Server status chat bot

A server status surveillance system for internal use at Lindum.

# Background

At Lindum we collect process data in our factories on-site with OPC-servers and databases. Running on Windows and Linux servers respectively. Sometimes errors occur and the systems can require manual attention to get them back to normal. Ideally these systems should run on their own without the need of check-ups. We are therefore in need of a simple server status bot that does the checkup programmatically. It should regularly ping the Windows and Linux servers to check if they are running, as well as query the database to see if data was stored recently. When an unwanted situation occurs, the responsible team should be alerted by a chat bot in our business communication platform. The goal is to improve uptime of the data collection systems and minimizing manual routine work.

# User interaction

The system should require minimal user interaction other than during installation. Parameters used for contacting desired endpoints should be defined by a simple xml file. End users should, within the scope of this system, only be concerned with the chat bot’s message outputs on the communication platform.

# halvt bladData flow

The system should be deployed as a cloud service. The program should ping the virtual machines that it is configured to monitor and register the response. It should also query the database and verify steady data acquisition by checking the latest timestamps. If anything is wrong with either of these services, then that information should be pushed to the chat bot. Only one chat message should be shared by the chat bot when an error occurs, this error does not need be acknowledged. The bot should continue to scan for problems and should be able to inform of additional or simultaneous errors. When a problem is resolved it should, additionally, inform of this.