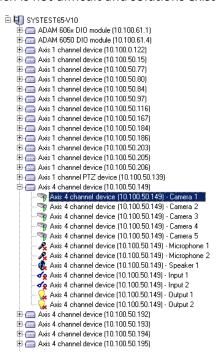
Human-computer interaction in Video Management System with thousands of cameras

Background

When setting up an IP based Video Management System, one of the necessary steps you have to do, is to add the IP cameras from which you expect to receive video. This as such is not difficult and solutions exist

that automatically can scan the network and just add whatever is found. The problem however, is how to manage these cameras, especially if we are talking about thousands of cameras. Large setups today can easily have 5000 cameras added and already here the approach with a simple tree structure representation is troublesome.

Typically, an administrator would like to be able to find cameras based on where they are physically located, what network they are attached to, what video codec they are using, what their current state is (e.g. recording / not recording), who has access and so on. One could manually group cameras, but this is not the way going forward, if we imagine supporting 50.000+ cameras.



The project

In this project, we want to investigate how to design a user interface that is intuitive and easy to use even if 50.000+ cameras are to be handled. How should cameras be added, configured and maintained using this new interface?

It is expected that different alternatives are investigated with both advantages and disadvantage listed for each. Based on this, the project should conclude on a recommended approach and show ideally with a mockup how it would work with a 50.000 camera setup.

