

# Statens It uses Powerapp for energy reporting and data centre optimisation

Statens It is responsible for the operation of the Danish government's servers. This demands exceptional operational reliability, and, as a government enterprise, It must focus on reducing carbon dioxide and providing energy-efficient solutions. That is why it underwent a major consolidation and modernisation project of its servers in 2012-2013. The solution came about by working with the Knowledge Centre for Green IT in the Danish Agency for Digitisation and Go' Energi.

## World-class energy efficiency

Statens It plans to consolidate its 28 server rooms into one data centre, located at three locations. The power usage efficiency (PUE) of the new data centre is projected to be 1.2, compared to approximately 1.4 previously. This will result in exceptionally high energy efficiency compared to international standards. PUE is the measurement standard for energy efficiency in data centres, and the figure is calculated by dividing the total power consumption, including uninterruptible power supply (UPS) and cooling, by the electricity used for the servers and network devices.

Installation of electricity meters and automation of the readings is absolutely essential for Statens It to be able to keep up with the PUE number, which is used to optimise the infrastructure. That is why Statens It wanted automatic power measurement in central devices and in all server racks. By reporting the power measurement in real time, it can be used for monitoring and alerting, and eventually it will be able to allocate costs and carbon dioxide production to the ministries that use the servers.

## Automated, user-friendly electricity measurement

Statens It selected Powerapp's solution because it is different from other solutions on the market in that it shows real-time consumption, is automated and is portal-based. Now Statens It can monitor the data centre's PUE figure on an on-going basis, which ensures that everything runs optimally, while providing the essential input for green documentation that a government enterprise requires.

Powerapp's power consumption monitoring has enabled Statens It to plan upgrades and optimise the operation of chillers, UPS and other installations. Statens It has also entered values into the solution so that Powerapp sends an alert if the expected power consumption is exceeded. By doing this, the capacity can be increased before major problems arise.

Powerapp also provides Statens It with access to a number of reports that show power consumption figures. These reports provide an overview of how different areas of the data centre perform and help map out future strategies for server implementation.