

March 18, 2019
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Weekly report: Week 11 of dissertation for Uninett AS on authentication in IoT

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Activities

Monday March 11

We worked on the Django project, specifically securing it with SSL. We still have some work to do here. We have set up the project so that we can test locally without SSL and debug, while the production server is always secured and will not reveal debugging details.

Tuesday March 12

We fixed bugs in the Django project and are now able to accept requests that result in the creation of PSKs. The newly generated PSK is returned in the response to the client, and is optionally sent by email if the client specifies that it should be.

Wednesday March 13

We made more improvements to the Django code. We looked at two solutions for sending requests from the frontend: JavaScript and PHP. The Django backend should be secured against any fake requests, and limiting who is allowed to send requests to it is not necessary. Therefore we have opted for the former option: Clients will send HTTP requests through JavaScript that runs locally in their browser. It will be easy for attackers to alter the requests, but without valid credentials, it will not matter. Further validation has been added to the backend as well.

March 14–17

We worked on the design report, focusing on the frontend.

Remarks

We are getting close to a fully working solution.