

Qpoint Calculation



- Max 100 Qpoints achievable per session independent of workout duration and number of steps in the workout.
- Qpoints is achievable when:
 - HR profiles: During all workout
 - Power profiles: During all workout
 - Tabata session: During Work time excl. raise time (first 20 seconds of the Work time is excluded, with a minimum of 50% of the workout time calculated)
 - HR Tracking: During all workout
- Qpoints achieved during the workout are calculated continuously every second (as a Qpoint-fraction) based on how close Exerciser's Actual Value is to *Actual Target* (Dev):
 - HR profile: $\text{Actual Target} = \text{Target "line" between current Step Target and previous Step Target}$
 - Power profile: $\text{Actual Target} = \text{Target}$
 - Tabata profile: $\text{Actual Target} = \text{Target for Work time}$

$$\text{Qpoints} = \text{maxQpoints} * (\text{time in DevZone1} * 1.0 + \text{time in DevZone2} * 0.6 + \text{time in DevZone3} * 0.2)$$

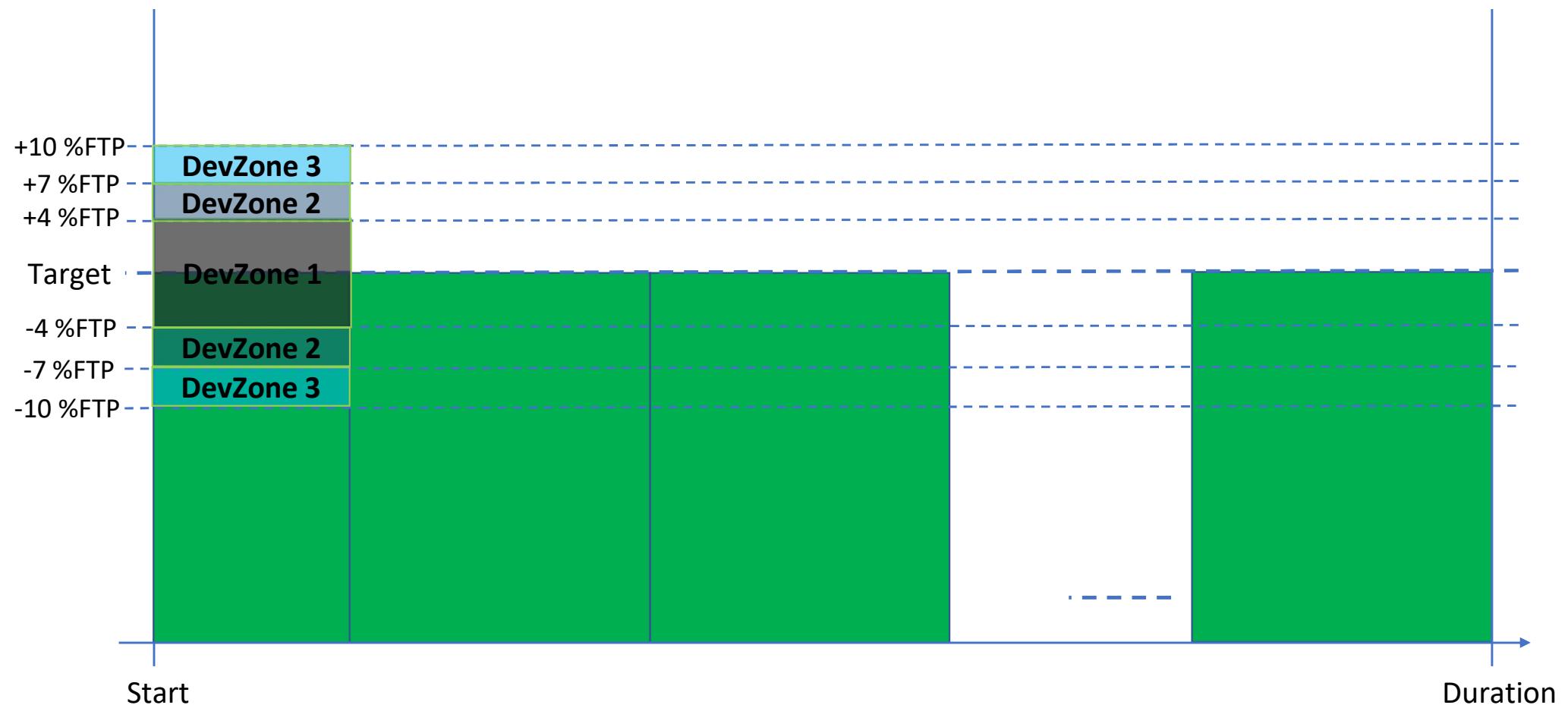
where

	HR profile	Power profile	Tabata profile
DevZone 1 =	$-1\% \text{HR} < \text{Dev} < +1\% \text{HR}$	$-4\% \text{FTP} < \text{Dev} < +4\% \text{FTP}$	$-4\% \text{HR} < \text{Dev} < +4\% \text{HR}$
DevZone 2 =	$-3\% \text{HR} < \text{Dev} < -1\% \text{HR}$ $+1\% \text{HR} < \text{Dev} < +3\% \text{HR}$	$-7\% \text{FTP} < \text{Dev} < -4\% \text{FTP}$ $+4\% \text{FTP} < \text{Dev} < +7\% \text{FTP}$	$-7\% \text{HR} < \text{Dev} < -4\% \text{HR}$ $+4\% \text{HR} < \text{Dev} < +7\% \text{HR}$
DevZone 3 =	$-5\% \text{HR} < \text{Dev} < -3\% \text{HR}$ $+3\% \text{HR} < \text{Dev} < +5\% \text{HR}$	$-10\% \text{FTP} < \text{Dev} < -7\% \text{FTP}$ $+7\% \text{FTP} < \text{Dev} < +10\% \text{FTP}$	$-10\% \text{HR} < \text{Dev} < -7\% \text{HR}$ $+7\% \text{HR} < \text{Dev} < +10\% \text{HR}$

- HR Tracking: $\text{Qpoints} = \min(100 \times (\text{dur}/45) \times \text{multiplier}, 100)$
- Qpoints is displayed as rounded integer values (79,5 Qpoints displayed as 80 Qpoints)
- Thumb-up on step transition, if 80% of max Qpoints for the step has been achieved during the step

Power – Qpoint Calculation

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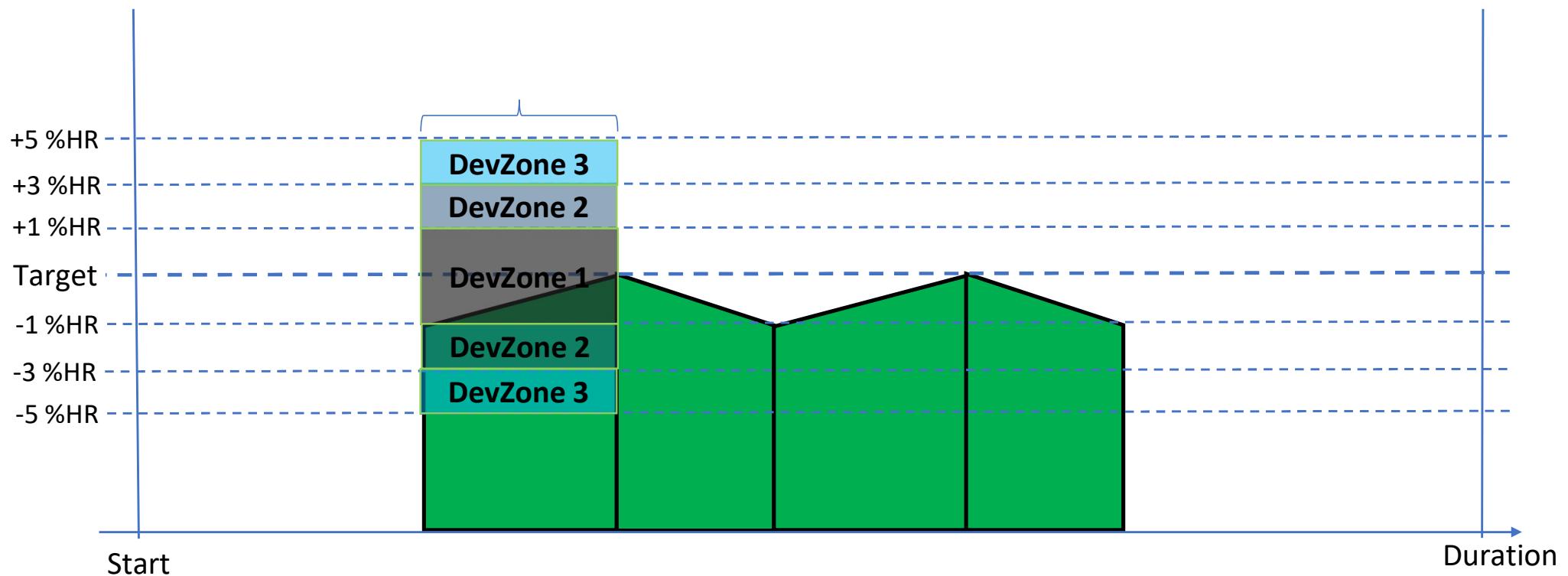
Tabata – Qpoint Calculation

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Heart Rate – Qpoint Calculation

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Heart Rate Tracking – Qpoint Calculation

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