Cinterion® Module Services

Proactive IoT Device Lifecycle Management
Cinterion® Module Services

Minimizing costly service interventions and keeping devices secure for the duration of their lifecycle is of paramount importance to OEMs and IoT service providers alike. Implementing preventive maintenance strategies helps reduce the total cost of ownership and ensures business continuity. The Cinterion Module Services platform is a set of device management tools for Cinterion Modules and Terminals that help detect situations that can disrupt connectivity, as well as proactively manage the lifecycle of installed applications and firmware.

Cinterion modules are embedded into all kinds of IoT devices and designed to provide reliable wireless connectivity even in the harshest environments.

Dynamic wireless network environments and fluctuating device conditions raise the need for ongoing changes and updates to optimize performance.

Cinterion Module and Terminal Management

Cinterion Module Services provide a toolbox that covers all key aspects of lifecycle management:

> **Fleet Access.** The IoT Agent embedded in the wireless module establishes and maintains a secure link to the cloud-based back-end system powered by Gemalto. Large-scale fleet operations, including software updates, can be remotely scheduled and executed automatically.

> **Security.** An end-to-end encrypted management channel provides fraud detection and alarms to identify security breaches.

> **Hardware.** Cinterion hardware diagnostics along with automated file transfer to the back-end help identify and prevent operation beyond safe limits.

> **Connectivity.** Network diagnostics identify modem details to detect faulty device behavior and take immediate corrective action.

> **Application lifecycle.** Over-The-Air (OTA) application lifecycle management enables new feature deployment while fixing issues on-the-go.

> **Firmware lifecycle.** Managed Firmware-Over-The-Air (FOTA) service helps keep devices updated and secure over the complete lifecycle.

As IoT deployments expand, it becomes increasingly challenging to maintain large device fleets. Smart strategies are needed to securely build, maintain and continuously evolve IoT applications, over long lifecycles.

Cinterion Module Services help to address these challenges by providing a robust solution that is tightly integrated with Cinterion hardware and that leverages Gemalto’s expertise in securely managing millions of distributed assets worldwide.
Supported Devices

Cinterion Modules and Terminals now feature an embedded IoT Agent - a software component tightly coupled to the cellular module - that enables secure remote management of the module lifecycle.

Onboarding and Set-up

Gemalto customers register by accessing the Module Services web portal and providing a valid customer ID. Bulk provisioning of large fleets is done within minutes based on the unique module fingerprint.

The flexible pay-as-you-grow model allows everyone to benefit by starting small and purchasing additional license packages as the fleet expands.

Two service packages are available to meet individual needs:

- **UPDATE Services**: enable secure firmware updates to Cinterion Modules and Terminals.
- **CONTROL Services**: provide module remote control, network monitoring, Java application management, automated fleet tasks and troubleshooting tools.

Trial accounts can be requested directly through the Module Services portal or by contacting your Gemalto sales representative.

Gemalto Hosting

The solution is fully and securely hosted by Gemalto. We strive to provide best-in-class solutions that respect the highest standards and protocols. Our hosting services comply with industry standards including ISO-27001 and SSAE-16 Type 2.

Future-proof Solution

When growing in scale, Cinterion Module Services can be easily integrated into the customer’s own IoT front-end application, using web APIs.

SOLUTION KEY BENEFITS

- Effortless service activation
- Secure fleet access
- Best module performance through easy OTA updates
- Real-time connectivity monitoring for immediate corrective actions
- One-click massive fleet operations
- Fast application deployment for shortest time-to-revenue
- Flexible pay-as-you-grow model

If you have specific needs regarding uptime SLA and server availability, Gemalto is able to assist you.

1) Please contact Gemalto to confirm compatibility with specific products.
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