The Open Source Way
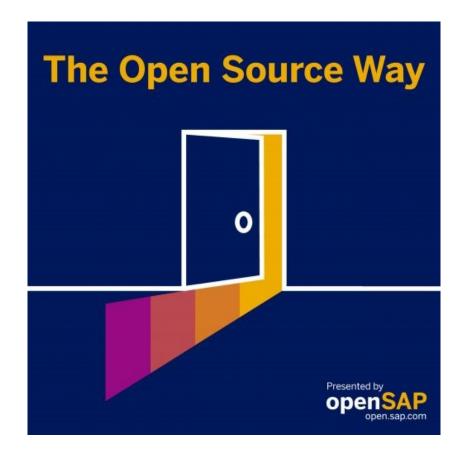
Episode 29: SUSE – Delivering automation and enterprise grade Open Source software to the SAP ecosystem

Transcript

Karsten: Welcome to the Open Source Way. This is our podcast series, SAP podcast series about the difference that Open source can be. And in each episode, we'll talk with experts about Open source and why they do it the Open Source way. I'm your host, Karsten Hohage, and in this episode, I'm going to talk to Alan Clarke and Keith Seigel. Right? Keith, is it Seigel?

Keith: Correct.

Karsten: Or Seigel?

Keith: Seigel. Correct.

Karsten: Seigel. All right. Because in German, I would say Seigel as you are spelled with an EI from SUSE, which I haven't even said about automation and probably some other topics. So, hi Alan, hi Keith. Great to have you here.

Keith: Hello, Karsten.

Alan: Hey, Karsten, thanks very much.

Karsten: All right. Alan is an SAP Alliance manager for the EMEA region at SUSE. He has spent eight of his ten years there embedded within the SAP ecosystem. Alan spends much of his time collaborating with and supporting both SAP partners and also assisting SAP customers on the partner side, Hyperscalers and regional CIs MSPs and so on, mostly with their migration and transformation projects. Keith came to SUSE in December 2020 after a ten year career within the SAP ecosystem. At SAP he was an account executive who then moved through the sales ranks and shortly after leading the sales development teams at SAP, he moved into a leadership role for various different solutions and services at SAP. And now he oversees SUSE's partnership with SAP for

North America. So, hello again, Alan and Keith. Where are you both currently located anyway? Because we're still doing this remotely, by the way.

Alan: Yeah. Hi, Karsten. Hi, everyone. I'm in in a sleepy little village in the middle of England. Currently seeing very windy weather outside my window. But, yeah, that's where I am, about 50km north of London.

Karsten: And Keith.

Keith: Hey, thanks, Karsten and hello, everybody. Thanks for the time today. Very excited to be a part of this podcast. I'm from Phoenix, Arizona, where we have an SAP headquarters for the midmarket space down in Tempe, Arizona. So, I'm about 45 minutes away from that office. I've been in Arizona since 1991 and I regularly enjoy the heat and not having to plow any snow.

Karsten: Okay. So, we do get the picture for Alan, it's kind of the foggy moor with the Hound of Baskerville audible in the background. And for you, it's in sight of the Mexican border with some saguaros in a desert, Keith, I guess. Now, but we're not really here to talk about the touristy features of your locations. The other day I actually talked to someone who sits just around the corner who also used to be with SAP and is now working for the other big Linux distributor. I guess you know who I'm talking about. Today it's SUSE Day just mentioning that because we don't need to start back in the 90's when things with Linux or its popularity started. That's what I talked about with Arne a couple of months ago. So, to you now, the question for the short answer: Linux kind of used to fight for its entry into the enterprise world for a while. Nowadays, basically all of the very large data centers for the cloud run on Linux. How did that happen?

Alan: Yeah, Enterprise Linux is obviously it's open source, but it's considered nowadays the optimal choice for data centers because of the fact that it's much more performant, it's more scalable, more cost effective as a data center OS. But I think one of the key things from particularly an SAP customers perspective is that it's considered more secure. So, when we're talking about Linux being the OS beneath kind of mission critical crown jewels, as it were, as SAP to have the most secure and performant OS sitting beneath it is much the preference these days and that's where it's now taken over. We see as much of an incline in the adoption of Linux from a DC perspective as we do a decline in Windows.

Keith: Yeah. What we also need to realize from an operating perspective is that Linux is also preferred by the programmers and developers that are building out these infrastructures. And what we've seen is that one of the reasons for this is that it's less demanding from a hardware angle and has a lower resource consumption overall from an operations perspective. And, you know, this is really what makes Linux very attractive for organizations around the world.

Karsten: Okay. Sounds totally logical this far. And then I said I wanted to talk about one aspect a little bit today. That is automation, which is another quality you want of anything that you run in the cloud should automatically scale up, down, distribute resources to where they're needed and so on, deal with failure, etcetera. Again, what makes Linux the choice as far as that's concerned?

Alan: Yeah. So, I think, you know, everyone accepts that the key to any kind of comprehensive modern IT environment is, consistency and the reliability of all of its inherent software defined systems. The repeatability and rapidity of the deployment is crucial, particularly when we're talking about SAP workloads as an example, as a great example with Enterprise Linux, you've got then all teams, DevOps, networking can pre prescribe, if you like, their requirements and feel completely confident that any future automated deployments are going to follow that pre-designated spec. So essentially any new workloads can be provisioned on demand, for instance by lines of business in the cloud. If we're talking about a cloud scenario and it will always be done to the agreed template.

Karsten: Okay. Now we've all seen a lot of requirements prescribed and features promised, and specs followed or not followed or in our beautiful industry doesn't always really mean that they're being followed as prescribed. why can the DevOps and networking colleagues be more confident about that with Linux?

Keith: That's a great question, Karsten. So to break it down, unlike most companies that have an internal sort of only network that fields responses, the questionnaire feedback, the customer successes and failures from utilization of the software, we actually have an external massive network that we like to consider a community of customers, developers and programmers that are all contributing to the needs, the

feedback, the best practices of our customers, needs and desires, all just to be successful. The best part of this entire Linux community is that these updates and tweaks, these improvements are released for customer utilization as often as on a daily basis. So, this way the customer is always on the latest and the greatest versions if they so choose to be. This is not compulsory. This is not a mandate. This is a choice on the part of the customer and the end user. So, the major point to really take here and to really understand is that we have releases happening all the time.

Karsten: Makes sense. As far as the Linux being the choice, is there anything else you'd want to add for Linux in general or maybe even for SUSE Enterprise Linux?

Keith: Yeah. So, the other key factor is maintaining those characteristics after deployment. You know, so you've got like your provisioning, your patching, your scheduling, you know, security compliance can all be handled by comprehensive Linux management tools. So, we're talking about automation, live patching and overall insight into the problems that could possibly occur even before these, you know, potential errors even happen. And that is the gist behind what we call Trento, which is something that we're going to discuss here in a few more moments down in our conversation here today.

Karsten: Okay. And that, of course, is something that specifically SUSE adds to the abilities of Linux. Is that right?

Keith: Correct? Yes.

Alan: Yeah. And I think if we're being specific, you know, from a SUSE perspective here, you know, not wishing to talk point product, but it's relevant in this case and what we're talking about. So, it's the same for any enterprise Linux distribution. There has to be a management console, a central management console that is the kind of the glue, the puppet master here, if you will, and becomes, again from an SAP basis team's perspective, their best buddy, because of the level and the depth of automation and all of the points that Keith just outlined, this is where it's all handled in the managed central management console. And this is a huge kind of relaxant allows the basis team member to sleep at night. Certainly from an infrastructure perspective in terms of keeping the lights on because it pulls together the management and the unified deployment and

automation of all these key components in the one central console, no matter what point product we're talking about within the portfolio and obviously the ability from a SUSE manager perspective to manage a mixed Linux environment, which is again a key factor for such people as basis admins, because a lot of them are dealing with a mixed Linux distribution environment. So, to have one central console that does it all instead of having to flick between consoles is a huge benefit.

Karsten: Quick return question there. You said mixed Linux environment. So, the SUSE console is totally equipped to also manage a mixed environment of different distributions, be that there are some SUSE and some Linux, some Red Hat and maybe some exotic servers in the landscape. Is that right?

Alan: Yes indeed. So, SUSE, Red Hat, canonical Ubuntu can all be managed by SUSE manager in the one console.

Karsten: Okay, cool. I mean, we are still talking about an open source system here. So that kind of also still sounds logical to be possible at least. But you also talked about updates, fixes coming from the entire community and everything. Um, how is that these days? I mean, do mainly the distributors such as SUSE and or Red Hat provide these fixes or do they actually still also come from customers or even still sometimes from the lone wolf pizza-munching developer in the Detroit basement or where do these things come from these days?

Alan: Yeah. So, I think from an Enterprise Linux perspective, I think the subscriptions, the Open source subscriptions are support based subscriptions. So, you know, it's not a case of the product, it's the support wrap around it. So, from a customer perspective, all of the updates, patches, fixes come from the individual Linux distribution vendor itself. Okay. And in the case of SUSE manager, that is the throughput, if you like, to apply all of those patches in a scheduled structured manner so that it doesn't disrupt the smooth running of the business. These are all applied at specific individuals, specific times in the background, whilst the systems are still running. Now, obviously if a customer hits an issue, they raise a support ticket with us and if they have a specific issue upon us investigating that issue, our support teams, we may ascertain that a fix is required in order to resolve the issue in question. Now, at this point, we in the background, our support teams liaise with product management and if necessary, our developers and

the teams and staff in the SAP Linux labs over in Walldorf with SAP, we work on the fix or the enhancement. And then we if that gets certified by SAP, it's rolled up into the next version or service pack. Now we've got a very good example of how this works and benefits not just the customer that raised it, but all of the other customers So um, what happened last year was that a customer came to us and reported an issue. They thought it was an OS issue and we investigated it as such. It's so turned out that it actually wasn't down to SUSE Linux, for instance. It was down to an issue with SAP HANA index server. Now the impact on the uptime and the high availability there for a customer is huge because it's not available to fail over as quickly as it should. So, this then means that this downtime, it's way too long to meet customer SLAs and a fix needed to be applied. So, we worked on this in the background without going into too much detail but essentially, we came up with a fix for this to enable a dying HANA database index server to fail much quicker and then the failover process could kick in and the next resource is back up and running and the customers or the customers customers have experienced no or little impact. So that's an example of where someone, a customer reporting something to us it's an open source issue if you like. we looked at how we could resolve it and we've then fixed it, and we've fixed it and now rolled it up as a feature in our next release. So, any customer now consuming SUSE for SAP, for instance, will have access and will benefit from that feature. And that's a really good example of where this is the beauty of open source, right?

Karsten: All right, let me add that, of course, SAP HANA index servers have completely stopped dying by now anyway. No, I have no idea, but felt I had to say that. Nice example, thanks. But I do want to return to one other thing that I think you mentioned, Alan. There was more or less in the ways of that all updates, patches, fixes are issued by the Linux distributors or distribution vendors. Is that so? Are they all happening in the distributors branches and are then being resubmitted to the community, which I guess you have to do? Or do some things still happen on community Linux itself and that then you adopt or am I getting the process wrong here?

Keith: Yeah. So, I'll chime in on this one, Karsten. So, the thing to really keep in mind here is that we are talking about a community of many people, internal as well as external to the Linux vendor. So, this is not necessarily coming directly as fixes from a distributor, but more or less from a community of contributors. So, we want to kind of keep that almost like a poem distributor versus contributor. Now, we certainly contribute

in a major way to these fixes that our customers require, But the more important aspect to consider is that this all comes from a broad range of community contributors in the Linux space. So other Linux providers absolutely have the opportunity to capitalize on the improvements, the patches, the updates, as well as the customer requests if they so wish to do, because as mentioned, this is in fact a community effort, not a single distributor based effort, if that makes sense.

Karsten: I think I'm beginning to get it. Let's maybe look at it from the other side a little bit. Um, who reports the issues to whom, if there are such issues? Do they all get reported directly to SUSE Enterprise or do they get reported to Open SUSE or do they get reported again to the totally public community, or is that a mix of things?

Alan: Yeah so, just to clarify, as I mentioned a moment ago, open SUSE Enterprise Linux, it's a subscription for patches updates and either 12x5 or 24x7 support, back to the Linux vendor or distributor in question. So, it's not a license maintenance model. But, with this in mind, you know the process is that the customer will find the issue reported to SUSE and SUSE will then look at the potential resolution to that issue. And then of course, just as in the example I've mentioned, if we feel that is something we needed to fix or amend, we go through a certification process with SAP, and it then gets rolled out into the next release. But if you talk about Open SUSE, which is the community version of Linux, that's not the case from an enterprise Linux perspective. So as the enterprise customers, the commercial customers are not using Open SUSE because it's not supported or certified by it. For instance, SAP. However, just like with, for instance, our friends at Red Hat, they have Fedora. It's their community version. We have open SUSE, it often foretells what's to come in an enterprise version because there are new features being developed there that are coming from much as you indicated, ideas from the Linux community that are being rolled up into open SUSE and SUSE looks at Open SUSE has a look at that say Feature and thinks well, is this something we can use in an enterprise release. So, the open SUSE community actually does feed the enterprise community, but obviously we have to test that, harden it, make it enterprise ready. So, hopefully that kind of clarifies it and as I say, ultimately it's the whole pay it forward nature of open source, which is where the customer, you know, is always going to be the winner.

Karsten: I guess I just get confused sometimes because we're talking open source here and sometimes you call it free and open source. And yes, you're making the point what the distributors are distributing, or selling is really a patch and fixes subscription and maintenance subscription, not a license model, I get it. And it does really sound as if from the processes you're describing that the open source idea is at work within this still, right? I mean, Keith, do you have any more examples maybe where these things happen with the open source part kicking in?

Keith: Yes, indeed, Karsten. So, to take you through it, the most obvious example is a very recent one where we had a customer sort of expressed a need for a simpler tool with which they'd be able to scan nodes and identify potential problematic operating system misconfiguration issues before they actually affect the SAP workloads. From this, our technical team and our product managers began working on a new open source project that we call Trento, which I kind of mentioned a little bit earlier, very briefly. Something such as this is not a quick turnaround as it actually took us 18 months to develop test and get it certified. This is now part and parcel of SUSE Linux for SAP applications and not a cost option module.

Karsten: And not a cost option module means it's included in the SUSE Linux enterprise license. Or is it community...Open for everyone to use?

Alan: So, this is actually purely for SUSE Linux Enterprise server for SAP applications. A nice, short product title there. But it's actually a bolt onto that. And using the example that Keith's just mentioned there. So, it was something that develops came out of a customer scenario again, but it's only specifically for SUSE for SAP, it isn't included in the community version, it's nor included in our kind of entry level SUSE Linux Enterprise Server. It's just for the SAP customers, but it's not a cost option, so it's rolled up into the product.

Karsten: I think I've understood a lot more already, so thanks for that. Maybe last question before we come to the before last and then to the last question. Why in summary, SAP and SUSE.

Alan: Yeah, I think it's SUSE and SAP have been partnering and jointly innovating. Both German companies in origin, obviously, for well, nearly 25 years now, with SUSE being

SAP kind of Linux development platform of choice. Um, and the vast majority of whether it's R/3 or HANA deployments are running on SUSE technology, um, and that really is it's that affiliation between SAP and SUSE, it's very strong. We're always certified by SAP first, and there are specific reasons for that. SAP is intrinsic to SUSE's business. It's a huge part of our business. We plow an awful lot of resource and innovation into this area. I think really this is borne out by the examples that Keith and I have mentioned today with Trento and with the fast dying index server. We put an awful lot of technical resource into into the SAP area, and it's always been that way ever since we first started with partnering with SAP.

Keith: And I'd like to add to that if possible. So, SAP runs all of their own personal day to day production infrastructure on top of SUSE technology as we are recognized as the referenced architecture for HANA, as does HANA Enterprise Cloud as well as RISE. And therefore, SUSE is always the first to be certified with any new release, and to the best of our knowledge is that we've been recognized as being a part of roughly 85% of the SAP customer installed base. We are actually the platform that 85% of that customer base is, you know, sort of parking their SAP HANA infrastructure, if that makes sense.

Karsten: All right. While I can't verify the numbers ad hoc that you're giving here, I'll just let that stand that way and for itself. Um, with that, let's maybe come to our famous last two questions. The one is, beyond maybe the very obvious places of just hacking SUSE into the Google search interface, where would be some very good addresses to find out more.

Keith: Great question. So, we have a comprehensive pool of resources, including data sheets, technical white papers, best practice guides and informative blog links all at https://www.suse.com/solutions/run-sap-solutions. And I'm sure that you'll be able to distribute that to folks as well for them to easily capture this data and the other thing I would also like to say the most important part, you know, if there is this interest in, you know, parking your HANA on SUSE, you should really connect with your local SUSE resources. You know, they can manage your account from a customer experience standpoint. So don't go at it alone. Let us help you out.

Karsten: Right. Okay. And as I was just going to say, we're of course, going to put URLs like the one you just spelled out in detail in the information accompanying this podcast episode, which brings me to the very last one. If you would have our listeners to take away the 2 to 3 famous key takeaways from this episode today, what would they be?

Alan: Yeah, I'll chime in with the first one. I think, um, particularly based on the nature of this podcast and personally I think it's great that there's an open source dedicated podcast from SAP, something as vital as SAP HANA only running on one of two enterprise Linux operating systems is a huge feather in the cap for open source technology in itself. As I mentioned earlier, this is the kind of crown jewels of anybody's business and it runs on Linux, whether it's ours or the other guys, it's running on open source enterprise Linux. That's a great thing for a start. We've already talked about the fact that there's a vast amount of SAP workloads in the world today running on SUSE technology, including SAP's own infrastructure as Keith has mentioned. And also, the fact, just to reiterate, the fact that it is one of the biggest areas of focus, of SUSE's business, is SAP. And this hopefully, if anyone out there listening is an SAP customer and is looking for a takeaway is to make you feel a little bit better, that from a SUSE perspective, because of that level of investment and innovation, and close alliance with SAP, you can rest assured that the solution itself, as it were, from SUSE, is something that's only going to be the most performant out there and will help those basis admins sleep a little bit better at night. There will only be an increase in investment and innovation in this area going forward and I think that's a real key, this won't stop. It's been going like this for 20 odd years now, and it's set to continue, and we'll look to match whatever SAP is doing with whatever innovation and investment we can.

Karsten: All right. I think that was a little bit more than just one key takeaway. So now just Keith adds, gets to add one more and then we consider these key takeaways done. Okay.

Keith: Yeah, this is actually kind of a short and simple but very relevant. As we talked about the community, you know, our expansive external infrastructure of, you know, folks that are dedicating their time to improving SUSE and, you know, Linux itself. So, the SUSE mission for customer success and HANA deployments is demonstrated by

the amount of effort, expertise and resources we, as well as the community, dedicate globally to our SUSE for SAP value proposition.

Karsten: All right. Okay. Thank you very much, Alan. And thank you very much, Keith, for being our guest today. It was nice to have you both here.

Keith: Thank you as well. Really appreciate it.

Alan: Yeah, very much appreciate you having us on.

Keith: Great conversation.

Alan: Thank you.

Karsten: Thanks. And thank you all out there for listening to the Open Source Way. If you enjoyed this episode, please share it and don't miss our next ones published every last Wednesday of the month. At least in most months. You'll find us on openSAP and in all those places where you find your other podcasts like Apple Podcasts, Spotify and the likes. Thank you again, Alan and Keith. And now let's all say bye bye. Bye bye.

Keith: Bye

Alan: Bye.

Keith: Bye, everybody.

Alan: Thanks. Bye.