

"Melco_HTML5RE" JIT on Image Test Scope & Contents

1 Javascript Performance Benchmark

1.1 Websites for testing

1.1.1 SunSpider - SunSpider, a JavaScript benchmark. This benchmark tests the core JavaScript language only, not the DOM or other browser APIs.

1.1.2 V8 Benchmark Suite - A suite of pure JavaScript benchmarks that used to tune Google V8 engine. The final score is computed as the geometric mean of the individual results to make it independent of the running times of the individual benchmarks and of a reference system.

1.2 Test Results

JIT on/off performance benchmark

Test Site	with JIT	w/o JIT	Remark
SunSpider 0.9.1	11076ms	23862ms	The score is the lower the better
V8-version7	80.8	25.4	The score is the higher the better

2 Javascript Function Testing

2.1 Simple Samples

2.1.1 Loops

2.1.2 Bouncing Ball

2.1.3 Date-Time

2.1.4 Background Color Change

2.2 Web Workers

2.2.1 A sample with JQuery

2.3 Canvas

2.3.1 Canvas Animation

3 API Verifying

3.1 setScriptMaxTimeOutInLoop

4 Online Complicated Websites With lots of Javascripts

4.1 [Yahoo JP](#)

- 4.2 [Adworks](#)
- 4.3 [Mercedes](#)
- 4.4 [ESPN](#)
- 4.5 [HTML5test](#)

5 DIBA Contents

6 Conclusion

- 6.1 According to the benchmark result, JIT on image got almost double performance improvement than JIT off image.
- 6.2 The change of JIT didn't cause any abnormal error. We verified these by running javascript code and loading several complicated websites that contains lots of javascript. API that related to javascript also wasn't impacted.
- 6.3 DIBA contents are displayed same as JIT off image.