

## Questionnaire – Demographic Questions

1. What is your current role in the company?

I'm a solution architect

2. What kind of tasks do you usually do in your work?

I'm responsible for the architectural part for about three teams, three teams of developers. And there I'm responsible for only one product and how that one product interacts with systems of our internal customers and other back-end systems that we require.

3. Given enough time, can you understand the architecture of an application system that is described using an IaC script of an IaC technology you are familiar with?

I guess so.

But I'd like to add that infrastructure is mainly not always only a small part of my day-to-day work, if at all.

Yeah. I'm aware of the output. I'm aware of what we're using, what we have deployed.

4. For how many years have you worked on tasks associated with IaC tools?

5. How large is the company you currently work for?

more than 100,000

## Questionnaire – Compliance Rule Modeling and Checking

6. How do you check the compliance of the software applications of your company?

there's a tool we are using where all applications are modeled or at least presented in what they are offering and what they require and what side effects they might bring with them.

it's called Lean I X. And they actually can, for example, there's stuff modeled like also the dependency, maybe between systems.

7. Do you use well-defined models for the compliance rules applicable to the software applications of your company?

- a) If so, how do you define them?

it always started. It's like a framework. I think they call it actually a solution architecture framework, for example, where they provide like some best practices or how you should approach a certain problem, for example.

The incentive is given to check with your colleagues, do an architecture check, like just have a, another pair of eyes, look at what you did who.

And this other person is not really familiar with what you do in your day to day business or just that you have a.

And another person look over that.

8. Do you think having a well-defined and machine-readable format for compliance rules reduces the complexity associated with checking them?

Yeah.

I would say so, yes.

9. Do you think having a well-defined and machine-readable format for compliance rules reduces the uncertainty associated with interpreting them?

Yes.

That it reduces this for nine. (Interviewer Note: He probably means agree but less than the question 8)

10. How often do you have to deal with new compliance rules?

I'm not sure about the, how often they are.

They are at least with every major release, if you release, even if you do like a major update on your cloud software.

11. How much do you agree with the following statement: *using IACMF reduces the effort associated with defining and checking compliance rules?*

it would say it's a five.

12. How much do you agree with the following statement: *using IACMF reduces the complexity associated with defining and checking compliance rules?*

I would say I definitely agree.

13. How much do you agree with the following statement: *using well-defined models for compliance rules reduces the uncertainty associated with interpreting them?*

Yeah.

There I would go with a three.

## Questionnaire – Architectural Reconstruction

14. How do you reconstruct the architecture of running application instances you need to understand?

if I don't know the system, if it's not my system basically, um, I would ask a person responsible.

I would ask, oh, I will look for information about the architecture we've designed that and I would look at that one for, for the systems we are responsible. We would be, um, I would resort to our monitoring. So monitoring mainly through New Relic, for example, where we do some APM application for once monitoring and where you could also see, um, the connected databases, for example.

15. Do you use any (semi-)automated tools for this purpose?

Yeah.

Monitoring is always, always running. This is always on this.

New Relic is always running.

16. How much do you agree with the following statement: *using IACMF reduces the effort associated with reconstructing the architecture of running application instances?*

it wouldn't create too much difference.

I'm rather on the left side of the scale here.

So maybe it would even, because it's easy to just ask the human that did that and they explain it to you and it's like half an hour and it's done more or less. If you don't understand it, um, so I would rather, yeah, I mean, I'm rather on the left side of the scale here. So I would say rather to like, uh, disagree.

## Questionnaire – Compliance Violation Fixing

17. What do you do if you find out that a running application instance violates a compliance rule?

I would email or call the person responsible.

18. Do you use any (semi-)automated tools for this purpose?

This is done manually.

20. How much do you agree with the following statement: *using IACMF reduces the effort associated with fixing compliance violations?*

Probably it does

21. How much do you agree with the following statement: *having well defined models for compliance jobs reduces the uncertainty associated with handling detected compliance violations?*

Not sure about that.

## Questionnaire – General Questions

22. How do you evaluate the novelty of the framework?

I would say it's, it's interesting.

it's very useful.

23. How do you evaluate the extensibility of the framework?

sounds cool, but we will need to create a thousand rules for something like a thousand plugins.

24. Would you use the framework in your work?

probably not.

a) If so, in which areas?

25. What is your general impression?

I found really interesting.

And definitely something that is not, um, so at least I have not heard about something like that before. So, and I think for, um, there are definitely applications I would say, uh, where this could be used.