0:0:0.0 --> 0:0:0.380  
Speaker 1  
So.

0:0:1.840 --> 0:0:5.100  
Speaker 1  
And basically, uh, yeah, let me share the screen.

0:0:5.680 --> 0:0:16.890  
Speaker 1  
And so we, uh, and that the the earlier hmm restudy meeting with the yeah.

0:0:16.900 --> 0:0:55.200  
Speaker 1  
With the list of challenger requirement challenges and requirements UM that motivated the need for this continuous conformance checking and now based on the discussion we had with you and the other experts, we refined the requirements we developed, we we define, let's say uh, we propose some definitions and also we developed a tool supporting the the viral process that we envision and we now show some examples of you use for this tool.

0:0:55.430 --> 0:1:2.610  
Speaker 1  
We start with a basic one that shows basically all the the different components of the tools and the of the tools.

0:1:39.310 --> 0:1:39.580  
Mr.X  
Umm.

0:1:2.620 --> 0:1:55.410  
Speaker 1  
Sorry and and so basically the first thing here that you can see is the how the tool uh look like and on the left side here on the grid bar you see that you have a repository of already developed it can be let's say architecture, architecture style or any other solution that you already developed and have it as a knowledge based let's say once you select the architecture that you want to start with let's say that you select a style that it can be I'm just ascribe or you can have like a IT architecture you double click and you will you will have it graphically represented in this quadrant over here then after that you can start composing your your uh let's say more concrete architecture your uh let's say uh.

0:1:57.350 --> 0:1:59.740  
Speaker 1  
Software architecture and you do it textually.

0:1:59.750 --> 0:2:8.940  
Speaker 1  
As we discussed already, you define like the components and while you do this each time, let's say you say that runtime you will get the.

0:2:9.0 --> 0:2:15.480  
Speaker 1  
Also, the graphical representation of this architecture of what you're modeling using the component and connector view.

0:2:16.290 --> 0:2:22.60  
Speaker 1  
Then always add runtime you get the other two, let's say features.

0:2:22.130 --> 0:2:24.760  
Speaker 1  
The one is the the conformance view.

0:2:24.770 --> 0:2:40.150  
Speaker 1  
So you each time you you save you will see if you're you're you're architecture is conformant with the with the the selected style or or more general architecture.

0:2:40.600 --> 0:2:46.570  
Speaker 1  
And in case it's not, you will see also which are the violations that are causing this.

0:2:46.580 --> 0:2:48.350  
Speaker 1  
Not not nonconformance.

0:2:48.640 --> 0:3:11.80  
Speaker 1  
The last thing that you can see in this in this let's say view over here is what we call the validation script view, which is essentially a way it's another view over the let's say the there, the architecture that allows for the specification of additional logical strains on the starting architecture.

0:3:11.90 --> 0:3:12.560  
Speaker 1  
So here you can go strain.

0:3:12.570 --> 0:3:15.260  
Speaker 1  
For instance, let's say the communication.

0:3:15.530 --> 0:3:22.940  
Speaker 1  
The existence of specific component, the mega component mandatory or you know different things that you can do.

0:3:56.50 --> 0:3:56.320  
Mr.X  
OK.

0:3:23.130 --> 0:3:57.880  
Speaker 1  
And of course this constrains if specified there also taking taken into account uh, when performing the conformance check that you are in this let's say, uh video, you can see uh, like in this case we specified the disconnector which in the in the actual architecture as you can see links B to C but disconnector is illegal according to the reference architecture every year because here we don't have any connector that goes between B&C.

0:3:57.990 --> 0:4:18.770  
Speaker 1  
So we get this violation in the console and as you as I told you there other diagram there other chart shows the red there had part and then once once we fix this violation basically removing the connector you get the the the chart that is updated or green.

0:4:18.780 --> 0:4:21.870  
Speaker 1  
And of course, the gonzale that shows no violation.

0:4:22.200 --> 0:4:23.960  
Speaker 1  
So this is, let's say the general.

0:4:26.290 --> 0:4:30.990  
Speaker 1  
Yeah, yeah, the general workflow, let's say process and the already here.

0:4:31.0 --> 0:4:33.730  
Speaker 1  
If you have any feedback, we can, yeah, register them.

0:4:35.310 --> 0:4:43.40  
Mr.X  
No, I'm only wondering if the constrained there came actually break or can go against the architecture.

0:4:43.50 --> 0:4:45.560  
Mr.X  
The reference architecture works.

0:4:45.150 --> 0:4:46.360  
Speaker 1  
In theory, yeah.

0:4:46.370 --> 0:4:47.400  
Speaker 1  
In theory, yes.

0:4:47.950 --> 0:4:48.160  
Mr.X  
No.

0:4:47.710 --> 0:4:53.70  
Speaker 1  
You could specify constraints that are that don't make sense, let's say.

0:4:53.810 --> 0:4:55.580  
Mr.X  
Yeah, and.

0:4:55.270 --> 0:4:59.430  
Speaker 1  
And uh, yeah, this is uh, this is this is possible in a way.

0:5:0.350 --> 0:5:5.660  
Mr.X  
And is not highlighted somewhere that for example you have this constraint that breaks.

0:5:5.670 --> 0:5:6.790  
Mr.X  
Kind of dereference.

0:5:7.190 --> 0:5:9.680  
Speaker 1  
No, at the moment it's is not.

0:5:8.670 --> 0:5:11.20  
Mr.X  
Yeah. Umm.

0:5:10.130 --> 0:5:30.890  
Speaker 1  
Is not a lighted exactly because, uh, this is the one of the, let's say, improvements that we would like to to perform umm to have uh, I check on the on the different let's say constraints that you yeah.

0:5:30.900 --> 0:5:34.940  
Speaker 1  
As you said, you can specify yeah and.

0:5:37.220 --> 0:5:37.550  
Mr.X  
Umm.

0:5:37.140 --> 0:5:57.30  
Speaker 1  
OK, but this is in general as as a as as we discuss is the normal, let's say or normal, it's the general workflow and what we maybe we can also use this figure already here and to to to discuss a little bit the the the notion of continuous conformance now.

0:5:57.100 --> 0:6:9.250  
Speaker 1  
So what we what we had in mind is that general scenario where you have architecture, whatever that yeah they may evolve.

0:6:9.260 --> 0:6:25.440  
Speaker 1  
So you may have different distances or they volution of this architecture overtime and this is of course is pretty normal in development, but also you may have that these architecture and maybe define in accordance to more general architecture.

0:6:25.450 --> 0:6:38.770  
Speaker 1  
So architecture that are more abstract, as in the case of architecture reference architecture, but it can also be architect, reference architecture and architectural style and different other examples.

0:6:39.20 --> 0:6:54.80  
Speaker 1  
So in this in this scenario, we would like to have this process for continuous conformance, meaning that a process that always allow you continuously to process this them conformance in a non blocking way.

0:6:54.230 --> 0:7:7.300  
Speaker 1  
So the the the next two cases we that we would like to discuss with you is what we call the partial conformance checking and the let's say restrictive or yeah adjustable conformance checking.

0:7:7.310 --> 0:7:13.670  
Speaker 1  
So the first case is when you basically have a, uh, architecture.

0:7:14.260 --> 0:7:35.830  
Speaker 1  
I'm a more abstract architecture that can be a reference architecture for instance, and you don't want to check the conformance of a software architecture with all the reference architecture, but just with a part of it because you know that maybe the in this stage of the development you didn't develop all the the, the whole architecture for whatever reason no.

0:7:35.920 --> 0:7:41.460  
Speaker 1  
So you may have this this aspect over here and now.

0:7:41.470 --> 0:7:43.420  
Speaker 1  
Do you do this simply?

0:7:43.430 --> 0:7:46.600  
Speaker 1  
You do the the, the, the the approach.

0:7:46.610 --> 0:7:56.920  
Speaker 1  
That tool that we developed works in a way that if you don't specify and which component in.

0:7:56.960 --> 0:7:57.990  
Speaker 1  
Sorry which component?

0:7:58.0 --> 0:8:11.550  
Speaker 1  
The reference architecture your component in the software architecture implements then the conformance check is not run on that specific part.

0:8:11.560 --> 0:8:27.290  
Speaker 1  
So meaning that if in this case we have the elements of the reference architecture being ABC, if we don't instantiate C in the hungry architecture than the conformance check are only run on A and B component.

0:8:29.890 --> 0:8:30.180  
Mr.X  
Hmm.

0:8:27.300 --> 0:8:30.650  
Speaker 1  
So we can have like a partial course.

0:8:30.660 --> 0:8:37.90  
Speaker 1  
This is A3 real example but in bigger example I may make more sense.

0:8:37.420 --> 0:8:48.170  
Speaker 1  
The other view, the other example we would like to discuss is whether you when you stand, you can have a more restrictive or more, let's say general conformance check.

0:8:48.400 --> 0:8:53.210  
Speaker 1  
And this again, it's May, may may be due to the fact that you are a difference.

0:8:53.370 --> 0:8:54.330  
Speaker 1  
Just development.

0:8:54.340 --> 0:8:58.930  
Speaker 1  
You don't want to be as strict for reasons at the beginning when you are just brainstorming.

0:8:59.150 --> 0:9:1.700  
Speaker 1  
And how do we how do we do this?

0:9:1.710 --> 0:9:6.590  
Speaker 1  
Well, we we give the user the possibility of specified script. Sorry.

0:9:7.930 --> 0:9:11.780  
Speaker 1  
Constraints in the validation script that can of course.

0:9:13.0 --> 0:9:13.630  
Speaker 1  
Yeah.

0:9:13.640 --> 0:9:17.550  
Speaker 1  
Modify the street thinness of this conformance check.

0:9:17.810 --> 0:9:18.370  
Speaker 1  
Umm.

0:9:19.750 --> 0:9:20.30  
Mr.X  
Hmm.

0:9:19.650 --> 0:9:22.640  
Speaker 1  
And yeah, again here the the problem persists.

0:9:22.910 --> 0:9:26.20  
Speaker 1  
UM and All in all doing this.

0:9:26.30 --> 0:9:26.460  
Speaker 1  
Of course.

0:9:26.470 --> 0:9:38.570  
Speaker 1  
We you we're gonna have, let's say the multi level the multi level comply the what we call the multi level conformance view where basically you first define let's say a style.

0:9:38.580 --> 0:9:42.710  
Speaker 1  
In this case, we define as a publish subscriber style, not.

0:9:42.970 --> 0:9:59.710  
Speaker 1  
Then we use this style to define a reference architecture for the IoT domain and then later on we actually load this reference architecture for Ayotte domain in in the tool for the.

0:9:59.790 --> 0:10:3.120  
Speaker 1  
And basically for the developing another.

0:10:3.350 --> 0:10:8.100  
Speaker 1  
Yeah, another software architecture that is compliant with the reference architecture.

0:10:8.110 --> 0:10:9.50  
Speaker 1  
So in the multi level.

0:10:9.360 --> 0:10:9.640  
Mr.X  
You know.

0:10:10.760 --> 0:10:10.920  
Speaker 1  
Yeah.

0:10:14.110 --> 0:10:15.880  
Speaker 1  
So this is a the the.

0:10:15.940 --> 0:10:21.980  
Speaker 1  
Yeah, again, the case is that we we wanted to discuss and also to to help you a little bit.

0:10:21.990 --> 0:10:31.180  
Speaker 1  
Maybe I can show you again at the, let's say, the challenges and the the requirements that we discussed in the previous meeting.

0:10:31.630 --> 0:10:37.240  
Speaker 1  
We refine them a little bit based on, yeah, the the discussion with you and the other practitioner.

0:10:37.330 --> 0:10:54.840  
Speaker 1  
So we also group them now in challenges that are more like, yeah, general, let's say challenges and then requirements that extend the drove the let's say developing of the, the, the definition of the process and developing on the supporting tool.

0:10:55.300 --> 0:10:55.560  
Mr.X  
Yeah.

0:10:55.280 --> 0:11:0.720  
Speaker 1  
And now, based on what we discussed and what you saw, yeah, we can dig some minutes to.

0:11:3.130 --> 0:11:12.750  
Speaker 1  
You we can have some means for you to to to go through this requirements and see whether or not you think we address them or if you see any problem.

0:11:13.450 --> 0:11:13.700  
Mr.X  
Umm.

0:11:14.190 --> 0:11:14.450  
Speaker 2  
Com.

0:11:16.360 --> 0:11:16.820  
Mr.X  
OK.

0:11:18.870 --> 0:11:20.280  
Mr.X  
No, I understand why now.

0:11:20.290 --> 0:11:31.390  
Mr.X  
For example, if you just go back quickly to the to the previous slide, I understand basically now why you can actually break the hardware architecture.

0:11:31.400 --> 0:11:38.90  
Mr.X  
The reference architecture in this case with the with the constraint as you mentioned, because you can always do that as an actual feature, isn't it?

0:11:37.900 --> 0:11:38.660  
Speaker 1  
Yeah, exactly.

0:11:38.640 --> 0:11:42.880  
Mr.X  
Time of like a dev dev view and production view in the case.

0:11:42.890 --> 0:11:43.380  
Mr.X  
So yeah.

0:11:43.420 --> 0:11:44.480  
Mr.X  
OK, then. OK.

0:11:44.520 --> 0:11:54.530  
Mr.X  
So then they sense, uh, yeah, in general, I don't know for the requirements that you all the challenges that you mention now.

0:11:54.590 --> 0:11:58.740  
Mr.X  
Yeah, there's a conformance solution to mention that to be ready and then.

0:12:6.440 --> 0:12:6.930  
Mr.X  
Hmm.

0:12:8.980 --> 0:12:11.720  
Mr.X  
So the first table are basically all the challenges right?

0:12:11.730 --> 0:12:19.600  
Mr.X  
Like all the kind of aspects to take care of and then the requirements is are the ones.

0:12:19.610 --> 0:12:20.540  
Mr.X  
Yeah, there are the bottom.

0:12:20.550 --> 0:12:21.510  
Mr.X  
OK conformance.

0:12:23.640 --> 0:12:24.0  
Mr.X  
Umm.

0:12:24.950 --> 0:12:25.200  
Speaker 1  
No.

0:12:24.870 --> 0:12:28.130  
Mr.X  
And those are prioritized or these are?

0:12:28.100 --> 0:12:28.570  
Speaker 2  
No, we.

0:12:32.60 --> 0:12:32.600  
Speaker 2  
Umm.

0:12:27.840 --> 0:12:33.180  
Speaker 1  
And no, these are the these are just listed the yeah, this is not the priority.

0:12:33.800 --> 0:12:34.60  
Mr.X  
OK.

0:12:34.960 --> 0:12:35.200  
Speaker 2  
Yeah.

0:12:35.0 --> 0:12:36.110  
Speaker 1  
The that's.

0:12:36.480 --> 0:12:37.590  
Speaker 1  
Yeah, exactly.

0:12:37.600 --> 0:12:38.110  
Speaker 1  
We use the.

0:12:35.210 --> 0:12:39.420  
Speaker 2  
Yeah, we remove it and we connected with the salads.

0:12:39.990 --> 0:12:40.930  
Mr.X  
OK. Yes.

0:12:40.960 --> 0:12:49.190  
Speaker 1  
We that we use the prioritization only to remove those that were uh, uh, let's say dim not relevant.

0:12:50.770 --> 0:12:52.520  
Mr.X  
And if you scroll a bit up, sorry.

0:12:52.570 --> 0:12:53.400  
Mr.X  
Uh, you have?

0:12:55.540 --> 0:12:55.660  
Speaker 1  
Yeah.

0:12:53.410 --> 0:12:56.600  
Mr.X  
See one checking what are known blocking in this case.

0:12:56.610 --> 0:13:1.10  
Mr.X  
So chill, see 1C2 and C4.

0:13:3.410 --> 0:13:3.610  
Speaker 1  
Yep.

0:13:6.90 --> 0:13:7.290  
Mr.X  
Uh, yeah, OK, OK.

0:13:7.300 --> 0:13:10.160  
Mr.X  
Yes. No.

0:13:10.170 --> 0:13:11.340  
Mr.X  
Yeah, I mean it's.

0:13:15.60 --> 0:13:18.30  
Mr.X  
Looks quite solid, you know way.

0:13:20.420 --> 0:13:20.780  
Speaker 1  
OK.

0:13:22.990 --> 0:13:23.800  
Speaker 1  
I'm glad.

0:13:23.810 --> 0:13:26.240  
Speaker 1  
Do you want to add the any?

0:13:26.390 --> 0:13:26.850  
Speaker 1  
Anything.

0:13:27.890 --> 0:13:28.980  
Speaker 1  
Uh, questions.

0:13:28.730 --> 0:13:31.210  
Speaker 2  
Uh, I remember that.

0:13:31.220 --> 0:13:48.940  
Speaker 2  
You, but we discussed the the press study you mentioned the the idea is to have a some views, some view about the the security aspects.

0:13:48.950 --> 0:13:51.180  
Speaker 2  
If I remember correctly. Yeah.

0:13:51.190 --> 0:13:51.270  
Speaker 2  
Yeah.

0:13:49.570 --> 0:13:51.350  
Mr.X  
Umm, yeah, yeah, yes.

0:14:6.670 --> 0:14:6.990  
Mr.X  
Umm.

0:13:52.200 --> 0:14:11.950  
Speaker 2  
And in fact, to Daddy is to uh to provide the tool that can be extended by our big UPS, the requirement that #7 uh try to to work explain this this feature so.

0:14:12.750 --> 0:14:13.70  
Mr.X  
OK.

0:14:15.150 --> 0:14:15.520  
Mr.X  
Nice.

0:14:17.650 --> 0:14:20.990  
Mr.X  
Umm well no.

0:14:21.0 --> 0:14:22.670  
Mr.X  
I mean, to me it's like looks.

0:14:24.30 --> 0:14:24.820  
Mr.X  
Oops, very good.

0:14:27.770 --> 0:14:32.560  
Mr.X  
Of course, and all these is open to interpretation, basically that it's. But it's.

0:14:33.880 --> 0:14:33.990  
Speaker 1  
Yeah.

0:14:32.760 --> 0:14:36.40  
Mr.X  
Yeah, looks very nice.

0:14:36.720 --> 0:14:36.920  
Speaker 1  
OK.

0:14:41.40 --> 0:14:41.610  
Speaker 1  
Yeah.

0:14:36.690 --> 0:14:42.280  
Mr.X  
Alright, this sources here this you know this SLR G RPS that you have.

0:14:41.820 --> 0:14:43.600  
Speaker 1  
Uh, these are just these.

0:14:43.610 --> 0:14:43.890  
Speaker 1  
Uh.

0:14:43.900 --> 0:14:45.10  
Speaker 1  
Source uh yeah.

0:14:50.650 --> 0:14:50.950  
Mr.X  
Uh.

0:14:45.20 --> 0:14:54.720  
Speaker 1  
For indicating from which basically activity which activity produced this specific requirements.

0:14:54.730 --> 0:14:57.760  
Speaker 1  
But this is just for our our purposes.

0:14:58.240 --> 0:14:58.910  
Mr.X  
OK, alright.

0:14:58.700 --> 0:14:59.50  
Speaker 2  
Umm.

0:15:0.320 --> 0:15:0.950  
Speaker 1  
OK.

0:15:0.960 --> 0:15:6.260  
Speaker 1  
But then again, uh, stop the transcript here and and.