Microgrid Software as a Service (MSaaS)

Innovative and affordable

The hassle-free alternative
Microgrid Software as a Service (MSaaS) is a remotely-hosted microgrid control solution. MSaaS is designed for campuses, institutions, infrastructures, and utilities that want advanced monitoring, control, and optimization of distributed energy at an affordable cost – without the hassle of managing and maintaining on-site IT infrastructure.

Who can benefit?

End users with a limited capital budget looking for a low-cost distributed generation control solution

End users seeking an advanced control solution without the headaches of deployment, implementation, and operation

Utilities or firms owning and operating one or more microgrids on behalf of their end customer

How does it work?
The end user only pays for the use of the software service – no need to purchase the microgrid management software or have it installed on-site.

No need to train IT maintenance personnel – the Siemens team will maintain and upgrade the system as needed. Management of the microgrid system is maintained through web dashboard login.

MSaaS includes:
- Spectrum Power™ Microgrid Management System (MGMS) software
- Integration to existing on-site software systems (i.e. Building Automation)
- Advanced physical and cyber security measures
- Regular software maintenance and upgrades
Remote hosting – Onsite control
With Siemens hosting the MGMS servers remotely, each controllable microgrid resource is connected locally at the microgrid customer site in a local area network (LAN). The microgrid LAN is connected through a virtual private network (VPN) to MGMS at the Siemens data center. The devices communicate to the MGMS server located in the Siemens data center via the VPN.

Siemens personnel will monitor and maintain the microgrid software system from the datacenter 24x7. If interested, the end user may choose to have a User Interface (UI) console for monitoring and/or backup local control. Any user of the microgrid can log in to view the status of the microgrid via the MGMS dashboard in a monitor or manage configuration.

Cellular gateway communication is also available depending on the end customer’s preference.

Additional benefits
• Flexible and affordable financing structure (e.g. periodic payments)
• Software and hardware upgrades are transparent to the user and implemented seamlessly
• User can monitor and manage microgrid system settings via the User Interface
• Option for operational control support by Siemens

Hardware features include:
• Switches/routers with VPN and firewall capability for group resources as needed
• Router with VPN and firewall capability in Siemens data center
• Monitors for UI on both ends
• MGMS servers in Siemens data center

Figure 1 Remote hosting overview diagram with Microgrid Communications Network ecosystem