TriSign is a secure, TGS specific network of changeable signage for use on project sites which allow for remote access to affect the sign scheme changes which avoid TCs or other works manually changing multi message signs on the road side.

To be able to activate signs on your site, you will need to have a few things arranged first:

1. You will need to have the signs setup and installed for your work site and the TGS registered with SmartSite
2. You will need to be setup as an active user on the system
3. Your user profile will need to be given access permissions to the TGS that you are trying to change
4. You will need to have an Android device with the TriSign app installed

Items 1-3 above can be setup by your supplier so you and your workers are ready to go on site

Item 4 will need to be completed for each device you plan to use on the worksite to activate and monitor signage. The app is available for download HERE and soon to be on the google Play Store. The device must have a 4G data connection to load the app and live signage data. A tablet is better for viewing and using this app.

Your app will talk with the signs through Bluetooth (BLE), please keep in mind that you need to be within 30m or a sign or a TriLink device to maintain a reliable connection to the sign network.

TriLink connection distance is approximately 1km line of site.

Getting Started

1. **Open the TriSign app and log in**
   a. When you first open the app, you will see the screen to the right.
   b. Use the username and password that has been set for you.
   c. If you cannot remember your password, select "I forgot password" and you will be redirected to a browser and webpage to reset using the registered email address for your account.
   d. If you are using a communal or shared device, select "No" if the device asks if you want to save your password.
   e. Keep your login credentials to yourself, each user should have an account and permissions set up for them.
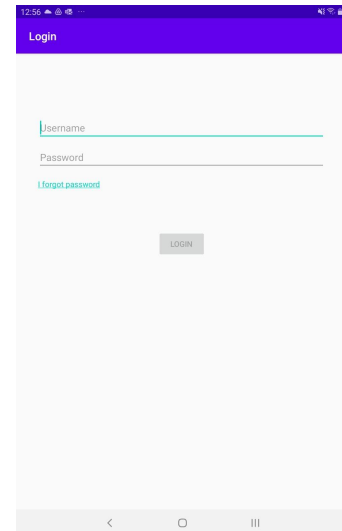
2. **Home Screen**
   a. When you log in each time, you will see project name you have access to (In this case it shows "Outsource Support"
   b. When you press this project name, you will see a list of the Sign Groups (TGSs) you have access to.
   c. The sign group will have a name and description in text to help you identify which group is which.
   d. Tap the title of the sign group you want to change or view the status of.
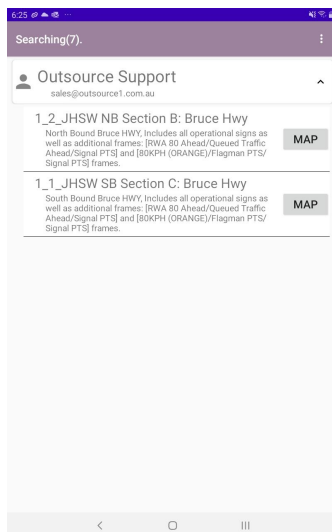
NOTES on this screen:
- At the top of this screen when you first log in, you will see a grey bar with the words 'Searching (XX)' where "XX" are numbers - this is the app searching for the nearest sign or TriLink to connect to the network.
- The numbers represent the number of signs found. The word "Searching" will change to "Connecting" then to "Connected" with a yellow bar behind it to show you are connected (image to the right).
- This grey / yellow bar is visible in all screens on the app to show you connection status.
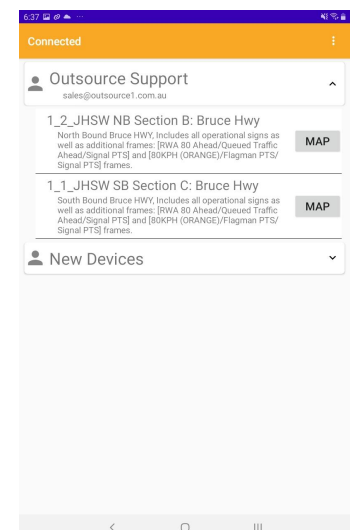
3. When you first connect and open a TGS, you may see this screen with only one image per sign showing or numbers in circles replacing the images, this is normal.

a. The app is just starting up and syncronising information from the sign and comparing it to the database (why you need an internet connection)

b. It will only take a few seconds for the full list to populate with the alternative available sign faces for each sign
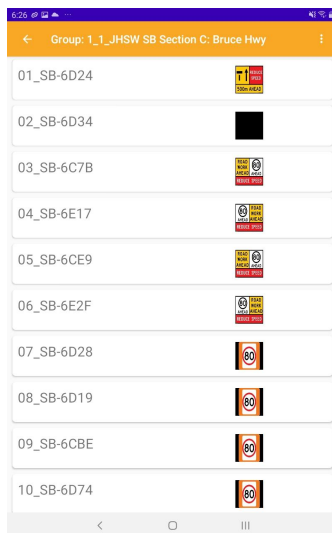
c. Wait for the sign images to load up before attempting to make changes
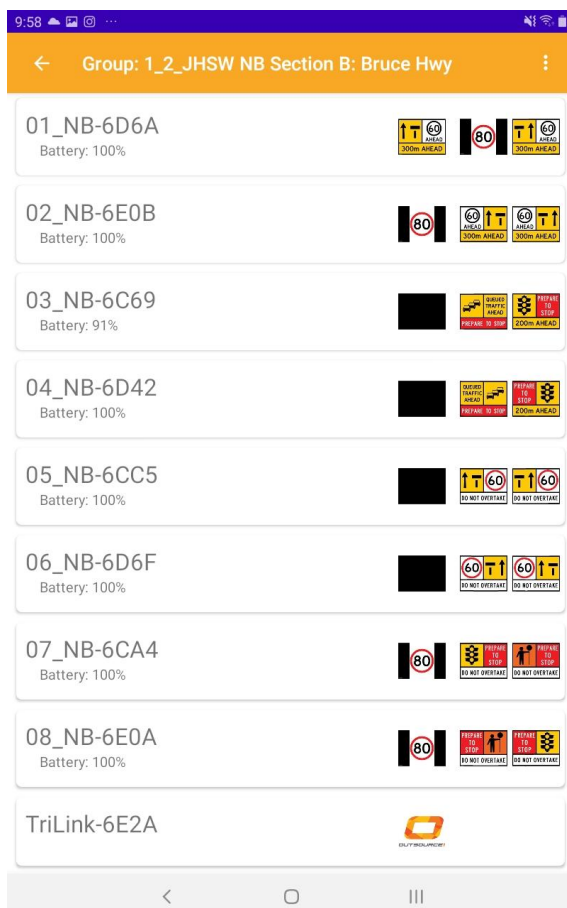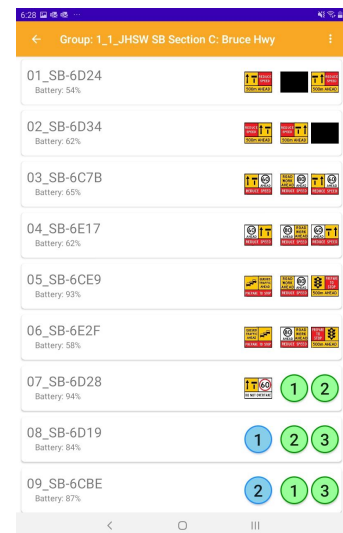
4. When the app is loaded and ready to go, your screen will look like the image on the left.

a. All images populated,

b. Sign numbers / identifiers visible

c. Battery percentages for each sign

NOTE: The trilink device is an additional device on the network to allow remote access to signs if you are not within range of them. The TriLink is designed to be used in a vehicle or site office that is within range (1km) of any of the signs in the TGS.

This device will connect to your android device, then act as the link between the TGS signs and your Android device.

You are now ready to start selecting signs to change!

a. The left most image is the one currently displaying on the sign and is the important one to make note of.

5. Changing signs

a. All you need to do is press on the sign image you want to display for each sign

b. The border of the sign will go red as in the picture, this indicates that your sign is in the process of making the change for you

c. As the sign rotates, the images will be updated on your screen.

d. When the signs have changed to the selected image, the red border will disappear and your selected image will now be in the left column of images

e. Each sign change takes 10-20 seconds, please continue monitoring your sign changes in the app for this period.

f. Your sign is changed!

g. Complete selecting the required image for each sign in the sign group / TGS.

h. When complete, visually confirm that all the required signs are in the left column of images
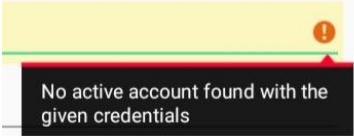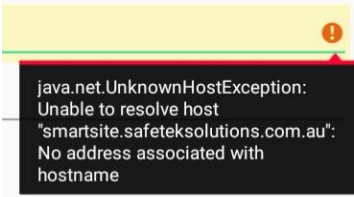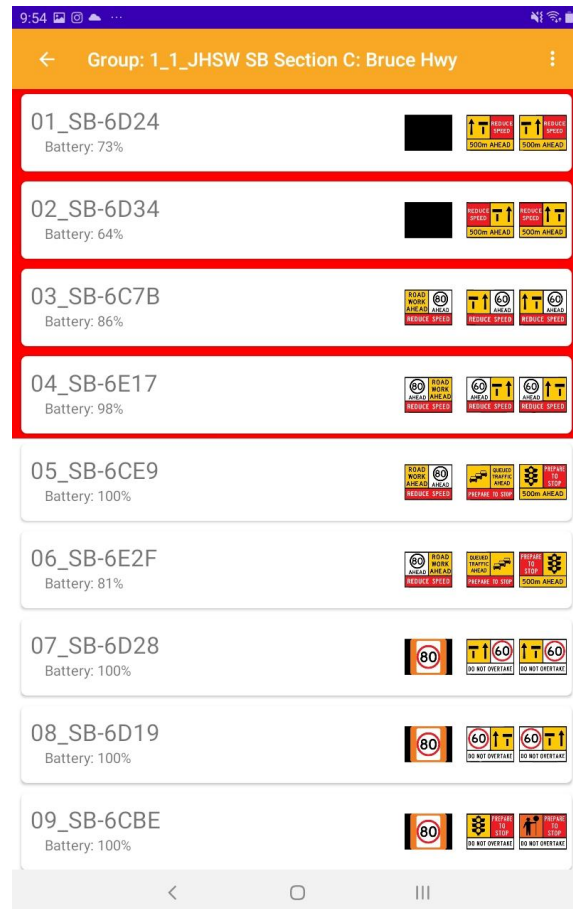

You are able to change one at a time or all at once.

From time to time your press may not be detected, so if you press and you don't get a red border, select the image you want again.

Changing the signs back to aftercare or to another available scheme for the group is done by following step 5 and selecting the new images.

Troubleshooting

From time to time you may experience some unexpected behaviours that aren't outlined above. The items listed below have been built into the app and signs to provide feedback to the user of what is happening unseen on site:

App Behaviour	Description	Remedy
I get this error when logging in No active account found with the given credentials	This means your username and/or password are incorrect.	Press the 'I forgot password' link and reset your password. If you can't remember your username, get intouch with your site supervisor.
I get this error when logging in java.net.UnknownHostException: Unable to resolve host "smartsite.safeteksolutions.com.au": No address associated with hostname	This means you have no internet connection and the app is unable to verify your login details with the database.	Ensure you have a data connection on your device.
I selected a sign change and the background has remained red an the images have not changed on my screen	From time to time a message will be sent to the sign group at the exact time when a message from the sign is received by the app. When this happens, your request to the sign is not sent and the sign in the app remains red	Select the image you want to display again and wait 10-15 seconds for the change
I selected an image and the sign keeps turning	If the sign is newly installed or the control system has been rebooted, the sign will do a full cycle of all signs 1 time to be able to know which sign face is showing. There are internal switches that activate as the sign turns, so it needs to cycle these to determine which image it is showing	Nothin, wait for the sign to cycle through and it will stop on your requested image

One or more signs in my sign group only have a single image, no other options to change to	This means the sign is no longer part of the sign network. It could mean a flat battery, disconnection or some other failure.	Escalate immediately to your supervisor. Manual activation may be required using battery pack and direct connection to sign cable.
I can't see the sign group I need to change	This means your user profile has not been given access to this sign group.	Escalate to your supervisor to request change to your profile
App won't connect. Status is 'Searching' then 'Connecting' then 'Disconnected' back to 'Searching'	This means the app is struggling to find a sign / TriLink to connect with.	1 - Ensure when app is "Searching" it shows numbers in brackets, eg: "Searching (2)". If your app shows no numbers, it means you are out of range of the signs or the TriLink. Move closer to a device (within 30m) 2 - It can sometimes take 30-45 seconds to establish a solid connection using bluetooth - wait for this time to 3 - If you do have numbers and it keeps searching and disconnecting, restart the app and search again. **If the problem persists:** 4 - ensure your device is setup as 'discoverable' on its bluetooth connection 5 - ensure it is able to connect to new bluetooth devices