

Equilibrium Web Application User Guide

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The EQ Web Application

This section of the document focuses on how to use the EQ Web Application for the various operations you can perform through the web interface.

The EQ Web Application is the dashboard that allows users to:-

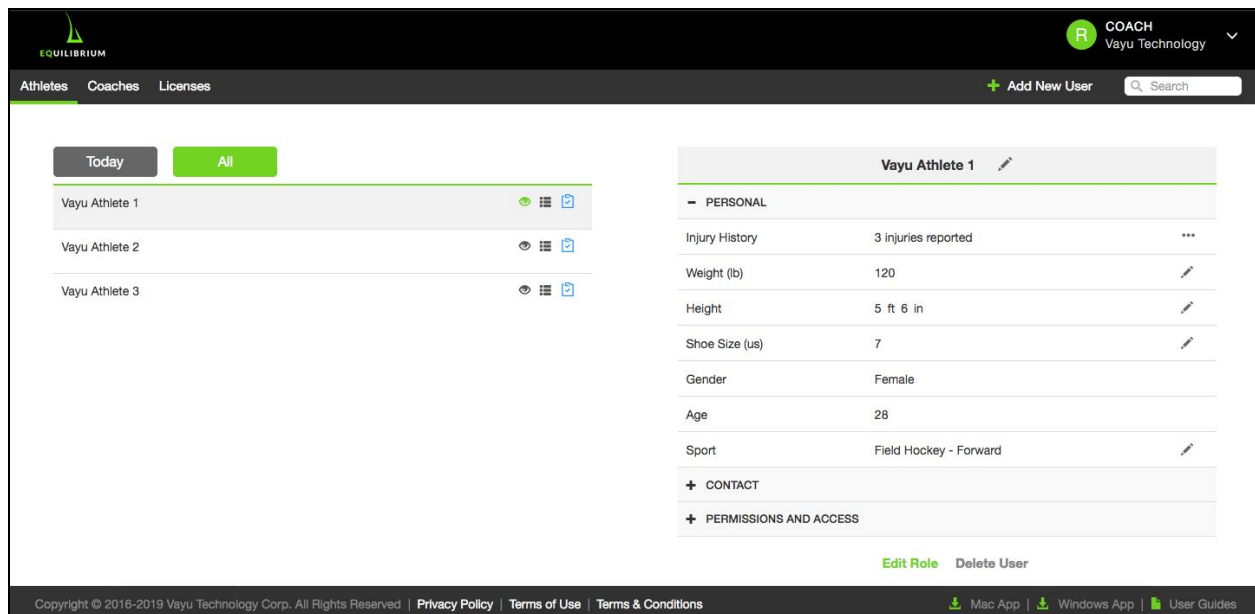
1. Visualize the insights generated for athlete trials
2. Manage user profiles for your organization
3. Manage supervisory assignments

Please note that as of this moment the web application is officially certified to work on Chrome (55+), Safari (10+) and Firefox (52+). The Web Application can also be viewed on mobile footprints such as a tablet. The nature of the interface however may not be suitable for viewing on smaller form factors such as mobile phones.

Sign-In

As is the case with the EQ Client Application, you will need to sign-in using the EQ Systems credentials associated with your user profile. There is a one-time mandatory action where you need to accept the EQ End User Agreement and Privacy Policy in order to use EQ client and web software.

Once you sign-in into the application you will see a screen that lists the athletes and coaches who are in your hierarchy.



EQ Web Application

User Profiles

When the system is first provisioned for an organization a special admin user with the role of Organization Admin is created. This user will have the capability to provision additional user profiles for the organization. These user profiles could have a variety of roles that reflect the actions that they will be performing.

The roles that a user could have include supervisory roles over other users, ability to add users, and the ability to visualize data. See the appendix for more details on the roles an EQ user can be assigned.

Adding a User Profile

In order to be able to add a new user profile you will need to have the User Manager permission (which is something that the organization admin has by default).

1. Adding an Athlete

- a. Use the Add New User button on the Home Page to add a new user into the system.
- b. Select “Athlete” in the “Profession” field to identify the new profile to be that of an athlete.
- c. Choose whether or not this athlete will have login permissions to view his/her own data in the “Grant Access to Results” field.
 - i. If no access is required for the athlete, select No and continue to the next section.
 - ii. If access is required for the athlete, select Yes. You will also need to provide an email address for the athlete and select the desired permissions. The email address will be used to login to the EQ system by the athlete. The selection of this option at the time of user creation will result in a notification being sent to the new user at the email address provided to complete the activation process.
- d. A user profile is required to use the EQ system to collect data from trials, however the login access permissions are only required for users who need to view their own results or manage other activities through the application.
- e. The access permissions that can be granted to an athlete are:-
 - i. Data Visualizer - Set by default if the user has login access. Allows an athlete to visualize his/her own data only.
- f. In the Athlete Profile section, provide the required information for the athlete and click on Add User.
- g. At this point the new athlete is now in the system and can be supervised by you.

- h. You can use the web application to change the permissions and supervisors for this athlete in the Access and Permissions section at a later point of time.

ADD NEW USER

Full Name/ID

Mobile Number (optional)

Profession
☒ Athlete ☐ Coach

Grant Access to Results?
☒ No ☐ Yes

EQ Web Application: Adding a new athlete with no login permissions

ADD NEW USER

Full Name/ID

Mobile Number (optional)

Profession

☒ Athlete ☐ Coach

Grant Access to Results?

☐ No ☒ Yes


Email ⓘ

Permissions ⓘ

☐ User Manager
☒ Data Visualizer
☐ License Manager

Continue **Cancel**

EQ Web Application: Adding a new athlete with login permissions



ADD ATHLETE PROFILE

Athlete 4

Gender

☒ Male ☐ Female

Age

Height

Weight ⓘ

Shoe Size ⓘ

Is the new user an athlete?

☒ Yes ☐ No

Sport

☒ Continue and Enter Injury History Now

Continue **Cancel**

EQ Web Application: Entering the athlete profile

ADD ATHLETE INJURY HISTORY

Athlete 4

Injury History

Knee **2018** **Not Bothering** Surgery to fix ACL tear

☒ Left ☐ Right

Injury Area **Injury Year** **Injury Status** Additional details, treatment received etc. X

Add User **Cancel**

EQ Web Application: Entering the athlete injury history

2. Adding a Coach

- Use the Add New User button on the Home Page to add a new user into the system.
- Select "Coach" in the Profession field.
- The user's email address will be used to uniquely identify them on the system.
- A coach is required to have login permissions to visualize the data for the athletes under his/her supervision. Therefore, an email address is required to login and a Data Visualizer permission will be granted by default. This will result in a notification being sent to the new user to complete the activation process.
- Other permissions that can be granted to a coach are:-
 - User Manager - Create and delete user profiles in addition to being able to visualize their data.
- This coach is now in the system and you can assign other users in their hierarchy.

ADD NEW USER

Full Name/ID

Coach 2

Mobile Number (optional)

Enter mobile number

Profession

☐ Athlete ☒ Coach

Grant Access to Results?

☐ No ☒ Yes

Email ⓘ

Enter email

Permissions ⓘ

☒ User Manager
☒ Data Visualizer
☐ License Manager

Add User

Cancel

EQ Web Application: Adding a new coach

3. Adding a User who is both a Coach and an Athlete












- Use the Add New User button on the Home Page to add a new user into the system.
- Select both “Athlete” and “Coach” in the Profession field.
- See the sections on “Add New Athlete” and “Add New Coach” to complete the user creation.

Managing User Access and Permissions

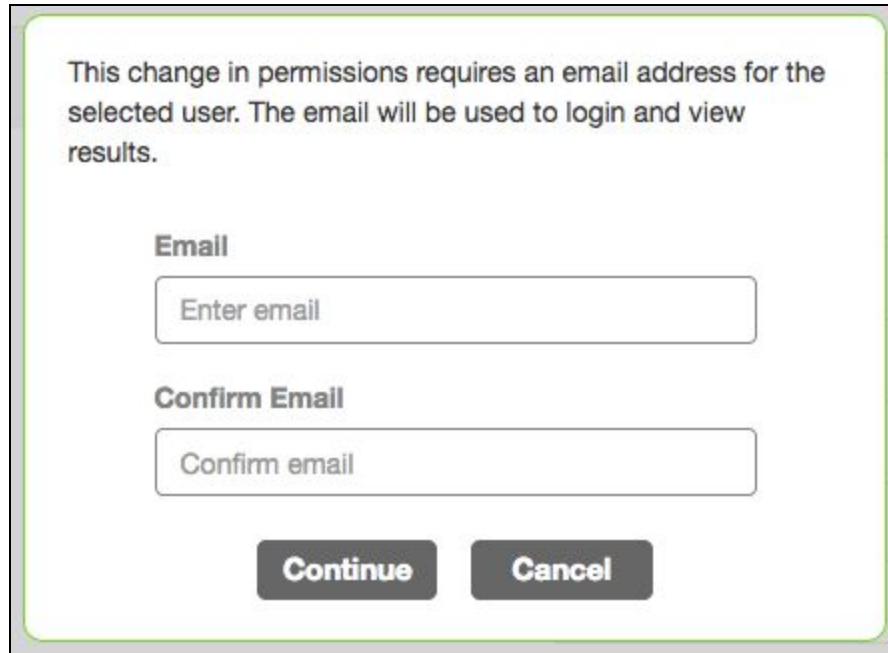
The permissions granted to a user determine whether or not he/she can login to the EQ system. If yes, these permissions further determine what actions this user can perform once inside the system. The “Adding a User Profile” section describes how these permissions can be set at the time a user is first created. This section describes how new permissions can be added or existing permissions can be removed after a user has been created.

Editing the Permissions of an Athlete

- a. Granting new permissions
 - i. In the Access and Permissions section of the athlete profile, click the “Edit” icon and select the desired permissions. The available options will be Data Visualizer and License Manager.
 - ii. If an email address is not available for the selected athlete, you will be asked to provide one. This email address will be used to login to the EQ System by the athlete.
 - iii. If an email address is already available, you will not be asked to provide it again and the selected permissions will be added directly.
- b. Removing existing permissions
 - i. In the Access and Permissions section of the athlete profile, click the “Edit” icon and unselect the permissions you wish to remove.
 - ii. If you remove the Data Visualizer permission, the selected athlete will lose his access to the EQ System i.e. his/her permission to login will be revoked.

Athlete 3 		
- PERSONAL		
Weight (lb)	170	
Height	5 ft 8 in	
Shoe Size (US)	8	
Gender	Female	
Age	24	
Sport	Not available	
- CONTACT		
Email	-	
Phone	-	
- PERMISSIONS AND ACCESS		
Coaches	 Coach	
	None	
Permissions	<input checked="" type="checkbox"/> Data Visualizer <input type="checkbox"/> License Manager	 

EQ Web Application: Selecting the Edit Permissions option in the athlete profile



This change in permissions requires an email address for the selected user. The email will be used to login and view results.

Email








Confirm Email

Continue **Cancel**

EQ Web Application: Providing an email address required for login

Editing the Permissions of a Coach

- c. Granting new permissions
 - i. In the Access and Permissions section of the coach profile, click the “Edit” icon and select the desired permissions. The available options will be User Manager and License Manager.
- d. Removing existing permissions
 - i. In the Access and Permissions section of the athlete profile, click the “Edit” icon and unselect the permissions you wish to remove.
 - ii. The Data Visualizer permission for a coach cannot be removed because a coach is required to have login access to the EQ System.

Coach 1 	
CONTACT	
Email	coach1@vayu.tech 
Phone	- 
ACCESS AND PERMISSIONS	
Permissions	<div>  Data Visualizer  User Manager </div> <div> <input checked="" type="checkbox"/> Data Visualizer <input checked="" type="checkbox"/> User Manager <input type="checkbox"/> License Manager </div> <div>   </div>

EQ Web Application: Editing a coach's permissions

Managing User Roles

User roles are defined by the profession set for a user at the time his/her profile is created for the first time. These roles are set in the Profession field of the “Add New User” form, and determine the nature of personal information required for the user’s profile and the kind of access permissions that will be associated with the user. The EQ System recognizes the following roles:-

1. Athlete

- When creating this user, the Profession field will be set to Athlete in the Add New User form (only the “Athlete” checkbox is selected).
- An athlete can be created without being granted any access permissions (the Grant Access to Results field is set to No).
- To create an athlete, information about his/her physical profile - Gender, Height, Weight, Shoe Size, Age - and sport is required.
- At a later time, an athlete’s permissions can be set to Data Visualizer and/or License Manager.
- A user whose role is an athlete is not eligible to hold the permission of a User Manager. This permission is reserved for users with the role of a Coach.

2. Coach

- a. When creating this user, the Profession field will be set to Coach in the Add New User form (only the “Coach” checkbox is selected).
- b. Since a coach requires login access to visualize the results of the athletes under his/her supervision, this user is created with the default permission of a Data Visualizer.
- c. At a later time, a coach’s permissions can be additionally set to User Manager and/or License Manager.

3. Both

- a. When creating this user, the Profession field will be set to Athlete and Coach in the Add New User form (both the “Athlete” and “Coach” checkboxes are selected).
- b. Creating this profile requires the personal information described in the Athlete section and the access permissions described in the Coach section.

Editing User Roles

The EQ Web Application allows you to edit the role of any user after his/her profile has been created, using the Edit Role option. On selecting this option for a user, you will be presented with the available options for a role and asked for any additional information that may be required to execute the change based on the description of each role provided above.

You are allowed to perform the following changes in a user’s role depending on the original role:-

1. Athlete to Coach
2. Athlete to Both
3. Coach to Athlete
4. Coach to Both
5. Both to Athlete
6. Both to Coach

After a change in roles is complete, the permissions held by the user must match the requirements of the intended role.

For eg. If an Athlete with no access permissions is being converted into a Coach, a permission of Data Visualizer will be automatically granted. If a Coach with the permissions of a Data Visualizer and User manager is being converted to an Athlete, the permission User Manager will be automatically removed.

EDIT USER ROLE

Choose New Role

☐ Athlete
☒ Coach
☐ Both

Email

Enter email

Confirm Email

Confirm email

Save

Cancel

This change in role requires an email address for the selected user. The email address will be used to login and view results. ×

EQ Web Application: Editing the role of a user from Athlete to Coach

EDIT USER ROLE

Choose New Role

☐ Athlete

☐ Coach

☒ Both

Gender

☒ Male ☐ Female

Age

23

Height **Weight** **Shoe Size**

6

2

165

lb

10

US

Save

Cancel







EQ Web Application: Editing the role of a user from Coach to Both

Managing User Injury History

To edit the injury history for a user or to report injuries for the first time, click on the “Manage Injury History” icon in the user profile on the Home Page.

MANAGE INJURY HISTORY
Vayu Athlete 1

[+ Report an injury](#)

1. Injured Left Ankle in 2017 - Bothering		
2. Injured Right Elbow in 2017 - Bothering		
3. Injured Left Shoulder in 2016 - Bothering		

Done

EQ Web Application: Manage Injury History Dialog Box

Reporting a New Injury

To report a new injury, click on Report an Injury, provide the necessary details, and then click on the Save icon. The newly added injury will appear at the top of the injury list.

Click on the “Done” button to close the dialog box.

MANAGE INJURY HISTORY







Vayu Athlete 1

Injury Area ▾

Injury Year ▾

Injury Status ▾

Additional details, treatment received etc. ✓ ✕

1. Injured Left Ankle in 2017 - Bothering	 
2. Injured Right Elbow in 2017 - Bothering	 
3. Injured Left Shoulder in 2016 - Bothering	 

Done

EQ Web Application: Reporting a New Injury

Edit Status of an Existing Injury







To change the status of an injury from Bothering to Not Bothering or vice-versa, click on the Edit icon next to the injury item. Then, make your selection in the dropdown menu and click on the Save icon.

Click on the “Done” button to close the dialog box.

MANAGE INJURY HISTORY

Vayu Athlete 1

+ [Report an injury](#)

1. Injured Left Ankle in 2017 -	<div>Not Bothering</div>	 
2. Injured Right Elbow in 2017 -	Bothering	 
3. Injured Left Shoulder in 2016 -	Bothering	 

Done

EQ Web Application: Editing the Status of an Injury

Delete an Injury

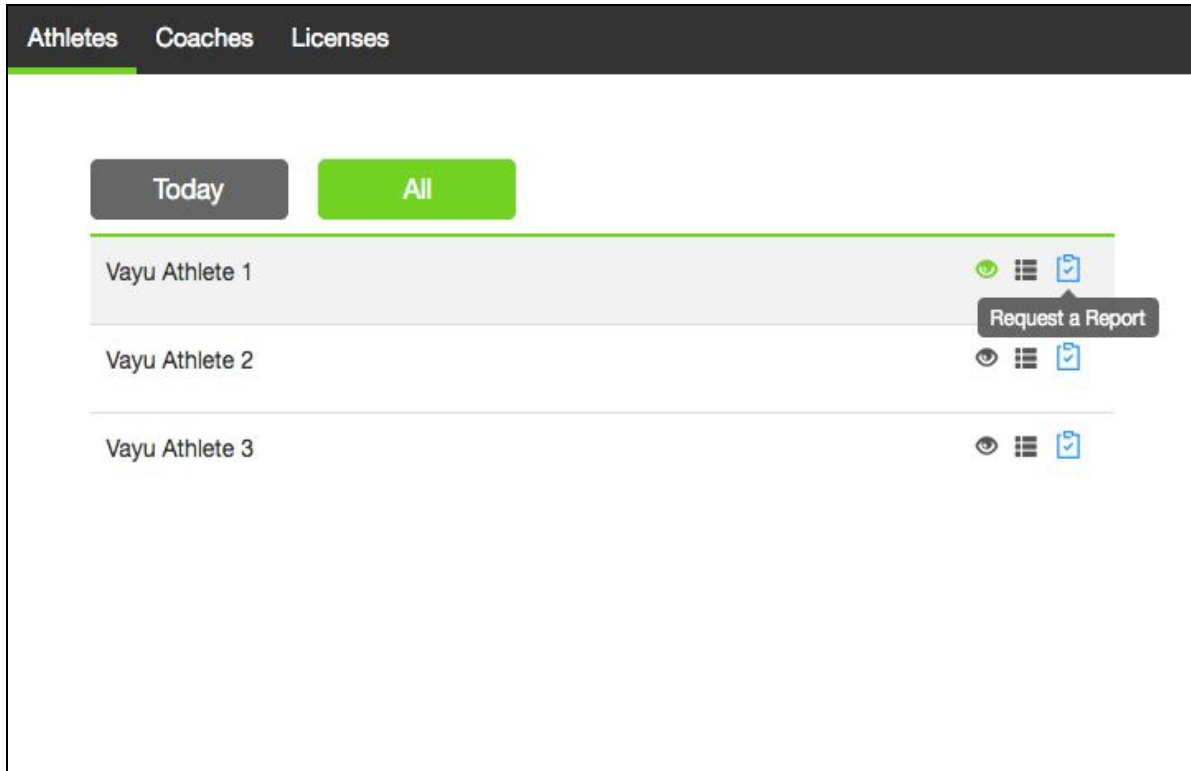
To delete an injury, click on the Delete icon next to the corresponding injury item.

Click on the “Done” button to close the dialog box.

Requesting and Viewing Reports

Request a Report

If you have purchased licenses for one or more Report Vendors, then you will be able to see the “Request a Report” icon for every athlete in the Athletes list on the Home Page.



EQ Web Application: Request a Report Icon

To start your request, click on the Request a Report icon. You will then be presented with a dialog box to make your selection of the Report Type and trials to include in the request.

1. You may select trials that you conducted “Today” for the athlete or you may select another date by exercising the “Pick a Date” option.
2. On selecting a Report Type and date, you will be shown a list of trials that will be restricted to activity types that are required for the report. Therefore, if the selected athlete performed a Lunge today, and you don’t see it in the list of trials, it may be because lunges aren’t required as input activities to generate the particular type of report.

Each trial name will be tagged with the corresponding activity type.

Once you have made the report and trial selection, and agreed to the Terms & Conditions, select Continue.

REQUEST A REPORT

Select Type of Report

☐ Report 1

☒ Report 2

Select Trials

☒ Today's Trials

☒ Jog_5 : Gait

☒ LHop_4 : Hop

☒ LHop_3 : Hop

☒ Jump_2 : Jump

☒ Squat_1 : Squat

☐ Pick a Date

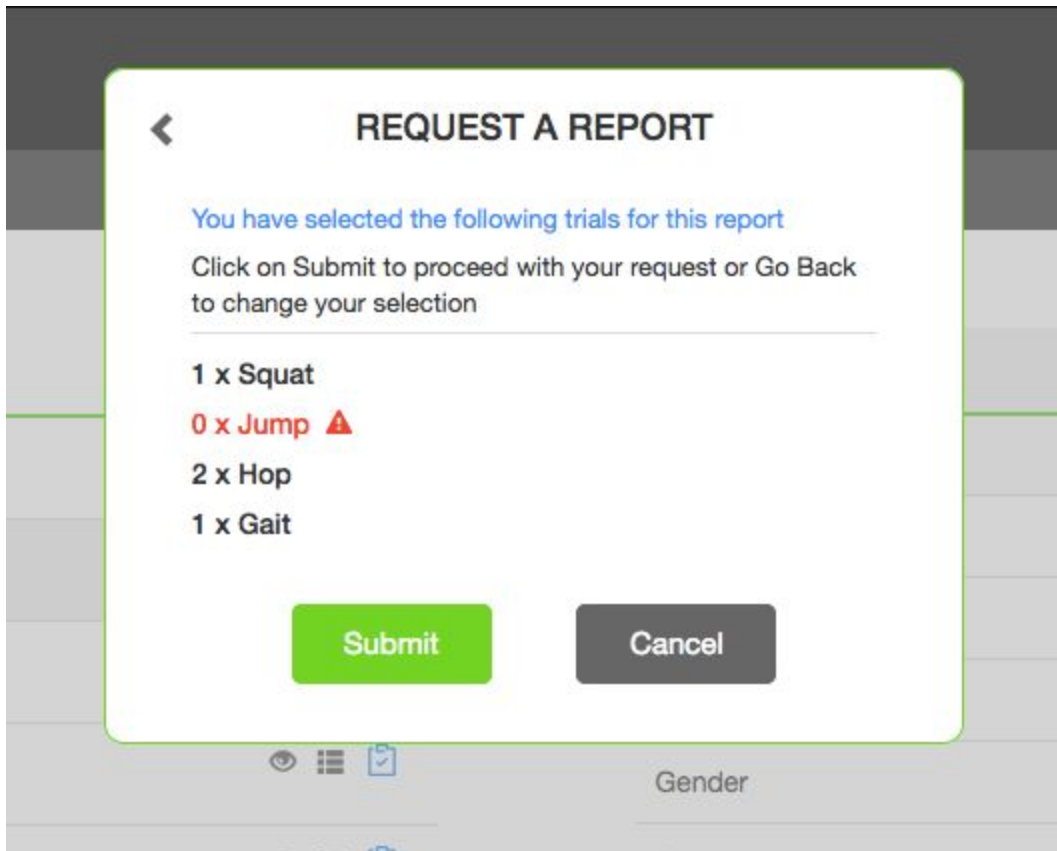
☒ I have read and agree to the following [Terms & Conditions](#)

Continue **Cancel**

Request a Report : Report Type and Trial Selection for Today

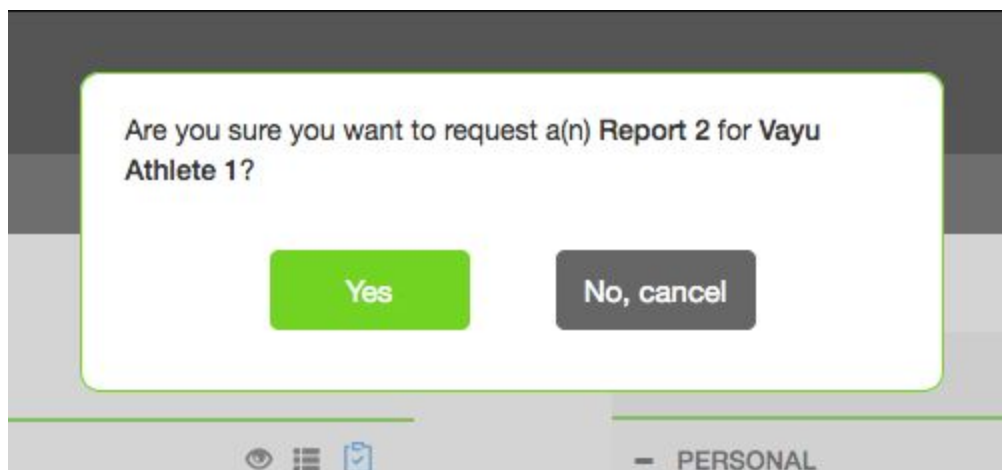
The next section presents a summary of the activities selected as input for the report and flags any missing activities - every report type has a set of minimum requirements to generate the full set of results. If those requirements are not met, you may get an incomplete report.

The image below shows an example of a report request for which no Jump was selected. The warning sign indicates that a Jump is required for generating a complete report. You can go back and edit your trial selection at this point.



Request a Report : Missing Activity in Report Request

After you have reviewed the activity summary, click on Submit and confirm your request. Upon submission, you will see a success message on your screen.



Request a Report : Confirm Report Request

View Reports

In order to view all reports generated for an athlete, click on the athlete's name in the Athletes list on the Home Page. You will land on the Dashboard

Trial Results

The data collected by the hardware system is transferred into the cloud using the EQ Client Application. The data is then processed by the EQ Algorithm layer and made ready for consumption by the visualizer layer which is the EQ Web Application.

Accessing Trial Results

When you login into the system, you will be able to see the list of athletes whose results you can view. You can click on an athlete's name to land on the EQ Dashboard that provides a quick overview of the statistics for Runs, Jumps and Hops uploaded on the current day or any other date selected from the calendar. You can also view all the reports requested for the selected athlete on this page. If you are not supervising anyone else you will automatically be taken to view your own Dashboard.

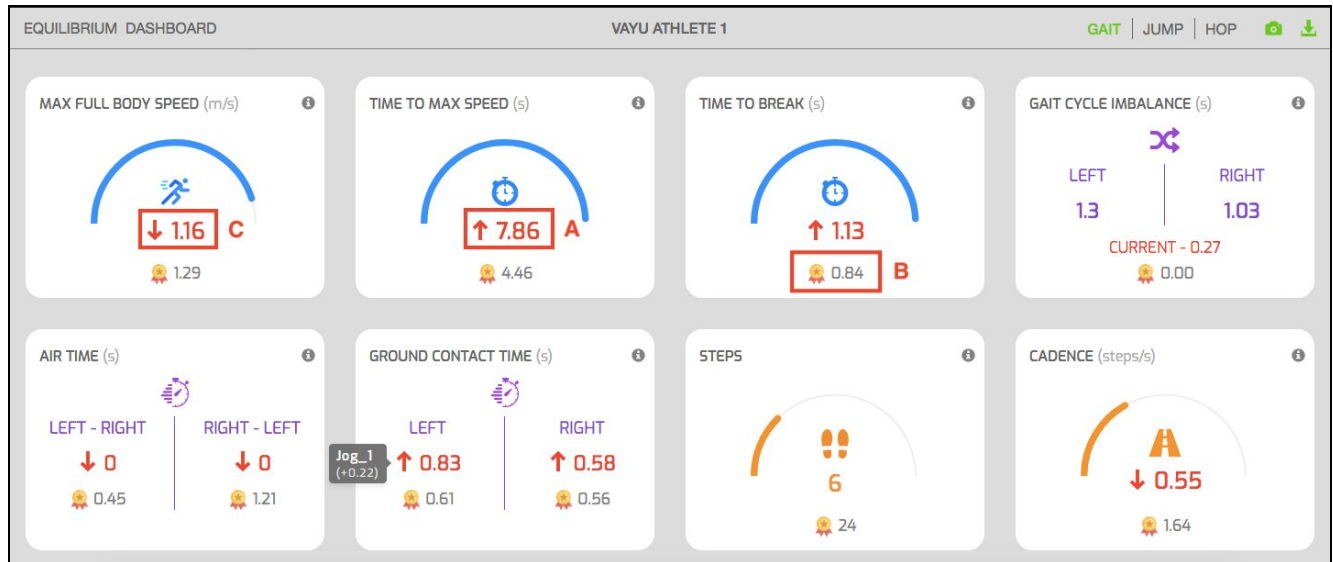
On the EQ Dashboard, click on 'All Trials' to select and examine trials in greater detail.

The screenshot displays the EQ Web Application interface. At the top, there is a navigation bar with the 'EQUILIBRIUM' logo on the left and a user profile 'COACH Vayu Technology' on the right. Below the navigation bar, there are tabs for 'Athletes', 'Coaches', and 'Licenses'. The 'Athletes' tab is active, showing a list of three athletes: 'Vayu Athlete 1', 'Vayu Athlete 2', and 'Vayu Athlete 3'. Each athlete entry has a small icon and a list icon. To the right of the list, there is a detailed profile for 'Vayu Athlete 1'. The profile is divided into sections: 'PERSONAL' (Weight: 120, Height: 5 ft 6 in, Shoe Size: 7, Gender: Female, Age: 28, Sport: Ice Hockey), 'CONTACT', and 'PERMISSIONS AND ACCESS'. At the bottom of the profile, there are buttons for 'Edit Role' and 'Delete User'. The footer of the application contains copyright information and links to 'Privacy Policy', 'Terms of Use', and 'Terms & Conditions'. There are also links for 'Mac App', 'Windows App', and 'User Guides'.

EQ Web Application : List of Users

EQ Dashboard

The EQ Dashboard for a selected athlete provides an overview of the statistics for the Gait trials, Jumps and Hops uploaded on the current day or any other date selected from the calendar.

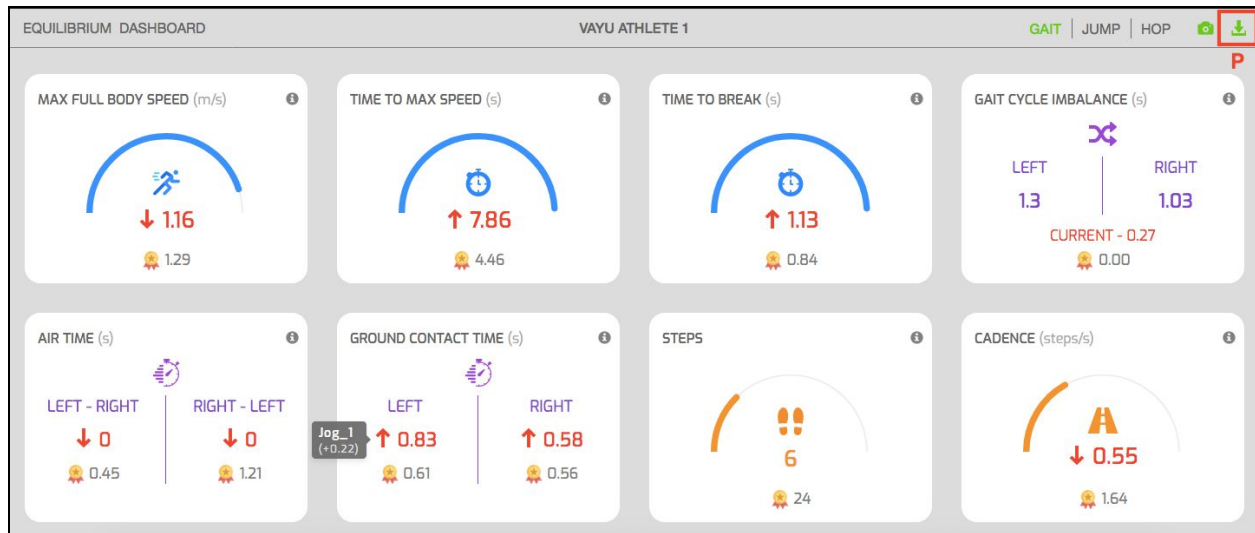


EQ Dashboard : Gait

The EQ Dashboard displays the following scores:-

1. **Daily Best ('A' in image above)**
 - a. Values of various metrics for the best gait trial, jump and single hop of the selected day.
 - b. The best gait trial is determined based on the Maximum Full Body Speed. The best jump and the best hop are determined based on the Jump Height.
2. **Historic Best ('B' in image above)**
 - a. The best score for each tile from all the trials of that category that made it as daily bests.
3. **Indicator of a difference between the Daily Best Score and Historic Best Score for each tile ('C' in image above)**
 - a. Hover over the daily value to view the exact difference.

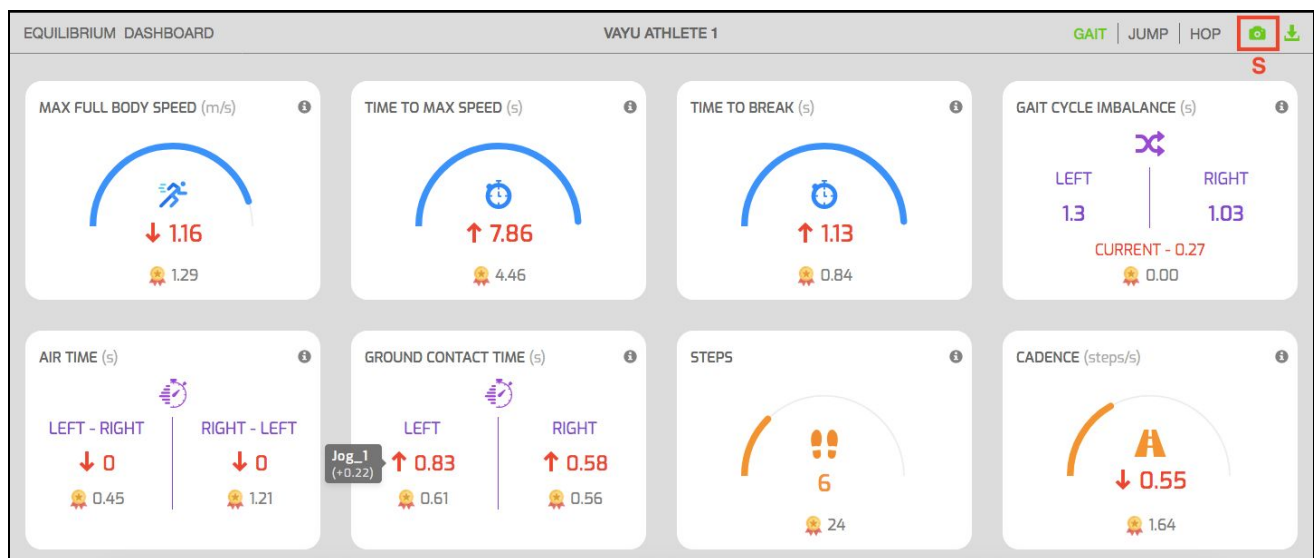
Downloading the Dashboard



EQ Dashboard : Downloading as PDF

In order to download all Dashboard metrics in a PDF file, click on the “Download Dashboard PDF” icon (‘P’ in image above).

Saving Dashboard Screenshots



EQ Dashboard : Saving a Screenshot

You can also save screengrabs of each section of the Dashboard on to your device for later use or sharing by clicking on the “Save a Screenshot” icon (‘S’ in image above). The screengrab is downloaded as a PNG file.

In order to analyze a trial in greater detail, click on All Trials. This will redirect you to the Trial Visualization Page.

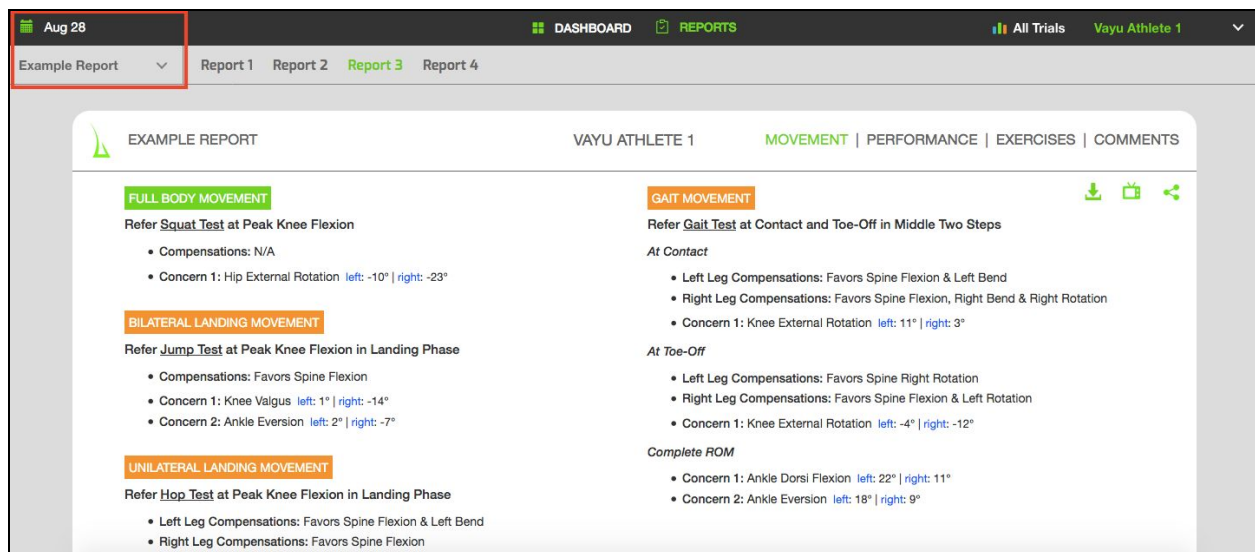
Use the Change Athlete dropdown on the right corner to switch between your athletes.

Viewing Reports

To view all the reports that have been requested for the selected athlete, select the Reports tab. At this point, the most recently generated report for the athlete will load.

You can view previously requested reports by changing the date in the calendar in the top left corner.

You can change the Report Type by selecting another vendor from the dropdown in the top left corner.



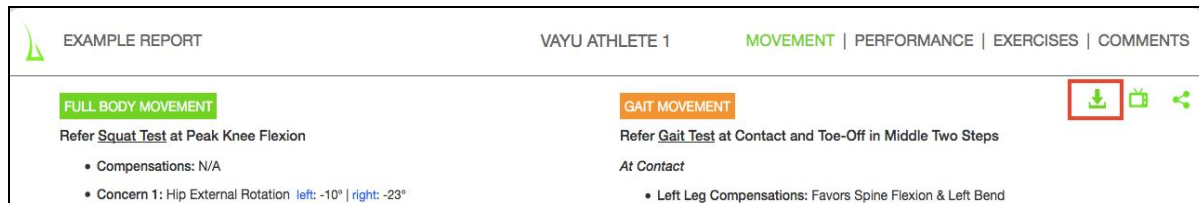
EQ Web Application: Viewing Reports

Depending on the Report Type/Vendor, you may see the following sections in a report:-

1. Movement - The movement diagnostic information.
2. Performance - The performance diagnostic information.
3. Exercises - The exercise recommendations to address the concerns.
4. Comments - A section to add additional comments.

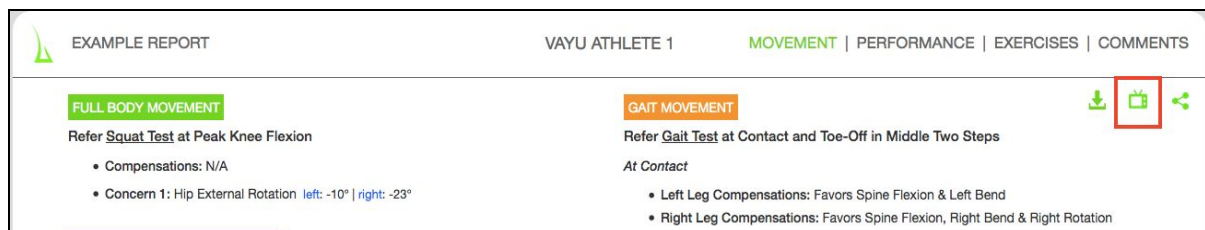
Furthermore, you can perform the following operations on a report:-

1. **Download Report** - Click on the Download icon to download a PDF version of the full report. You can optionally include or ignore the Exercises section and the Dashboard metrics for the day while downloading the PDF.



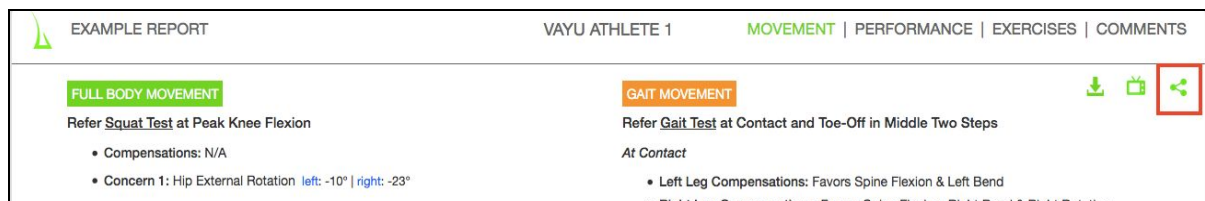
EQ Web Application: Download a Report

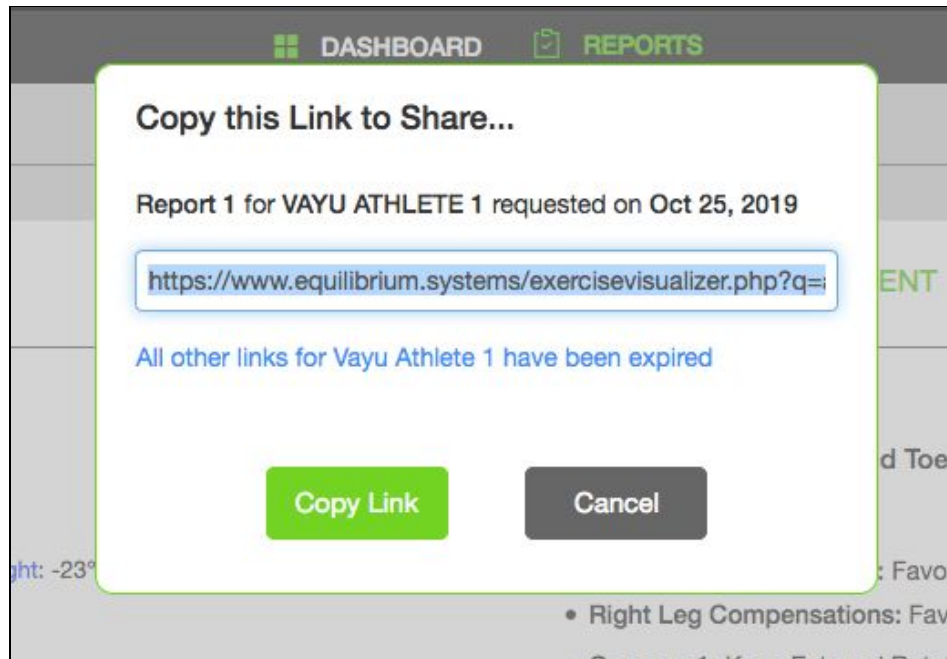
2. **View Report in the Exercise Visualizer** - Click on the View in Visualizer icon to view all the recommended exercises in this report on a playlist style interface - the EQ Exercise Visualizer.



EQ Web Application: View Report in Exercise Visualizer

3. **Share Report** - Click on the Share icon to get a shareable link for the exercises in the report. The link will lead to a playlist style interface - the EQ Exercise Visualizer - for a user to easily access their list of recommended exercises without having to log in to the web application.



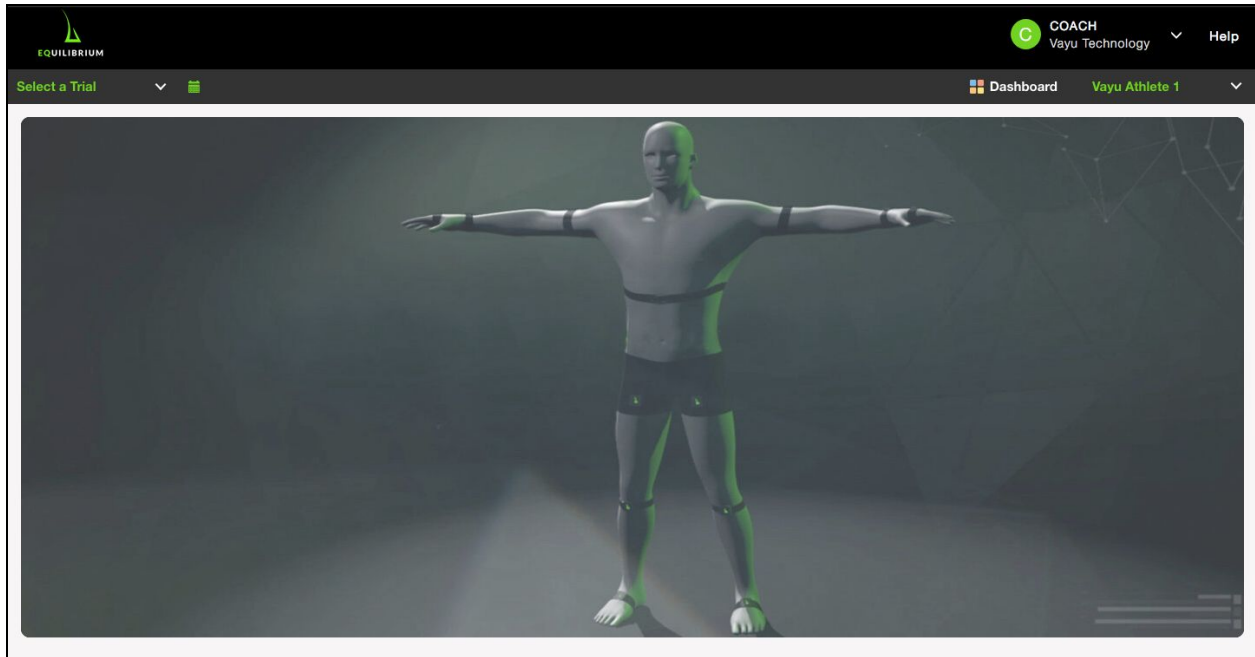


EQ Web Application: Share a Report

When you click on Copy Link, the link is copied to your clipboard. You may then paste it at another location for later use.

Trial Visualization Page

On landing on the Trial Visualization Page, select a trial using the drop down on the left side of the Actions bar.

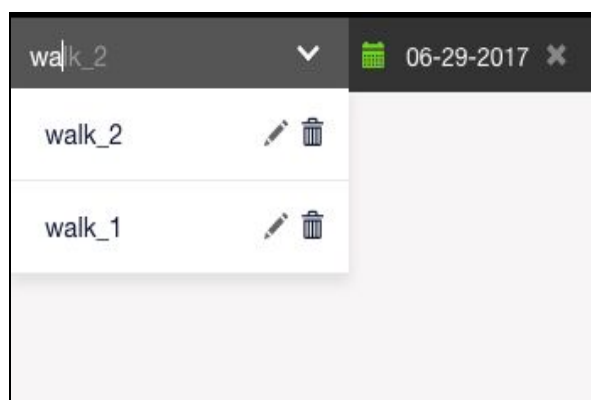
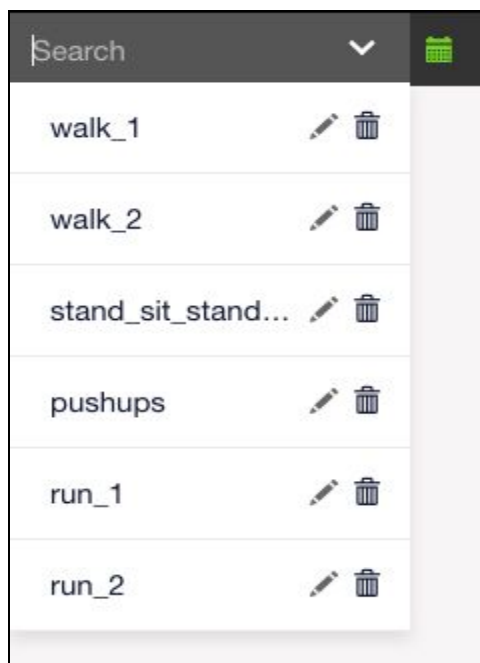


EQ Web Application: Select Trial Screen

Viewing Trial Details

1. Selecting a Trial

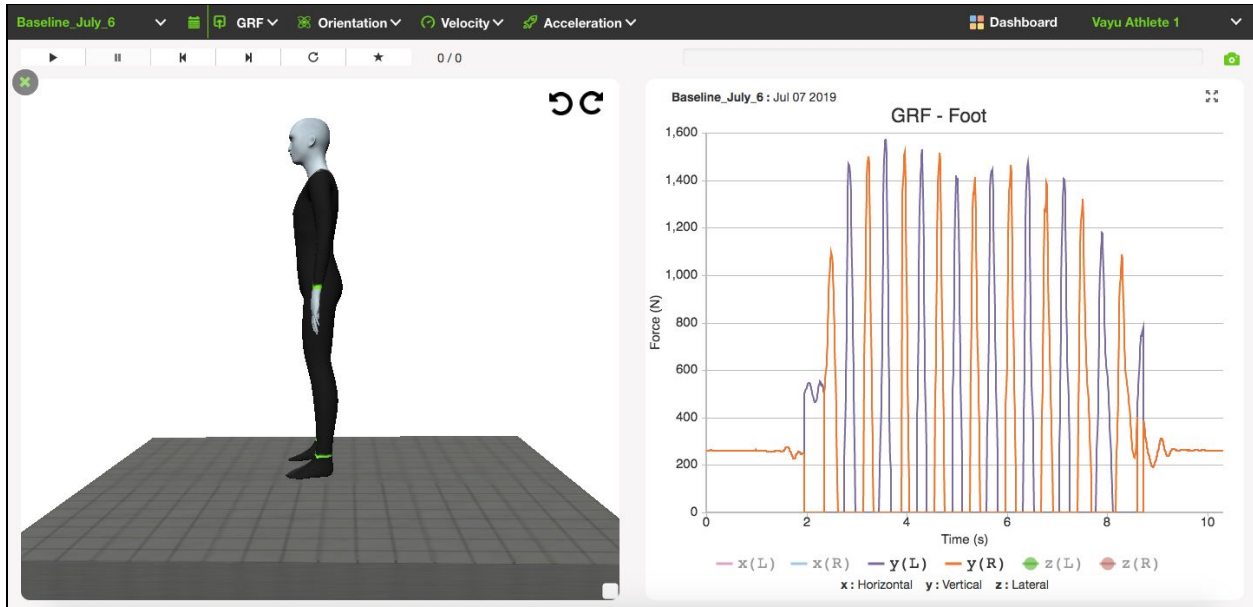
- Use the drop-down to select the trial that you want to analyze.
- These trials are all sorted by the date of trial, with the latest trial appearing at the top of the list.
- Use the calendar to filter out trials from a specific day.
- You can also hover over the trial name to see additional details about the trial.
- You can rename and delete your trials in this interface as well.
- You can close and reopen the list of trials to refresh the list.



EQ Web Application: Select Trial

2. Features

- The features computed for the selected trial appear on the bar next to the trial name.
- Click on any feature to view the details on the graphs.



EQ Web Application: Trial Visualization Page

The image above shows the GRF related details for the selected trial.

3. The EQ 3D Model

The EQ 3D Model provides a very comprehensive visualization mechanism on Elite systems. In effect you will be able to visualize the activity that you did in the real world. The 3D model provides a number of capabilities to make the experience even more effective.

- You can use the rotate buttons on the top right corner to rotate the model either clockwise or counterclockwise.
- You can use the progress bar to 'seek' the position of the model at a particular point in time or to define a start point enabling you to focus on a specific part of the trial. Clicking on a point on the progress bar when the model is paused also plots a [visual cue](#) at the corresponding point on the chart.
- The point of time (in seconds) is displayed to the left of the progress bar which will help you to map the current point of time to the graphical representation.
- The Controls Panel



- Play button : To play the 3D model
- Pause button : To pause the 3D model. On pausing the model, a visual cue is overlaid on the chart at the corresponding time instance.
- Step Forward and Step Backward buttons : To step the model forward or backward frame by frame. These buttons are enabled only when the model is paused.

- iv. Reset button : To reset the model to time 0. Also clears the visual cue from the chart.
 - v. Mark button : To mark a particular point in time. The said point will be marked on the progress bar, highlighted on the chart and added to the Marked [Points Table](#). Points can be marked when the model is playing or paused.
- e. The checkbox in the bottom right corner of the model controls the mobilization of the hip - select the checkbox to mobilize the hip and unselect the checkbox to lock it.

4. EQ Graphical Data

The EQ Graphical data provides a comprehensive graphical representation that can be used for a more detailed analysis. The interface provides you with a variety of features to allow you to view specific aspects of the trial such as (a) zoom into specific sections of the graph to expand on the specific phases of a trial (b) focus on specific aspects of a feature such as the force on the Y-Axis for the left leg in GRF data (c) click on any point on the chart to mark it or view the model at that particular instance of time.

The graphs interface allows you to do the following -

- a. Select and deselect the graphs that you want to see on the screen using the legends at the bottom of the graph
- b. The fullscreen button lets you open the graph on a wider screen.
- c. You can click and drag on the charts if you want to zoom into a particular section of the trials.
- d. When you are in the zoomed in mode, the pan button on the top right corner lets you scroll through your data and the refresh button next to the pan button will help you come back to start state.
- e. If the 3D model is available, click on any point on the chart to move the progress bar and the model to that particular point in time. If the model is paused, the visual cue will also be overlaid at the said point on the chart. If the model is not available (for e.g. in a Basic System), only the visual cue will be visible on clicking on a particular point.
- f. After clicking on a point on the chart, use the Mark button in the Controls Panel to mark it. This will highlight the point on the chart, mark it on the progress bar (if the 3D model is available) and add it to the Saved Points table.

Note:-

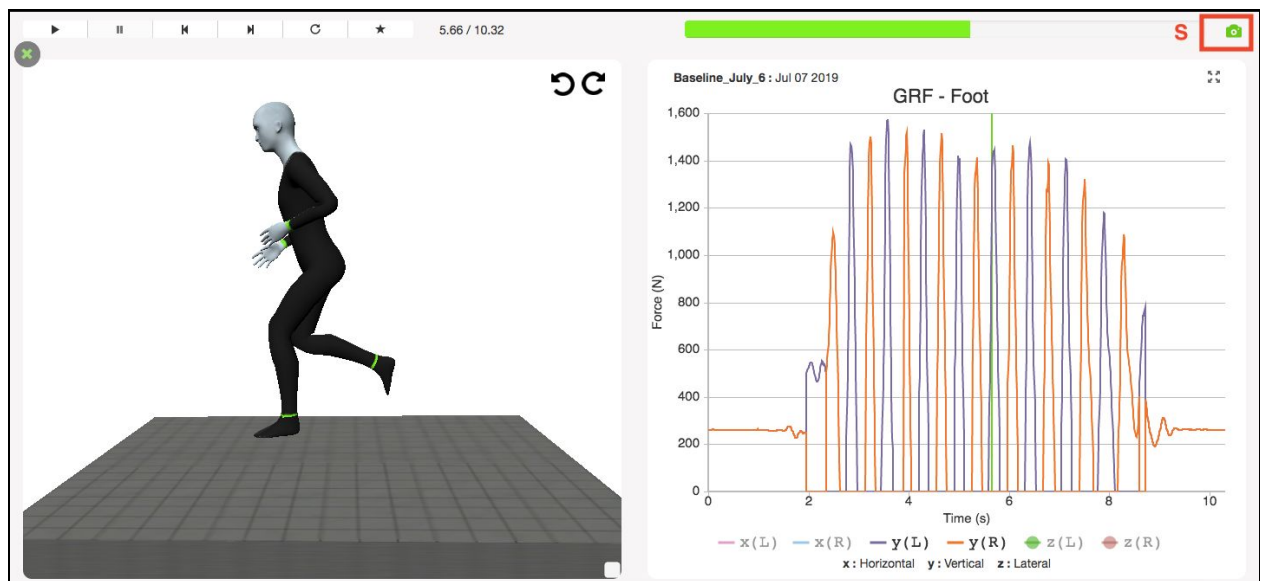
The EQ System provides graphical data for movement only until the point the subject follows the supported activity protocol. For points beyond the supported activity, although the 3D model will still provide the complete simulation, the graphs will be clipped and grayed out as shown in the image below:-



EQ Web Application: Clipped Data in Case of Unsupported Activity

5. Saving a Screenshot

You can save screen grabs of the 3D model and the loaded graph at a particular instance of time on to your device for later use or sharing by clicking on the “Save a Screenshot” icon (‘S’ in image below).



EQ Web Application: Saving a Screenshot on the Trial Visualization Page

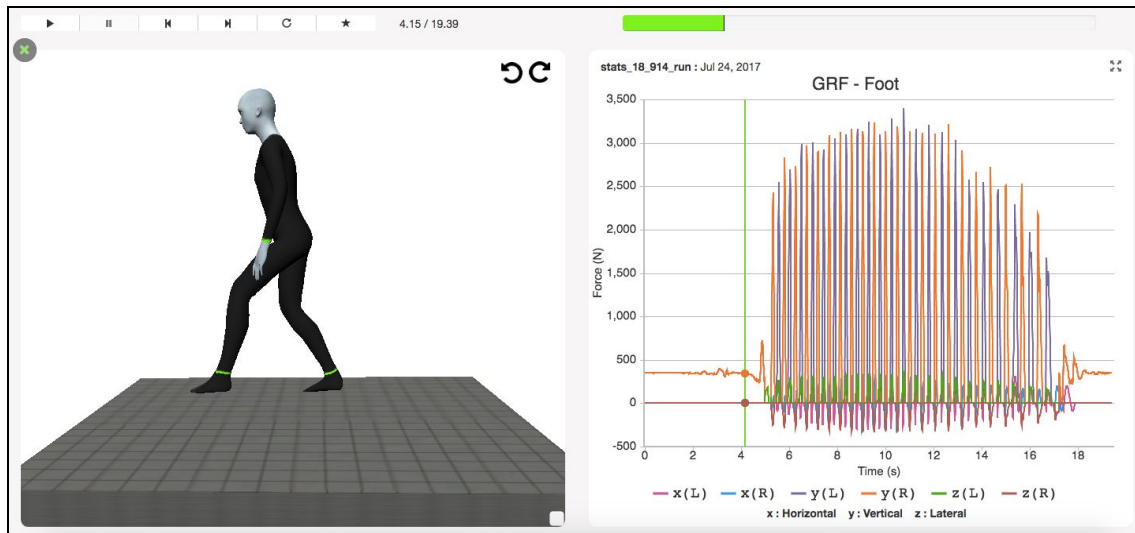
6. Phase Statistics

For certain categories of trials, the EQ Algorithm will break down the entire activity into distinct phases and each phase will have a set of metrics associated with it.

▲ PHASE STATISTICS							
Phase	1	2	3	4	5	6	7
Time Interval	5.65 - 6.05 s	6.05 - 6.28 s	6.14 - 6.65 s	6.65 - 6.8 s	6.77 - 7.31 s	7.31 - 7.63 s	7.63 - 8.13 s
Contact Foot	Both	NA	Both	NA	Both	NA	Both
Ground Time	0.40 s	NA	0.51 s	NA	0.54 s	NA	0.50 s
Full Body Air Time	NA	0.23 s	NA	0.15 s	NA	0.32 s	NA
Peak GRF	698 N	NA	800 N	NA	727 N	NA	682 N
Rate of GRF Development	1745 N/s	NA	1569 N/s	NA	1346 N/s	NA	1364 N/s
Vertical Velocity at Take Off	1.13 m/s	NA	0.73 m/s	NA	1.57 m/s	NA	NA
Jump Height	NA	0.07 m	NA	0.03 m	NA	0.13 m	NA
Reactive Strength Index	NA	0.57	NA	0.29	NA	0.59	NA

EQ Web Application : Phase Statistics for Repeated Jumps

7. The Visual Cue



EQ Web Application: The Visual Cue

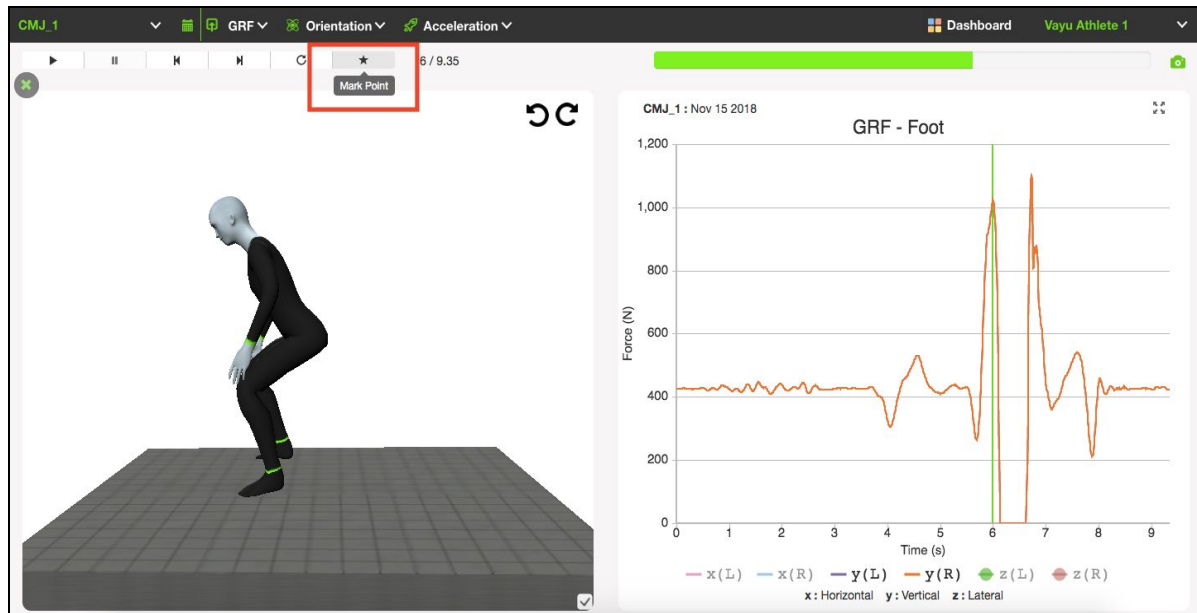
The visual cue is a green line that is overlaid on the graphs to establish a visual sync between the 3D model and the points on the graphs. In cases where the 3D model is not available, it is used to highlight a clicked point on the graph. The cue is visible in the following situations -

- When the 3D model is paused, the cue is overlaid at the corresponding point on the currently loaded graph.
- When you click on a point on the graph and the 3D model is paused, the cue is overlaid at the clicked point on the graph.
- When the 3D model is not available, the cue is overlaid on clicking on a point on the graph.

8. Marking a Point

Marking a point of time enables you to save it in a table for analysing values corresponding to it across various parameters. A point of time within a trial can be marked in the following ways -

- Click on the Mark button in the Controls Panel when the 3D model is playing or paused.
- Click on a point on the chart and click on the Mark button.
- You can mark a maximum of 5 points in a trial.



EQ Web Application: Marking a Point

9. Marked Points Table

<div> MARKED POINTS </div>			
<div> 0 / 5 Saved Points </div>			
<div> Click on to preserve a point for future analysis </div>			
Force (N)	3.25	4.38	5.96
x(L)	0.000	0.000	0.000
x(R)	-29.000	-52.000	0.000
y(L)	0.000	0.000	0.000
y(R)	2171.000	2276.000	1581.000
Select for a Region of Interest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EQ Web Application: Marked Points Table

The Marked Points table contains all the points in time within a trial that have been marked using the Mark Points button. It has the following features -

- a. Each column corresponds to a marked point of time.
- b. Each row corresponds to a data series in the currently loaded graph. For e.g. - the Marked Points table will contain a maximum of 6 rows when the GRF graph is loaded - x(L), x(R), y(L), y(R), z(L) and z(R). Similarly when an Orientation graph is loaded, the Saved Points table will contain 2 rows - Left and Right.
- c. A cell corresponding to a given row and a given column contains the value of a parameter at a given time instance for a particular data series. For e.g. - if the GRF Foot graph is loaded currently, a cell in the column 3.25 and row y(L) contains the value of GRF at 3.25 s on the left foot in the y-axis.
- d. The title of each column has 3 elements :-
 - i. The value of the time instance
 - ii. A trash icon - Clicking on this icon will delete the corresponding point from the set of marked points i.e. the corresponding column will be removed from the Marked Points table, and the markers corresponding to this point will be removed from the progress bar (if the 3D model is available) and the graphs.
 - iii. A Save Marked Point icon - The marked points for a trial are transient i.e. they will not be preserved once you leave the trial by selecting another one or leaving the page. In order to permanently save a particular Marked Point for a trial, click on the Save Marked Point icon. See more details in in the [Saving Marked Points](#) section below.
- e. The final row corresponding to each column in the Marked Points table contains a checkbox - select or unselect the checkbox to add or remove the corresponding point as a boundary for a [Region of Interest](#).

10. Saving Marked Points

MARKED POINTS			
3 / 5 Saved Points			
Force (N)	2.84	4.44	5.99
x(L)	58.000	-23.000	82.000
x(R)	-83.000	82.000	-44.000
y(L)	406.000	1019.000	604.000
y(R)	940.000	759.000	983.000
Select for a Region of Interest ⓘ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The marked points for a trial are transient i.e. they will not be preserved once you leave the trial by selecting another one or leaving the page. In order to permanently save a particular Marked Point for a trial, click on the Save Marked Point icon corresponding to the desired time instance in the Marked Points table.

Once a point is saved, it will be available in the Marked Points table every time you select the particular trial.

11. Region of Interest

TRIAL STATISTICS								
	Left	Right	Region 1 4.15 - 7.65 s		Region 2 4.15 - 10.75 s		Region 3 7.65 - 10.75 s	
			Left	Right	Left	Right	Left	Right
Avg Ground Time of Foot	0.162 s	0.149 s	0.144 s	0.144 s	0.130 s	0.128 s	0.118 s	0.117 s
Avg Swing Time of Foot	0.385 s	0.390 s	0.302 s	0.320 s	0.334 s	0.338 s	0.360 s	0.357 s
Avg Gait Cycle	0.547 s	0.539 s	0.446 s	0.464 s	0.464 s	0.466 s	0.478 s	0.474 s
	Left - Right	Right - Left	Left - Right	Right - Left	Left - Right	Right - Left	Left - Right	Right - Left
	Steps	Cadence steps/s	Steps	Cadence steps/s	Steps	Cadence steps/s	Steps	Cadence steps/s
Avg Air Time of Full Body	0.120 s	0.129 s	0.096 s	0.092 s	0.107 s	0.111 s	0.117 s	0.124 s
Pedometer	46	3.764	11	3.143	24	3.636	12	3.871

EQ Web Application: Statistics for Regions of Interest

The web application allows you to select a region within a trial and view all the available statistics (in the Trial Statistics table) for the selected region. In order to select a region :-

- [Mark the points](#) you wish to choose as the boundaries of a region.
- In the Marked Points Table, select the checkbox in the “Select for a Region of Interest” row for each of the desired points
- Once 2 points are ‘checked’ (say A and B), all available statistics are computed for the region bounded by A and B, and displayed in the Trial Statistics table.
- You may ‘check’ up to 3 points (say the third point is C) i.e. establish up to 3 regions of interest - A to B, B to C and A to C. At least 2 points must be ‘checked’ to form a region of interest.

12. Deleting and Renaming Trials

Trials can be deleted or renamed from either the athlete’s visualization page or by selecting a specific trial to take action on the Home Page.

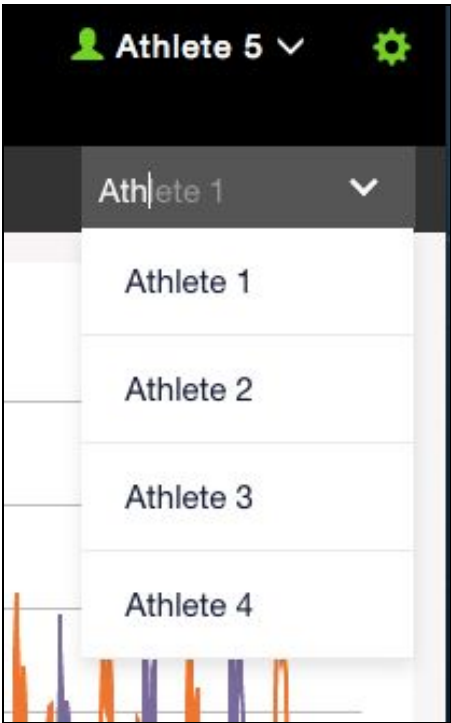


EQ Web Application: Deleting and Renaming a Trial

Please use the edit or delete icons next to the trial name to either rename or delete the trial.

13. Switching Between Athletes

Use the Change Athlete dropdown on the right corner to quickly switch between your athletes.



EQ Web Application : Change Athlete

Appendix

Appendix A: Troubleshooting

The Vayu Technical Support team will help you resolve problems that you might run into as you use the EQ product. Below are some potentially common scenarios that you may run into and some suggestions on how to resolve them.

Sign-In Failure

In the event of failures in the Sign-In process first confirm that your connection to the internet is operational and you have used the correct combination. It is possible that you might have disabled cookies on your browser. If that is the case please ensure that cookies from <https://www.equilibrium.systems> can be stored on the system.

Athlete or Trial data rendering is slow

Given the quantum of data that is being pulled into the system at the start, it is possible that loading the Athlete's data is slow. Please wait until this first time load is completed after which you should not see this behavior as much.

Data from Features are missing

Each trial such as a run, squat, jump is different in nature and consequently the kind of data that is generated varies. This data in turn acts as the input for the various characteristics being computed and portrayed. EQ handles the Ground Reaction Forces (GRF), Orientation, Velocity and Acceleration. Depending on the nature of the trial (essentially the category of activity) you might not see some of the above features. Please refer to the information pertaining to the Activity Roster to determine if there is a problem.

Having said that, please do not hesitate to contact the Vayu Technical Support for clarifications and information you may want with regards to these features.

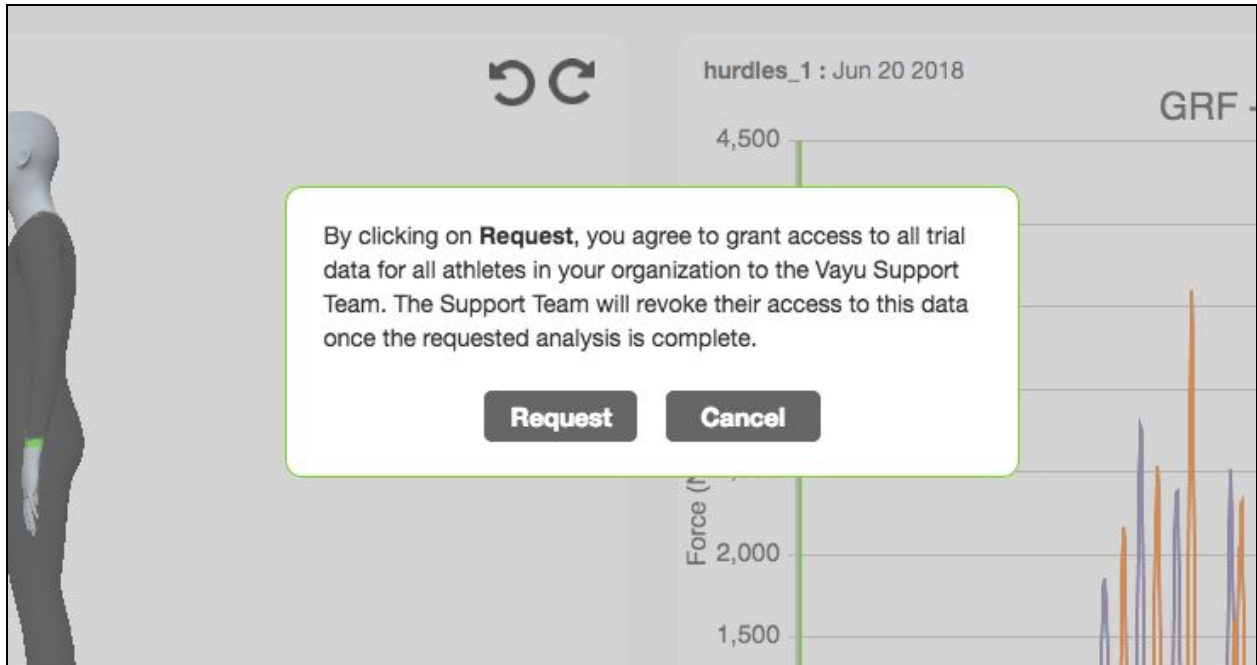
Requesting Support

In order to request the Vayu Support Team to analyze your data, should you feel that certain results do not appear as expected, click on the Request Support Icon.

Please note that by requesting support, you agree to allow access to all trial data from your organization to the Vayu Support Team for the duration of the support request.



EQ Web Application: Request Support Button



EQ Web Application : Request Support Dialog

Appendix B: User Permissions

The EQ System manages access and operations using a set of permissions which are commensurate to the operations that the user is required to perform.

Data Visualizer	This user can view the reports/graphs for the data that belongs to them and the users in their hierarchy. This permission is the minimum requirement to grant a user login access to the system.
User Manager	This user can create, update, delete (deactivate) a user in the organization under their hierarchy. This user can assign a number of permissions to the user being managed. This user can assign additional managers/ coaches to the user subject to restrictions of hierarchy.
Org Admin	The user can allocate any capabilities including the org wide specialized capabilities.

Appendix C: User Roles

Role	Required/Default Permissions	Optional Permissions
Athlete	-	Data Visualizer License Manager
Coach	Data Visualizer	User Manager License Manager
Both	Data Visualizer	User Manager License Manager