Fingerprint Process Speed and Fingerprint Match Rate

Biometrics is a probabilistic science. There is a fingerprint match rate threshold value set by the system Super-Administrator within the OnTime app,

if the percentage match crosses that value it is called a 'match', and if it does not it is a fail or non-match.

Capture and extraction also change with every presentation (presentation means every time fingerprint is placed on the fingerprint scanner). A user may place his fingerprint differently. Also, with seasons (wet in summers, dry in winters) the capture may be of different quality. Each fingerprint capture results in a different template, variation might be small, but it is there. Hence it is not necessarily true that you will get a match every time.

There can be a multitude of reasons why you are not getting a match but if fingerprint quality is not inherently bad, try reregistering as a first process in resolution.
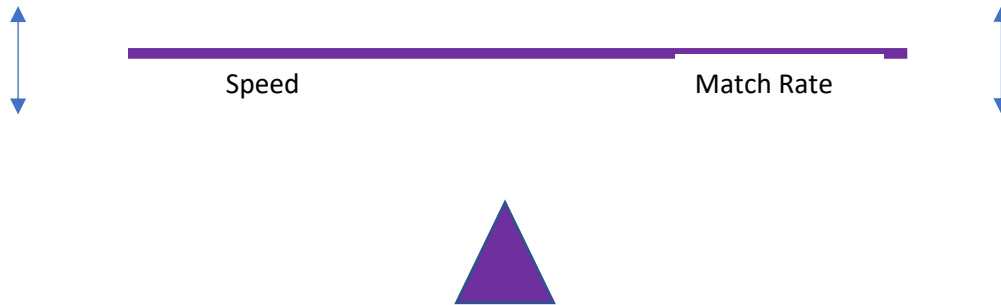
Fingerprint Process Speed

The OnTime software will in most circumstances complete the fingerprint matching process in less than 2 seconds, often under 1 second. This depends on the size of the user fingerprint digital template database within the OnTime app. The bigger the database the slower the matching time.

End-to-End process, including required actions by the user and OnTime app notifications will take 4-8 seconds per user event
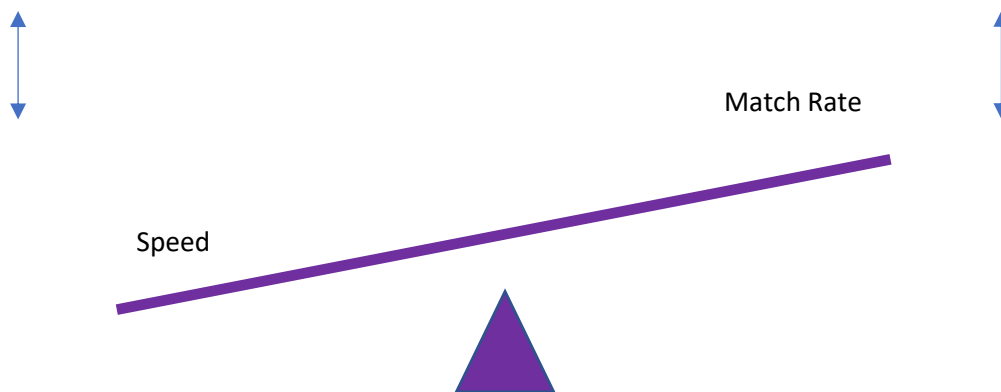
Fingerprint Match Rate

The Ontime software has a variable match rate that can be set within the super-administrator setting of the OnTime app. It is recommended that this is set to a minimum of 70%
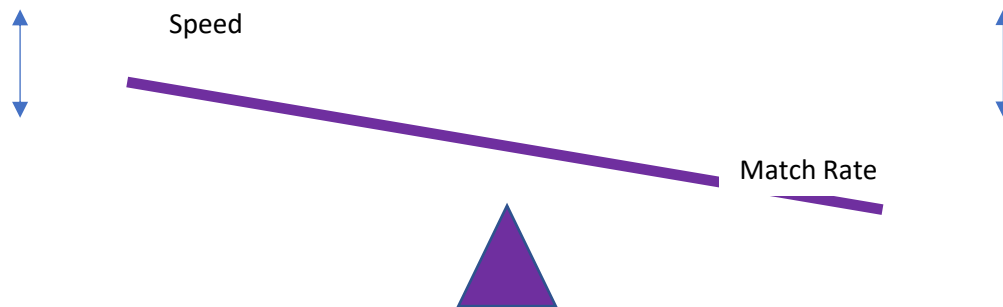
Speed Vs Match Rate

- Should the requirement be more accuracy of fingerprint match or less chance of a mismatch then the match rate should be increased in the Super Administrator settings within the OnTime app.

Consequence of change:

- More chance of failed reads or non-matches

- Less chance of mismatches

- require the users to more diligent in placing their finger on the reader

- Slower Fingerprint Process Speed

- User will need to reregister the fingerprint when they encounter multiple fail reads

$\Rightarrow$ Should you require quicker fingerprint process speed then the match rate should be decreased

Speed

Match Rate

Consequence of change:

- Quicker Fingerprint Process Speed

- The chance of a failed of non-match will be decreased

- The chance of a user mismatch will be increased

Note: The Ontime app will process 4-7 users per minute depending on configuration and location.

For more advice please contact your ClockedIn team on 0845 4 903 901