



SRP Latency Update

for Redacted@
Friends of Low Latency
2017-05-19

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DX0099

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Agenda

- Google vs Bing findings
- Measuring the Bing gap going forward
- Projects under way that may help close the gap
- Additional investigations

Google

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Recap: FoLLy Workstreams

go/foolly-roadmap-projects

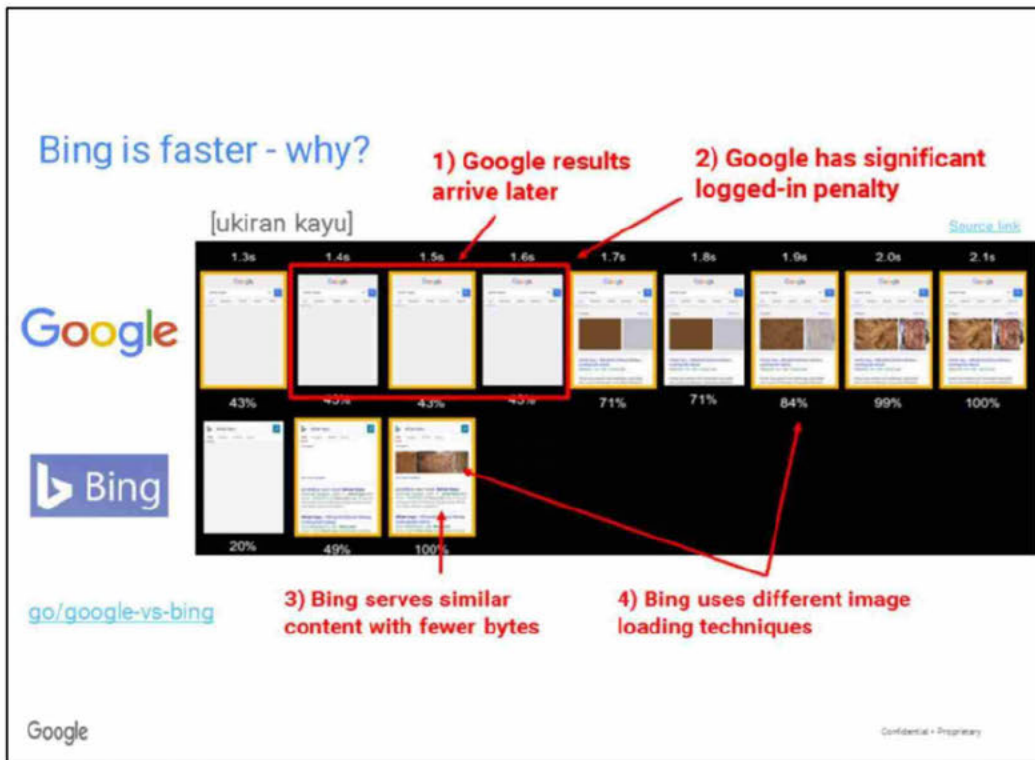
CURRENTLY PLANNED / STAFFED						
Rank	Project	HEAD Impact (ms)	TAIL Impact (ms)	Confidence (H,M,L)	Staffing	Expected impact
1	Confidential	O(1000)	O(100)	H	5	Multiple image-inlining improvements.
2		O(100)	O(100)	H	6	~200ms mean SRT+AFT on AQSA queries, in 2 quarters.
3		O(10)	O(100)	M	2.5	~50ms mean SRT+AFT on all queries, in 2 quarters.
4		O(100)		M	3	Learn results of initial experiments.
5		O(100)	O(100)	L	1	Proof-of-concept demo. Potentially high impact, but lower confidence
6			O(100)	L	1	Proof-of-concept demo. Potentially high impact, but lower confidence
7		O(100)	O(10)	H	5	~150ms mean SRT+AFT on IGSA queries this quarter.
8		O(100)		H	2	Gradual fixing of well-known head queries.
9			O(1000)	H	<1	Gradual dialog with slow-backend teams, possible improvement?
10					tbd	
11					tbd	

Google

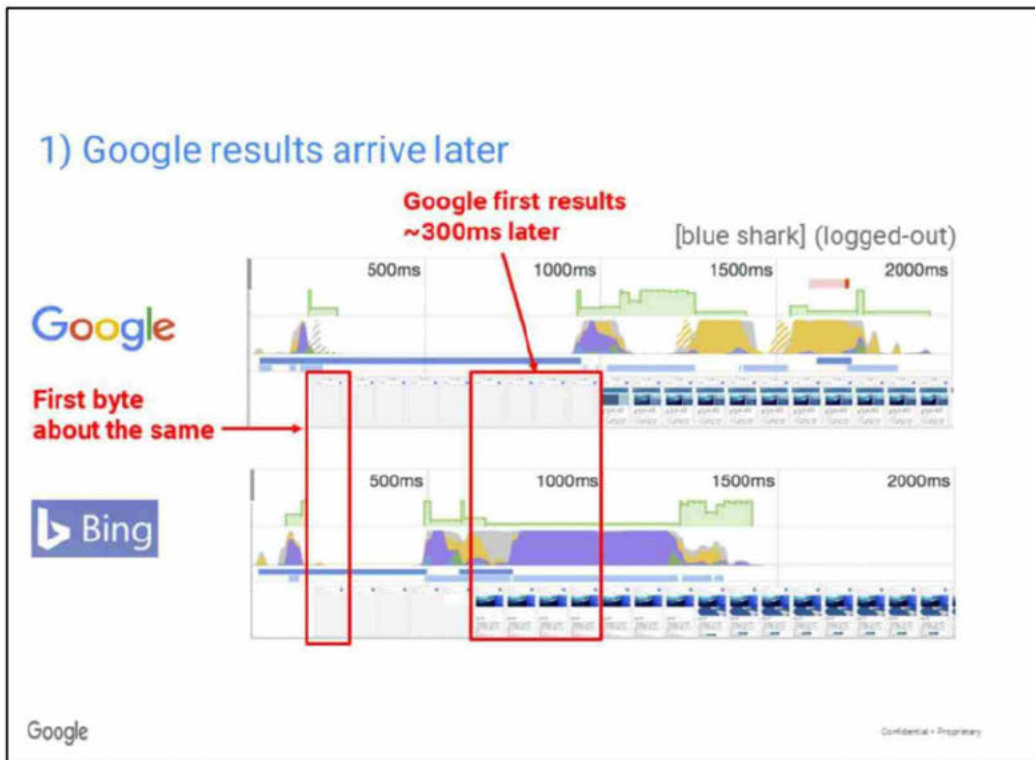
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There is lots of latency reduction work happening -- we are focusing on one part of it today.

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Bing loads more images externally so the page looks complete sooner and does not fade them in like Google does.



On both search engines, the first byte returns at roughly the same time.

However, server time spent before first result is rendered is ~300ms for Google.

It's worth noting that GWSTime has increased (particularly since Q3). Since results are in the body chunk and that depends on GWS, this probably contributes to the gap.