User Manual

Made for iPhone

MADE FOR ANDROID

Welcome!

Congratulations of your purchase of a gFlight V2,

You have now joined the community of gFlight members who are all benefiting from the most affordable and accurate jump device on the market.

At Exsurgo.us we value your feedback, please contact us below with any questions or concerns you may have regarding the gFlight:

sales@exsurgo.us

Exsurgo ZenDesk LINK for additional questions & answers

Contents

What's in the Box?

The gFlight is comprised of two wireless bluetooth units (white)

Each unit has a silicone protective sleeve that fits snug around each unit (red)

Batteries are no longer provided do to shipping restrictions

Initial Setup

Picture 1 is the *display* component. This component has a power switch (on / off), the display screen for jump metrics and a sensor

Power switch

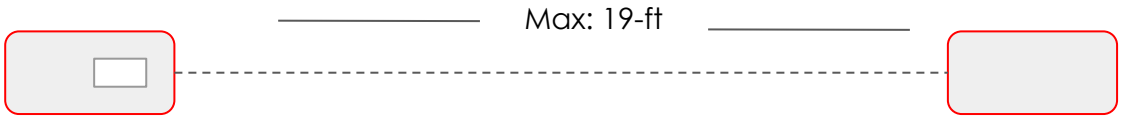
Picture 2 simply acts as a *sensor*. As you will see in the upcoming pages, the sensors are quite small and proper alignment is key for best use

Power switch

Initial Setup

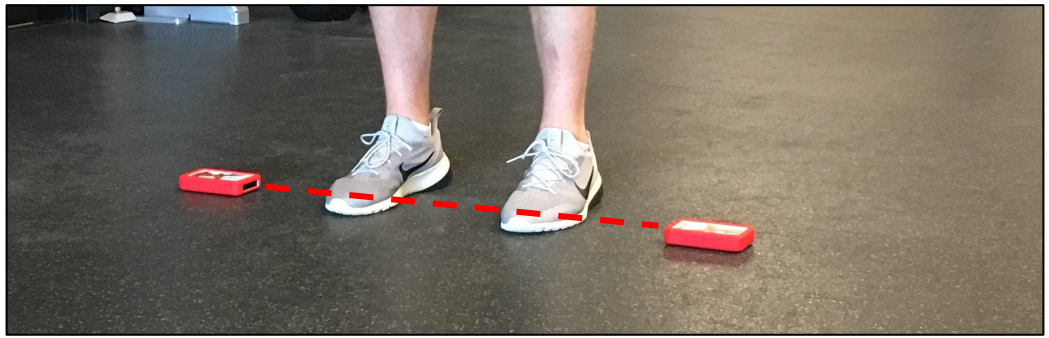
The gFlight V2 works by using micro-sensor technology and laser beams so both units can talk to one another, making the gFlight V2 a completely wireless device

Distances of up to 19-feet can be used with full battery power



Proper Jump Alignment

Line up your **pinky toes** with the sensors. You may want to take a small hop before you take your first jump. This will test to make sure the sensors are lined up properly and the metrics are appearing on the display unit

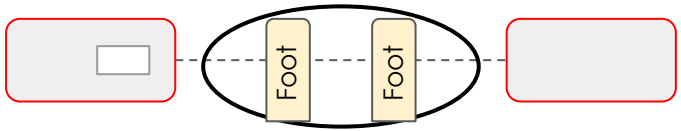


The gFlight's sensors need to be free of all obstructions

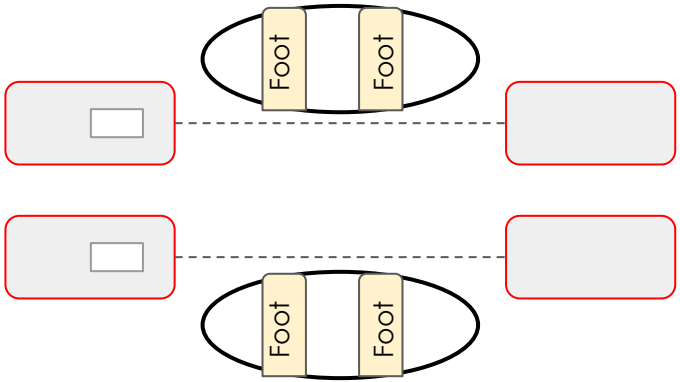
Proper Landing Alignment

Landings need to be consistent. If you land outside of the sensors, the jump will not register. We have found that a couple of practice jumps or adding a visual landing marker can help limit the error.

Optimal Landing



Not Optimal Landing



Welcome - gFlight App

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First download the “gTechAMS” app in the iTunes App Store or Google Play Store

iOS download here

Android download here

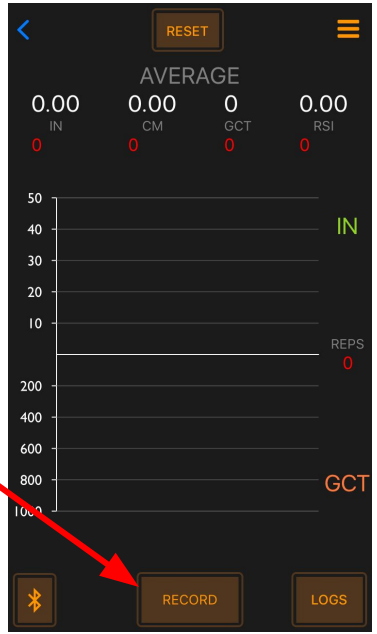
Bluetooth Pairing - make sure the gFlight is within range and your phone’s bluetooth is turned on, open up the app and click on “tap to connect device”, the app will begin to scan for available devices, click your device, once paired the app will take you to the data recording screen

Basic App Guide

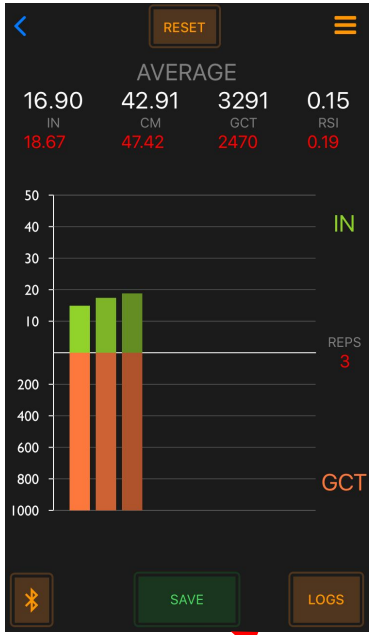
Click to begin

Choose your device

Once the athlete is in proper position, click record

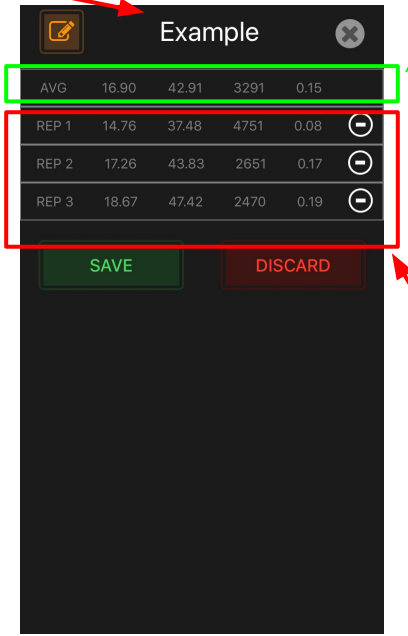


Basic App Guide



Click to save jumps

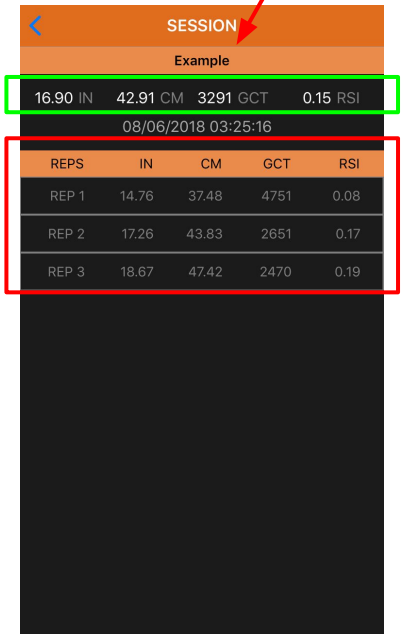
Type in athlete's name



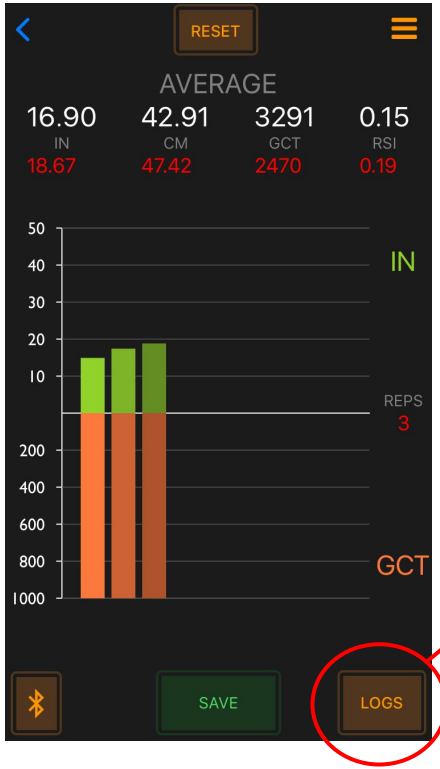
Average metrics for all jumps

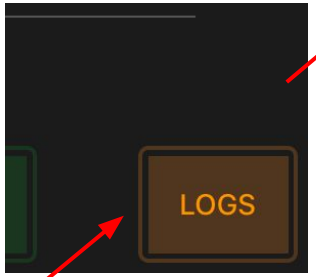
Metrics for each jump

Find athlete's file under "LOGS"

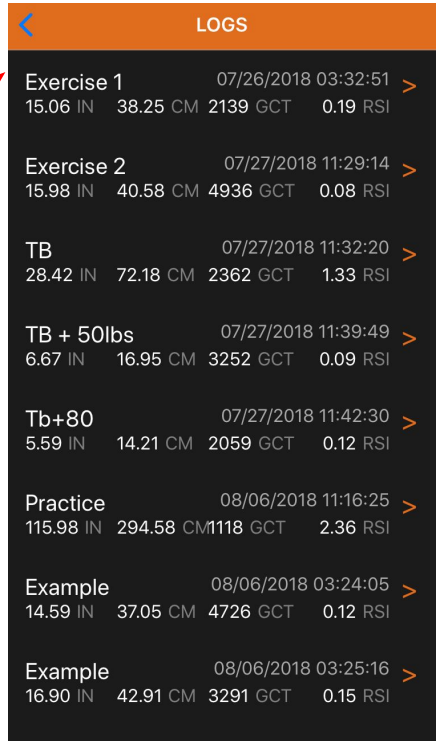


Basic App Guide - Storage





Here you can store all of your athlete's jumps under "LOGS"



gFlight Performance Metrics

The gFlight will provide you with 4 metrics:

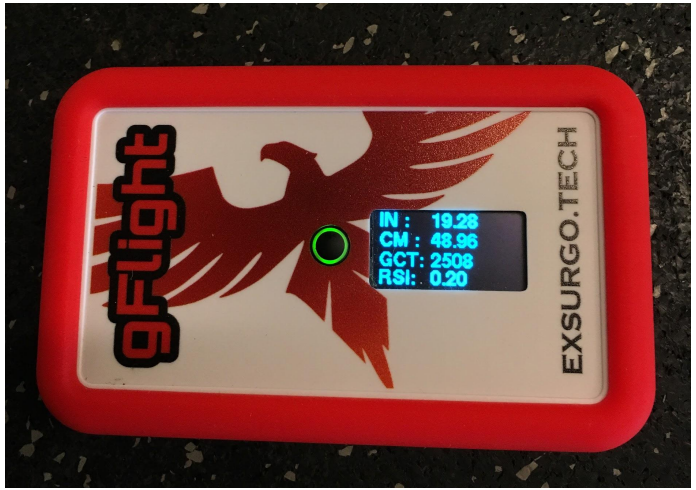
IN = Jump Height in Inches

CM = Jump Height in Centimeters

GCT = Ground Contact Time (ms)

RSI = Reactive Strength Index

Each metric will be explained in depth on the following pages.

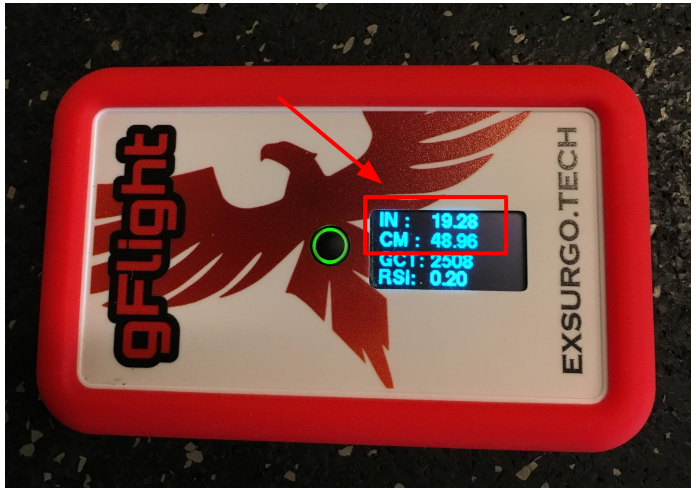


Jump Height

The gFlight measures the time the athlete is in air. Time in air is measured in milliseconds (ms). It is measured from the time the athletes foot leaves the sensor's beam to when it comes back into contact with the sensor's beam (beam disruption).

Time in air is then used to help calculate jump height which is then displayed as inches **(IN)** or centimeters **(CM)**

*Jump height is most accurate when takeoffs and landings are consistent in terms of the athlete's **foot position**.

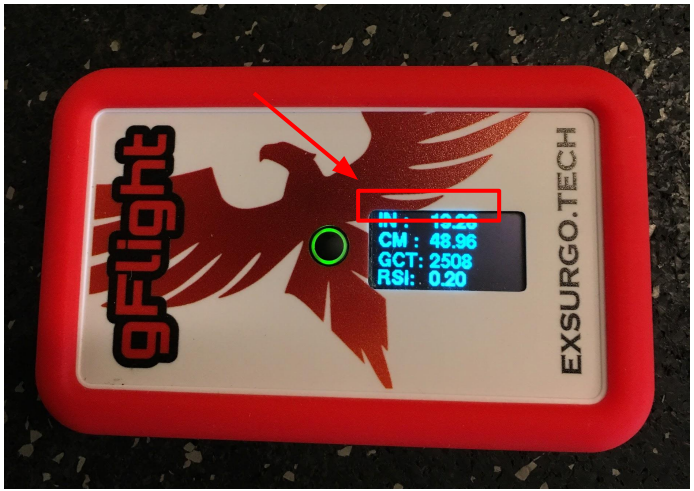


Ground Contact Time (GCT)

GCT is the length of time one's feet are on the ground preceding the jump.

This metric is typically only useful for continuous movements (i.e depth jumps, hops, or bounds). GCT will not be useful for a single jump.

Drop GCT Jump



Reactive Strength Index (RSI)

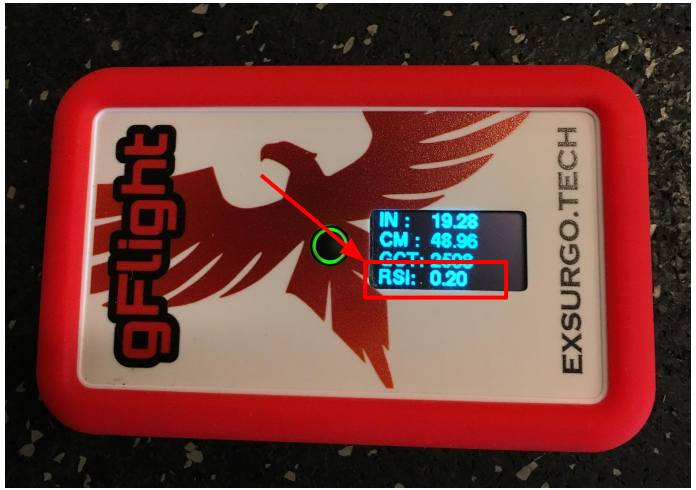
RSI is derived from ground contact time (GCT) and jump height. It is a composite score used to measure the level of “reactive strength”.

Typically a higher RSI will yield a more explosive athlete

It was developed at the Australian Institute of Sport and more information can be on the web (link below).

RSI = Jump Height / GCT

Read more about it here at *Science for Sport*



gFlight Best Practices - Review

The gFlight is best used indoors (no sun interference from outside)

The gFlight needs to be lined up properly (sensors facing each other)

The gFlight metrics will be best if landings and takeoffs are controlled.

The gFlight needs 6 AAA batteries, 3 in each unit to function

The gFlight's sensors need to be free of all obstructions

Athlete Testing & Tracking

Vertical Jump Testing- the gFlight can be used as a simple and effective way to assess an athlete's vertical jump; daily, weekly, or monthly, you get to decide

Readiness Testing- daily readiness testing can be done using the gFlight, simply record the athlete's jump height or RSI and track trends over time , this can tell you if the athlete is in a "ready to train" state, major deviations from day to day may indicate overreaching or fatigue

Athlete Testing & Tracking

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Force-Velocity Profile Testing- using the JB Morin Force-Velocity profile generator (or other FVP generator) you can input jump height into the data sheet, along with other anthropometric measurements the generator will tell you if your athlete is force, or velocity deficient to help the coach build a better, more individualized program

Percent Drop-Offs (Fatigability)- percent drop-offs in jump height can be assessed using the gFlight, first obtain a baseline jump height for the day, next have the athlete jump before each set of a given exercise, if their jump height has significantly decreases this would indicate that the athlete has fatigued and the exercise should be terminated, or the load decreased

Athlete Testing & Tracking

EXSURGO

Power Test- this test is used to determine an athlete's ability to produce and maintain power, this can be done via a simple power maintenance calculation

Have the athlete jump 15 consecutive times, record each jump with the gFlight app. Take the average of the first 5 jumps **(J1)** and the average of the last 5 jumps **(J2)**

Power Maintained (PM %) = J2 / J1

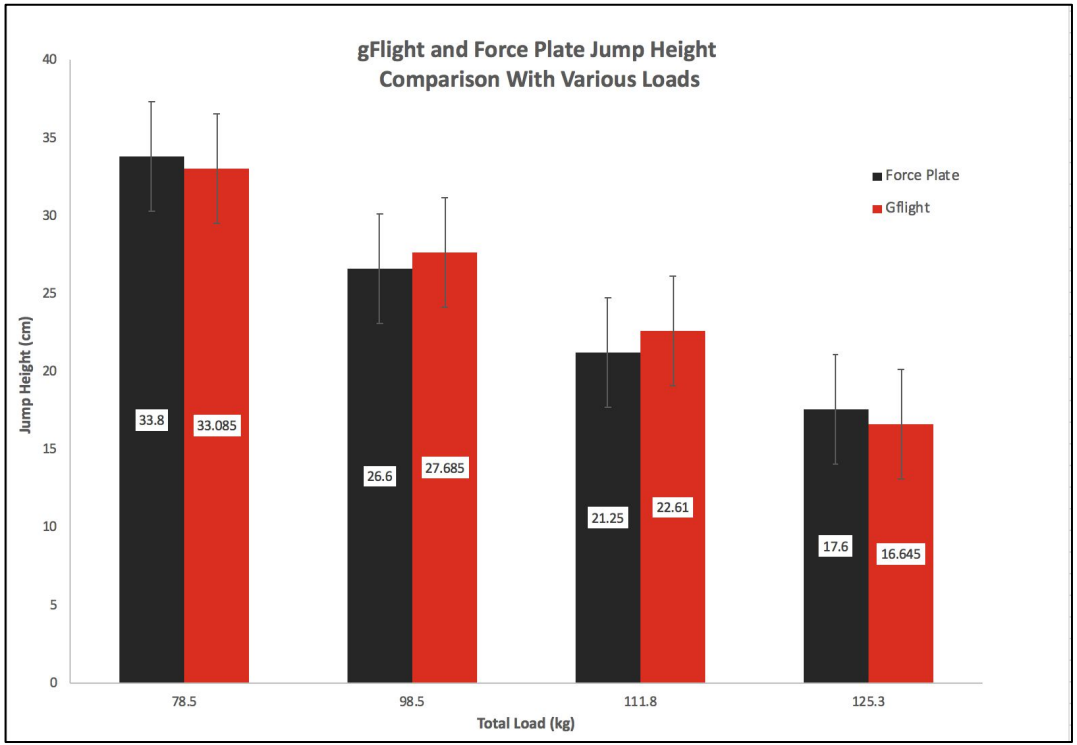
This percentage represents the athlete's ability to maintain power overtime

This test can be modified for any number of jumps. Adjust J1 and J2 accordingly to be equal sized blocks when calculating each average.

Third Party Testing - Force Plate

The gFlight has proven time and time again to be a valid and reliable product. When compared to state-of-the-art force plates the average difference is 1.03 cm

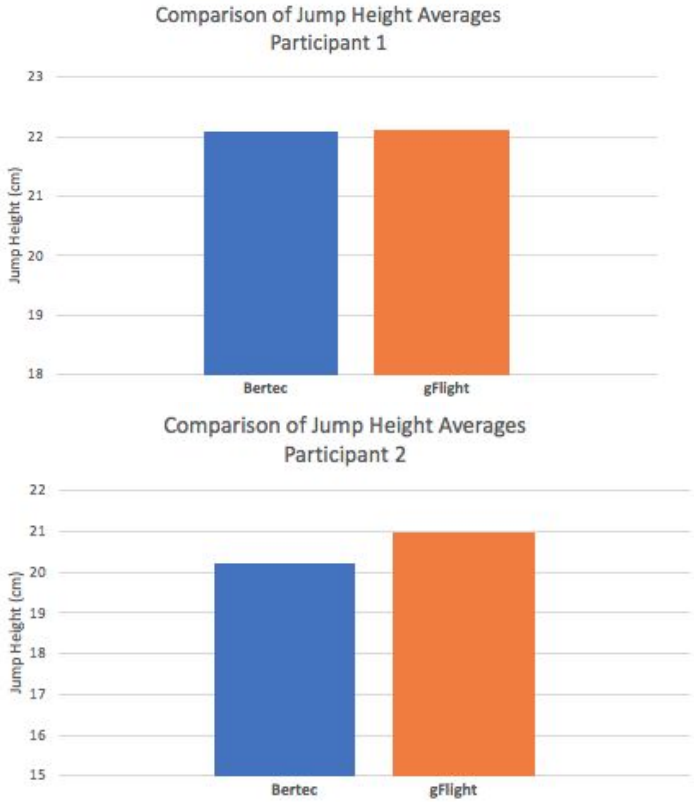
Click here to see the study



Third Party Testing - Reliability

The gFlight has been compared to the industry standard of force plates to validate the accuracy and reliability of jump height. gFlight was on average less than a 1 cm difference in jump height over the course of 200 jumps over ten days.

Click here to see the study



Troubleshooting

99% of the time the issue is the batteries. Please ensure that you have new batteries in the unit and they are properly placed in the units.

The gFlight is a simple and easy to use product. If you are having trouble connecting your gFlight to the app turn the power off on both units, and turn it back on

If you are still having trouble connecting to the app, check to make sure that your phone's bluetooth is turned on and is within range

If problems persist, please contact support@exsurgo.zendesk.com

Frequently Asked Questions

Where can I access the assessment sheets to test my athletes?

- The assessment sheets can be downloaded here

How much will shipping cost?

- Find out here

Does the gFlight measure force?

- No it does not measure force, more information here.

gFlight Specifications

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Measurement Specifications

Optimal Distance	36” inches
Maximum Distance	19-feet

Technical Specifications

Battery	(6) AAA
Interface	Bluetooth
Weight (display) Weight (sensor)	
Dimensions (both)	

Warranty

The gFlight has a warranty against production defects. If you receive the gFlight and it doesn't turn on, we will take back the old one and send a new one once we go through troubleshooting.

The warranty will be voided if the gFlight is broken through misuse.

Misuse: If you smash it, jump on it, slam it, drop a weight on it, dunk it in water, take it apart, blow it up, launch it into space, we do not cover that. We will take back any unit that fails to function so long as there are no visible signs of any of the above. Just email us at support@exsurgo.zendesk.com and we will go through the process. Accidents happen and we understand that, but the gFlight is in a highly volatile environment and will be subjected to some harsh abuse. Treat it kindly.

Thank You For Choosing the gFlight

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Get Social With Us!

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