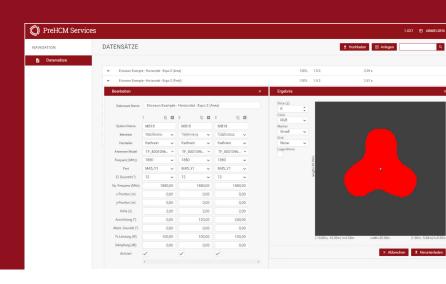


# Application Management of Mobile Radio Sites

WW Cluster for the efficient use of the BNetzA reference tool called WattWächter



#### Near-field prediction for the site certification procedure using WattWächter

Wattwächter is an evaluation procedure for the issuing of site certificates. It is developed by the Karlsruhe Institute of Technology on behalf of the Federal Network Agency (BNetzA).

Using this evaluation procedure, WW Cluster determines the safety zone in the vicinity of cell phone antennas at a cell site and displays this zone graphically.

Within the three-dimensional safety zone, the legally prescribed limit value of the electromagnetic field strength must not be exceeded. According to the 26th BImSchV, two limit values are specified, one for the electric and another one for the magnetic field. Both depend on the frequency of the radio equipment used.

WW Cluster integrates the latest version of the WattWächter, which is officially published by the BNetzA, into a cloud environment to ensure efficient use of the software for the applicant.

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#### **Parallel computing**

Parallel multiple calculations are possible, incl. display of the calculation progress using an architecture for mass data handling.



## Central antenna data management

Shared antenna data (field files) are mounted in each operator instance and therefore do not have to be kept locally.



#### **Value Added Features**

In cooperation with the users, the given scope of use of the WW Cluster is extended with further functionalities (e.g. alignment to the north / transformation of coordinates).



### Data Import / Data Export

Configuration and interface parameter file can be exported and imported. Graphics can be overlaid on construction plans after download. Created radio configurations and calculations are stored persistently for each user in association with his account.

