atvise® portal solutions
Remote monitoring and smart data usage.
LESS EFFORT
With a private cloud solution you organize your remote monitoring applications more efficiently – without high investments, but with the inclusion of existing atvise® visualizations, with just one click.

SECURITY
atvise® portal guarantees absolute system security. The connected systems communicate with encryption and only directed towards outside (there is no direct connection from the server to the controller), this means that a complex IT infrastructure is not necessary.

SMART ADMINISTRATION
Thanks to the specially designed client capability, new services can be implemented without high development costs, and new applications can be integrated into your existing system. The user interface can be fully adapted to your corporate design.

FUTURE SECURITY
atvise® portal is capable of development and can be scaled in accordance with your requirements – from simple remote monitoring to smart data. Since this is a solution designed for the long-term, the investment costs remain predictable.

DATA SOVEREIGNTY
Your private cloud server is installed in your facility. With atvise® portal the risks of a public cloud, such as espionage or legal uncertainties, are excluded. Nevertheless, for OEM solutions multiple end customers can be managed on one server, whereby strictly separated data repository and finely-granulated user rights are ensured.

HISTORY
Long-term data management and aggregation, as well as complete logging of user accesses and incidents, enable an overarching and comprehensive analysis, because all incidents can be interlinked on a user-specific basis.
Information is one of our most valuable resources. The task at hand is to enrich data in order to optimize processes. The way to future-oriented use of data is the private cloud:

With atvise® portal and the connected M1 controllers you select the entry that can be implemented without major investments in the network infrastructure or years of product development.

**ATWISE® PORTAL**

**THE ENTRY**

**TO CLOUD SOLUTIONS**

From remote monitoring to smart data with atvise® technologies
CONTROL

Thanks to the technologically advanced communication channel, the connected system can not only send data to the server, it can also call up „commands“ and execute them locally on the distributed systems. Thus it is possible to prescribe setpoints or acknowledge alarms via an absolutely secure channel. These applications are only possible with the appropriate authorization.

COLLECT

The communication module for data acquisition is integrated directly in the controller without additional hardware. Coupling to the private cloud occurs via configuration. Over the encrypted OPC-UA interface, secure and „firewall-friendly“ communication is ensured.

ADMINISTRATE

The variety of functions facilitates data administration – without programming or special knowledge: Any hierarchical structuring of integrated machines, flexible client and user administration, limitation of the areas for end-customers (sub-customers), integration of new machines or plants via the web configuration.

VISUALIZE

Existing atvise® on-site HMIs can be used in the cloud. Now, with the powerful atvise® visualization for the organization of applications, alarming, and long-term historicizing of variables, the leading web visualization is also available for cloud applications.
With atvise® portal archive data and live data can be observed or evaluated via flexible trending. The presentation forms – from management dashboard to trends, and extending to complex combined analyses – can be adapted as desired.

atvise® portal can be extended as desired – thus you can have the know-how gained in your applications flow into new algorithms. Whether for data mining and data analyses, the integration of external tools or for implementation of your own algorithms via web programming, (e.g. PHP).

For your projects in atvise® portal the proven engineering tool, atvise® builder is available to you. Via graphic project planning you can develop your applications, define extended configurations (language switch, user administration, user rights, etc.) and transfer them directly to the server with one click. The defined variables for engineering can simply be taken over from the server or directly from the M1 controller.
REMOTE MONITORING

with atvise® portal

Remote monitoring, redefined
With atvise® portal you decentrally operate, monitor and analyze distributed equipment and processes through a variety of different users. Thus, thanks to the client capability, your plant data and process data can be made available to different areas or customers in a targeted manner. Online data and archive data is operational at a central location and in a few hours for your equipment.

Fast and easy setup
Your entry into the private cloud solution: The M1 controller is configured as a data source; the server is set up via the web interface. The engineering of the application is simple, and without complication. Existing atvise® visualizations can be used in atvise® portal, and existing libraries can be referenced as the basis for new data creation.

Efficient data management
Via the atvise® portal you can call up your data from a variety of systems. The data is on a cloud server that you can access via Intranet or Internet and from all end devices. A database in the background decouples the data suppliers and data users for security reasons.

M1 transmits into the private cloud
A software module of the M1 controller is the communication component for the connection to the atvise® portal. The module only transmits data to the portal, inversely no connection is established. Through this measure – in conjunction with TLS-encrypted OPC-UA connections – a special firewall configuration is not required. The software module is set up via intuitive configuration interfaces in the Bachmann Solution-Center, and then establishes the connection to the portal, to announce the configuration and the first data.

Fault-free operation
The M1 controller is prepared for network interruptions or communication faults. It saves the data and subsequently delivers it when the connection is re-established. Thus communication problems of up to 5 days can be bridged without data loss.

One software system for all applications
High-efficiency and consistency: With atvise® you are using the same software system, from local visualization to large data portal.

FOCUSED ADMINISTRATION

Many systems publish data via OPC UA (TLS encrypted) on the atvise® portal. Access is possible via different web clients.
From big data to smart data
As manufacturer, plant operator or system provider of equipment and machines you collect a variety of plant data and process data that is available to you through a number of systems. With atvise® portal you can evaluate this data with greater precision and use it as the basis for optimizations and new services.

Step 1: Collect data – easily and safely
For the M1 controller Bachmann electronic makes a configurable software module available that takes over the communication to an atvise® portal on the Intranet or Internet. Therefore an encrypted connection that is directed to the outside is established over the existing network infrastructure, and the required data is delivered to the portal. In compliance with maximum security measures, machines and equipment can store relevant data in a central database on a server in a few minutes.

Step 2: The first data visualization
In the simplest case, you use an existing HMI application that is based on M1 webMI pro, the leading web visualization, and with one click make it available in the atvise® portal. Via web configuration you can then allocate the suitable visualization to the various data areas, thus in a short time you have a fully functional solution for remote monitoring.

Step 3: Development of initial services
Via the flexible allocation of HMI applications to data areas you supply different target groups with the appropriate information. Paired with a clever client capability, accesses can be granted to all users and user groups without extensive administration effort: From dashboards for management tasks, to information for maintenance and service personnel.

Step 4: Make data into information
With „smart“ data you gain for yourself an essential competitive edge. The upfront detection of relationships between error sources and recognizable patterns is only the first step here. Integrable, high-performance tools on the market are the future.