



Nic Jansma - 00:01

Hey, everybody.



Nic Jansma - 00:02

Hi.



Karlijn Lowik - 00:10

You made it. So there's my neighbor.



Nic Jansma - 00:18

Hey. Welcome. Good morning, everybody.



Nic Jansma - 00:26

Good afternoon.



Karlijn Lowik - 00:30

Yeah, we're very much ready for the weekend.



Andy Davies - 00:33

Oh, we do this on a Wednesday or something like that?



Karlijn Lowik - 00:35

Yeah, we. We discussed that once, and somehow it did not happen.



Andy Davies - 00:41

It's like Friday afternoon is normally my time. I go to the gym.



Karlijn Lowik - 00:46

Yeah, it was sort of like this was the moment where everyone had time off. As it's Friday afternoon, so, you know, we would all like to do different things. No, it's great seeing you guys.



Andy Davies - 00:58

It's the end of your work day.



Karlijn Lowik - 01:01

Oh, it literally is. You're my final thing. I mean, it's free with you. It's four with us. Yeah, but we like this, guys.



Cliff Crocker - 01:13

That's the weekend.



Karlijn Lowik - 01:15

Yes, it really is. We're ready for those rum cocktails.



Nic Jansma - 01:21

Always a good idea.



Karlijn Lowik - 01:22

Always a good idea.



Andy Davies - 01:24

Yeah, I found. I found the remains of the bottle of ginger beer in my bottom of my box where I'd been smashed.



Karlijn Lowik - 01:30

Oh, really? Oh, yeah. Yeah. I thought I just got one back from someone else that was also not looking great. So here we go with the most expensive post delivery service in the Netherlands. It still sucks.



Andy Davies - 01:47

More bubble wrap, I think was the answer.



Karlijn Lowik - 01:49

Yeah, I'll tell Shorty. Bubble wraps always answer. I don't know if about you guys, but you can't make Erin any happier than. Or Hannah, our daughter with bubble wrap. That just makes them really happy.



Nic Jansma - 02:11

Give folks a few minutes to join.



Karlijn Lowik - 02:18

So we had a really fun rum CG webinar last Wednesday. That was really fun.



Nic Jansma - 02:28

How'd that go?



Karlijn Lowik - 02:29

Went really well. At least I thought so. Philip Lyft went well, right?



Philip Tellis - 02:35

Yep, I think it went well.



Nic Jansma - 02:37

Yeah.



Cliff Crocker - 02:38

Good attendance and always fun to chat with y'.



Nic Jansma - 02:41

All.



Karlijn Lowik - 02:42

Yeah.



Nic Jansma - 02:44

Sorry I missed it. I can't wait to see the replay for it, I think. Did Henry post it? Yeah. I thought he said he was gonna, like, redo it or something.



Philip Tellis - 02:53

Yeah, generally take a week or so for him to get it up.



Nic Jansma - 02:56

Yeah.



Karlijn Lowik - 02:58

Stay tuned. We talk about you. You'll find out if it was nice or not in one week.



Nic Jansma - 03:07

Wait, was?



Karlijn Lowik - 03:13

Yeah, it was. So, anyone any fun plans this weekend?



Cliff Crocker - 03:24

I'm moving. If anybody has a truck and you want pizza and beer, please come over to Denver and help out.



Nic Jansma - 03:33

Be great.



Karlijn Lowik - 03:35

Oh, where are you moving to?



Nic Jansma - 03:36

Too old for that, Cliff. Too old.



Cliff Crocker - 03:38

I know.



Gilberto Cocchi - 03:39

Good luck with the moon.



Cliff Crocker - 03:42

It's hilarious when you ask your friends that these days, like, when you get to be my age and then like, they just, like, scatter like cockroaches.



Nic Jansma - 03:51

Amazing.



Cliff Crocker - 03:53

I'm just moving across town, just back to the neighborhood we just moved from not too long ago.



Karlijn Lowik - 04:00

You missed him.



Cliff Crocker - 04:02

Yes, yes. Turns out that's actually where we're supposed to be, so.



Karlijn Lowik - 04:07

Oh, well, congrats.



Nic Jansma - 04:09

Thank you.



Andy Davies - 04:11

The rest of his workmates find it hilarious that he's moving back to the neighborhood he moved out of two years ago almost to the week.



Cliff Crocker - 04:18

The same house that we sold.



Karlijn Lowik - 04:20

Oh, no. Oh, yeah. Well, I agree. We. We don't want to move outside the neighborhood we live in right now. It's a good neighborhood. I. I get the law.



Cliff Crocker - 04:32

I mean, when you raise your littles, like in an area, like in a community and they grow up there, it's. It's kind of. It's hard to move away from that. Like, we like this area, but had we raised, you know, our kids over here, we probably would have really wanted to stay here. But, you know, is what it is.



Nic Jansma - 04:47

It's.



Karlijn Lowik - 04:50

Going to be fine once she's completed the move. I mean, we only moved offices. It was a pain in the ass.



Cliff Crocker - 04:58

I was going to ask the stuff behind you, like the panels. I think Mark has these on his too.

Nic Jansma - 05:03



Are those.



Cliff Crocker - 05:03

Is it felt behind there like kind of soundproofed?



Nic Jansma - 05:07

Yep.



Karlijn Lowik - 05:08

Yeah. It's really nice.



Nic Jansma - 05:10

I really wanted to do that.



Karlijn Lowik - 05:12

Yeah. It was actually not that complicated. I mean, it wasn't super easy and Errington to side eyed me as he did it and I did not. But it could have been much more complicated. It was simply glue and then put it on. So it was actually quite doable. Yeah. Well, anyway, before we get to the whole home renovation, do you think we should start here?



Nic Jansma - 05:41

So why don't. Why don't we kick this off? I was waiting to see if Isaac was able to join today. He was gonna lead part of the discussion with unresponsive crash reports and self profiling. We'll see if he's able to join if not. Gilberto, I know that you wanted to cover a few things as well and we could probably wing a few other topics as well. If not. Let me just lead if it's okay with everybody with a. Somewhere some slides just to look at and talk about the next meeting as well. Okay. Yeah, yeah. Today, August 8th, 2005. That's 2025.



Nic Jansma - 06:21



Yeah.



Nic Jansma - 06:22

Logistics. Yeah.



Nic Jansma - 06:24

A little.



Nic Jansma - 06:25

A little off there in the date. Two topics that were going to talk about today. One was the. Based on a thread that Isaac had shared a couple months ago on how Slack is monitoring for unresponsiveness in the app, crash reports etc. How they're using the self profiling API to help target some of that. I know that he had worked on some slides for that, so I guess we will pivot. If he's not here for today, we can try to do that for another one. Gilberto wanted to talk a little bit about the chrome soft nav ot and I also saw a few other updates on BFCash lately as well. I don't know if you want to throw a few words in from there. Just it's a good forum to talk about that logistics all the same from the last few weeks.



Nic Jansma - 07:16

These, the links here are the same. The next meeting will be roughly a month from now. So we did take off July. It is August. We are going to meet September 12th. That'll be the next one. So it'll be a couple Fridays, four or five Fridays from now. Don't necessarily have a locked in topic yet. We do have a backlog of topics that we're slowly kind of working through. Maybe we'll pull from there today if we don't have another large part of the discussion happening. But yeah, if there's anything in particular that you think would be very timely, please let us know. And yeah, so were going to talk about unresponsive crash reports I don't see as a cure.



Nic Jansma - 07:57

Why don't we head over to Gabretto first of all and if you would like, you can share with us some details about the origin trials for soft navs and kind of what that's about.



Gilberto Cocchi - 08:09

Yep, can do that. Thank you Nick. Hello everyone. It's great to see you all. So Perry is out office so I had to cover for him. But luckily there is Michael Mockney here so I will make sure that I don't say nuts things about the sub navs APIs. So just want you know to kind of give you like a friendly FYI about what is ot. And we will be really keen to hear your feedback in the future when we you get you know, a chance to check the API. I know because I know as many of you have been like vocal about spa.



Nic Jansma - 08:44

Spa.



Gilberto Cocchi - 08:44

Can we measure it better? You know like you know already know the context so I put in place like really small slides. I mean here's the link if you can, if you want to add to agenda. I think you already know the motivation about why we all want to measure spa better that cracks and you know the chrome mechanism are not emitting new LCP candidates when there is a soft nav. So there may be aspects of that because developer may, you know, like have a hard time understanding like hey, is mysoft nav any slower or faster than the hard nav? Who knows?



Gilberto Cocchi - 09:25

So that's definitely an aspect of blind spot that we would like, you know with this initiative is successful to help more developers all together to tackle and if you remember for what it concerns cracks, I know that in realm some of you managed to do a better work than us we sometimes miss attribute entries. So cracks you know where you land. Some things may happen, but maybe you move to another soft nav URL and some CLS happens and cracks will report the landing URL. So there are some aspects that may create like as you know, developers pain or concerns about the program. So we definitely want to address them. But in the context of this meeting we are not going to talk about how we will consider how to blend this data whatever in crux this is something to consider much later stage.



Gilberto Cocchi - 10:26

But what we really would like to hear from you in the future is if you can help us get this right. Because now Michael Mockney is doing an amazing work by continuing your work on the previous heuristic. The fact that API is NLT is the right time to contribute because when we ship it in stable it might be really hard if not impossible to make it better.



Gilberto Cocchi - 10:53

Just to give you the context of the super obvious that you already know in the deck, if you're not already aware, I put all the useful links that everybody should be aware or save it in order to find the different useful resources on the topic from announcement article from Barry and Michael explainer verition trial link and also put in place like a really simple code snippet, do just local code testing and as you may be already aware, very recently updated the softmaps branch including the API changes the latest API changes reflecting on the new ot. Okay, so feel free you know to review these links afterwards. All the information are there but here I just want you know to summarize a 3 really high level what we release for testing with this origin trial. So what's changing?



Gilberto Cocchi - 11:50

So in a nutshell, the soft navigation API heuristics emits not an LCP but something called interaction counterfold paint performance observer entry. Okay, so it's like an lcp, but it's happening only when a soft navigation is detected

and emitted. So that is the I think one of the biggest difference because as you remember like LCP were kind of finished being emitted after the first interaction. So now when our heuristic in the origin trial detects the soft navigation an interaction contour paint performance observer entry is emitted with all very interesting bits about it is text image the timing there are multiple of them similar to SAP core work in progress. There might be bugs feature requests so we would love to hear your feedback. So currently this new performance observer entry is emitted only for interaction contentful paint actually only for soft navigation detections.



Gilberto Cocchi - 12:58

When they're emitted we could possibly think about expanding for all possible interactions I think Michael mentioned in the article Michael feel free to comment so but currently they are limited only when the sub navigation is recognized by heuristic Another change which is really relevant still I think it's hopefully helping your ARM providers but more easily attribute layout shift and event timing entries happening across multiple soft navs is that now different largest interaction counterfeit paint event timing and layout shift entries have different navigation IDs together with the soft navigation performance observer entry which I forgot to add here.



Gilberto Cocchi - 13:46

So by using the navigation IDs it will be it should be easier to regroup them and make them show to the user in your different dashboards, your Latam instrumentation or what's happening not only on the whole page but across different sub navs, views or URL or however you want to call it. So first so what I show like is like what changed but what constitute a soft navigation according to the proposed soft navigation API heuristic. So the following should happen so the user there should be like user based interaction that should occur. So the decision was not to give like JS frameworks or developers in general full control about you know admit what is the soft navigation about. We could theoretically also rely maybe a navigation API.



Gilberto Cocchi - 14:51

I think there was some discussion but our current decision was to aim to something that would be consistent across all type of sites, all type of frameworks if the will eventually be accurate enough at the end of the trial and that's done by the browser by intercepting that you know the user interacts and the URL changes there is a result that DOM modification and the paint and also that there is going to be like a history change. So all of these aspects should happen in order for the heuristic to emit a soft navigation entry and also all the resulting metrics to be reported differently as explained before. So why I'm talking about all of this.



Gilberto Cocchi - 15:44

But by the way, maybe you already read the article it's because we would love to hear your feedback about what we're doing right, but more importantly what we're doing wrong. So as I mentioned before this is the right Time for not only today, but in the coming months to share feedback if you can. So your feedback really matters in order to make sure that we get it right, that we capture your point of view and that this heuristic will actually not only match your product expedition requirements, but also developer expectation requirements. And eventually we may all make developers happy about measuring spa or maybe we will help developers, you know, tackle or see opportunities they're not seeing it right now. So this is definitely an aspect and really looking forward to work with you all around that.



Gilberto Cocchi - 16:39

So feedback on any sort is really welcome and especially like whether you can see any false positives or false negatives. These are all really important because it can be like things going wrong both directions and also you know, feedback, you know, in general about, you know, primitives that we suggest, you know that we proposed that Mikael worked really hard on the specs and explainer so were. We will be really keen to hear of it. Lastly, auto report issues if you get to test this.



Nic Jansma - 17:19

Thank you.



Gilberto Cocchi - 17:20

So I hope you know I managed to group all the useful resources but you know there is definitely a GitHub repo so if you feel about going to get a repo please go with it. Whatever works for you. You know, if you. If you prefer like. Yeah, yeah, I will get to that. Sorry. If you, if you prefer like you know like web Slack discussion first and then go to the repo, whatever it works for you. Barry also suggested a PR to discuss web Vitals JS softness branch specific issues discussion because there might be issues with web vitals JS which may not be related to the soft navigation API proposals.



Gilberto Cocchi - 18:08

So if you see like something weird on web vitals JS please feel free to escalate you know in the on the web vitals JS repo and maybe in the PR Mika also put in place like a handy saved search if you want to know about known list. Known list sorry known issues that we already are aware and if you are, you know, willing and friendly enough, you know to open bug. Thank you please if you can open a bug with written soft nav somehow square bracket is nice but whatever you can it's helpful will help us better categorize the bugs among our chromium issue tracker to answer to Erwin. Sorry. Yeah. Yes. So the API proposed is available on origin trials since Chrome 139 which is available since early this week on stable if I'm not mistaken.



Gilberto Cocchi - 19:07

Sorry I forgot about putting the availability I put together the deck today so yeah it's everything is Specified into the Chrome status, you can check on the ot. You go on all these links, you click on the ot, you find all the relevant links. So the ot, you can see that is enabled for some conversions and all the explainers, things like that. Okay, that's it for me. Do you have any questions, concerns, feedback, whatever, Happy to answer. Thank you, Mikael, for the touch. Go ahead.



Nic Jansma - 19:48

Matthias.



Mateusz Krzeszowiak - 19:51

Quick question. If I can. On one of the slides, one of the requirements is that like the. The interactions should result in a DOM modification. Is that like just a simple heuristic? Any DOM modification? Is there any threshold that you're considering? Because I'm looking at my. My main concern was that we like on our platform, like at least the standard one, we have MPAs, but the standard like behavior is that when you switch between product sizes, for example, the gallery will update and the URL will update. And we wouldn't want that to count as a different page. But I'm using a snippet and I'm not seeing any soft navigation. So I'm guessing there is some heuristic that judges how much the DOM actually changed or not.



Gilberto Cocchi - 20:48

I will let Michael chime in, but I suspect that your change is not rendering an history change. So that's why it's not triggering soft navigations. But please, Michael.



Nic Jansma - 20:57

Nico.



Michal Mocny - 20:58

Yeah, so a few things. I wouldn't put too much weight into DOM modifications. So if you change the source attribute on an image, that counts. If you add content to the page, that counts. Right now there's a limited amount of support for like style changes, but it should count like we will continue adding. Basically the page changed in a way that had a visual update and we'll do our best to try and find those. And there's like a long list. So if there's an example that you have where it. Where you think there is a visual update, the URL does change. There was an interaction triggered it, but we're not reporting a soft navigation then either.



Michal Mocny - 21:35

You aren't in the origin trial when you're testing, if you're doing it on Canary with flags enabled and you see it sometimes that's when you should throw me the report and say, hey, this is an example where it's not detecting and I'd love to take a look.



Nic Jansma - 21:49

There's a.



Michal Mocny - 21:50

There could be a slew of reasons why we're just failing to do it. It sounds like in this case you don't want it to be detected, even though it might technically meet the criteria. So that's a separate. I think Question. If it's a separate page with. With actually a URL update and a visual update and we provide metrics, you could ignore that data.



Nic Jansma - 22:11

Right.



Michal Mocny - 22:11

Like you will get those entries, but you don't have to slice and dice and we still have a long ways to go before we decide what is a new, you know, a URL. Just because you get the data for an interaction that had a URL change doesn't necessarily mean it gets merged in. So we're a long ways from deciding, you know, for example, what data goes into crux and when. Because that's kind of a UX question, you know, what are navigations? What are. You know, we'll get there.



Mateusz Krzeszowiak - 22:41

Cool.



Michal Mocny - 22:41

If you have an example, please share.



Mateusz Krzeszowiak - 22:44

I think I'm just not. I don't have all of the things that are needed enabled, so I think that's just that.



Nic Jansma - 22:50

Yeah.



Michal Mocny - 22:50

Try any known simple example and see if you could get the snippet to do a thing. And if it can, then you'll know. But otherwise it might be.

Nic Jansma - 23:02



Cool.



Mateusz Krzeszowiak - 23:02

Thank you.



Gilberto Cocchi - 23:05

Yeah, I really suggest like if you go on the slide, there is like, you know, the soft navs code snippet from Mikael. It's really easy to just add it to the console. Try in that current page, load some soft navs. So you should see like a combination of soft navs entries and ICP and other entries. So if you don't see them, maybe there is premises for a bug. Thanks for the question.



Nic Jansma - 23:45

Thanks for sharing all the updates, appreciate that. Is there anything else you want to share?



Nic Jansma - 23:51

Cool, thank you, Andy.



Andy Davies - 23:53

So my question isn't really right. It's the standard I've been thinking about. So currently we manual is our customers manually instrument for spars to tell us when a route change is going to happen and when a route change is going to finish or when a route change finishes. And my kind of question I suspect other people have thought about this is do you have any idea, do we have any thoughts amongst us about how we're going to align this data? Because we're going to have two separate sets of data source because we will never get rid of the manual instrumentation until other browsers support soft navs. So that's an open question really rather than a question for gebraso or Michael.



Nic Jansma - 24:45

And obviously Impulse has a similar challenge. We do some slightly more automagic heuristics. Right. I One of the things that were experimenting with the last origin trial was just capturing the delta between what the OT said as like the start and what our Heuristics said as a start just to understand it like you know, like a lot of the time it was within a few milliseconds but sometimes it was off by 150 or whatever milliseconds and we didn't really have enough time at the time to like really dig in to figure out why and hoping that we have the opportunity to do this wiki and to dig in a

little bit more and capture enough debug things to like know, like to provide useful feedback, you know. But that's only the start too. Right.



Nic Jansma - 25:34

Like you're also talking about the end which is an even more kind of fluffy goal.



Andy Davies - 25:42

Yeah.



Nic Jansma - 25:43

That we won't even have support from for Chrome Prom. Right. Customers doing manual interpretation versus us doing like mutation observer based trickiness. Right. Like it's all kind of different. Andy, I guess I would love to know between those two approaches, like have you had success with your customers in them being able to declare the end of the thing? Like to smartly say I know when this is done, this is when I want it to be done. Like is that.



Andy Davies - 26:18

Yes. And some people do it excellently and some people do it horribly. Yeah, you have to make a judgment, you know, it's a value judgment on, you know when is a meaningful point to record the end.



Nic Jansma - 26:32

Of the route change.



Andy Davies - 26:33

You know, when I. When which component renders. And so there are challenges around that. But yeah, my view at the moment is capture the data and work out.



Nic Jansma - 26:44

The difference with the customers that are not as good at declaring the end. Do they even know that they're not as good at declaring the end or are they just happy with what they have declared as the end and move forward? Like do you guys refer audit or try to give guidance or feedback or work with that?



Andy Davies - 27:06



Right, we do because we're.



Cliff Crocker - 27:07

Anybody really unhappy with like sub second performance, Nick.



Nic Jansma - 27:12

I mean.



Andy Davies - 27:15

We have a few people who actually tell us the start and end immediately after each other.



Nic Jansma - 27:21

Yeah.



Nic Jansma - 27:22

Because it's that fast. Right.



Andy Davies - 27:23

We're trying to audit the data. We've been through a process of ordering the data at the moment and talking to a number of customers to improve their instrumentation. You know, it tends to come up. The people who spot it tend to notice CLS in Crux is very different to CLS in our run. And then we discover they're not measuring for very long at all.



Nic Jansma - 27:46

Yeah.



Andy Davies - 27:46

So yeah, it's a challenge. But measuring and measuring the difference I think is probably where we would start.



Michal Mocny - 27:56

Just A quick follow up. Are you saying that the end time doesn't just end like a loading metric, it ends the whole route path. So, so like layout shifts that follow the end would not get recorded.



Andy Davies - 28:11

Depends where the customer chooses to mark their endpoint.



Michal Mocny - 28:17

So there's kind of, I suspect, hypothetical whether your product supports this or not. I'm thinking there's hypothetically two different endpoints here. There's the end of the loading of the route and then there's the end of the route like nothing after this is thing. So maybe that's the moment you beacon or. And in a perfect world the end of the route wouldn't be until it unloads, which might be the start of the next or whatever. Yeah.



Andy Davies - 28:43

So yeah, in our SPA implementation it gets beacon at the end of the route in your terms, but it's when. So that's essentially when somebody soft navs away. But it becomes, okay, I start a route change and then that route change completes and I have a experience in front of me and people want to know that point, which is kind of what soft navs is attempting to measure at the moment in the Chrome implementation. Although there can be, you know, ICP is still potentially after that and there's still layout shifts after that. So yeah, we're trying to do what you're doing or what Chrome is proposing to do, but getting people to do it manually.



Andy Davies - 29:30

And it's just, you know, how do we think about trying to align them a bit closer so that, you know, the people using, the few people using Firefox and the huge number of people using Safari customers can get meaningful data from them.



Nic Jansma - 29:46

A bit of a follow up question for there too. Like again, our instrumentation, we have our own quirks for it. We do have some customers, so we try to do things automatically. We do have some customers that declare declaratively in JavaScript a start. We do have some customers that declare in JavaScript an end. I wonder if it would be useful like I'm sure your version of that is like slightly different than ours, but very similar. Would it be useful for us as a

community to have a more portable across rum vendors way of declaring a start and end of a thing? Just so if we do have customers that want to bounce back and forth, not that's a good thing, but like, you know, like that it would be a little more portable, right?



Yoav Weiss - 30:31

Yeah, totally.



Cliff Crocker - 30:32

I mean preventing vendor lock in is a good thing.



Nic Jansma - 30:39

Is, is yours like a speed curve dot start kind of. Kind of, kind of thing?



Michal Mocny - 30:44

Yes.



Nic Jansma - 30:46

Yeah. Okay, so Boomerang got started for us. Yeah. Yeah.



Nic Jansma - 30:50

Mark names Michael Zane. Yeah, yeah. The challenge with that, with any performance observer based thing though is that.



Nic Jansma - 31:02

Yeah.



Nic Jansma - 31:04

So having like a specific JavaScript API.



Nic Jansma - 31:09

Yeah.



Nic Jansma - 31:09

Customer kind of thing. Interesting ideas.



Nic Jansma - 31:12

Okay.



Michal Mocny - 31:17

I'll just quickly follow up. I think that makes sense especially to remove the amount of forking and to support this transition period where you compare one to the other and to support Interop for a long period forward, given how long it's been to get to this point. I'm not personal, like I don't. If you haven't been motivated up until now to solve this problem, I'm not sure that this is the moment to be more motivated. Maybe that's wrong.



Andy Davies - 31:48

Well, now up until now we've had one source of data, now we can have two. So you know, that does become a motivation to solve the problem.



Nic Jansma - 31:55

Yeah.



Michal Mocny - 31:55

The other thing I was going to say is, at least from Chromium, the part of the inspiration was to focus on the user.



Nic Jansma - 32:02

Right.



Michal Mocny - 32:03

Like we try that with other metrics as well. So if the user thought this, it was a soft navigation, they requested an interaction with the page. The page did something that felt like a navigation and it looked like a thing. They can't tell the difference whether the page navigated or not rather than how it was implemented. Right. So if the developer says I'd like you to have a navigation every second because for whatever reason the developer wants to do that, we didn't want to provide that opt in. That's why the heuristics are there. So again for your products, welcome to have a difference of opinion on that one. But that was part of the reasoning here.



Philip Tellis - 32:41

Yeah, I think with Impulse we're pretty much the same. We don't look at automated changes periodically updating a ticker or something and you know, typing in a search box and it's using the server to do autocomplete, that's also not considered a spa interaction even though the user is interacting with it.



Nic Jansma - 33:04

Yeah.



Karlijn Lowik - 33:06

Matthias.



Mateusz Krzeszowiak - 33:08

Yeah. One more quick question about the web vitals integration of that. I don't know how like we don't have a buy on the call, but my question would be whether are there any plans to integrate the like this new metric as a separate on like callback. What's the interaction to interaction content for paint? I'm just trying to think of a way like how we could integrate that without disrupting the current metrics that we collect. Because we aggregate them and we show them in the admin panel and Right now, if we opt into the soft navigations because we are using web vitals as our main instrumentation, we'll just get different metrics. I don't know, maybe that's something to consider.



Mateusz Krzeszowiak - 34:06

But like having a separate on ICP callback would allow us to start like gathering just this one in a separate field, investigate how it looks like, how it changes and stuff while keeping all of the other metrics the same. For example, right now we just need to spin up our separate performance observer just for that. I guess.



Michal Mocny - 34:33

That's a very good question and very good point. That was part of the motivation of changing from actually resetting LCP and re emitting LCP entries to going to this new ICP so it's easier to distinguish between the two as well as

other use cases. That said, it's not just on LCP that's affected. I think with the Web Vital soft nav branch, I believe you have to pass a parameter to say like I want the soft nav version, but there's also INP and cls. So when you're using the soft nav branch and you're requesting soft navs, all three of them are automatically updated. So I guess you could register two observers with and without soft navs reporting. But if you're going to use one observer and one library, I would file an issue. It's an interesting question. So on ICP or I.



Michal Mocny - 35:32

Yes, ICP that could have use cases outside of just soft navigations reporting. There are none right now because we require the soft navigation entry to come first. But eventually you could imagine having that even for that reason.



Nic Jansma - 35:51

Cool. Okay.



Mateusz Krzeszowiak - 35:52

Like, I mean our main motivation is like how can we test it without disrupting, you know, the like within the current script that we have without disrupting the current metrics? Just.



Michal Mocny - 36:05

Well, the easiest. Yeah, the easiest would be to have two versions of the library or use the soft nav branch, but then have two registered callbacks, which I think you could do with and without this flag, I think.



Mateusz Krzeszowiak - 36:18

Okay.



Nic Jansma - 36:19

Okay.



Mateusz Krzeszowiak - 36:20

I think that would, that would work. Yeah, two callbacks would work, I think.



Nic Jansma - 36:27

Cool.



Mateusz Krzeszowiak - 36:27

Okay, thanks Michael.



Karlijn Lowik - 36:33

Erin, you had a question. Was that answered?



Nic Jansma - 36:39

Okay.



Karlijn Lowik - 36:42

All right. Any more questions or things we would like to discuss?



Michal Mocny - 36:47

Can I follow up with Irwin's question? I think it was very specifically about if you use request idle callback from the context of push state, will it still get tracked? And I think like in general any scheduling mechanism we should be able to track the context and continue thing. But there are always going to be some small gaps and Holes that we improve over time. So these ones are, I would say, like relatively straightforward and easy. There's only a set of explicit scheduling mechanisms and they're all supported. But things can get more complicated. A recent one that Scott fixed was like if you add a style sheet to the page and then have an onload event and then don't update the page until the style sheet finishes loading. So that's not really a scheduling permitted, but it's actually pretty common. It's a useful pattern.



Michal Mocny - 37:39

So you don't lash unstyled content, right? You load your route, you load your content, but then you inject the style sheets and wait for them to load. So that was an important scheduling primitive to support. Same with like fetch is supported and if you await a promise from Fetch, but if you use LOB to convert the response body or something like that and then stream the data or file readers, like there are going to be things that are going to slip through the cracks. So please do file reports for things like that. So anyways, that's on the scheduling thing. On the other hand, the question here is partially related to inp.



Michal Mocny - 38:19

And so I think that there's a. I think there a bit of a question to say when you have an interaction that does next paint and it eventually also updates the URL and does route change and gets icps, so it gets lcps. Part of the origin trial isn't just do we detect these things and do we give you an LCP value? It's also, let's look carefully. What did we pick as the time origin value? How long did it feel like it loaded to the user? So if the developer's kind of shuffling things around, are we still reporting the right values? So then you kind of have to look carefully at the phrase. If you have examples of this and you think this was a better experience, for some reason INP improved.



Michal Mocny - 38:59

Maybe it regressed a little bit of ICP because now you postpone the start of the route change because of the push task or something. So this is where you have to look carefully and it's not just like something still fired. That's good. Did it actually represent. User experience is what we want to test during the origin trial. So like digging into tracing, looking at film strips and looking at the timestamps is where would be very useful.



Karlijn Lowik - 39:31

All right, homework. Well, I think that sounds great. Can't wait to try it. All right, so I'm sort of grabbing it over from Nick here. I don't think we're going to be Talking about the other subject today, I think that's probably gonna get postponed. There were some two other things that we discussed as co chairs that we might talk about. The first thing is actually just something that sounded like a fun idea and that is performance now is in about three months and were thinking there's probably not gonna be a good Google specific meetup like there was last year. Like no on conference or anything. But were thinking it might be nice and valuable to have some one one time in reality and reserve a couple of hours and just talk for real.



Karlijn Lowik - 40:40

Barry offered that we could still use the Amsterdam offices of Google and maybe reserve two hours and have a real meeting. Cliff and I are happy to sponsor some food. What do we think of that? Would there be interest in that?



Cliff Crocker - 40:57

We're thinking more or less like a rum CG mixer but maybe some announcements there if we've heard any progress on, you know, WebKit for example or anything like that we want to cover. But also as a way to sort of invite everybody to let them know about the community group and potentially encourage some more involvement and participation. So wouldn't be like a web perk days like we did last year with a bunch of talks, but more or less like grab some pizza and maybe a beer or something if they'll let us and chat with your colleagues and make some kind of informal announcements.



Nic Jansma - 41:35

I think that sounds like a great idea. I won't be able to join this year, but I would love for. For the group to meet up and facilitate that. That'd be awesome.





Cliff Crocker - 41:44

So it looks like there might be at least four of us. So we're off to a sweet start.



Karlijn Lowik - 41:48

Erin might charge too. Bye. Who's actually going to performance now?



Gilberto Cocchi - 42:03

Attendees list is public, right?



Andy Davies - 42:06

Yes, some attendees.



Nic Jansma - 42:09

Okay.



Karlijn Lowik - 42:10

To the people who want to share it out info at least.



Nic Jansma - 42:13

Gotcha.



Cliff Crocker - 42:14

So it sounds like even for something small we should just do it. Barry said the space. So I guess next steps on that. Carla, I don't know you. You were mentioning maybe sending out an event right. Link or something so we can at least have people registered. So we have to get that in order to get them through security at Google. So we'll post stuff to the web Slack and then maybe send it out to your. Your friends and people that are interested that you might think we're going.



Gilberto Cocchi - 42:42

Just.



Yoav Weiss - 42:42

We're talking about the Wednesday.



Karlijn Lowik - 42:45

We're talking about the Wednesday before but.



Cliff Crocker - 42:47

You know, sorry, thanks for. Just to be clear, we're not. We're going to do it. So we're not overlapping at all with the meetup that night or the speakers dinner. So were thinking, you know, I guess noon to four window. Like maybe we do two to four, maybe we do 12 to noon, but something that gives people enough time to get over to the venue for the meetup that night.



Yoav Weiss - 43:09

Yeah, that sounds great, but I won't.



Nic Jansma - 43:11

Be able to meet it.



Yoav Weiss - 43:12

Oh, I mean, yeah, I arrive in the evening.



Karlijn Lowik - 43:16

Okay, yeah, that's hopeless.



Nic Jansma - 43:18

Sorry.



Cliff Crocker - 43:19

This is part of. Yeah, we didn't.



Andy Davies - 43:21

We, we.



Cliff Crocker - 43:22

We were gonna kind of can it and then we just said, no, we don't want to can it. But end result is people, a lot of people already booked travel and it's going to be tough.



Karlijn Lowik - 43:30

But it's also why we are now wanting to confirm this because if we're going to do it any later, then people are definitely going to make other plans. So, you know, pencil it in and we'll get back to with more details. The other thing is, was a bit of a smaller thing, but it was something that came up, I think this week on the performance lag, and that is that LCP is measured differently through Firefox than through Chrome. And I know we had a bit of a discussion about this, but I felt that it would be an interesting one, similar like the one we just had on soft navigation. Do we want this? How would we measure it? And what would be the consequences if we change it? Question is a bit.



Karlijn Lowik - 44:17

Barry is not here and I feel like Barry had very specific thoughts about this subject. So we could discuss it now. We could also put it on the agenda for next month. But do we think.



Cliff Crocker - 44:31

I think next month, because I think Barry should be part of that discussion. But also give people some time to simmer on it and think about it before we meet next month.



Michal Mocny - 44:44

Michael, I have the context if we want to talk about it now, but I think it's no rush and we can wait for Bari.



Andy Davies - 44:52

I think it'd be good to explain the context that everybody else understands it.



Nic Jansma - 44:58

Yeah.



Michal Mocny - 45:01

Sure. So in. So the origin of the question was in Firefox, in a single animation frame, paint. You might paint a small image first and a second image next in the same frame. So both images show up at the exact same time. So you have a small candidate, larger candidate. So the user sees both of those things at the same time. In Firefox, they will literally observe the first one, add it to the performance timeline, then observe the second one, add it to the performance timeline. Because the spec doesn't say anything about waiting for all candidates in one paint and then picking the single largest one. It just says every time you paint, and it's kind of arbitrary which one you paint first. Every implementation will do it different. So that was the origin of the question. Now, chromium doesn't do that.



Michal Mocny - 45:51

We select all of our candidates and we will pick the largest one and then we'll just report that one chromium actually comes out, is even more aggressive in the opposite direction. If we have a large candidate and we're waiting to get the presentation time, and in the meantime you have a new larger candidate, we know it's about to get replaced, so we won't report the old one. And then you get a new larger candidate and it's about to get replaced, we won't report the last one. So we don't even do it per animation frame. We basically say if you're constantly replacing them really quickly, we might sort of forget to report the old one.



Michal Mocny - 46:32

So the question was, when you have an LCP performance observer, would you prefer to know every possible new largest candidate along the way, or do you kind of just want to know the last one and have as little data as possible? The web vitals library will kind of do this for you. So you're only going to get the largest candidate at the end. So you don't even. You don't even see this nuance. But maybe if you're debugging, like it might be useful, you know, on the other hand, this is all arbitrary. You know, the paint order here. If you wanted to understand all element timings, you

could use element timing. Does this matter at all? And so I think Bari was arguing, it's just needless noise, let's remove needless candidates. Some others were saying, I want as much insight as possible.



Michal Mocny - 47:20

I want to know every paint that could have been LCP candidate. You know, both are, I think, defensible positions. So that's the background.



Nic Jansma - 47:30

Yeah.



Karlijn Lowik - 47:31

So maybe next month we'll.



Cliff Crocker - 47:34

To be continued.



Karlijn Lowik - 47:35

We'll continue. Yeah, we'll get some sorts out and have a bit of a fight. Maybe ask Robin. Maybe.



Nic Jansma - 47:44

Maybe.



Michal Mocny - 47:45

One quick question I have to rum is how often do you report more than the final candidate and like ever look at it like a progression of candidates along the way or do you just really care about the final timing and size of the last candidate.



Mateusz Krzeszowiak - 48:02

During debugging? Actually, quite often. But this is like referring to what you said about the unnecessary and the correct candidates. This is, I would say this is the most useful when we are debugging small size changes that update The LCP candidates, when probably, maybe they shouldn't, and the when the browser forgets about specific candidate, when it changes place in the dom. This is something that I think I raised some time ago. And yeah, these are the cases where seeing all of the candidates as they changed over time and understanding, okay, what were their sizes, why did they get updated when the layout finally settled is really useful. Outside of that, we only report the final one.



Michal Mocny - 49:00

Would you agree that lab testing would be sufficient for that.



Mateusz Krzeszowiak - 49:06

In, like, manually profiling? Yeah, definitely. We don't use ROM to track that. We just see that, okay, in ram, the LCP is higher than we expect it to be. So we need to manually validate why that's the case. Why does the LCP get updated?



Andy Davies - 49:29

I've got a slightly different view in that I'm not particularly. I'm not particularly wedded to Firefox's behavior. I think Chrome's is fine, you know, particularly if you're firing out LCP candidates or you would be firing out LCP candidates quickly. But even there are, you know, LCP candidates that are hundreds of milliseconds or seconds apart, they're interesting, even though we only report the last one at the moment. Because one of the things we often see in synthetic testing is people tell us our lcp. You're measuring my LCP wrong. Because visually on the screen it looks complete, but when you look at it, the LCP image has been repainted like a couple of pixels bigger in each dimension. So still having the way Chrome produces the LCP candidates and is okay.



Andy Davies - 50:25

I think the piece I would like is a separate largest image candidate and the separate largest text candidate for the situations in which, you know, somebody's got a hero image, it's got an image background, they do all the right things to make the image load quickly, and then the font loads later, so the text isn't rendered until later. So tracking those separately would be of interest from a field diagnostic point of.



Nic Jansma - 50:55

View.



Michal Mocny - 50:58

Just to make sure. I think that makes sense. Are you saying that when the text is larger, you lose all insights into the image, and so you'd like to sort of, in parallel, make sure your image optimizations are working so that when you fix

the font issue, you don't have to kind of roll out the text fix in order to see insights into the image fix both ways.



Andy Davies - 51:19

So in some cases, you know, you get people who prefetch, preload the image, so the image is there and then the text appears a second later. So you've got this image that looks nice. But you know the call to action over the top is missing.



Karlijn Lowik - 51:42

Well, might be still something to discuss next time. What do you think?



Nic Jansma - 51:50

Yeah, I think so. I think we spent a little time if Barry's.



Karlijn Lowik - 51:55

Yeah. Any other subjects that we really want to talk about next month?



Nic Jansma - 52:02

Cliff, you had mentioned possibly some server timing thing. Is that something for now or is that something for.



Cliff Crocker - 52:06

I can do it really quickly. It is just more of a psa. One second. So we talked about server timing a few meetings ago and just wanted to give some updates. One was Tim reached out from Cloudflare. So shout out to Tim and Sergey. They've now introduced these server timing headers for existing RUM customers within Cloudflare. So that's awesome. So by default those customers will be getting cache hit ratio or sorry, cache hit miss the edge time and origin time. If you're not a cloud for customer and we published this in our documents, I'll update our issues so people have this information as well. If you're not a RUM customer, you can also create a transform rule to essentially set server timing headers like you've done here in this example. So that's awesome.



Cliff Crocker - 53:02

So we've got, you know, Akamai with first class support for server timing. Cloudflare now is something that's pretty consistent. You basically have ways of doing this in fastly, but nothing that's being emitted by default to my knowledge. Cloud front that has a first class implementation Shopify will not a CDN and I don't want to speak for you

over Matthias, but they've also added some additional server timing headers in the. In the past couple months. I don't know if you guys want to hit on those or not. This is the ones I'm talking about. The prefetch and Speculation tags.



Mateusz Krzeszowiak - 53:41

Yeah, I, I think so. The, about this was the. This whole thing was a part of the Speculation Rules initiative that we had. We finally deployed them after like over a year of working on the platform wide Speculation rules basically. And, and yeah we are. We use this to tag which requests have been pre fetched or pre rendered for that matter. And we also collect the speculation tags, the Speculation rule tags that were used for this particular navigation. It just helps us to measure that in rum, but that was mainly to see the impact of the Speculation rules. I don't know if you saw my talk that I gave in Toronto, but the numbers that I talked about there stayed true with the A B test experiment that we did. So we are super excited.



Mateusz Krzeszowiak - 54:45

The the whole article is coming as well, but I'm going on vacation for the next two weeks, so you won't see that until then. Sorry.



Yoav Weiss - 54:56

Yeah, so I guess the like, the short version is like, these are server timings we used for our own RUM in order to measure speculation rules. But you know, anyone can do the same and we're happy to keep them there.



Mateusz Krzeszowiak - 55:16

It's not an official API that we document anywhere. It may change anytime, but we don't expect it to change because we are consuming it right now ourselves.



Karlijn Lowik - 55:28

Very smart.



Mateusz Krzeszowiak - 55:30

But like, that's a. That's an important disclaimer. We are not also responsible for all of the entries there. Some of them are coming from different parts of the system and. And we basically have no control over them.





Gilberto Cocchi - 55:41

So.



Cliff Crocker - 55:42

Yeah, well, we'll keep the documentation very unofficial and lots of asterisks around it. But that's awesome and thanks for sharing those. A couple weeks ago Yov.



Nic Jansma - 55:52

That's awesome.



Yoav Weiss - 55:55

One more question regarding server timing, because I had recent conversations about server timing trailers and I guess less from a RUM perspective and more from a server side perspective. But I know that this is something Firefox supports. I think it's something that fastly emit or emit it at least at some point.



Mateusz Krzeszowiak - 56:21

And.



Yoav Weiss - 56:23

I'm wondering if you all have thoughts on that. Maybe the next three minutes are not enough and if that's the case, we can schedule that for a different time. But yeah, Cliff just reminded me of a recent conversation on that front and it would be very interesting to gather use cases and see that this is, you know, something that's worthwhile for people to work on or not.



Nic Jansma - 56:49

Yeah, totally.



Cliff Crocker - 56:50

I think we should maybe add it to our backlog of things to chat about to have a bigger discussion on it, because I think there's some education needed there as well. So it's been a while anyway since I've looked at trailers. I remember Whoman talking about it years ago fastly. But yeah, they do that.



Nic Jansma - 57:14

Yeah.



Yoav Weiss - 57:14

But so yeah, maybe it's. Yeah, we can also invite the relevant chromium engineers to the call and have.



Nic Jansma - 57:24

A full discussion on it. Great idea.



Nic Jansma - 57:28

Great.



Cliff Crocker - 57:31

Okay, I have a topic idea that I wanted to just maybe see if people could think about and maybe we talk about it the next time in terms of how we might do this. But I've sort of pitched this a couple of times to people of having sort of a CDN day right, where we've got Fastly, Akamai, you know, Cloudflare, Cloudfront, anybody you know any CDN that wants to join to have a discussion in this forum to sort of hear back from some of what we would like to see, what we're liking, how we're using things like, you know, good to show them the adoption of the features that they're implementing when they're implementing things like server timing. But are there other things we want to look at standardizing on?



Cliff Crocker - 58:10

Are there other things we want to or we think we could get from CDNs that would be helpful for our consumption. So just think about that if that's something you guys think would be interesting and if so, like, what are some of the topics we would want to try to discuss and then maybe the chairs and we can look at setting that up at some point in the future for a future call.



Nic Jansma - 58:31

But I thought that.



Cliff Crocker - 58:32

I like the idea. I just want to make sure it resonates.



Karlijn Lowik - 58:38

Yeah, I think it would be interesting.



Nic Jansma - 58:47

Okay. See as we're just bumping up onto time, why don't we wrap it up there for today. I'll work with Isaac to see if he available for the next meeting as well to have the other discussion for that. We've talked about a lot of topics today, potential ones. If there's anything that people are really passionate about, please reach out to us and we'll post the videos and minutes and stuff afterward as well. Really quick question. Is the level of minutes that we're producing these days sufficient? I guess people on the call maybe different opinion the people that read them. But we're using the AI tool to post the minutes working. Okay.



Nic Jansma - 59:24

Anybody else thoughts on that?



Nic Jansma - 59:26

Decent.



Nic Jansma - 59:27

Okay. All right.



Nic Jansma - 59:31

Thanks all. Have a wonderful summer. We'll see you in September.



Karlijn Lowik - 59:36

Yeah, Matthias, have a nice holiday.



Nic Jansma - 59:39

Thank you.



Karlijn Lowik - 59:40

And then moving today.



Nic Jansma - 59:42

Enjoy your rumors.



Gilberto Cocchi - 59:46

Enjoy summer.



Nic Jansma - 59:46

Bye.



Nic Jansma - 59:47

Bye.



Karlijn Lowik - 59:47

Bye.