LEXI MOSTEK:
Welcome everyone to our webinar today on performance is power. How to optimize your site for max performance. Started with a little def punk there. Hopefully, we can make your websites harder, better, faster and stronger. Just a little pun on the performance play today.

Just a few housekeeping items before we get started on the webinar. My name is Lexi. If you’ve been to our webinar as you’ve seen me before. I am just the eyes and ears behind this webinar to make sure everything is operating correctly. We’ve got some lovely guests here to present to you on performance. Please feel free to continue the conversation in the chat. Engage with each other and attendees. But we will be pausing at the end of this webinar or questions from the audience. If you have questions for the panel, please use the question and answer feature in zoom that will allow us to kind of keep track of all of those questions. And then a reminder. We are recording this webinar. We will share it with you over email. After the webinar has concluded as well as posted on our WP engine resource center and on our WP Engine Youtube.

So with that being said, we're going to do a brief welcome and introductions. We're then going to go through today and define performance. Talk about how to read a waterfall report, and then we are going to go over what we think are the top 5 most common performance issues and kind of how we resolve them at WP Engine, but also as experts in the wordpress community. And then again, we'll end with question and answer at the end.

So with that enough of me. I'm here to introduce these lovely hosts of this webinar we've got MATT BAUM and JULIO DIAZ, Matt and Julio, if you all can introduce yourselves. Tell us a little bit about what you do at WP Engine, and then, if you can tell us like a fun fact or a fun story you have about performance. I think that would be a great kick off Matt, I'm gonna pass the mic to you.

MATT BAUM:
right on Lexi. Thanks so much. First of all, welcome everybody. I saw people coming in from all over the United States and the world. So I'm not gonna brag about the US. I mean. Good for you guys. You're awake the day. It's daylight hours, right? But Jakarta, India, Ukraine, hold fast, you guys, alright Canada, which I think is a similar time zone. But I'm not totally clear on that. Regardless, I'm a sales engineer at WP Engine. We are not about to watch an infomercial. That's not what we're doing here. We're not gonna glue anything to anything to lift up a bunch of bricks. We're just gonna talk about performance.

As a sales engineer, I deal with performance literally every day. Usually it's people coming from other hosts saying, Maty, my site. It's crawling. It's barfing all over itself. We need your help. What can you do to help us? There are things we can do. But there's things you can do, too.
Julio, my buddy, over here, the better looking one and smarter one when introduced him next, and he's gonna tell you what he does in support. Julio. Take it away.

JULIO DIAZ:
Everyone. My name is JULIO DIAZ. I am a senior support specialist in engineering. Call me whatever you like. Just don't call me late for dinner. Yeah, I've senior support specialist, many years at WP Engine deal with performance issues all the time as well. On top of that, I also train new hires who, you know, are joining the support team about performance issues. And you know, I've seen, you know, performance issues where pages timing out because of a plugin that is out of date and just simply update it. And magically, the site starts working, you know, doesn't work for every single case.

MATT BAUM:
But sometimes it's easy, though, right?

JULIO DIAZ: Those are my favorites when they're super easy.

MATT BAUM:
I love those too. Why don't we get into defining performance? It's easy to say, well, performance. I'm I'm at trouble with my performance. Okay, what the heck does that mean? That can mean so many different things. And there's so many different ways to measure it. In fact, I'll be brutally honest, when myself or a guy like Julio, we here, they have performance issues. They go…. Okay, what's going on, you know, because there's too many ways to define it.

So we're going to define it. First, we're going to talk about the entire experience of the website and the little things really little, not intense at all. Little things you can do to make your performance better? Right? Let's keep moving. Let's go to our next slide. And let's talk about it.

MATT BAUM:
Julio, all the time with people coming into support. I'm gonna let you

JULIO DIAZ:
absolutely. Yeah. So definitely, there's tons of different ways that you can go about, you know, improving your site performance, you know. Using the you know, the tools that we offer just within our own user portal, not to mention, you know, the tools within the WordPress admin area, keeping plugins updated using other tools external from Wp engine, like speed test pages, page speed insights GT Metrix. Those are all like tools that we use on a day to day basis.

You know. GTMetrix. I've pretty much got my own account, just so I can, you know, run as many tests as I need while I'm troubleshooting, you know, performances, and one of the thing most common things is just, you know, keeping those plugins up to date. Not only does it keep your site secure, but it prevents any, you know. Bugs that might have occurred in an in a plugin from causing performance issues
MATT BAUM:
for sure. And I think a good call out GTMetrix. It's great. If you're just looking for some basic information you want to go in and go. Why is my site slow? Gtmetrix is wonderful. It's free use it. It's fantastic. We're, in fact, gonna take a look at my crappy website right now and see some serious issues with it. Now, disclaimer, I work for WP Engine. This is not hosted on WP Engine. Please don't fire me. Okay, but hat we see here is a Gtmetrix report.

We've plugged the website into it. And we're taking a look at issues on the site right? What we can affect to make this score better, trying to go for an a ideally right now, there's a big difference here. A lot of people love lighthouse test through Google Page speed, Google Page. Speed is fantastic, too. t is more of a developer's tool. right? And the reason being is because Google Page speed is not taking caching into account. Caching is what makes your site go faster. The more cash ability the faster your site goes, because things aren't hitting the server directly we're serving it from the cache. Right?

That's the goal. Get it as cashable as possible. Now, not every site is extremely cashable. There are things that have to happen behind the scenes. That's where you need server power.

But, Julio, if I come to you. And I say, Julio, that side is slow. What's wrong? I did everything I can possibly do. What do you see here on this Gtmetrix report. That seems to be a problem.

JULIO DIAZ:
Well, definitely. You know the content full paint part. And you know, it's definitely taking some time what we want to do is, look at how big you know your images are loading, any potential videos that are playing in the background. You know, all of that is, gonna you know, bundle together because the server has to gather that information and then present it to you in the browser.

So the longer it takes to access that information. Thus, the longer it takes for it to load

MATT BAUM:
absolutely. The first thing I noticed when I look at this as a sales engineer if I'm coming. My, you know Matt's coming to Matt saying, Matt, my host, they're not doing a great job. The first thing I'm gonna look at. What's that time to first bite? Look at that, 1.4 s. That sounds super fast, right? No, that's not fast. That's not fast at all. We want that milliseconds. We're aiming for a hundred to 200 ms. So the first thing that a good host can do is get that time to first bite down ETFB.

I was gonna get that tattooed on my knuckles because it's super important my wife didn't go, for I don't blame her. She's a wonderful woman, the point being here. That is the one thing that a good host can do, the rest of this, that stuff you gotta dig into with your developer, but it's not a nightmare, and there's great ways to see directly what's going on. Hold the waterfall. Let's get into the waterfall real quick. And take a look, see what's going on on my nerd side here.
JULIO DIAZ:
when I look at this what's that big purple bar, right there I see a bunch of purple bars.

MATT BAUM:
What are these purple bars? What's going on that can't be good.

JULIO DIAZ:
and you are correct. It is not.

MATT BAUM:
Tell me about these, Julio. What am I looking at here?

JULIO DIAZ:
That's how long it takes the the response. That's the response. Time that it takes. So all of that big purple area is just how long it's taking for the browser to receive a response from the server and the load times right? So you gotta take into account that catchability. How big the file is, you know. And is it loading from the server, or is it learning loading from like a Cdn or another website. So like, those are all things you have to take into account. You gotta make sure that it's all loading from the from the server, because, at the platform level we're already boosting your stuff. So if you're loading it from outside of the server, it's kind of hard for us to, you know, help boost it even further.

MATT BAUM:
I think that's you brought up something really great there, one of the biggest issues that we see, and I was into the support trenches as well for a while before I got into the dirty world of sales. But back when I was in support, one of the things we would see is people come in and say, I can't speed my sight up anymore. I can't speed it up anymore. What do I do?

And we look at the waterfall, and we see external hits coming from Facebook right coming from Twitter or X, or whatever we wanna call it now, but coming from anywhere else that is not hosted on the Site server period. There's nothing you can do about that. It's a third party request.

And you can write Facebook all you want. Tell them, please speed that up. I don't think they're gonna get back to you. The idea being there is, maybe look into. How much of this do we really need? Right? now we've looked at the waterfall. We know where the problems are.

Why don't we go through some of the top 5 common performance issues that we can fix. Let's focus on what we can do here.

JULIO DIAZ:
Yup, and to top off the list, it's going to be. Keep your site up to date, both in PHP version, both in Wordpress version. And more importantly, your plugins. Can't say that enough. You know. We
even have tools to help keep your plugins updated in our smart plugin manager. So that's definitely something to look into as well.

**MATT BAUM:**
Definitely, we're gonna talk about using the Cdn, we're gonna talk about keeping your database healthy as well. And we're gonna look at things like cart fragments that can build up in the database and cause problems. So let's get right into it. Let's talk about keeping your website up to date.

What does that mean? What am I keeping up to date. Exactly. I thought you guys were managing everything. What's going on here?

**JULIO DIAZ:**
Yeah, well, I mean, we do manage everything. We manage the core wordpress files. So you know, we want to keep that up to date as much as possible, which you know, as many of. You know, that, you know, we'll send email out, before we do the update. But we're going to make sure that your site is protected with the core wordpress updates.

Outside of that. Then we offer the smart Plugin manager tool to help keep your plugins up to date. But that's also something that you, as you know, the website owner, you know, will want to do, you know, because there's many plugins that you can have, and sometimes, if you have too many plugins, that's not a good thing either. So, you know, keeping those plugins up to date, keeping your wordpress core versions up to date, which we'll take care for you and your themes as well keep your themes up to date as well.

**MATT BAUM:**
Julio, let me play devil's Avocado real quick here.

**JULIO DIAZ:**
I like avocados.

**MATT BAUM:**
Every time I update my PHP to 8.0, it breaks my site. I'm afraid of these updates. Why do you scare me with these updates? Why do I need to update this stuff?

**JULIO DIAZ:**
Well, we give you the opportunity to test it out. The PHP. To make sure that it doesn't break your site that way you get extra time to go in and try and fix those problems, not to mention use utilizing our staging and development environments, to do those updates without having to take your live site offline.

**MATT BAUM:**
That's pretty, Rad. I like that. And at the end of the day here's the deal. If you are on a host that is allowing you to use a very old Ph. PA very old Wordpres version. I have terrible news for
you. Your front and back door is wide open. And anyone that wants to come in. Cam, these are fundamental security vulnerabilities, bad bad news. Okay, you're not just at risk. You're gonna get hit. There's no way around it. The reason we update this stuff is for security. Primarily, it's important. It can seem like a big job. There are tools that will help. but we gotta stay up to date. Otherwise, Hackerman, he's out there getting all the keyboards, doing all the stuff breaking into your you know. You don't want that. You gotta stay up to date

Number 2. I'm let you take this one. Julio

JULIO DIAZ:
Less is more with plugins. This is one of my favorite sayings of all time, both in training and in general. You know, plugins, because you can do a lot with a few plugins. Right? You don't need to have 30, you know, Plugins, to do what the job of what one or 2 plugins could do.

So the more that your your site has to access. These other plugins, both connecting with, like, you know, back end connections and connecting to third parties and all that stuff. You don't need that stuff like caching. You know, plugins are okay, like WP Rocket, you know. That's a, you know. super good. One. Advanced custom fields. you know. Auto optimize. You know, those plugins help to optimize your site first and foremost. But then, if you don't need anything else, you know, outside of woocommerce, or you know, whatever your site is about, you know offload it. You don't need it

MATT BAUM:
absolutely. One thing that I always like to say “Wordpress is an engine”, right? And that's not a plug for WP Engine. It is an engine. Think of it like an engine. It's a little plug for WP Engine. They told me I had to plug it a couple of times. It's an engine in your car right? Think of plugins as smaller engines that you put next to the large engine. Now, those engines are doing something. They're helping the with. You know, the raw engine do something. They're also adding weight to the car.

And every time you put another one of little engines around the big engine. You're adding more weight. You're adding more dynamic calls. You're adding more functionality. All of this slows your sight down. Decide what you need. Only go with what you need, strip it down as much as possible. Think about like an F1 car. Right? Cars are literally built like spaceships, and they are lighter than air, for reasons they want them to go fast, not so fast that they take off and fly into space, but fast enough that hopefully you can beat someone like Max for Stappen, who is a bad guy. All right. I'm not rooting, for I'm a white girl guy myself.

Point being, just because you can add a plugin that does something in wordpress doesn't mean you should think about it. Do you need it?

JULIO DIAZ:
That's the question you need to ask yourself and compare it to other Plugin features. Does a Plugin? I already have, take care of the job that this one claims it does right.
MATT BAUM:
That's an excellent point. Let's move on to Number 3 here.

Okay? Points for anyone can tell me what CDN stands for in the chat right now, anybody

Content Delivery network! Oh, yeah, it comes flying in. We got smart guys here. I love that. Let's talk about it. What's the Cdn. How does this work hit me up, Julio

JULIO DIAZ:
Content delivery network. It does what it advertises, it takes your content that is static and doesn't normally change, and it caches it. Emphasis on the caching part. Right? Not only does it caches it, cache it, it caches it in different locations around the world to make it faster for those locations. So if you have a Cdn, you know that's storing your static data in the EMEA region or APAC regions, then boom! Your site's going to load a lot faster with the help of that content delivery network. Right?

So you have things like, you know, Cloudflare, that does a lot of the caching for you. Right? So that essentially is what the CDN does. It adds an additional layer of caching to your content, and helps deliver it that much faster.

MATT BAUM:
Absolutely. Caching is good. Caching is king. When it comes to speed, the more cashable you make your site, the faster your site will be.

JULIO DIAZ:
Cache rules everything around us.

MATT BAUM:
Boom! Thank you. Woo time. I think they set it up the best right, the point being here back in the day. All we had was data centers. You hosted your site as a data center. Most of you don't remember this. I've got some gray hair, so I'm older than you think.

I remember this garbage. It was a terrible way to live. All we had was a data center, and we hoped, everyone's just coming from Midwest right? No, these poor people in Jakarta and India and Germany, and in far off exotic Canada. They're trying to get to your site right? And they have to go all the way to the data center. That's a brutal bummer

Points of presence in your Cdn. That's how we win. That means there's a point of presence all over the world.

JULIO DIAZ:
That's how you win.
MATT BAUM:
Yes, how you win! Yes, when someone comes from far off exotic Canada, they hit that Canadian point of presence where your site is cached, and it serves like whitening.

Find a host with a good CDN. That's how you win

Next up, database. Health.

JULIO DIAZ:
The database. Keep that database. Query, clean. Auto loaded data. Keep it under check. You know, we have tons of resources in our support garage, you know, used to be called support garage support articles now. But yeah, keep. Keep your database optimized. Too many queries means that the databases having to work extra hard to put together queries and build pages and things like that within wordpress, and then deliver it up.

Object caching, you know, if you're using that. That's when you have to kind of balance as well, because too many, you know, queries that are being cached could slow your site down too. So it's like, you know, it's a fine line you have to balance. But you know, keeping those database queries in check is definitely going to be a boost to your performance as well.

MATT BAUM:
Absolutely let. So let's just bring it down to something simple. Let's say the database is the catalog for your store for your site whatever. It's the catalog. Right? Remember when you're growing up and used to look through like the Sears, I'm dating myself again. I apologize. You'd look through the catalog. And you look at all the toys you want for Christmas and circle them, and stuff like that.

There's a reason that those stores only put stuff that's actually available in the catalog. Because you want to keep it as small and as tight as possible. That reduce mailing costs that keeps people looking at it longer. Stuff like that. If you have too much stuff in your database, your catalog that isn't even on your site. That isn't even there. You've just got a big inflated catalog with a bunch of garbage that isn't even available.

Why is it there? Clean this stuff up, now? Queries come in. It's kind of go through everything. It's got to look through all the back days that pages that haven't been viewed for 15 years, pictures that you're not using things like that. Clean it out.

Trim up that catalog. So it's a lot slimmer. It's a lot thinner. So people can get those queries to where they need to go faster. Alright, clean out your catalog. That's what I'm saying.

What do we got next? This is an important.

This had directly deals with the database, and it goes back to what I was just saying. Cart fragments. Real quick, Julio, explain to me what a cart fragment is?
**JULIO DIAZ:**
Cart fragments are when you go to a site, you, you know. Look at the carts. You you say, Okay, cool. I'm gonna put stuff in the cart right? And somebody else at the same time is doing the same thing right? So you know, you have little fragments of carts. One person decides that they want to you know, Step, or they need to step away for X reason, and then, you know, they just kind of leave their cart, abandon there, and and there are still fragments of their cart there, even though they may not have anything there. So sometimes those will get mixed into the other person right?

So those cart fragments, you know, build up over time as well. So too many of those all at once. And you start to you know, impact server resources and things like that.

**MATT BAUM:**
Yeah, it's a perfect example of stuff you don't need in your database. Look not gonna name names, but people with initials like Matt Baum sometimes go to sites and put a bunch of stuff in a cart, and then they think, do I need to buy all these death metal records like, really, I'm getting older? It's telling. You know my wife's gonna kill me. I don't think I'm gonna buy this stuff. And so I just kind of leave whatever I have not done your site any favors. I left a bunch of card fragments in there.

You need to find a host that will either have a solution to take care of those cart fragments. This is another little plug for WP Engine, but maybe they've got something that moves those card fragments to a place where they can be dealt with, and they don't weigh down the database. If not, think about disabling car fragments.

Now, there is functionality stuff that you're going to check. If you disable those cart fragments, you could lose some functionality. So, find a tool that helps you deal with this, or find a host that has a tool to help you deal with this. Your e-commerce site goes faster. You sell more stuff. Morons like me buy more death metal records, you know. That's important. All right. We're all trying to make money.

I think we just hit our top 5.

**JULIO DIAZ:**
Yeah, I think we did right.

**MATT BAUM:**
I'm bragging a little bit here.

**JULIO DIAZ:**
But there are more than just top 5. You know. There are some honorable mentions that, you know. We need to talk about.
Image optimization, probably mentioned it earlier. You know, auto optimizes a great one for minifying files itself. But you have other plugins like smush, Wp smush, you know Optimizations.

Webp is now, you know, a huge, you know that Google wants to push. So that's a good way to optimize posting your videos on on the Server. Not really a good idea.

MATT BAUM:
Don't do it. Just don't do it, guys. No one's going to find it. No one's going to know. No one's going to go to your site and say, Wait a minute. Leave hosting this video on Youtube. Bruh, I'm going to go find a real perfect. No one cares embed your video, embed it unlisted that way. Nobody can go find the video. And then you know who's doing heavy lifting that your server

JULIO DIAZ:
YOUTUBE!

MATT BAUM:
Youtube is doing the heavy lifting. Vimeo is doing the heavy lifting, anybody else that specializes in video. We don't work for Youtube or Vimeo. They're just the big ones, right?

JULIO DIAZ:
For the most part.

MATT BAUM:
Don't put them on your site. Terrible idea.

JULIO DIAZ:
More importantly, of fit. What a 50 GB MP4 is not gonna load in 2 seconds or less.

MATT BAUM:
No, not at all. You've literally just put a tractor trailer on your F1 car and said, "Go", you know.

JULIO DIAZ:
although they do have competitions for those. Drag races, though.

Also using an SSL for security is important. You know, security security can't say it enough, you know. If your site isn't secure, you're vulnerable to, you know. Also by proxy performance issues. Absolutely. Hackerman can go in there and dump a whole bunch of stuff on there.

MATT BAUM:
Exactly. We're looking for that S. And HTTP. S.

S. Means secure. I'm going to buy something. And I go to your site. And it can Google goes, Whoo, Matt. hold up there looks like, there's some weirdness going on on this site. I'm not gonna go. You know what Google, I know, what's good for me. Let me power through and give
this questionable site my credit card number. I'm not worried. I'm going to a different site, cause I look at it. Go! Oh, they might be criminals.

They might not be criminals at all. Maybe they have an Ssl problem. Right? Maybe they need a good host that can help them get a quick, free. Ssl.

**JULIO DIAZ:**
yep.

**MATT BAUM:**
what about redirect pl events? What's a redirect Plugin do?

**JULIO DIAZ:**
Well, I want to go here, but the sign tells me to go there. Think of it kind of like construction right? A detour. You know, they're Con. They're doing construction on a road. They have to close it off. So they're going to tell you. Okay, here's a route that you can take. Let me redirect you to the other side of this road. You know where we're blocking off.

There is your redirect now too many redirects, and you might confuse the browser, and the browser is going to say, Hey, I don't know where you want me to go.

You know, and that can also cause performance issues. So when you're using those plugins, make sure that you're doing it in an efficient way, using a plugin, or just inherently using the tools that are within the server. Things like our web rules, you know, in the user portal. If you're hosting with the WP Engine.

**MATT BAUM:**
So I think that's a good point. And it goes back to what we were saying about plugins. How many redirects do you need? Let's really think about it. How many do we need on this site? Not want, need.

And if you don't know how to write those, a Plugin is a great way to help with that. There's plugins that do this job. Keep in mind when you add that Plugin, you put another engine next to the engine. If you have a host that has a good web rules engine where you can go in and you can write those redirects. Let us handle it for you.

Your host can do that. A good host should be able to, anyway. Not every host, but a good host should be able to do that for you. If you can't, you know. Do that? That's fine. The plugin will help. Maybe you're not that nerd. And I use that term of endearment. I am a nerd. Okay, I can say that.

**JULIO DIAZ:**
Same.
MATT BAUM:
Julio and I are both hard carrying nerds, the point being, if you can't write them. That's fine, find a plugin that'll help, but only use the redirects you need. Okay, that's the important part.

JULIO DIAZ:
Less is more as well like you might have many redirects, for you know, a similar page. But you can use other tools that will help you kind of consolidate them into like maybe 2 or 3 that are that have slight variations to them. So good Plugin. Good host, you know, with those Web Rule engines, you'll be good. You'll be in good shape

MATT BAUM:
absolutely. I think I feel good about this. I feel like we did it. This is our first webinar. I don't think we're going to get fired. I think we did a pretty good job, Julio.

JULIO DIAZ:
More importantly, do you feel faster?

MATT BAUM:
I feel so much faster. I have had a ton of coffee. I'll be the thing. So I got all sped up.

JULIO DIAZ:
You're all jacked up. Yes.

MATT BAUM:
Lexi, I think we have some questions that we're gonna it was time to place, stump the chumps right where then it tries to humiliate us. We asked some really really high level, high tech questions. So I can go. Julio. What do you think?

JULIO DIAZ:
Let's play Family Feud - top 5 answers.

LEXI MOSTEK:
Yes, no tons of questions. Thank you. To everyone that is sending those through. If you have questions, we're gonna start opening up to the audience. I'm gonna go ahead and kill the screen share. So I'm not looking at that but please drop those in the question and answer. Zoom has this great feature where we can't copy and paste from the chat, so when you drop them in the chat, it's really hard for us to kind of organize them and make sure we are answering them.

Huge shout out to Matt and Julio, this has been so fun. Matt, I do just have a funny question to pop to you. But you've got some admiration for your speaking skills. People in the chat would like to know if you are a toast master?

MATT BAUM:
I’m not a toast master. I do host a podcast. It is about something extremely nerdy. I’m an adult that talks about comic books on the Internet. and I would like to say, I do it for a living, but we barely make any money on it, no money in podcasting folks.

**JULIO DIAZ:**
Its a labor of love.

**LEXI MOSTEK:**
Yes we love a side hustle or a side hobby over here at Wp engine.

**MATT BAUM:**
My wife would call it a hobby, definitely. Hahaha.

**LEXI MOSTEK:**
cool. So I’m just gonna start tackling these questions. Again. Apologies. I’m an event planner, not a technical person. But how often should someone clear all your caches? If ever?

**MATT BAUM:**
that's a great one. Julio, I bet you get this one all day everyday.

**JULIO DIAZ:**
All day, everyday! So at most places, at least at WP Engine, we have a 10 min cash timer, right? If you go in and make any changes, you know, within your site. Theme plugins, pages whatever. Purge your cache.

Once you save it and publish it, purge your cache. That's going to be the quickest way for you to see your changes. If it doesn't purge, you know, in there you can also test with an incognito window. But sometimes browsers can stick to cache like glue. So, you know. in most cases purging your cache after you make a big change is highly recommend.

**MATT BAUM:**
That's it. Okay? I like what you just said. There. If you purge your cache and you do not see your changes don't freak out. Okay, stop! Think! What is the problem here? Maybe it's my own Browser cache. Maybe, I work in an office building with an It team that is super serious about security and cache doesnt update for 24 hours, you know, on our local network, right?

There's probably an issue there. But there’s a way, ways. You can bust your cache super easy at the end of your URL, put in one of those little backspaces. Right? Add a question, mark, and then write whatever you want. You can write no cache. You can write cache. Go away. You can write dammit cache you're ruining everything. Please stop. Just don't write the same thing twice.

And you should break that cache and see your updates on your browser. Okay? So if you don't see the update and you purge your cache, you're at a good host. That host allows you to purge
your cache. Maybe you got a button that says purge cache. That's the easiest way to do it right. If they don't have that, maybe look for a better host.

But if you still don't see those changes, check your browser cache.

**JULIO DIAZ:**
Not to mention, also use or and check the site from a mobile device that's not connected to your network.

That's an excellent way to test, you know, if a change push through or not.

**MATT BAUM:**
Love that one. And that's that's the way we used to settle arguments instantly and support like, can you do me a favor? Turn off Wi-fi on your phone? You see the change now and then they go, Sorry I was yelling at you. Matt and I go, hey? I totally understand. This stuff gets frustrating. I get it.

**JULIO DIAZ:**
We'll call it fact checking the cache

**MATT BAUM:**
Fact Checking, i like that

**JULIO DIAZ:**
Cache checking, oooh I like it.

Trademarked it.

**LEXI MOSTEK:**
Amazing. There have been a ton of questions in images are taking up a lot of load time on your site. What if you have an image heavy site, and you want large HD images, they load really slow. What do we recommend, or or how do we go about that? Do you guys have any recommendations?

**MATT BAUM:**
Think there's a question you need to ask yourself first. why do we need HD images? How important is it like, this is not to downplay anyone's site…. But I have never gone to a website, a single website. Whether I was looking at a car or I was looking at a Godzilla toy which I've been known to do.

But I've never gone to a website, and being like these pictures arent HD enough I'm leaving, you know your site is not necessarily the Louvre, speed is important. So ask yourself first. do these really need to be gigantic? HD. Pictures? You can make pictures look really good, and you gotta keep in mind. Not everybody has an 8K monitor.
You can make the picture look like the best thing in the world. But if I'm looking at it on my iphone. 10, you know, or or I'm looking at it on my apple 2E, its garbage.

**JULIO DIAZ:**
Talk about dating yourself.

**MATT BAUM:**
But if you want to do that, Julio, what do they do? What do they use?

**JULIO DIAZ:**
They use well, may sound contradictory to many things, but a plugin optimize those images right?I already see I've already seen it in the in the chat. but I sometimes like to be lazy when loading those images.

Lazy load, lazy load right? So it takes those HD images and just loads them as they appear on the screen when they are no longer on the screen. They're not there, so lazy. Load those images right is, there's nothing wrong with doing that.

Also have smaller images in a thumbnail right? So like have the image in the thumbnail, and if somebody clicks on it. Then they can see the nice 8K. You know. HD quality image on your, you know 60 fps.

**MATT BAUM:**
lazy load, though that's an important one. Back in the day, when people still read newspapers, there was this thing called above the fold and below the fold, the folder. You would walk up to the old timing newspaper stand and the guy with the hat. If I’m like, Hey, kid, what are you doing? I'll give you a nickel for a newspaper because you looked at that front cover. And there was your story.

You know, man bites dog, dog bites, man, or whatever right? And there's gory pictures they're gone. I gotta buy that paper that is above the fold. That's the first thing they see. They unfold the paper, and the less important stuff is down here. Your website is the same thing.

If I'm coming to your site and you want to deliver it as fast as possible, don't put that HD. Picture as the very first thing on the site. It's gonna take forever to load. You can do a thumbnail. b You can use a plugin called Lazy load. So, as I scroll down below the fold, as we call it. Now, these pictures start to load. They're not all loading at the same. Here comes all the giant picture. We don't want that, one picture at a time. Get in line, so as I scroll, then they're serving them. But please

Please optimize your pictures 101 P.
Ask yourself, do I need this gigantic HD picture like, do you need it? That's the question to ask. What else we got?

LEXI MOSTEK:
Yeah. Also, there's a ton of shout out of plugins and things that people use in the chat feel free to continue to contribute. And I do just wanna quickly shout out, we did 3 webinars in August on plugins where we talked about plugins 101, We talked about ecommerce plugins, and we talked about AI plugins. If you're looking for more information, those are definitely resources to you, and we have an ultimate guide to Plugins, where we kind of break down plugins in topics, not wp, engine to plugins, but more just general so please feel free to check those out. We're not gonna harp too much on plugins today.

Gentlemen, let's talk about PHP, we mentioned the importance of keeping your website up to date. We know that PHP sees upgrades and different versions. Some hosts say they support older versions of PHP, so we know your site might be running on older versions. Does that mean that hosts are providing protection for older versions? Or does that mean they're just simply allowing you to, be on this older version? And why would you want to be on a newer version of PHP?

JULIO DIAZ:
I love. That's an excellent question.

MATT BAUM:
Julio. Take it

JULIO DIAZ:
So, Say what we're dealing with, oh, yeah 100% PHP 7.4. Ring a bell. Yeah, we're getting everybody upgraded to 80, at the minimum 8 2 preferred, right?

Just because the host has you on an older version doesn't necessarily mean that they're not supporting. You know, the security aspect of the lower version. Obviously, they're going to want to try to you know, update you or upgrade you to the latest version. But if they're not, might be time to look for a new host that does right, because keeping up to date on the most tech current technology is important, not only for the security of your site, but for performance as well.

MATT BAUM:
Absolutely. And like you said. we main. We're maintaining an older version right now, but we're maintaining that ourselves to keep it safe. So make sure your host is doing that. They're not just letting your run whatever you want. And if you're worried about that, update

Right every time I try. PHP, 8, go on. Something breaks 8, 2 is coming. I'm not even ready for 80, find a host with a tool that lets you test this stuff either directly right there on your staging or your development, or maybe they got a handy, dandy little app called local.
where you can down. It's free. We're not even selling it, which blows my mind when they said local for everybody. I was like, Okay, you know, whatever

**JULIO DIAZ:**
I was hyped, I was just like, a developer tool that's free like you don't see that too often. It's great.

**MATT BAUM:**
You can download your website directly to your desktop. It mimics Wordpress. You go. PHP. 8.0 Go. You can see exactly what's barfing all over itself. Right there, you can dig in without messing with your live site. Fix those issues, get rid of that plugin. Maybe it's time to think about a new theme. Maybe you just need to update some stuff. Maybe it's not that big of a deal at all. But when you're done, you know it runs on Ph. P. 8, one click, and you can kick it to your staging. You can kick it to your development area. You can kick it to live, and it works with flywheel, or it works with Wp. Engine. And again.

**JULIO DIAZ:**
bonus to that is, you can also test Mysql. 8.

**MATT BAUM:** That's another one that's coming to. What? What is my sequel? What does that have to do with? I forget.

**JULIO DIAZ:**
Well, I mean, you know, if you want your database to to be on the newest, latest brand new shiny version, then, yeah.

**MATT BAUM:**
There it is. keeping your database updated and clean. My sequel 8 is here. Test it. Find a host that will let you test it. What else We got?

**JULIO DIAZ:**
One last thing on the local thing is, you don't have to host with Wp. Engine, or, if I will, to use local.

**MATT BAUM:**
to use it. No, to upload, to upload. Yes, host. then you need one of those. So yeah.

**LEXI MOSTEK:**
yes. Huge shout out to local there. We know a local has a lot of users and users that aren't just Wp engine, so we know there are a lot of people that likely use it on this call.

I'm gonna ask an e-commerce question. We talked about disabling livecar fragments. Does livecart need to load on every page of an e-commerce site?
MATT BAUM:
that's solid. I like this. Does livecart need to load in every page. The ideal with livecart is. It's helping those pages where it is loading when I go, and I put that Godzilla toy in my cart and I go. I want to go shop for more Godzilla toys. I'm a nerd, that's what I do.

JULIO DIAZ:
You need a tshirt to go with it!

MATT BAUM:
Yeah, of course you do right, and you probably need the final repressings of the old soundtracks and stuff, because you're that nerd right? The point being, you put that in your cart and it's going. Okay. Matt's got 3 things in this cart. Now, I'm just gonna invalidate the cache for the whole rest of the site while Matt's here, so I can make sure I'm keeping track of that cart.

That's not so great. What do? What do we do to deal with something like that? Julio

JULIO DIAZ:
Im not too sure honestly…. You've got me on that one.

MATT BAUM:
You can find a host that does something similar to what we do. They've got an ecom package, and that ecomm package says “hey cache, Don't worry about the cart. I'm going to handle that.”

You do your thing. You serve those other pages, I'll take care of the cart over here. It's gonna have that number in it. It's gonna keep track of it right? Other thing you can do. If you don't have access to that. disable your card fragments, that goes away. You don't have to worry about it right? So live cart. You don't have to worry about necessarily loading on every page. That's not a problem. It's doing you a favor by basically saying, I'm gonna keep everything in the cart. I got my job over here. Let's let the site do its job and serve everything as fast as possible without having to worry about invalidating the entirety of the catch for the site.

Livecart baby. It's good stuff.

LEXI MOSTEK:
amazing. We have so many questions. We can tell. This is a topic that people are interested in, and it really applies to everyone. But talking about. Obviously, we're talking a lot about front end performance and the speed of your actual site. But can we just talk a little bit about performance within Wp Admin. What are some of the reasons why the Admin area might run slow for you?

JULIO DIAZ:
That's a good one. So the biggest reason why the Wp. Admin runs slower is because it's not cached. It has to be uncached, because, if not, then you would have a mix of different users in your WP Admin. So you don't want a subscriber logged in at the same time as an administrator, because some of those tooling might get mixed up, and you don't want that to accidentally
happen. So we have to uncachef, You know, the Wp Admin area so that those processes don't get mixed up.

MATT BAUM:
What does that mean, let's break it down. Once someone logged in. They are a singular user that is asking for singular content or making a singular change. That means they don't want anyone else to see or do what they are doing as soon as you log in, and I'll take it a step further.

Not just Wp. Admin we have a membership site. Or if you decide, everything in my site's gonna be behind a paywall. Or maybe you've got an Lms site right where people are coming to classes. I want to track those classes. I need to see how well Julio did. I need to see how bad Matt failed so I could make fun of them in that class, or whatever right.

Those are singular experiences for that user. Anytime someone logs in, be it the admin, be it a membership page whatever it is, they are now getting a completely uncashed experience. If you want to see how fast that is. That's where Google Pagespeed comes in you can see what what's going on here. What's taking so long to load?

You might need more server power period. There's nothing caching's can do to help you. And the bigger the changes you're making in your Wp admin. maybe you are updating your entire inventory right? Or maybe you are getting rid of a bunch of pictures or adding a bunch of pictures. I don't know but it's completely uncached, and it's going to take some time. There's just no way around that usually,

JULIO DIAZ:
Which is why if you do a lot of things in bulk it's gonna take a long time, and you could run into errors like 502s or 504 s. Because if your front end is getting a lot of traffic, and you're in there doing a lot of work that's being uncached. That's gonna mix together and cost and performance issues not only for your own personal site, but you know, at a higher level as well, so you gotta be careful. Which is the main reason why we do not want to uncached the homepage of your site during business hours.

MATT BAUM:
Terrible idea, dont do it. But also, dont hake those changes during business hours. You've got your cute kitten site right and all cute kitten weirdos. They show up from 9 to 5, and they get their cute kitten on when they should be working. Whatever.

Don't go in and make your cute kitten changes while they're there. Do it after 5 o'clock. Play it safe that way. You're not affecting anyone else, because the more people that log in, the more people making changes, the slower everything moves right. We got the hood open of the car. We don't want to drive around the hood open. It's a bad idea.

JULIO DIAZ:
something else to note as well is when you see those errors check to see if you're logged in log out if you are, look at your front end and see if you get those same errors, or if you get any errors, if you don't. Then you know that it's just isolated to the WpAdmin, which you know is not public, and nobody, unless they're a member or a user on that site can access.

**MATT BAUM:**
That's a good point. Just because you see an error in your In your Wp Admin area that does not mean your site is down. It does not mean the whole rest of the world is seeing that error. It means you did something that either took too long or needed too many PHP, workers. Right? That's all it needs. Site is still being served. Life is good. You can dump that bucket over your head and put the fire out in your hair.

Everything's okay

**JULIO DIAZ:**
and contact support

**MATT BAUM:**
you call Julio. JULIO HELP!

**JULIO DIAZ:**
The support team is not gonna be happy with me now, haha!

**LEXI MOSTEK:** No, Definitely. Okay. Let's change gears a little bit.

Are there any tools that you recommend to clean your database or recommendations to keep your database clean?

**MATT BAUM:** I like this, and I liked it. Okay.

I like to be a diplomat when it comes to stuff like this because people like tools for different reasons. And as somebody who worked in support or works as a sales engineer. Now. I'm hesitant to say, Go use this tool. It's the best, right? Because some one could have a bad experience with that tool.

So I'm going to be diplomatic. I'm gonna say, find something that's easy to use and does the job.

Wpsweep. It's a really easy one. Right? And when I go in looking for something like this. My advice to someone is always, look at what's out there. Just Google it. What's out there? How to clean up my database plug in the clean up my database. Then look at the plugin. It's gonna be it should be in the wordpress repo if it's not, be warned. But if it's in the repo.

Look what reviews it's got. Does it have 200,000 positive reviews? That sounds like a good one. Make sure it's up to date. Make sure there's support for it. Things like that, you know. And don't
just go on and save some money on this. I'm gonna get the cheapest one possible, you know. A very wise man once told me. Never try and save money on surgery or a tattoo. You'll regret it right. Cleaning up your database is just as important. So find the tool that works best for you. Make sure it's supported. Make sure it's got a bunch of good reviews, just like when you're shopping for something

You get on there, and you're looking. And you say I need this thing. Here's 50 people that have that thing, and some of them are rated 5 stars, and some of them are rated. One star, Go for the 5 star.

JULIO DIAZ:
and compare the features that they offer to like. Make sure that it's something that you need, right? Cause. There are some plugins that have extra stuff that you don't need, but they still have that 5 star rating. So just, you know, if it fits within what you are looking for, then you could always use it as a backup if anything like. If the first one doesn't work out. Okay, cool. I have another one to try

MATT BAUM: absolutely. And again, what he needed to do. Everybody has a different database with different crap in there, right? What crafty need cleaned out? That's the first question you gotta ask if you got a good host and you don't know support should be able to help you. There.

Looks like you got a bunch of logs. Looks like you got a ton of backups, or whatever you know. It looks like you got all this security info from when the site was hosted somewhere else, that you don't. Okay, that's easy. Great. Now I know what I'm looking for. Go find the tool that works best for you supported, and has the best reviews

LEXI MOSTEK: totally. And again, don't wanna keep plugging the plugin webinar but we talked about this a lot on plugins and paying for plugins and things like that, and I think one of our panelists said like, if your Plugin is offering a lifetime, subscription like is that the best choice, like it might be, but a lifetime is a long time, and in 3 years. Are they still going to be updating that Plugin? Are they still going to be offering support? Are you paying for the plugin because you're paying for them to actively work on it and respond to you. There are kind of some costs and benefits you need to think about with plugins and just on that when we talk about a database cleanup plugin, or a tool that you're using,

Matt and Julio. Does that Plugin always need to be installed or kind of like. What recommendations do you make? On that, so that you can keep your performance as good as possible?

MATT BAUM: I don't know who asked that, but I see him working, and I like that.
We don't, get rid of it. If it's done its job, get rid of it

**JULIO DIAZ:**
just because it's off doesn't mean it's not there collecting dust. And if it's not updated, there's still a minute chance. That's something not good can happen.

**MATT BAUM:**
True, disabled little plugins. Disabled plugins are still there. They're still plugins if you don't need it. And this isn't. I'm not just talking database optimization. I'm just talking disabled plugins. Period. We're not using those, I agree.

Get them out of your closet, throw them away. 99% of them are free. You can always download them again if you need one right, especially database cleanup plugin. Get one for free cleaning for database. Get rid of it. take it off of there. If you're not using it. Get rid of it.

**LEXI MOSTEK:**
Amazing. I am going to take one more question. And then we're gonna have some closing thoughts again. I think there's been over a hundred questions. This is a huge topic, and you know there's lots of answers to everything. We're just here to kind of riff and provide you some experience.

But last question, how do you automate testing to ensure that updates don't break your site?

**MATT BAUM:**
That's an awesome question.

**JULIO DIAZ:**
Very good question. That is a host that has a tool that will do the test. They will test the update. If there. If, after the update is completed, it runs a curl which will see if the site is loading with the 200 Okay, status code. If it doesn't receive a 200, it rolls the update back and lets you know more, though that's the important part is that it rolls back and lets you know that it did not update

**MATT BAUM:**
absolutely. If you look if you've got a team of nerds in lab codes and they're all sit in front of computers 24 hours a day and they're mission control. And they're testing this on, you know. Good for you. That's great. You're probably not working with a managed host. You're doing different business. A good managed host should have a tool that allows you to automatically update your plugins and do so without breaking your site.

How does that work? It's very simple. You have your yoast right? Your your image optimizer. Maybe you got Wpsweep cleaning up your database on there right? They need an update.
So what they should have in place is something that goes alright. I'm gonna move a copy of the site, to a test environment. right? This is the live site. This is the site in the test environment. When I update this plugin, does it break anything?

If so, the site looks different. If the site looks different, the Cms changes, It doesn't make that update. It says bad idea. If it makes the update and everything's great perfect. Now let's compare Yup. They look the same.

This is a weird metaphor that I'm doing right now. But I think you get it right. Visual regression testing the first thing that's gonna break when you update a plugin your Cms, a picture moves. Something changes color, right? The whole menu goes away. Whatever. f that happens, don't update the plugin.

Send an email. Hey? We didn't update that plugin. It made things look weird. might want to contact that plugin developer. See what's going on with that? The idea being is everything else that could be updated, got updated. We are not worried about security vulnerabilities. They're up to date. Good news. right? The one that didn't we address as soon as possible. Get it taken care of.

But the idea there nothing breaks during the update because it's been tested, and you're not doing it on the live site we call that cowboy coding back when I was a really crappy developer. I was yeeha all the way, tipped my hat update and stuff breaking sites because I was like, I'm gonna be a millionaire. Now, I work for a web host and I realize how stupid that is. So I don't do it anymore

Find a host that has good testing. So you can automatically update this stuff. Otherwise. go get your team of nerds. make them do a first somewhere. That is not your live site. By the way.

**JULIO DIAZ:**
Yeah. use the dev or staging environments. Please use your dev or staging environment, please.

**LEXI MOSTEK:**
Amazing? Well, just a few minutes left. I want to just briefly thank both of you, Matt. Julio. This has been really fun. It's always you know, exciting to get together and just kind of talk about these, but also share jokes and stories. And then thank you to all of our attendees that showed up for our webinar. I'm gonna just briefly plug. We will be having a security focused. Webinar in October. October is security awareness month. Talk about hackers, bots, vulnerabilities, happens to be very related to performance. Kind of go hand in hand. But with that Matt Julio, any closing thoughts or comments you want to add.

**MATT BAUM:**
you guys have been great. Thank you so much. Thank you to everybody from around the world. This is awesome. I loved this. Thank you for the softball questions, Lexi, so we didn't look stupid, and thank you for not firing us if we said anything disparaging that I didn't catch. So

**JULIO DIAZ:**
Thank you again for everyone joining and glad I was able to share some of my knowledge, you know, to help improve your site.

**LEXI MOSTEK:**
Yes, cool, well, happy. Thursday, everyone, and see you back here in October. Bye.