Smart Cloud Climate Control for Heating and Cooling Systems for Panasonic Appliance Air-Conditioning Europe

Panasonic®

Client Background

Panasonic is one of the largest electronic product manufacturers in the world, comprised of over 600 companies. Making the best use of their technologies, Panasonic provides high-value products and solutions that support customer's needs and develops a wide range of consumer products (including AV, security and mobile equipment, various home appliances, beauty and healthcare), as well as provides business, heating and cooling solution, healthcare, ecology solutions and industrial devices. The company's corporate activities are based on an unchanging management objective stipulating that the company must contribute to society through its business as a public entity.

BUSINESS CHALLENGE

As an innovative Heating and Cooling solution provider, Panasonic Appliance Air-conditioning Europe decided to create an innovative Smart Cloud system for complete management of climate system inside business premises.

The company partnered with SoftServe UGE to develop a new cloud based system enabling simultaneous 24/7 control of the climate and related energy consumption monitoring in numerous business locations, shops and storage premises from a single device – a smartphone, tablet or computer.

The main goals of this project were to:

- Facilitate all units from several locations to receive real-time status updates of all client's installations, in a single click
- Prevent breakdowns
- Optimize costs by reducing energy consumption
- Ensure secure data storage as well as reliable connection between the units of the existing systems.
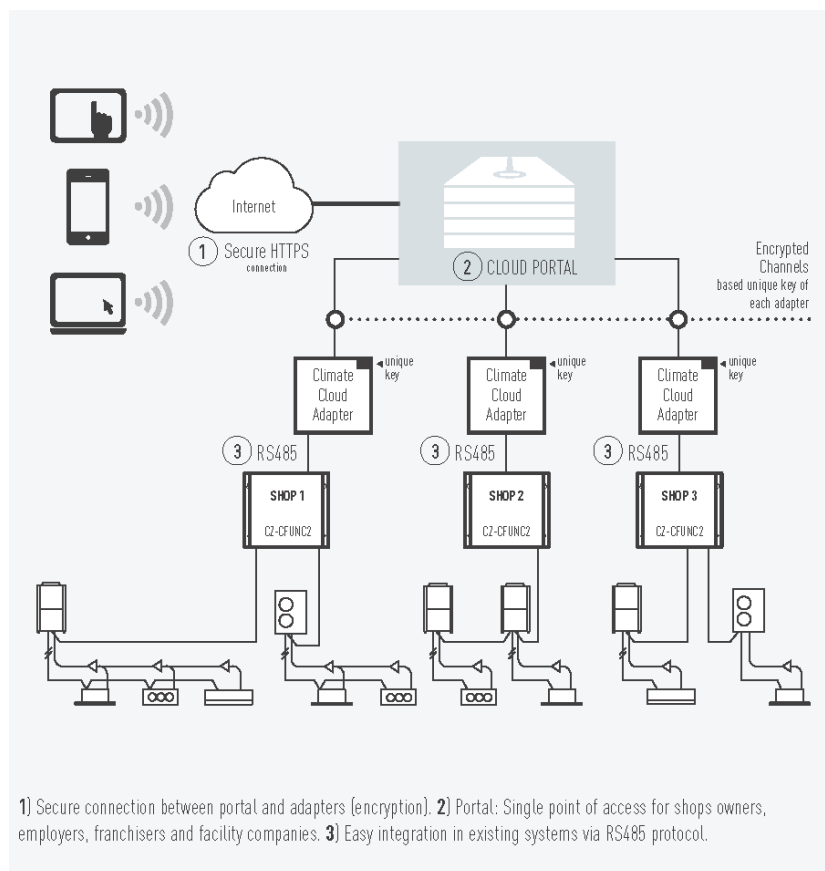
SOLUTION

The project involved the development of both software and hardware and needed a unique approach from SoftServe's team. To meet all the requirements, SoftServe's team was comprised of 7 seasoned software engineers who achieved the following results within 6 months:

- Control of all installations from a single internet connection in the cloud with 2 types of connections possible:

- Internet connection through the store's/building's internet connection

- 3G connection through a SIM Card and a 3G supply contract

- Real-time automatic updates of all the parameters from the GHP/ECOi/PACi

- Remote maintenance advice

- Alarms

Additionally, SoftServe's team provided physical and software protection with high level encryption to secure the data on the servers located in Germany.

1) Secure connection between portal and adapters (encryption). 2) Portal: Single point of access for shops owners, employers, franchisers and facility companies. 3) Easy integration in existing systems via RS485 protocol.

The solution includes the following functionality:

- Switching On/Off of units/groups/sites

- Setting mode for units/groups/sites

- Setting temperature for units/groups/sites

- Running time for units

- Scheduling for units/groups/sites

- Chosen store's status display on a map

- Initial configuration wizard

- Alert notifications

- Users management

To ensure the effectiveness of the solution, SoftServe UGE's team used the latest methods and technologies including Kanban, Ruby, GitLab, etc., test-driven development, and code-review practices, as well regular real-life testing of the equipment.

BUSINESS VALUE

The collaboration between Panasonic Appliance Air-conditioning Europe and SoftServe UGE created a first-of-its-kind Centralized Smart Cloud climate control. The cloud solution has both physical and software protection with a high level of encryption to secure the data on the servers.

As a result Panasonic Appliance Air-conditioning Europe received the following benefits:

- A fully scalable and functional solution in the air conditioning industry

- The opportunity to monitor and optimize temperature in all premises with just one click

- Significant reduction in electricity consumption and cost

- Ability to monitor breakdowns in order to take quick action to maintain comfort in stores

- Ability to compare performance in different facilities to develop a best practices plan

"We needed a sophisticated and innovative team who could meet the challenge of developing both hardware and software for this complex project, and SoftServe UGE fully exceeded our expectations. The resulting Panasonic Smart Cloud Climate Control system paves the way for more innovative solutions as we expand into new markets and work with SoftServe on bringing the future into our customers` everyday lives." Jose Alves, Head of Marketing Heating and Cooling Systems, Panasonic Appliance Air-conditioning Europe.

ABOUT SOFTSERVE INC.

SoftServe UGE GmbH is the German entity of SoftServe Inc.

SoftServe, Inc. is a leading global software application development and consulting company. We immerse ourselves in our client's business and relentlessly focus on providing technology solutions that create tangible business value. Our robust competencies include business and technology consulting, software optimization, SaaS/Cloud, Mobile, UI/UX and BI/Analytics for vertical markets such as healthcare, retail and high tech.

SoftServe developed Abiliton, a set of adaptive best practices and processes for software development optimization comprised of people, processes and technology. Abiliton ensures predictable, repeatable results and faster time to market, positioning businesses for scalable growth.

With over 20 years of industry excellence, SoftServe delivers rich user experiences, intuitive products and solutions providing our clients with a strong competitive advantage. Our offices are located in North America, Europe and Russia.

For more information please visit www.softserveinc.com