

BentoNet products

BentoNet offers a comprehensive portfolio of solutions for the digital transformation process in the energy sector. BentoNet thus occupies a pioneering position in the industry. The NetConnect and Work Desk products form the basis for digitalisation and are supplemented by a variety of offers from brand partners in the areas of software and hardware.

The Federal Republic of Germany and the entire European continent are currently in the midst of a comprehensive transformation process with regard to their energy supply systems. In order to achieve the ambitious climate targets of the Federal Republic of Germany and the European Union, a complete switch to electricity generated from renewable sources is essential. Such a transition requires far-reaching changes in the areas of generation, distribution and consumption.

In contrast to conventional large-scale power plants, renewable energies such as wind power and solar energy have a decentralised structure and supply the electricity they generate on a fluctuating basis.

The changes in the heating sector and in the area of mobility, which also mean increasing electricity consumption, represent additional stress factors for the electricity grid. Furthermore, new business models are emerging for which a large number of new companies require data from the electricity grid. As electricity can only be stored to a very limited extent and existing transmission grids need to be protected from overload, a digital grid needs to be developed that enables precise and continuous distribution: at the right time, in the right place. This is necessary 24 hours a day, seven days a week.

The processing and management of enormous amounts of data and protection against unwanted access represent a substantial challenge that cannot be overcome without an intelligent, fully digitalised and automated power grid.

The BentoNet portfolio was developed by experts specifically for this challenge. The BentoNet platform provides customers with everything they need to digitalise their electricity grid. This includes hardware, communication solutions, information technology, cloud services and software.



100% safety without compromise

Network operators usually implement their own isolated system to collect, transport and process the data. This process involves a great deal of effort, as the system not only has to be planned and built, but also operated by specialists, constantly developed and protected against threats.

To process the data, customers often use services such as cloud services from providers whose headquarters are located abroad and are therefore subject to different laws and regulations. In addition, the numerous isolated solutions and software products are not tailored to the specific requirements of the energy industry and are generally not compatible with each other. BentoNet, on the other hand, offers comprehensive solutions that fulfil the German and European security standards of the energy industry. This includes compliance with the IT Security Act 2.0 and the system protection plan of the transmission system operators (in accordance with the TSO zone model) as well as certification in accordance with the international ISO/IEC 27001 standard for information, cyber security and data protection. The secure processing of the data collected by BentoNet ensures maximum protection and security of the critical infrastructure.

Efficient solutions for the energy industry

BentoNet offers a 100 per cent scalable data hub as a platform consisting of cloud infrastructure, data transmission, a digital workstation and optional hardware components. The platform is marketed under the name "BentoNet" and is used in municipal utilities, municipal utilities, energy companies and industry. The solution offered is always tailored to the needs of the user. The costs are charged to customers in two licence tariffs, NetConnect and Workdesk.

NetConnect offers a comprehensive data acquisition and control domain with more than 20 standardised services and over 40 device drivers developed by BentoNet from well-known brand manufacturers.

The **WorkDesk** provides the application domain in which our partners' software applications process the customer data. The BentoNet infrastructure enables savings of up to 60 % compared to in-house implementation.

The reduction of personnel costs and resources in the provision and operation of the necessary data infrastructure enables network operators to digitise their systems quickly, reliably and cost-effectively. This digitalisation with BentoNet enables optimised network operation and reduced downtimes.

Network expansion can be better managed and new business areas can be developed.

The independent Internet of Energy

BentoNet is a manufacturer-independent platform on which various hardware and software solutions can be combined. This ensures a high degree of innovation and future-proofing for users.

Compatibility with existing field devices is a key feature of BentoNet. In addition, the BentoNet online marketplace includes a large number of new measuring, control and protection devices. Networking these devices with the BentoNet cloud leads to them being labelled "BentoNet ready". Protocols and data models are defined for them in a standardisation process developed for this purpose. The advantages of this solution are obvious: the devices and software are integrated into the BentoNet cloud in the shortest possible time.

In addition, centralised management of all devices in BentoNet is possible, which leads to a reduction in costs in both the short and long term. These synergies are realised through collaboration with renowned partners such as Janitza, Siemens, WAGO, Camille Bauer, reflow, envelio, Inavitas, SAE-IT and many more. An overview of all BentoNet-ready devices and partners is available at <https://www.bentonet.de/marketplace/>.

In addition, BentoNet has its own standard, the BN Unified Data Standard (UDS), which revolutionises the handling of data from the energy industry and enables the integration and linking of a wide variety of assets from the areas of renewable energies, storage, grids and consumers with a large number of professional apps. Finally, the BentoNet marketplace provides a diverse, manufacturer-independent range of hardware, software and interfaces that can be combined with each other. In combination, BentoNet ready, BN Unified Data and BentoNet Marketplace open up previously unknown