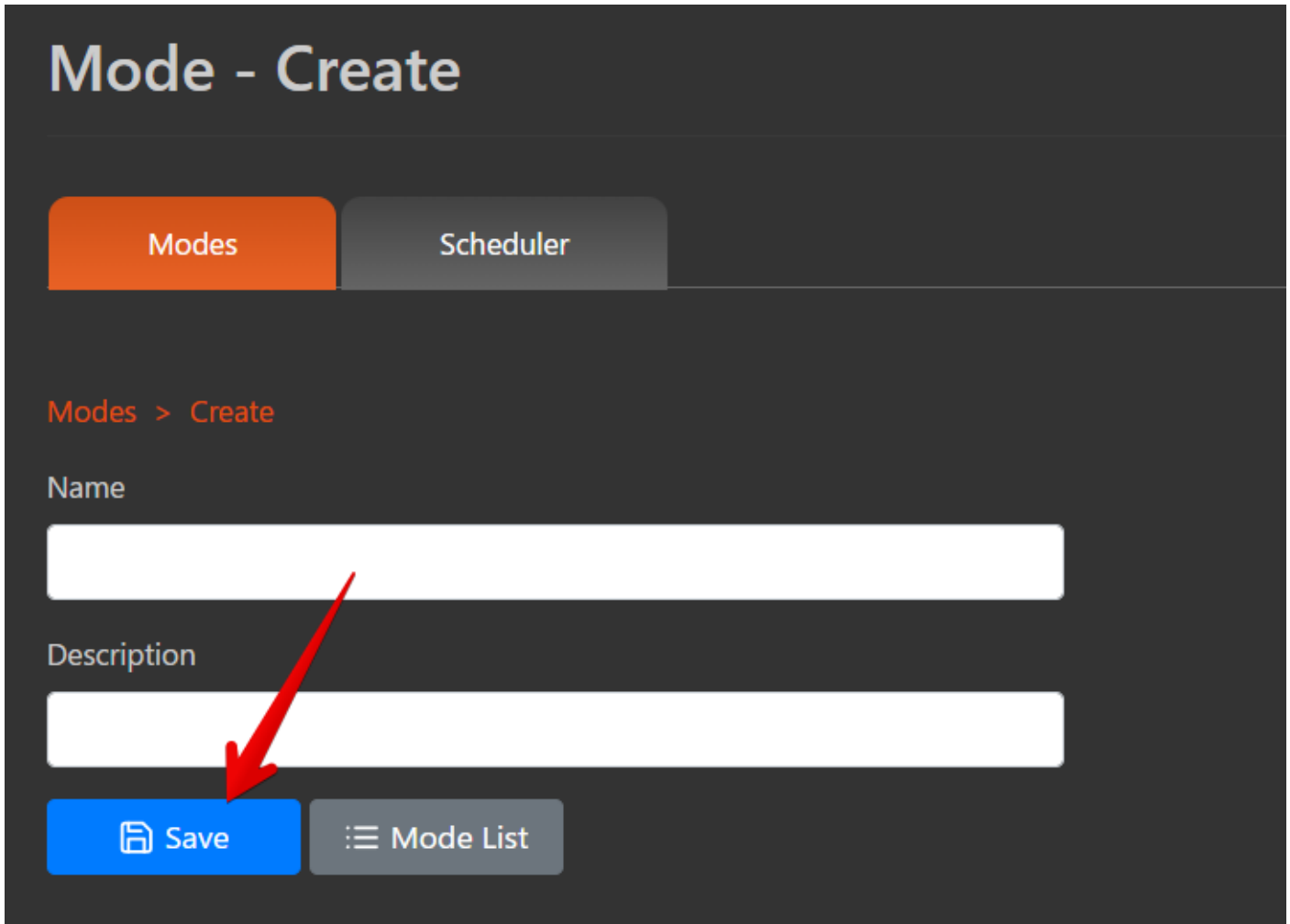
From your main dashboard, click **Modes** at the bottom to launch Modes options.



Under **Modes**, you can click **Add Modes** to add a mode.



Give it a name and a description before clicking **Save** to save the progress.



Mode - Create

Modes Scheduler

Modes > Create

Name

Description

 Save  Mode List

5.4.2 Edit a Mode

Once a mode has been created you can edit, delete, and apply the mode via the Master UI.

 Log out

Modes

Modes Scheduler

+ Add Mode

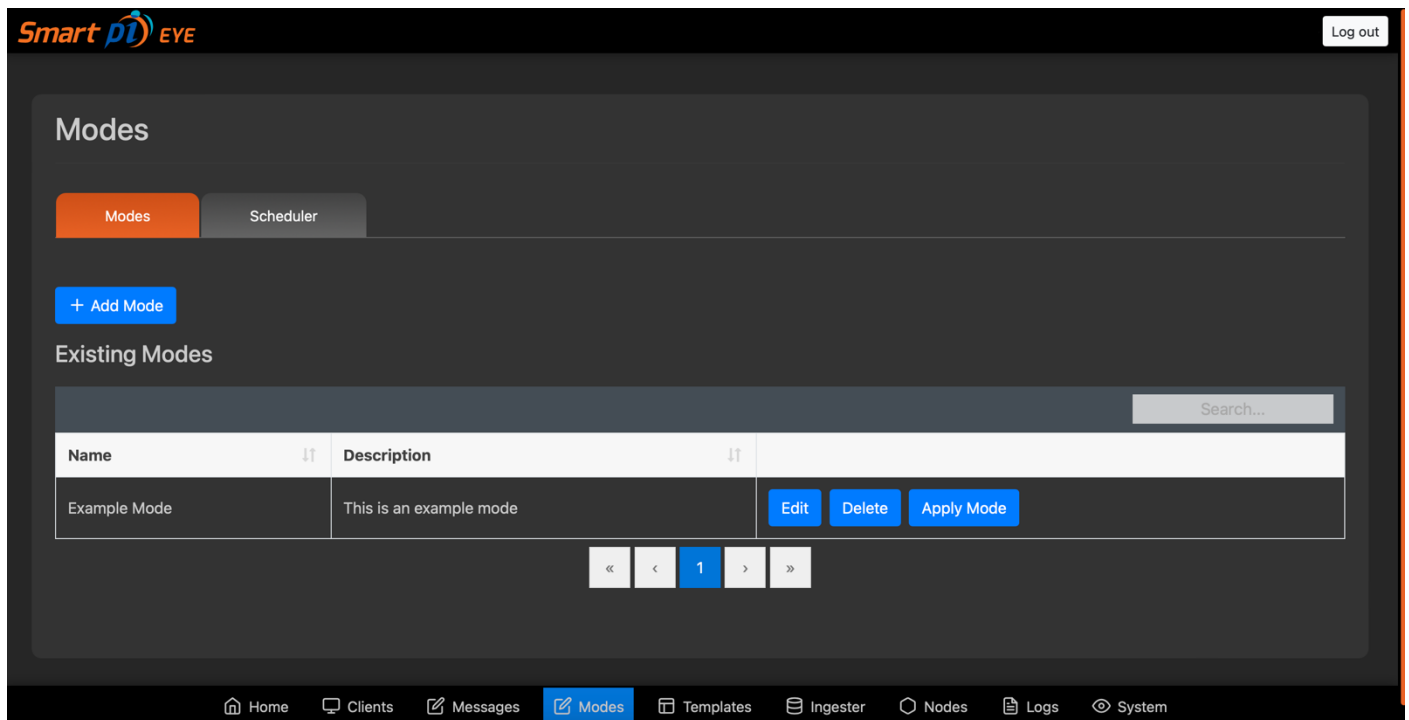
Existing Modes

Name ⇅	Description ⇅	
Example Mode	This is an example mode	Edit Delete Apply Mode

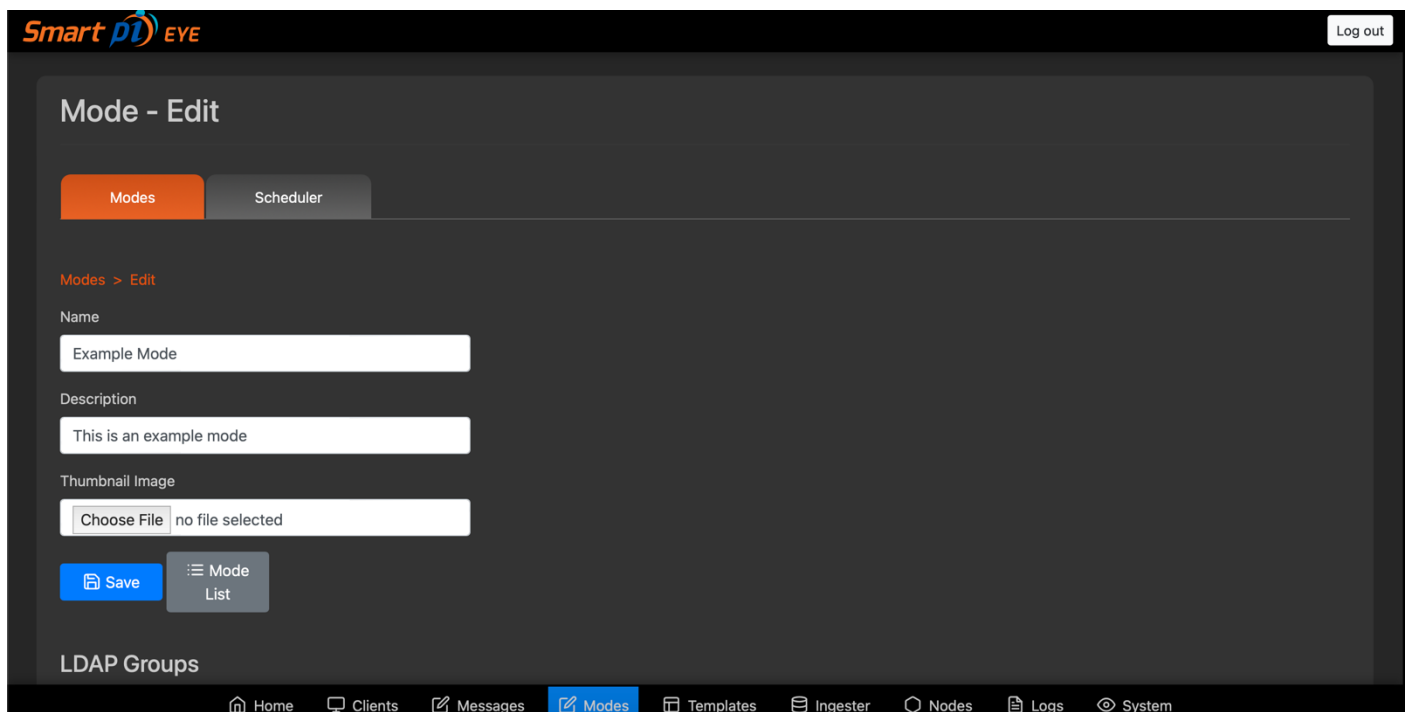
« < 1 > »

Home Clients Messages Modes Templates Ingestor Nodes Logs System

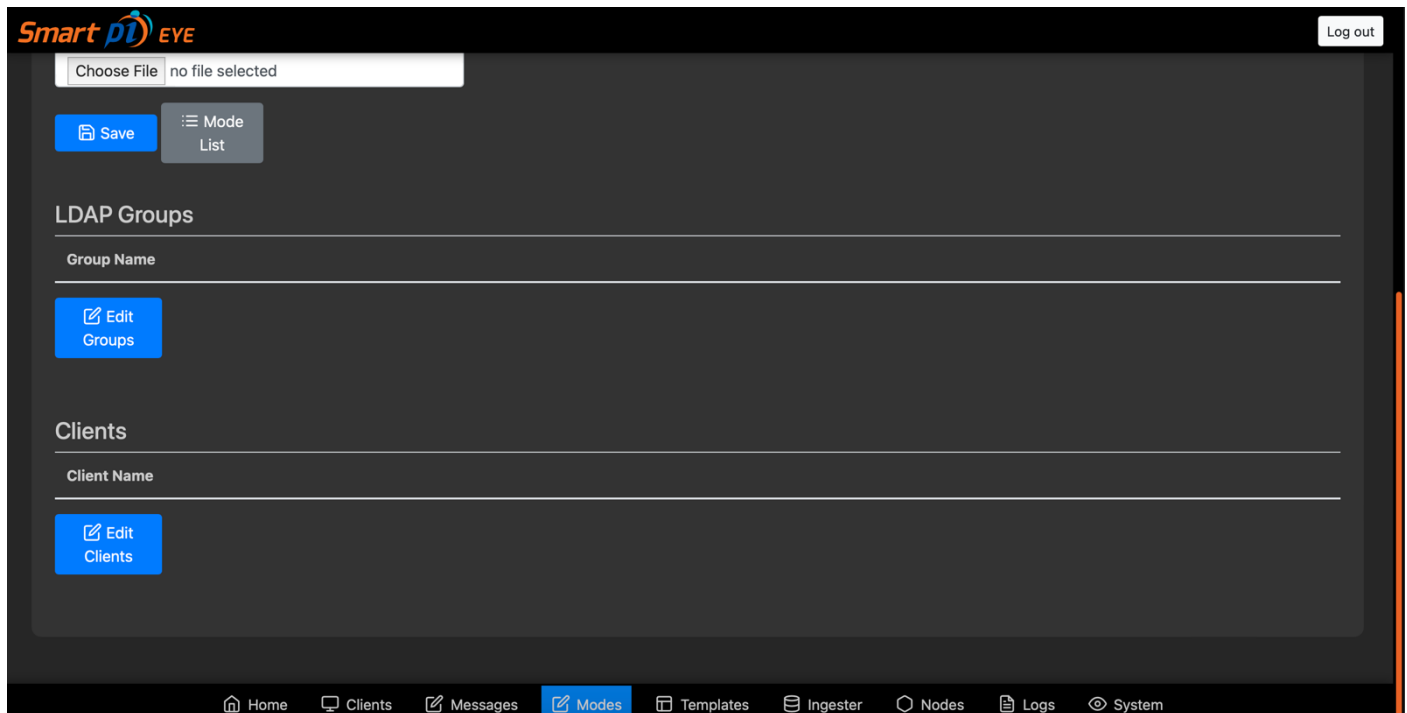
Click the **Edit** button to edit the desired mode.



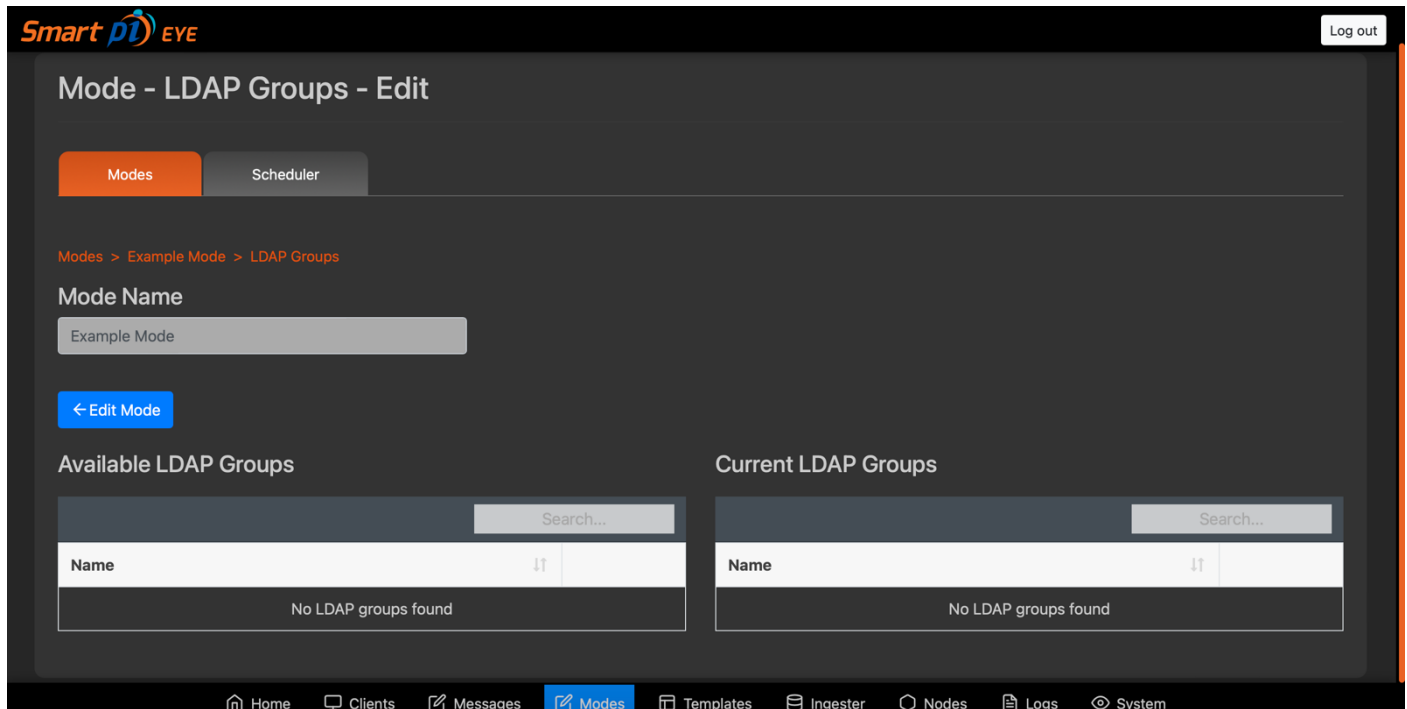
Once you client edit you can select a thumbnail that will be displayed in the user interface for the mode, click save once selected.



Once your mode is saved you are able to configure it, you can choose which LDAP security groups can access the mode. (see the [System](#) Configuration section for LDAP configuration requirements).



Simply select the LDAP groups you would like to access the mode.



It is now time to configure what the mode should do. All client features are possible to be configured within the mode.

First select the clients you would like the mode to control.

SmartPI EYE Log out

Mode - Clients - Edit

Modes Scheduler

Modes > Example Mode > Clients

Mode Name
Example Mode

< Edit Mode

Available Clients

Search...

Name	
administratorsmbp.tm-systems.com.au	Add
None	Add

Current Clients

Search...

Name	
No clients found	

Home Clients Messages **Modes** Templates Ingestor Nodes Logs System

You can select Single or Multiple Clients.

SmartPI EYE Log out

Mode - Clients - Edit

Modes Scheduler

Modes > Example Mode > Clients

Mode Name
Example Mode

< Edit Mode

Available Clients

Search...

Name	
None	Add
eye-warehouse.stagetec.com.au	Add
adminisatorsmbp.stagetec.com.au	Add

Current Clients

Search...

Name	
administratorsmbp.tm-systems.com.au	Configure Remove

<< < 1 > >>

Home Clients Messages **Modes** Templates Ingestor Nodes Logs System

Once you have selected each client you would like the mode to control, you can simply click configure on each client and set the desired parameters, each client is configured separately and does not have to have the same settings as other clients in the mode (see clients section for details).

Smart pi EYE

Log out

Mode - Client Configuration - Edit

Modes Scheduler

Modes > Example Mode > Clients > Configure

Common Settings

Hostname

administratorsmbp.tm-systems.com.au

Display Type

LED Display

Template Override

Smart Pi

Message

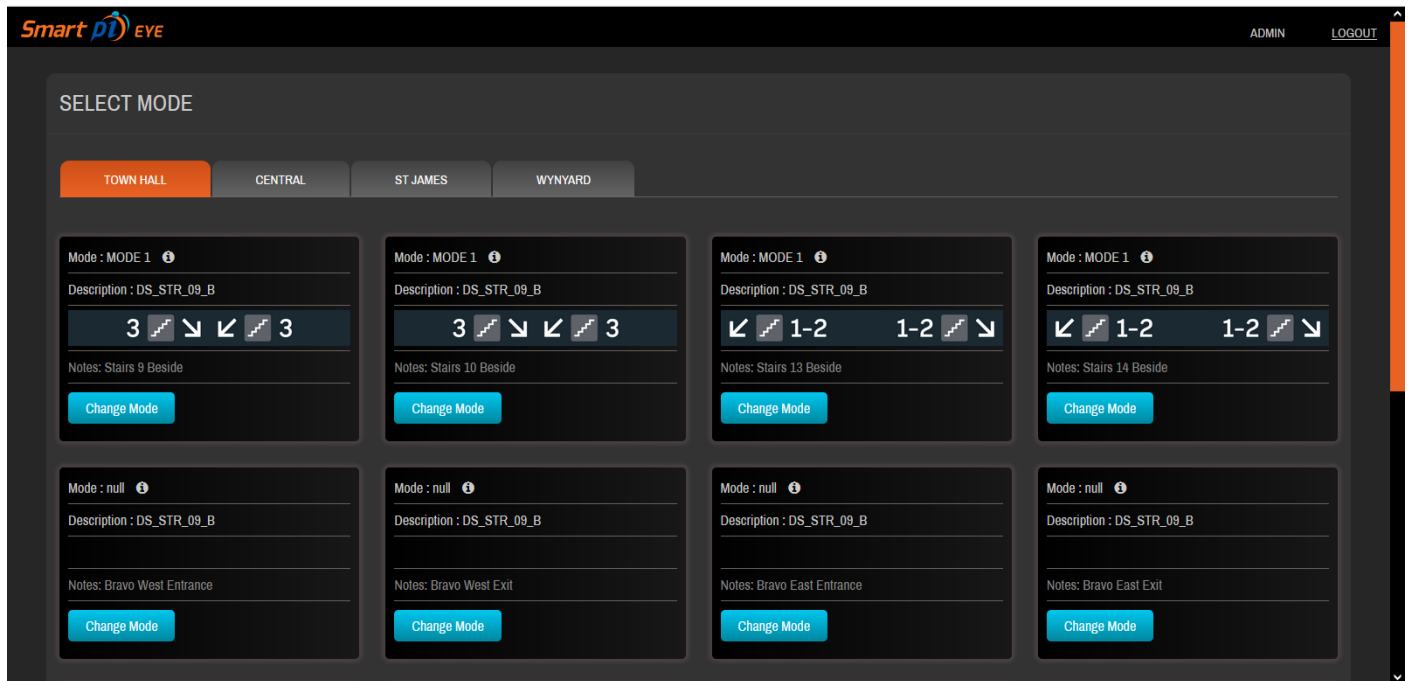
None

Display Settings

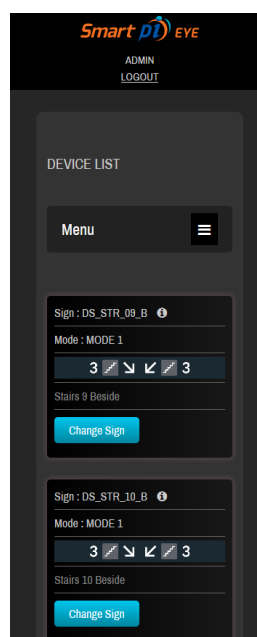
Home Clients Messages Modes Templates Ingestor Nodes Logs System

5.4.3 User Interface

Below is an example of User Modes Logged in via the Desktop User Interface, each tab can be configured to be linked to a LDAP security group allowing different users to have different permissions, it is possible to be in more than 1 security group.

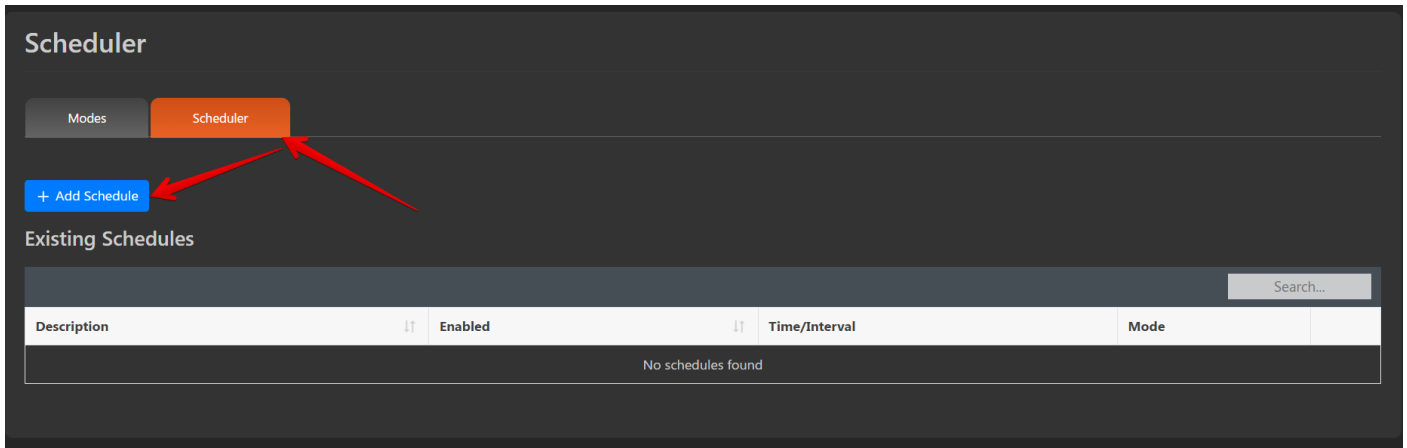


Below is the same example accessed via a mobile device, the system will automatically detect a mobile device and show this interface.



5.4.4 Add a Schedule

Similarly, you can add a scheduler by clicking the button at the top. Once there, you can add a schedule by clicking the **Add Schedule** button.



5.4.5 Edit a Schedule

Select the days, start time, end time, mode on, mode off and priority.

The screenshot shows the 'Add New' scheduler configuration form. At the top left, the breadcrumb trail is 'Modes > Scheduler > Add New'. The 'Smart pi EYE' logo is in the top left corner, and a 'Log out' button is in the top right corner. The form is titled 'DAYS' and includes checkboxes for 'MONDAY', 'TUESDAY', 'WEDNESDAY', 'THURSDAY', 'FRIDAY', 'SATURDAY', 'SUNDAY', 'WEEKDAY', 'WEEKEND', and 'ALL'. Below the days section, there are two tabs: 'INTERVAL' (selected) and 'TIMESTAMPS'. The 'INTERVAL' tab shows fields for 'Start time' (00 : 00), 'Every Hr/Min' (00 : 00), 'End time' (23 : 59), and 'For' (00 : 00). There are also date pickers for 'Start Date' (20 / 11 / 2023) and 'End Date' (20 / 11 / 2024). A red 'NOT ACTIVE' button is visible on the right. Below these fields, there is a 'DESCRIPTION' text area, 'MODE ON' and 'MODE OFF' dropdown menus (both set to 'Select Modes'), and a 'Priority' dropdown menu (set to '1'). A blue 'SAVE' button is at the bottom left.

Alternatively, you may also choose **Timestamps** if you'd like it to run it only on the specific intervals set by you.

The screenshot displays the 'SmartPI EYE DATS' configuration window. At the top, there are tabs for 'INTERVAL' and 'TIMESTAMPS', with a red arrow pointing to the 'TIMESTAMPS' tab. Below the tabs, there are seven time slots (Time 1 to Time 7) each with a 'For' dropdown and a time picker (HH:MM). To the right, there are 'Start Date' and 'End Date' pickers. A red 'NOT ACTIVE' button is visible. Below these fields, there are sections for 'DESCRIPTION', 'MODE ON', 'MODE OFF', and 'Priority'. At the bottom left is a 'SAVE' button. The bottom navigation bar includes links for Home, Clients, Messages, Modes (highlighted), Templates, Ingestor, Nodes, Logs, and System. The top right corner shows the user 'Hamid Raza' and a 'Log out' button.

SmartPI EYE DATS

Hamid Raza Log out

MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY

WEEKDAY WEEKEND ALL

INTERVAL **TIMESTAMPS**

Time 1 00 : 00 For 00 : 00

Time 2 00 : 00 For 00 : 00

Time 3 00 : 00 For 00 : 00

Time 4 00 : 00 For 00 : 00

Time 5 00 : 00 For 00 : 00

Time 6 00 : 00 For 00 : 00

Time 7 00 : 00 For 00 : 00

Start Date 20 / 11 / 2023

End Date 20 / 11 / 2024

NOT ACTIVE

DESCRIPTION

MODE ON

Select Modes

MODE OFF

Select Modes

Priority

1

SAVE

Home Clients Messages **Modes** Templates Ingestor Nodes Logs System

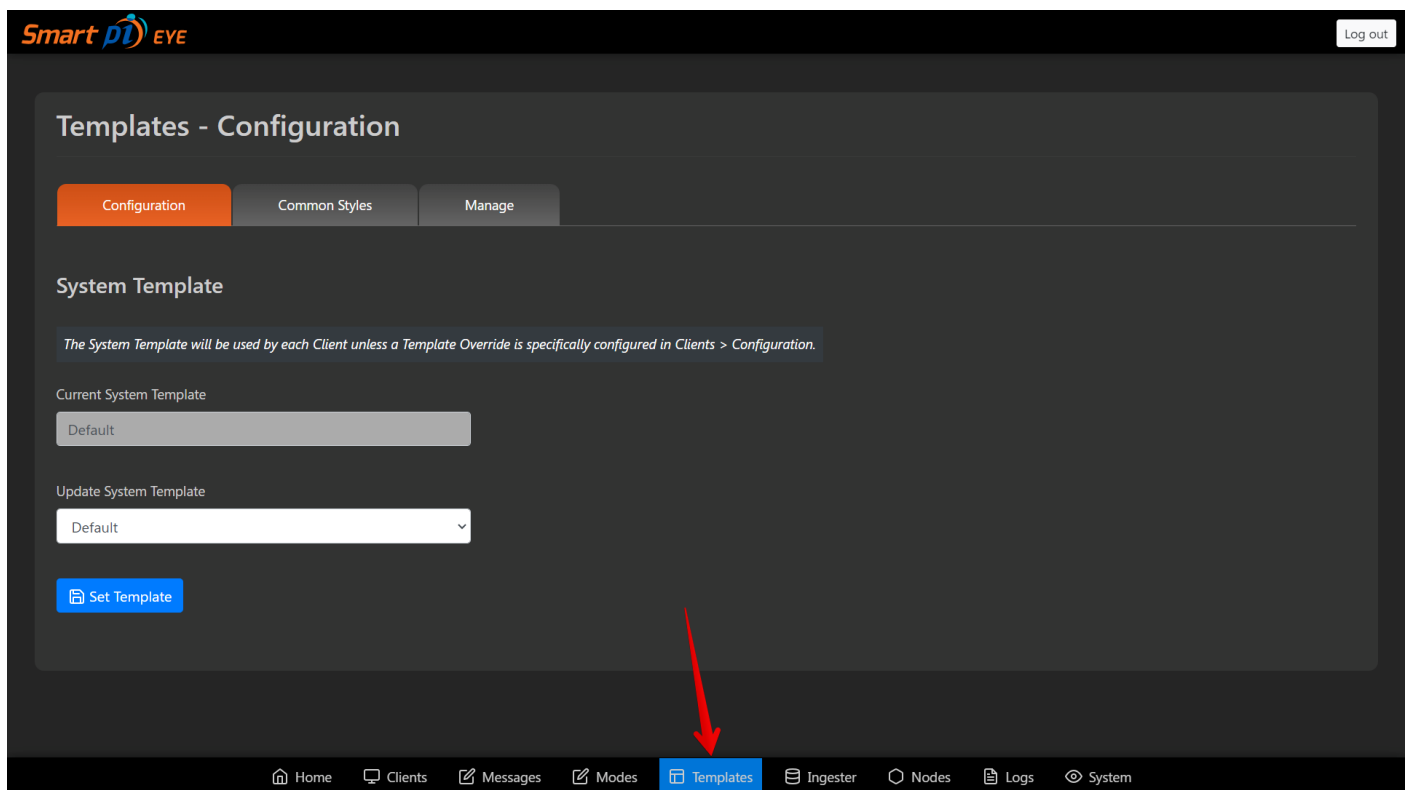
5.5 Templates

A simple templating system has been implemented within SmartPi EYE to provide a way to customize the look of Display Types.

This system works by dynamically switching to a template's defined stylesheet and dynamically applying the defined classes and styles for each element within the Display Type. This means that the class and style attribute for almost every HTML element used within the Display Types can be defined directly. Others can of course be targeted via cascading.

5.5.1 Configuration

To access **Templates** options, click **Templates** from the dashboard:



Here you can update system template from the given options: Default, Dark and Smart Pi. Click **Set Template** to save changes.

Templates - Configuration

[Configuration](#)[Common Styles](#)[Manage](#)

System Template

The System Template will be used by each Client unless a Template Override is specifically configured in Clients > Configuration.

Current System Template

Default

Update System Template

Default



 Set Template



5.5.2 Common Styles

Hit **Common Styles** at the top to customize the background color or choose a template. Hit **Update** when you're done making the changes.

Common Styles

Configuration

Common Styles

Manage

This page provides a fast way to modify common settings in templates.

Select Template

Select the template to modify

Default

Set Template

Real-time Text Overlay

Background Color

0000FF

Font Color

FFFFFF

Font Size

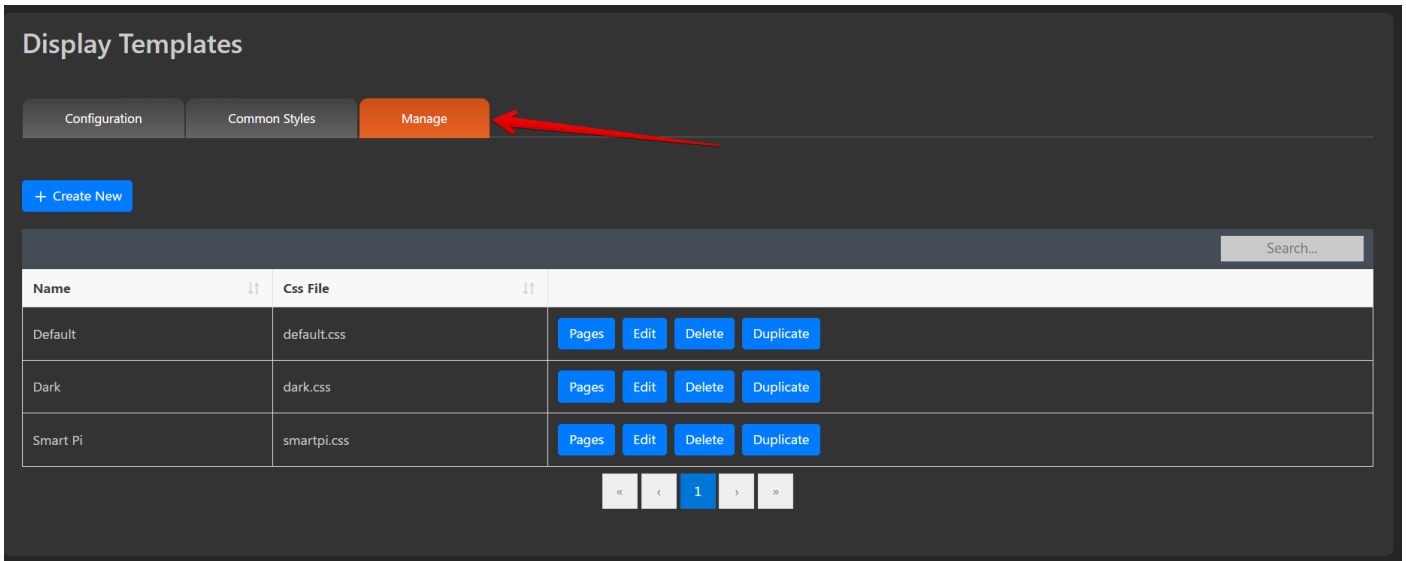
20

px

Update

5.5.3 Manage

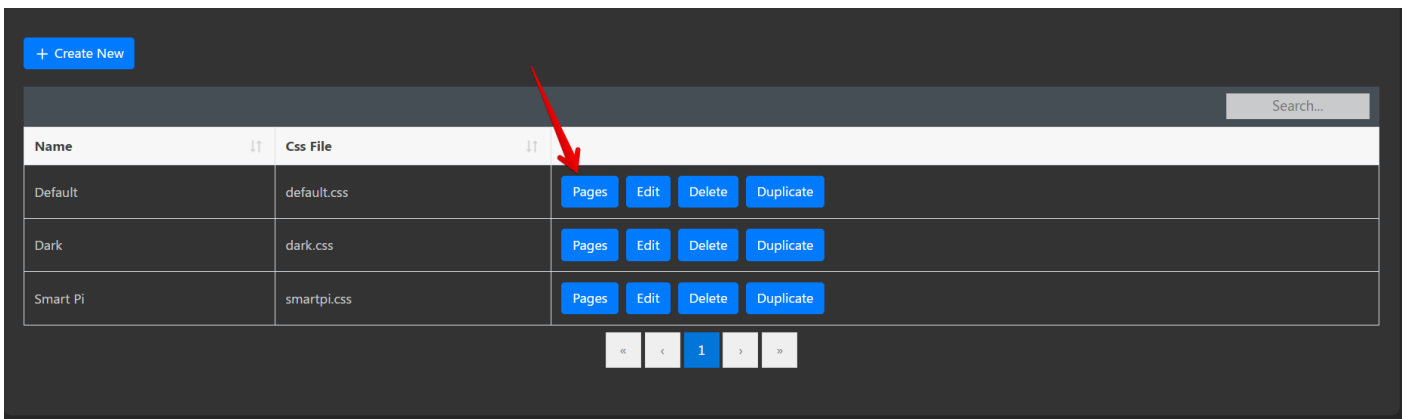
As the name suggests, you can create new, delete, edit or even duplicate the templates on this page. Simply click **Manage** to access these settings.



The screenshot shows the 'Display Templates' interface. At the top, there are three tabs: 'Configuration', 'Common Styles', and 'Manage'. The 'Manage' tab is highlighted in orange, and a red arrow points to it. Below the tabs is a '+ Create New' button. A search bar with the placeholder 'Search...' is located on the right. The main content is a table with two columns: 'Name' and 'Css File'. There are three rows: 'Default' (default.css), 'Dark' (dark.css), and 'Smart Pi' (smartpi.css). Each row has four buttons: 'Pages', 'Edit', 'Delete', and 'Duplicate'. At the bottom, there is a pagination control showing '1' as the current page.

Name	Css File	
Default	default.css	Pages Edit Delete Duplicate
Dark	dark.css	Pages Edit Delete Duplicate
Smart Pi	smartpi.css	Pages Edit Delete Duplicate

Clicking the **Pages** button opens the list of current pages that are live:



This screenshot shows the same 'Display Templates' interface, but with a red arrow pointing to the 'Pages' button in the first row (Default template). The 'Pages' button is highlighted in blue. The rest of the interface remains the same.

Name	Css File	
Default	default.css	Pages Edit Delete Duplicate
Dark	dark.css	Pages Edit Delete Duplicate
Smart Pi	smartpi.css	Pages Edit Delete Duplicate

Smart **pi** EYE Log out

Template Pages

Configuration Common Styles **Manage**

Templates > Manage > Pages

[+ Create New](#)

Search...

Page Name	Template	
LedDisplay	Default	Settings Edit Details Delete
App	Default	Settings Edit Details Delete
Multi	Default	Settings Edit Details Delete
Kiosk	Default	Settings Edit Details Delete
FollowingServices	Default	Settings Edit Details Delete
DepartureBoard	Default	Settings Edit Details Delete
NextService	Default	Settings Edit Details Delete

Home Clients Messages Modes **Templates** Ingestor Nodes Logs System

The **Edit** button opens the edit menu.

[+ Create New](#)

Search...

Name	Css File	
Default	default.css	Pages Edit Delete Duplicate
Dark	dark.css	Pages Edit Delete Duplicate
Smart Pi	smartpi.css	Pages Edit Delete Duplicate

« ‹ 1 › »

Template - Edit

[Configuration](#)[Common Styles](#)[Manage](#)[Templates](#) > [Manage](#) > [Edit](#)

Template

Name

CssFile

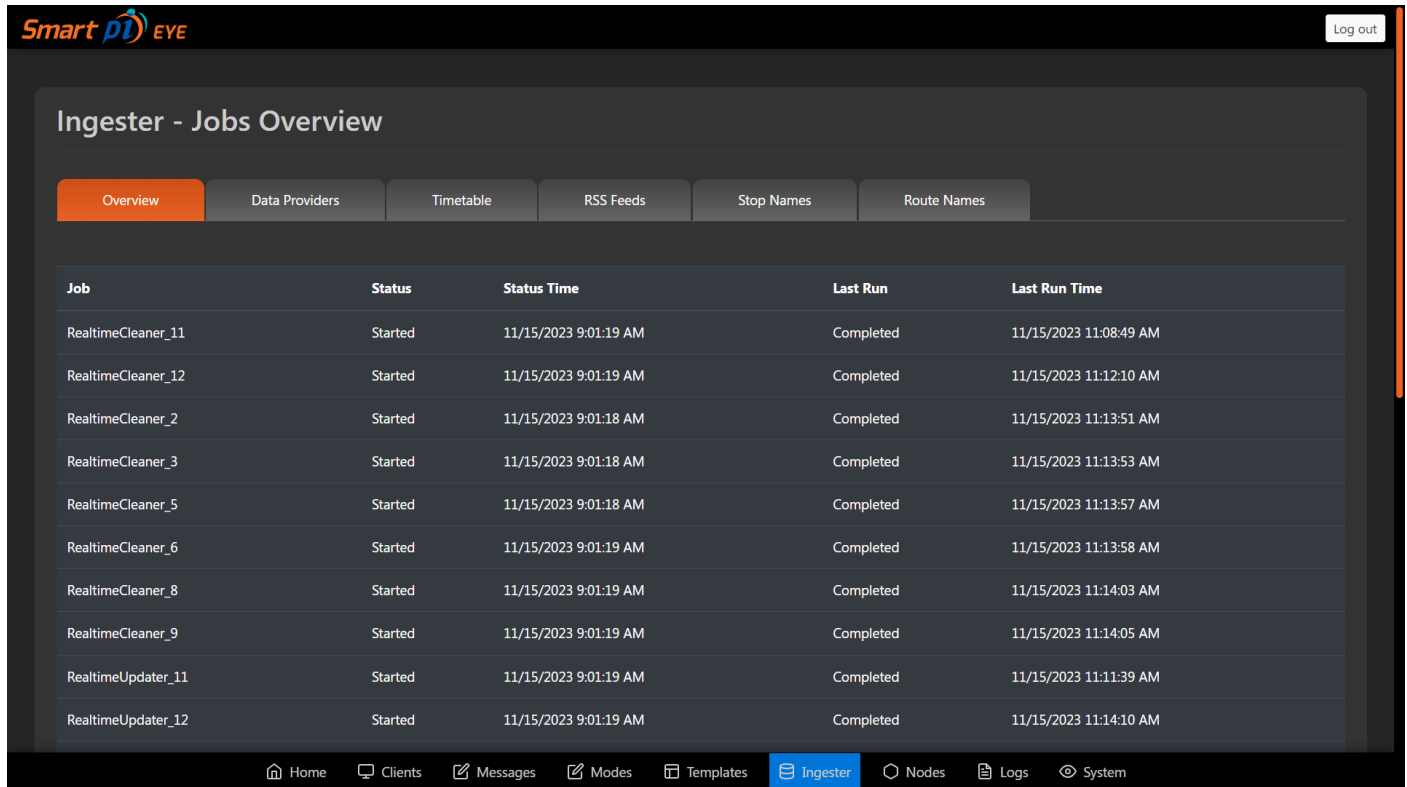
 Save Templates List

Similarly, for delete and duplicate buttons, you can take the appropriate actions right from this screen.

5.6 Ingester

5.6.1 Overview

An ingester is a program that reads data entering the system through a communications port. To access the ingester menu, click **Ingesters** from the main dashboard.



Job	Status	Status Time	Last Run	Last Run Time
RealtimeCleaner_11	Started	11/15/2023 9:01:19 AM	Completed	11/15/2023 11:08:49 AM
RealtimeCleaner_12	Started	11/15/2023 9:01:19 AM	Completed	11/15/2023 11:12:10 AM
RealtimeCleaner_2	Started	11/15/2023 9:01:18 AM	Completed	11/15/2023 11:13:51 AM
RealtimeCleaner_3	Started	11/15/2023 9:01:18 AM	Completed	11/15/2023 11:13:53 AM
RealtimeCleaner_5	Started	11/15/2023 9:01:18 AM	Completed	11/15/2023 11:13:57 AM
RealtimeCleaner_6	Started	11/15/2023 9:01:19 AM	Completed	11/15/2023 11:13:58 AM
RealtimeCleaner_8	Started	11/15/2023 9:01:19 AM	Completed	11/15/2023 11:14:03 AM
RealtimeCleaner_9	Started	11/15/2023 9:01:19 AM	Completed	11/15/2023 11:14:05 AM
RealtimeUpdater_11	Started	11/15/2023 9:01:19 AM	Completed	11/15/2023 11:11:39 AM
RealtimeUpdater_12	Started	11/15/2023 9:01:19 AM	Completed	11/15/2023 11:14:10 AM

It will already have the **Overview** tab open where you can see the jobs, their status, last run time etc.

Ingester database management has been improved for more reliable handling of stored feed data.

Per Feed Mappings

Replacements and mappings, such as platform names and headsigns, can be applied on a per GTFS feed basis. This lets you use different values for the same field depending on the incoming feed, which is useful when several agencies share a system but need their own naming. When creating or editing a mapping, select the GTFS feed it applies to before saving. If no feed is selected, the mapping applies across all feeds.

5.6.2 Data Providers

Here you can add, edit, delete or configure a data provider(s). Click **Add Data Provider** to start adding one.

Data Providers

Overview **Data Providers** Timetable RSS Feeds Stop Names Route Names Platform Names

[+ Add Data Provider](#) 

Existing Providers

Search...

Name	Description	
Sydney Busses Area 6	Area 6	Edit Delete Configure
Sydney Trains	Trains	Edit Delete Configure

« ‹ 1 › »

Give it a name and a description and click **Save**.

Data Provider - Create

Overview **Data Providers** Timetable RSS Feeds Stop Names Route Names Platform Names

[Ingestor](#) > [Data Providers](#) > [Create](#)

Name

Description

[Save](#) [Data Sources](#)

5.6.3 Timetable

Click **Timetable** at the top to see the stored timetables.

Timetable

Overview Data Providers **Timetable** RSS Feeds Stop Names Route Names Platform Names



Timetable Sources

Search...

Name	Agency	Last updated	
Sydney Busses Area 6	Sydney Busses Area 6	11/18/2023 12:07:40 PM	View
Sydney Trains	Sydney Trains	11/18/2023 12:07:13 PM	View

« ‹ 1 › »

Click **View** to view the timetable.

Timetable

Overview Data Providers **Timetable** RSS Feeds Stop Names Route Names Platform Names

Timetable Sources

Name	Agency	Last updated	
Sydney Busses Area 6	Sydney Busses Area 6	11/18/2023 12:07:40 PM	View
Sydney Trains	Sydney Trains	11/18/2023 12:07:13 PM	View

« ‹ 1 › »

On this page, you can either purge the timetable or start an update.

Overview Data Providers **Timetable** RSS Feeds Stop Names Route Names Platform Names

[Ingestor](#) > [Timetable](#) > [View](#)

Stored Timetables

ID	Status	Time Update Started	Time Zip Retrieved	Time Ingestion Completed	
1	OutOfDate	11/17/2023 10:00:11 PM	11/17/2023 10:00:13 PM	11/17/2023 10:00:25 PM	Purge
3	OutOfDate	11/18/2023 12:13:00 AM	11/18/2023 12:13:02 AM	11/18/2023 12:13:12 AM	Purge
5	Current	11/18/2023 12:07:21 PM	11/18/2023 12:07:25 PM	11/18/2023 12:07:40 PM	

Update Timetable

[Start Update](#)

Update Progress

5.6.4 RSS Feeds

Similarly, you can add a RSS Feed by clicking **RSS Feeds** at the top and choosing **Add RSS Feeds** on the next page.

RSS Feeds

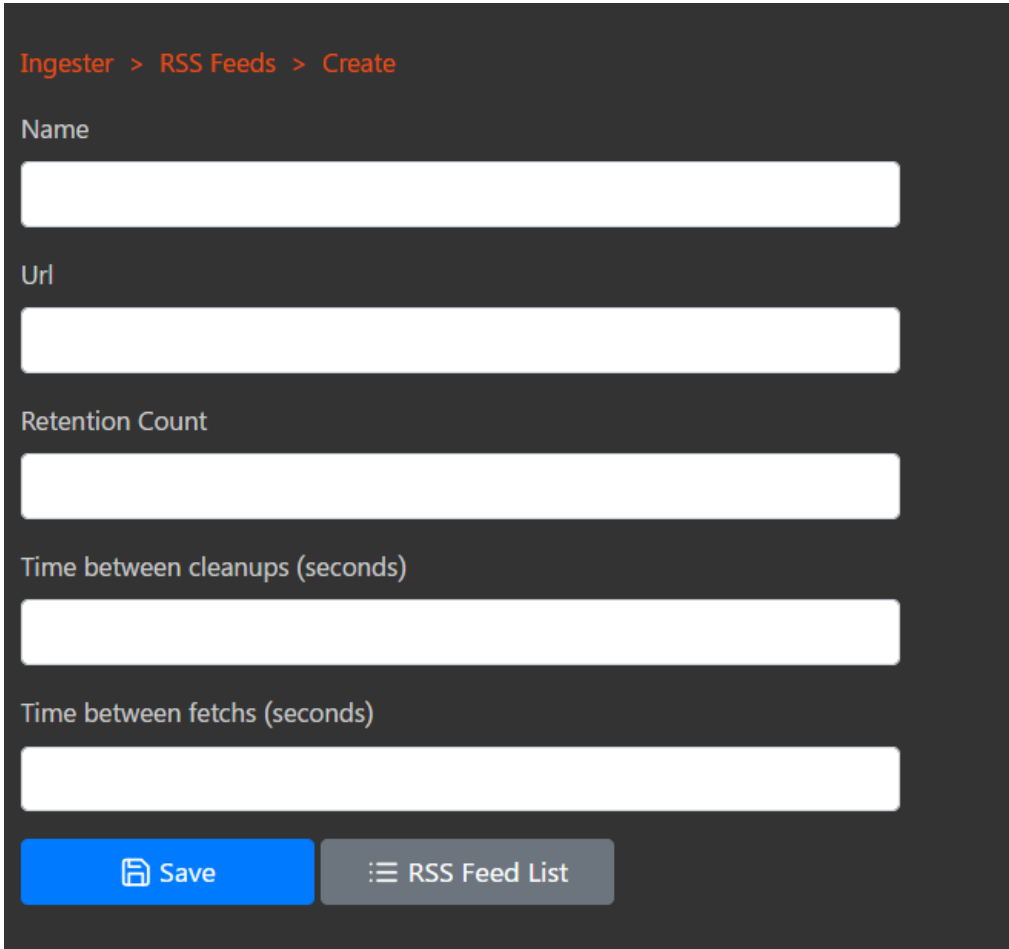
Overview Data Providers Timetable **RSS Feeds** Stop Names Route Names Platform Names

[+ Add RSS Feed](#)

Existing Feeds

Name	Url
No feeds found	

Give it a name, URL, retention count and time between cleanups and fetchs before clicking [Save](#).



The screenshot shows a dark-themed user interface for creating a new RSS feed. At the top, a breadcrumb trail reads 'Ingestor > RSS Feeds > Create'. Below this, there are five white input fields stacked vertically, each with a label to its left: 'Name', 'Url', 'Retention Count', 'Time between cleanups (seconds)', and 'Time between fetchs (seconds)'. At the bottom of the form, there are two buttons: a blue 'Save' button with a floppy disk icon, and a grey 'RSS Feed List' button with a list icon.

GTFS-R service alerts can be shown across the different display modes, so alert messages carried in the real-time feed appear consistently regardless of the display type in use.

5.6.5 Stop Names

Click [Stop Names](#) at the top to either add a new stop name or edit an existing one.

SmartPI EYE Log out

Stop Names

Overview Data Providers Timetable RSS Feeds **Stop Names** Route Names Platform Names

[+ Create New](#)

Search...

Long Name	Short Name	
Bondi Junction	Bondi Jn	Edit Delete
Domestic Airport	Domestic	Edit Delete
Hills Showground	Hills Showgrd	Edit Delete
International Airport	International	Edit Delete
Macquarie Fields	Macquarie Flds	Edit Delete
Macquarie University	Macquarie Uni	Edit Delete
Mount Colah	Mt Colah	Edit Delete
Mount Druitt	Mt Druitt	Edit Delete

Home Clients Messages Modes Templates **Ingestor** Nodes Logs System

Click **Create New** at the top left, then on the next screen give it a long name and a short name. Finally hit **Save** to continue.

Ingestor > Stop Names > Create

Long Name

Short Name

[Save](#) [Stop Names List](#)

5.6.6 Route Names

Similarly, click **Route Names** at the top to either create a new one, or edit and existing one. You can also delete an existing route name from this page.

Routes Names

Overview

Data Providers

Timetable

RSS Feeds

Stop Names

Route Names

Platform Names

[+ Create New](#)

Search...

Long Name	Short Name	
Bondi Junction via Banksia	Bondi Jn via Banksia	Edit Delete
Bondi Junction via Wolli Creek	Bondi Jn via Wolli Creek	Edit Delete

[«](#) [«](#) [1](#) [»](#) [»](#)

To add a route name, click **Create new**.

Routes Names

Overview Data Providers Timetable RSS Feeds Stop Names **Route Names** Platform Names

[+ Create New](#)

Search...

Long Name	Short Name	
Bondi Junction via Banksia	Bondi Jn via Banksia	Edit Delete
Bondi Junction via Wolli Creek	Bondi Jn via Wolli Creek	Edit Delete

« ‹ 1 › »

Then give it a long name and a short name before clicking **Save**.

Route Names - Create

Overview Data Providers Timetable RSS Feeds Stop Names **Route Names** Platform Names

[Ingestor](#) > [Route Names](#) > [Create](#)

Long Name

Short Name

[Save](#) [Route Names List](#)

To edit a route name, click **Edit**.

Routes Names

Overview Data Providers Timetable RSS Feeds Stop Names **Route Names** Platform Names

[+ Create New](#)

Search...

Long Name	Short Name	
Bondi Junction via Banksia	Bondi Jn via Banksia	Edit Delete
Bondi Junction via Wolli Creek	Bondi Jn via Wolli Creek	Edit Delete

« ‹ 1 › »

Then change its long name and a short name before clicking **Save**.

Route Names - Edit

[Overview](#) [Data Providers](#) [Timetable](#) [RSS Feeds](#) [Stop Names](#) [Route Names](#) [Platform Names](#)

[Ingestor](#) > [Route Names](#) > [Edit](#)

Long Name

Short Name

[Save](#) [Route Names List](#)

5.6.7 Platform Names

Click **Platform Names** at the top to open up the options.

Smart pi EYE

Log out

Platform Names

Overview Data Providers Timetable RSS Feeds Stop Names Route Names **Platform Names**

+ Generate Platform Names

+ Create New

Search...

Long Name	Platform Name	
Bayview Park, Burwood Rd	Rd	Edit Delete
Central Station, Railway Square, Stand J	J	Edit Delete
Wynyard Station, York St, Stand H	H	Edit Delete
QVB, York St, Stand B	B	Edit Delete
QVB, York St, Stand C	C	Edit Delete
QVB, York St, Stand D	D	Edit Delete
St James Station, Elizabeth St, Stand A	A	Edit Delete

Home Clients Messages Modes Templates Ingestor Nodes Logs System

Here you can either create a new platform name or generate one.

To create a new platform name, hit **Create New**.

Platform Names

Overview Data Providers Timetable RSS Feeds Stop Names Route Names **Platform Names**

+ Generate Platform Names

+ Create New

Search...

Long Name	Platform Name	
118 Bourke Rd	Rd	Edit Delete
139 Kyle Pde	Pde	Edit Delete

Then give it a long name and a short name before clicking **Save**.

Platform Names - Create

Overview Data Providers Timetable RSS Feeds Stop Names Route Names **Platform Names**

[Ingester](#) > [Platform Names](#) > [Create](#)

Long Name

Short Name

 **Save** Platform Names List

To generate a new platform name, hit **Generate Platform Names**.

Platform Names

Overview Data Providers Timetable RSS Feeds Stop Names Route Names **Platform Names**

+ Generate Platform Names 

+ Create New

Search...

Long Name	Platform Name	
118 Bourke Rd	Rd	Edit Delete
139 Kyle Pde	Pde	Edit Delete

Then select the Data Agency from the dropdown menu and click **Start Generation**.

Platform Names - Generate

Overview Data Providers Timetable RSS Feeds Stop Names Route Names **Platform Names**

[Ingester](#) > [Platform Names](#) > [Generate](#)

Data Agency

 **Start Generation**

Generate Platform Names Progress

|

The process will take a few seconds to complete.

[Ingestor](#) > [Platform Names](#) > [Generate](#)

Data Agency

Sydney Busses Area 6



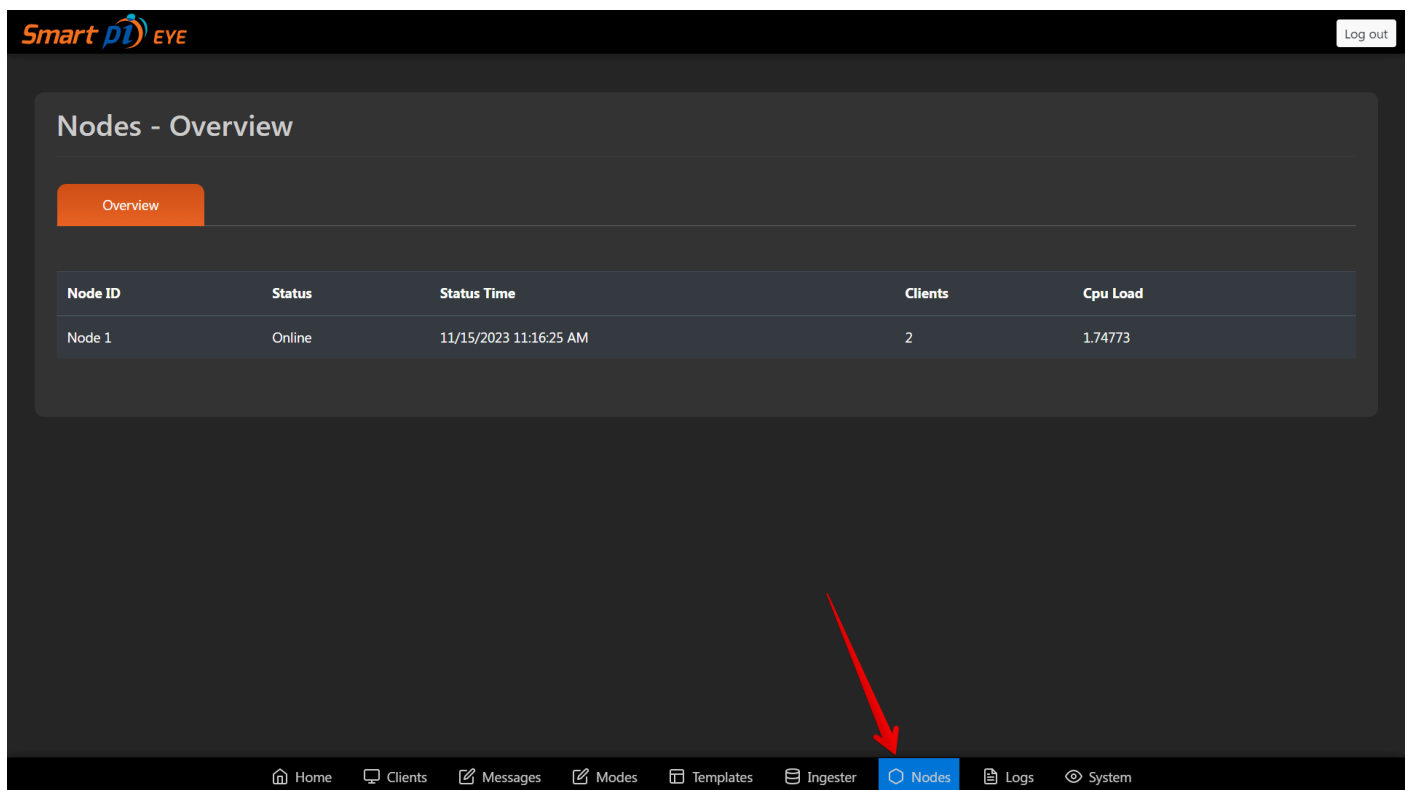
Start Generation

Generate Platform Names Progress

- Loading stops took 45ms
- Processing platform names took 5886ms
- Saving took 21ms
- Platform Name generation complete

5.7 Nodes

Click **Nodes** from the main dashboard to open up the nodes overview.



The nodes page will allow you to view configured nodes and their current status.

This includes:

Item	Description
Node ID	The ID configured within the node application
Status	The current status of the node
Status Time	The last time the node contacted the database / master
Clients	How many clients are connected to the node
CPU Load	The current CPU load of that specific node

Notes:

- There is no limit to how many nodes are connected to a system.
- Nodes can be used to either add capacity or redundancy

5.8 Logs

Click **Logs** from the main dashboard to open up the logs menu.

SmartPI EYE Log out

Logs - Master

Master | Ingestor | Node | Config

Search...

Time	Master	Log Level	Category	Message
4/24/2024 10:40:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: lio34wpz3o Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:40:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: 7iztu3dtzb Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:39:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: rhfrdko2j7 Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:39:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: exjqsapabe Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:38:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: 4w7mahphjb Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:38:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: 5riak2gzim Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: fzcvtw4c1 Type: Client MessageType: ClientConfigChanged NodeId: Node

Home Clients Messages Modes Templates Ingestor Nodes **Logs** System

Switch between Master logs, Ingestor logs, Node and Config by clicking the respective button.

SmartPI EYE Log out

Logs - Master

Master | Ingestor | Node | Config

Search...

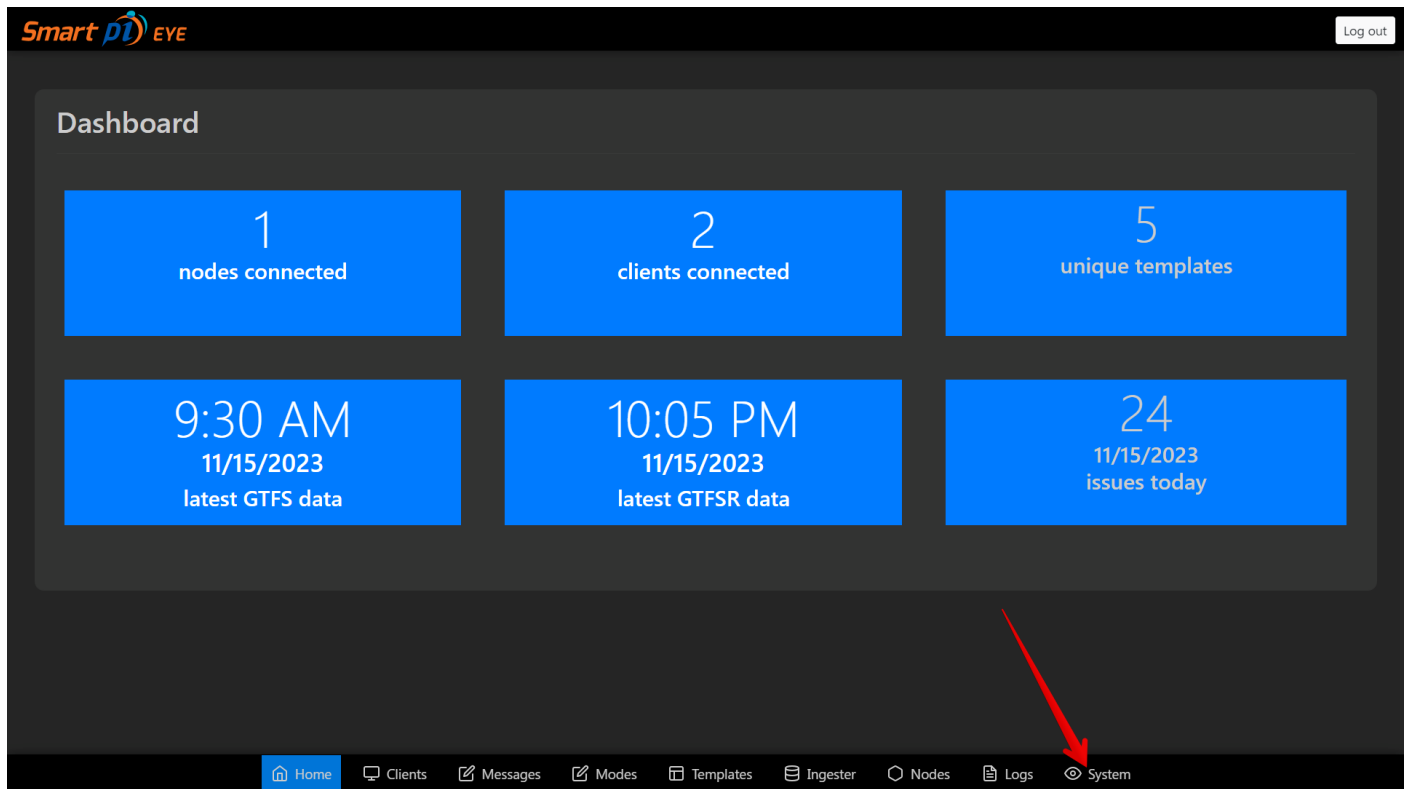
Time	Master	Log Level	Category	Message
4/24/2024 10:40:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: lio34wpz3o Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:40:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: 7iztu3dtzb Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:39:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: rhfrdko2j7 Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:39:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: exjqsapabe Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:38:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: 4w7mahphjb Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024 10:38:00 AM	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: 5riak2gzim Type: Client MessageType: ClientConfigChanged NodeId: Node 1 ClientKey: 53e412f1f0f61a145291bb54a03a6a13a36e9ef288bb1f9eb7899a2628a9c088
4/24/2024	Surface-1	Information	PID.Master.MessageQueue.MessageQueueManager	Got Ack. TracingId: fzcvtw4c1 Type: Client MessageType: ClientConfigChanged NodeId: Node

https://surface.smart-pi.info/Messages Home Clients Messages Modes Templates Ingestor Nodes **Logs** System

Logging has been refined to reduce excessive entries, which makes the logs easier to read and lowers storage use. The available log views remain Master, Ingestor, Node and Config.

5.9 Systems Tab

To access the administration interface please click on **System** tab from the bottom of the screen to enter further settings.

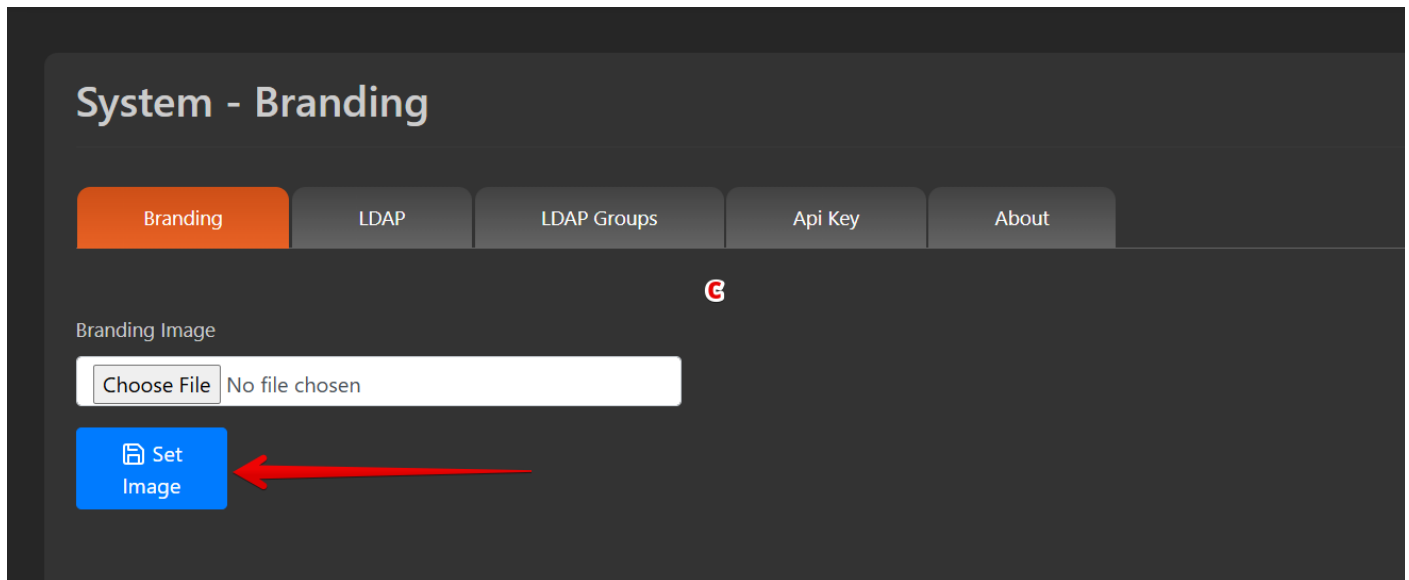


The Admin Panel of Smart pi EYE showcases settings required by an admin screen to control other connected screens. It comes with various sections like Branding, LDAP, LDAP Groups and About.

5.9.1 Branding

You can set your own branding/logo here in the Smart pi EYE. Simply click **Choose file** and then select an image from your computer. Once done, hit **Set Image** to save changes.

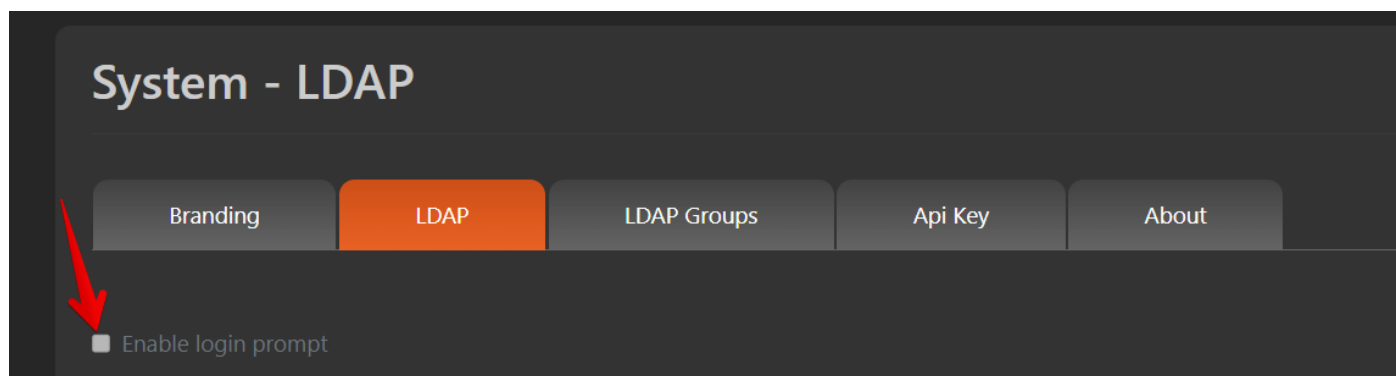
This will change the Smart pi EYE Logo to one of your choice throughout the system.



5.9.2 LDAP

This section allows you to use LDAP (Lightweight Directory Access Protocol) protocol for accessing and maintaining distributed directory information services over a network. Allowing user to limit access with login prompt.

Start by clicking the radio button of your choice to choose whether you'd like to enable or disable the login prompt.



Proceed with adding the values in these fields:

LDAP Server: Your LDAP Server address.

LDAP Server Port: Your LDAP Server Port.

LDAP User: Username for login.

LDAP Password: Password for login.

LDAP Users Base DN: The Base DN is the starting point an LDAP server uses when searching for users authentication within your Directory. The first output displayed is your Base DN: "DC=example-domain,DC=com"

LDAP User Search Filter: Add a user search filter as per your own preferences.

LDAP Admin Group: name entered in the ADMIN GROUP will represent a group of users with administrative privileges and special permissions within the directory or network.

Notes:

- Users can only access the user modes section and are not able to administer the system.
- It is possible to be in both the Users and Admin groups if access to both parts of the system is required.
- LDAP groups is used for the user modes section to limit access to different groups as needed. Users can be members of multiple groups.



Log out

☒ Enable login prompt

LDAP Server

LDAP Server Port

LDAP User

LDAP Password

LDAP Users Base DN

LDAP User Search Filter

LDAP Admin Group

Home Clients Messages Modes Templates Ingestor Nodes Logs System

5.9.3 LDAP Groups

LDAP groups will allow you to manage which users have access to specific user modes and groups.

LDAP Groups

Branding

LDAP

LDAP Groups

Api Key

About

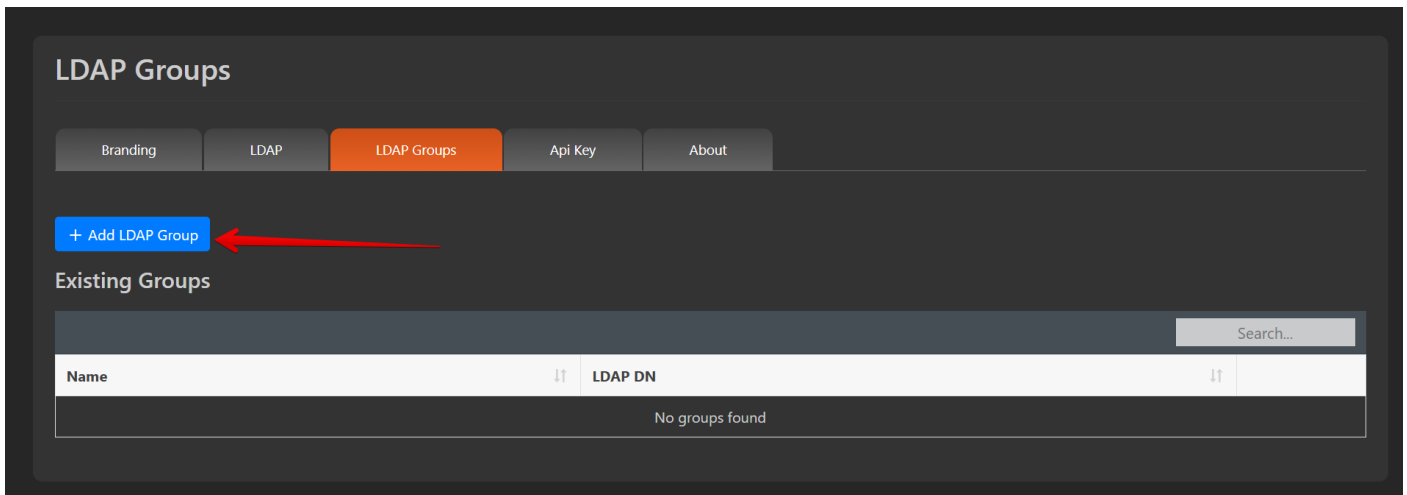
+ Add LDAP Group

Existing Groups

Search...

Name	LDAP DN
No groups found	

Click **Add LDAP Group** to continue.

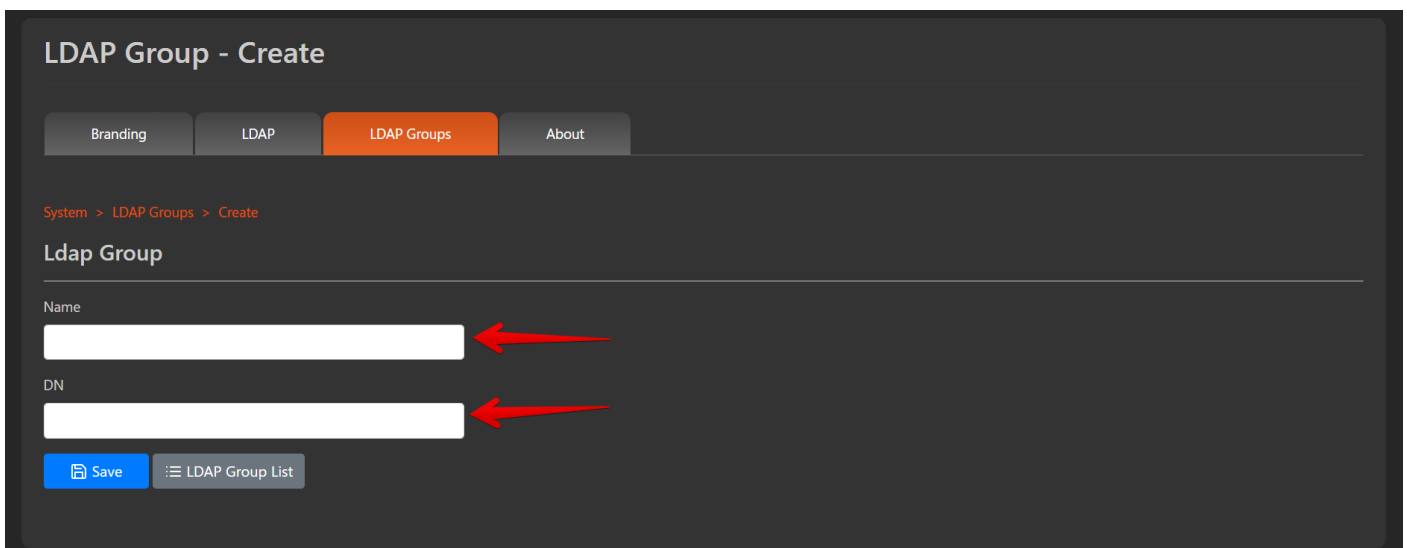


Give it a name and a DN (Distinguished Name i.e. the unique path to its place in the directory). Here's an example:

cn=John Doe,ou=Users,dc=example,dc=local

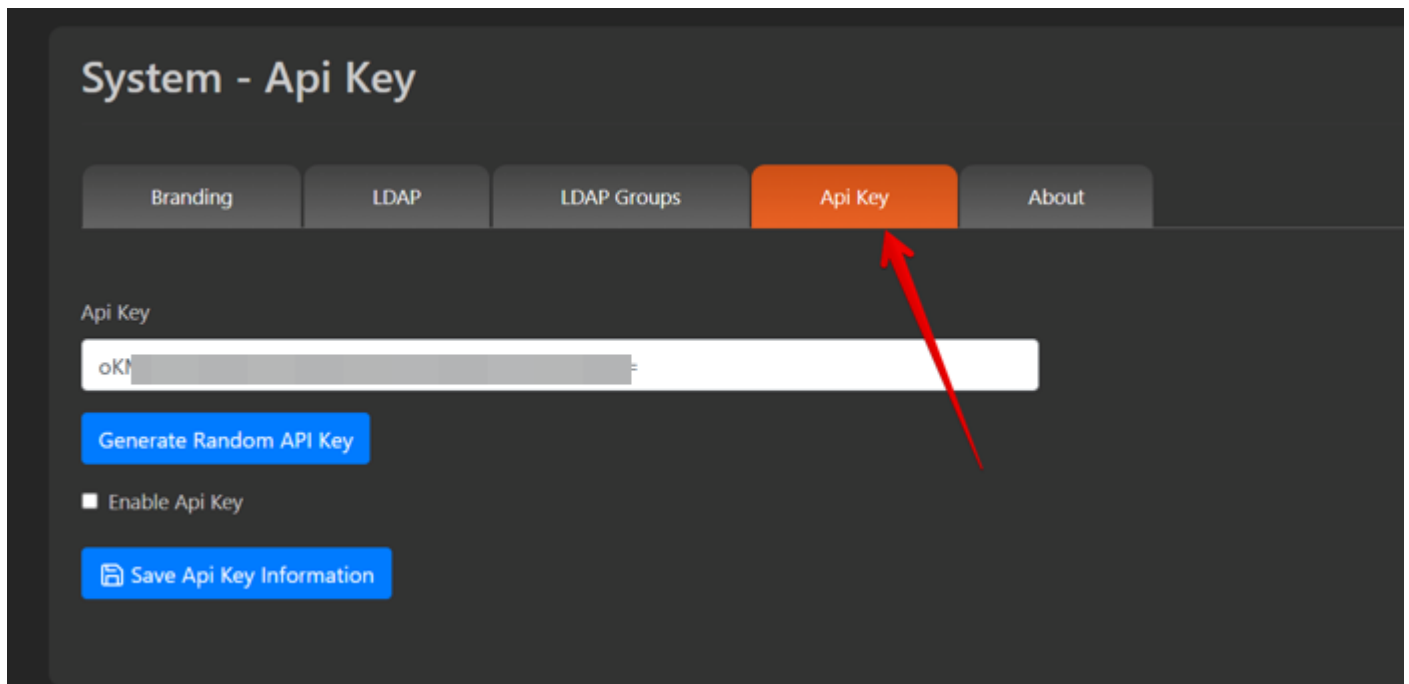
cn=Finance,ou=Users,dc=example,dc=local

Once added, click **Save**.



5.9.4 Api Key

The API Key controls access to the Smart pi EYE ReST API, which allows other systems to integrate with and pull data from the server. Manage the key from the **Api Key** tab in the System section.



The screenshot shows the 'System - Api Key' configuration interface. At the top, there are five tabs: 'Branding', 'LDAP', 'LDAP Groups', 'Api Key' (which is selected and highlighted in orange), and 'About'. Below the tabs, the 'Api Key' section contains a text input field displaying a masked API key 'oKl...'. A red arrow points to the 'Api Key' tab. Below the input field are two blue buttons: 'Generate Random API Key' and 'Save Api Key Information'. Additionally, there is an unchecked checkbox labeled 'Enable Api Key'.

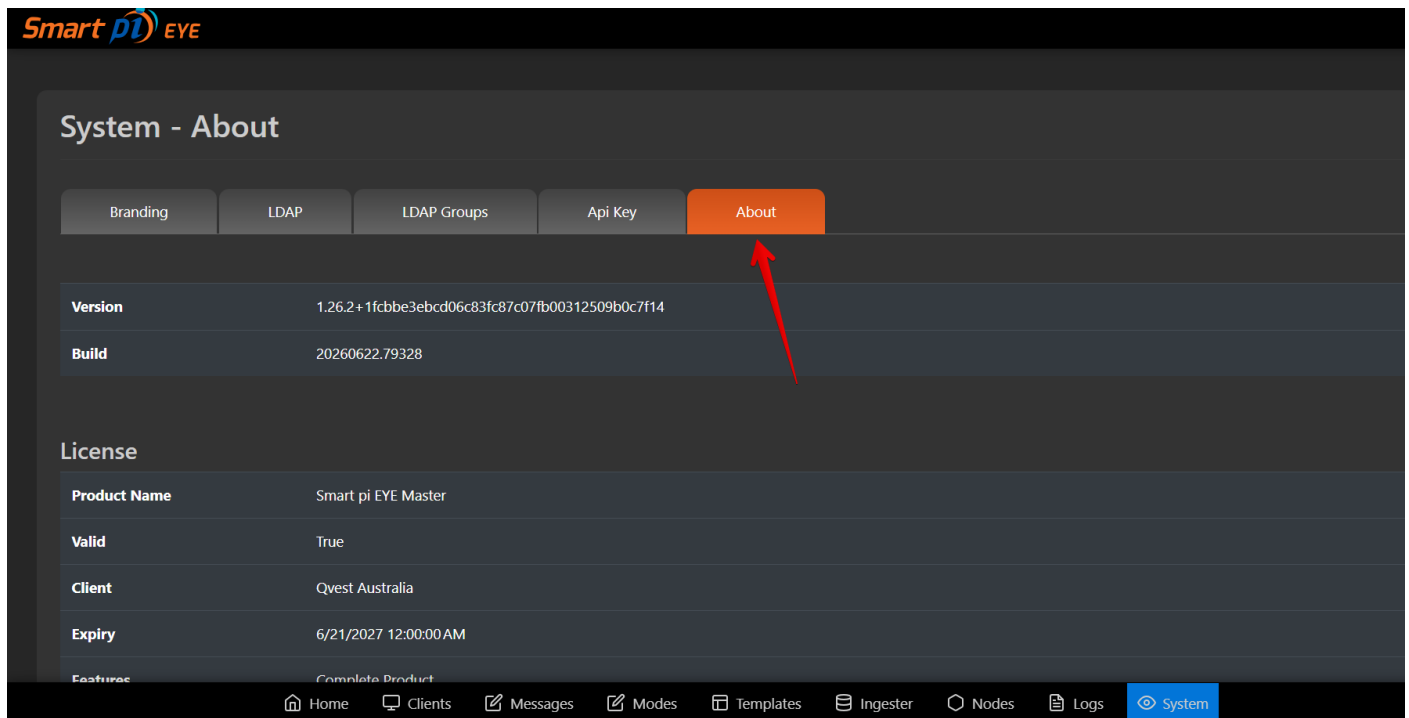
The current key is shown in the **Api Key** field. To create a new one, click **Generate Random API Key**, which replaces the value in the field.

Tick **Enable Api Key** to require the key for API access. Leaving it unticked disables key based access.

Once you have set or generated the key and chosen whether to enable it, click **Save Api Key Information** to apply the change. Any external system that connects to the API will need to use the current key.

5.9.5 About

The about section shows the version and build you're currently on.



Smart pi EYE

System - About

Branding LDAP LDAP Groups Api Key **About**

Version	1.26.2+1fcbbe3ebcd06c83fc87c07fb00312509b0c7f14
Build	20260622.79328

License

Product Name	Smart pi EYE Master
Valid	True
Client	Qvest Australia
Expiry	6/21/2027 12:00:00 AM
Features	Complete Product

Home Clients Messages Modes Templates Ingestor Nodes Logs **System**