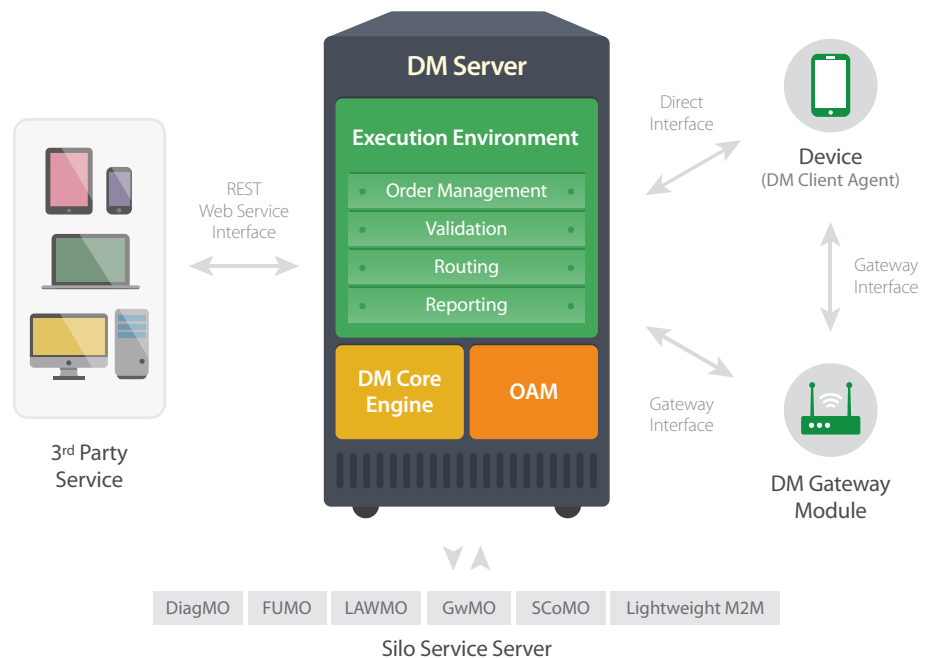# N SDM™

Smart Device Management

NTELS Smart Device Management (SDM) is a remote device management solution that supports OMA DM as well as custom specifications.

The solution enables integrated management of M2M/IoT devices from device monitoring to remote device locking & data wiping and firmware upgrade. With N-SDM, communication service providers can define a vendor-specific scenario for interfacing with its M2M/IoT devices in a GUI environment and apply to a specific service. With the intuitive and integrated management GUI and simulator, it also provides 24/7 remote monitoring of devices.

DM Server

Execution Environment
- Order Management
- Validation
- Routing
- Reporting

DM Core Engine | **OAM**

3rd Party Service

REST Web Service Interface

Direct Interface

Device (DM Client Agent)

Gateway Interface

Gateway Interface

DM Gateway Module

| DiagMO | FUMO | LAWMO | GwMO | SCoMO | Lightweight M2M |

Silo Service Server

Features

Support for OMA DM Specification

- GUI-based interface scenario and execution environment
- OMA DM[1]-based specification
  : DM Protocol, Standard Object, Security, etc.
- Support for standard Silo specifications
  : FUMO, LAWMO, DiagMon MO, GatewayMO, etc.

Support for Lightweight M2M Device

- Customization to support non-standard specification
- Adaptor and mapper functions to support vendor-specific specification
- Open RESTful APIs for 3rd party services (monitoring, device lock, data wiping)

Note1: OMA (Open Mobile Alliance) DM (Device Management)
A specification created by the OMA organization for device management of wireless devices

Benefits

Intuitive Interface Scenario

Device Vendor-specific Support

Easy to Extend Services

Standard-specific Support
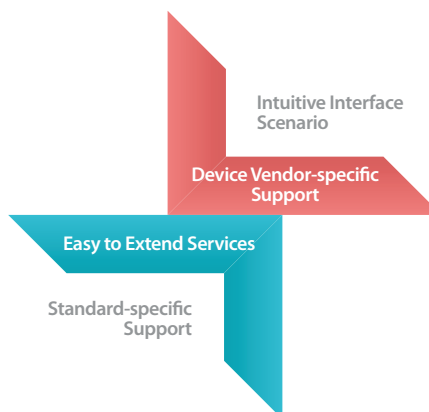
Standard-Specific Device Management

- Device or device group management for a specific version of the specification or specific device vendor
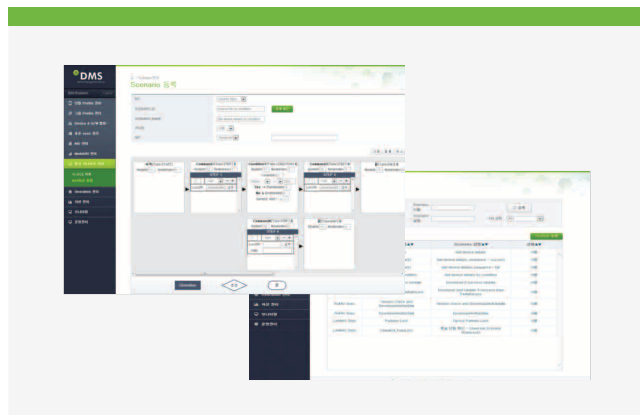
GUI-based Definition of Interface Scenarios

- Easy to define a vendor-specific scenario for interfacing with the vendor's devices in a GUI environment

Easy to Extend Services

- Various open APIs to support services by third-parties

M2M/IoT Device Management

Smart Device Management

GUI-based Service Creation & Execution

- Web-based GUI
- Execution environment for a specific version of the OMA DM protocol
- Asset management based on standards-compliant node URI
- Environment to define interface scenarios
- Standards-compliant simulator
- Scenario-based execution and monitoring
- Definition of requirements for custom operations
- Device-/vendor-specific service execution
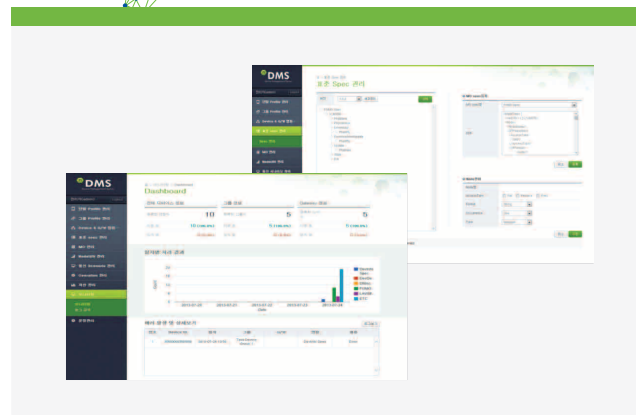
Service Operations & Management

- Web-based integrated operations environment
- Device profile management
- Device authentication
- Basic device management (firmware deployment and monitoring)
- Monitoring of scenario-based interfacing status
- Device-/group-specific execution log and statistics
- Admin permission and activity management
- Open API tests
- Third-party and open API service management

Use Cases

Lost Phone Finder Service for SK Telecom

We implemented the Lost Phone Finder service for SK Telecom. This service allows users to lock their phone when they lost it, check the current location, and wipes out personal data stored in the phone.

Service Features

- Lock: Locks the phone once a loss report is filed
- Data Wiping: Wipes out personal data
- Alarm: Plays alarm sound at the maximum level
- Location: Shows the phone location using GPS and base station

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