

Transscript Interview

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1 Overview

To gain more in-dept information regarding some requirements, Pascal Buschoten, a former shifter, has been interviewed.

2 Interview questions + answers

The interview is split into three parts; common, front-end and back-end related questions. The common questions are about features or requiremetns that aren't clear for the front-end and the back-end. The front-end questions are about the front-end and finally the back-end questions are about the back-end of the new logbooking system.

Pascal is answering all the questions. Sometimes during the interview, Heiko and Dr. Marten stepped in to expand the answer. They're answers and comments are given into the answers of the research questions.

2.1 Common questions

Do you have any objections if this interview is recorded? The record will only be used to write the full answers down as s source for the thesis? I do not have any objections that this interview is recorded.

Can you introduce yourself and tell what you have done for CERN? I'm Pascal Buschoten and, for my graduation project, I've spend one year working at CERN. I've worked at a prototype for data process algorithmes for the upgrade of OSquare. That was mainly aimed at the TPC, Time Projection Chamber, that is the biggest detector of CERN. The data that comes free from that detector contains a lot of noise, for example, particles that make signals that are not usefull. I've tried to remove this noise from the data. After that, I've stayed there for two years as a trainee and I've worked a lot with drivers for the PCI-Express Reroute cards, cards that read out the data from the cables that are connected to the detectors. That was a big task, because the drivers needed to be developed, maintained and a lot of new requirements we're added to the system. My second task was evaluating a database for the process-configuration, that is all the processes that are running on the OSquare farm. At the start-up of the processes, they need to gain parameters, and it happends often in one big burst at the start of a run. I've looked at a couple of back-end systems to look at which back-end fitted the most for this process. I've also written an interface for this system. And that's what I've done during my time at CERN.

This interview is divided into three parts: some common questions regarding concepts that are not clear to us(Naomi and Frederick red.) so that we gain insight into them. Is this clear for you? Yes.

During reading the requirements for the new logbooking system, the term

follow-ups are regularly mentioned. Do you know what they mean with this? I've got a vague guess, but I'm not sure. Perhaps they mean that, when they have an on call intervention, then they write down what's next to do or what the other problems could be? I'm not sure.

One of the possibilities for the new system is the functionality to add files to log entries. What kind of files are added? Are these text based files or special files related to ALICE? I think that these are text based files, such as logs, and maybe crash-dumps, but generally, if you want to give more information, you write it down into a bug report.

There are announcements in the current system. What are these announcements and who creates these announcements? Can you show these announcements(asked to Heiko van der Heijden)? I don't know exactly what this means. Is this into the current system? (Heiko shows the announcements). I have no idea what this means.

What are on call interventions? Who can make these and how many times do they appear I've done on calls when I was in the DAC(Data Acquisition Chain) team, and everyone in the team is responsible or maintains a piece of software in the DAC. On every moment, someone needs to be accessible when problems arise that the shifters cannot solve in the control room. So the team has decided that every member must take a sum of days in a year to be on call duty. When you are on call duty, you have a CERN phone with you and if there's a problem, you will be called. Once you are called, you must run to a terminal and log in remotely and look if you can solve the problem. Usually, you look at logs, and if you can't solve this, then you call the specialist on that area. For example, if there's something wrong with the logbook, you call Vasco, the specialist on that area. There are levels of preparedness. So when there is an important period of runs, then you must be reachable in a very small amount of time and being able to perform an intervention. (Frederick): To sum it up, On call interventions are interventions that cannot be created by shifters, and they only happen when there are problems with the system, then you need to solve the problems, and if you cannot solve them, then you need to call a specialist. Did I understand it correctly? (Pascal): yes, a shift leader can say, for instance that you need to call that person. (Naomi): does a on call intervention get added to a log? (Pascal): Every 24 hours, an on caller must make a log entry, and there you give a summary on what you have done. But it's not attached to one specific run. It's usually on multiple runs. (Dr. Marten): Every run can take 2 minutes, 2 hours or 0 seconds. (Pascal): That happens sometime (Dr. Marten): Why does that happen actually? (Pascal): Wrong configuration usually. (Dr. Marten): But how is it possible that that can start? (Pascal): It's not literally zero seconds, but it is possible that something can go wrong in a short amount of time. It doesn't happen that often though.

The requirements refer to a template for making an EOS report. How does a template look like and what is a EOS report? I've been told to look at the previous report and that's your template. I don't know if there is a formal template. More like this is the structure of the report you need to use. (Heiko): It is a wish from Roberto(one of the product owners at CERN red.), because everyone has their own way of writing down things. (Pascal): I can imagine that. (Dr. Marten): It is also Robert's wish. Once every while they look at the logs to look why their machine is not working well. When everyone is just writing down stuff and use different terms for the same thing, then it's very difficult to check the reports. You can't do search and find due to the different terms. So that's why CERN says that it maybe be usefull to use a template. The other problem is that, if everything becomes a template, then its click click and there issues could arise aswell. So, we need to look at how we can create this.(Frederick): But there are not standard thing you need to fill in such as your name, to keep things simple or a description of your shift? (Pascal): Not in the way of a form, but you write down the time and a summary on what you did and how you fixed it?

One of the wishes for the new system is a forum like enviroment. This forum idea consists of leaving comments after entries. How do you envision this? I think that you need to keep it as a simple forum. You can place a comment under every log. You don't need threads and other difficult stuff as if people want to have a discussion, they can do that either in e-mail, Slack or personal. (Frederick): So the forum is just to say something small? (Pascal): Yes

Are logs only created on location at CERN or can this be made at a different location? These logs can be made everywhere. When you do an on call, you do not sit ever time at the headquarters of CERN. It 24 hours, so there is not a formal time you need to make the report. Not anymore though. In the past, there was not a formal time, but now there is every day a meeting with Roberto, so the report needs to be made before the meeting.

2.2 Front-end related questions

To gain some insight into the front-end, I(Naomi red.) was wondering what you think about the current front-end of the logbooking system and what you liked and disliked about them What I liked about the system is that it works, there are a lot of search options, you can search very specifically on issues What I didn't like about the system is that it's a bit old fashioned and a bit slow. (Frederick): What do you mean about old-fashioned? Does it feel old-fashioned, does it look old-fashioned? (Pascal): Yes, those two options that you mentioned and to be specific it doesn't work very well on smart phones. It would be fine if it was possible on a mobile phone.

What kind of colour scheme would you like to see on the new logbooking

system and what did you think about the current white system? The white looks a bit boring, and there could be some improvements. The people at CERN are tolerable with things that don't look posh, but they prefer it. (Frederick): Can you give us some colour examples? For example no use of yellow? (Pascal): I would prefer it if you could add the colours of ALICE into the design. Just the highlights would be enough.

How does a big screen view look like and what does it mean? That's about the control room! I'm not sure if you saw some pictures about the control room? Everyone sits in a glass box and people sit in front of a couple of computer screens and at the top of those screens there are big televisions that show the important information. (Heiko shows a Googled picture of the control room)(Naomi): What kind of information is shown on those big screens? (Pascal): For example, the status of the detectors, it depends on the priorities. Some graphs. (Heiko): The information is more like Teletext. (Naomi): And everyone sees that? (Pascal): yes. (Frederick): To come back to the graphs, what kind of information do they show? (Pascal): I don't know but we need to talk specifically about every graph.

2.3 Back-end related questions

Can you tell us more about the OAuthentication used to log into CERN's products and how it exactly works? Are you talking on a technical level or a global level? (Frederick): On a technical level and on a global level? (Pascal): From the users side you can log into CERN's products, that's very nice. On a technical level, I don't know that much. (Frederick): So it's more like a token you receive to use CERN's products? (Pascal): yes

Can you tell us more about SAMS? My experience with SAMS as a on caller and as a shifter is that I use it to book my shifts. You need to do this early since the other shifters want to book their shifts depending on their vacation and the free days they have. At sams you can look at a kind of agenda and with that you can book your shifts. Sams can also be used to search for phonenumber from shifters to reach somebody. Sams is also used for a big screen view, that sits into the corner of the control room. There, all the cellphone numbers are shown for the on callers.