

Solution overview brochure

Get it done

HPE Advanced Device Management Engine



Hewlett Packard
Enterprise

Work with a partner, such as Hewlett Packard Enterprise. We can help frame a mobile device management solution strategy designed to provide outstanding service. HPE is capable of leveraging existing investments.

Thousands of smartphones and mobile connected devices—complete with new services—are introduced yearly. To support them, monitoring and provisioning tasks must be triggered and automated. You need help.

Develop a strategy

When users change their devices, it usually requires complete reconfiguration. Such a tedious task is error-prone, if done manually. And despite the widespread use of mobile phones for personal and professional activities, most mobile communications service providers do not have a mobile device management strategy.

Those that have one would like to increase their device management capability based on driving factors, such as security—remote lock and wipe, synchronization—remote backup-restore sync, remote diagnostics and resolution, and remote update of software and firmware. It includes all of this, plus managing basic settings or introducing new devices, such as machine-to-machine devices. While many vendors provide such elementary services, the challenge is finding a partner that can help frame a mobile device management solution strategy designed to provide outstanding service, and is capable of leveraging existing investments. To meet this challenge, we developed the HPE Advanced Device Management Engine (ADME) as a key element of our overall device management solution.

HPE ADME also can be used with specific optional modules in the following use cases:

- Enhance a legacy equipment identity register or HPE Equipment Identity Register (EIR) of an operator—especially when the operator needs to support more than the basic blocking and unblocking of international mobile station equipment identities (IMEIs) reported as stolen, such as cloned device monitoring and blocking.
- Provide a central equipment identity register (C-EIR) or nationwide mobile device compliance management system to a telecom regulator at a country level, which needs to monitor the entire device population and how individual devices comply with local and international market regulations. They include import rules, GSMA type allocation coding compliancy, and cloned devices.

Review the details

HPE Advanced Device Management Engine saves on capital and operating expenditures.

HPE Advanced Device Management Engine is a comprehensive business process solution for automation of real-time sensitive business processes in the mobile device management (DM) domain. It comprises a process automation manager and DM framework, and offers the following business values:

- Provides vendor-agnostic device management solution architecture for use with excellent DM enablers
- Orchestrates core device management services of legacy solution and next-generation DM system
- Enables faster integration into customer network

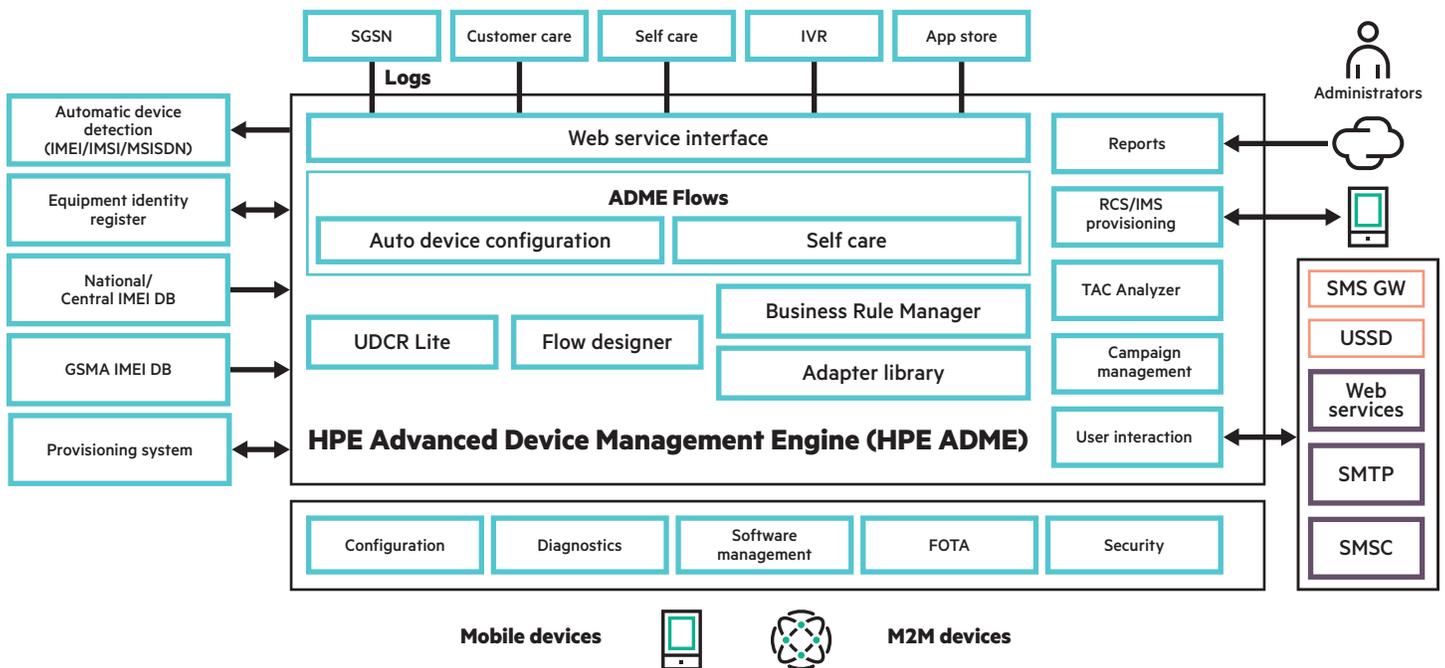


Figure 1: Functional architecture for HPE Advanced Device Management Engine

- Provides seamless management of business rules
- Exposes different elementary and orchestrated services, such as automatic device configuration on change of mobile device, using service-oriented architecture (SOA)
- Caters to customer care, self-care, enterprise customer care, or detection of device-change requirements
- Bases reusable DM business process flows on top telecom providers' best practices
- Accommodates new service enablement, such as rich communication services (RCS) or VoLTE/IMS, or rollout of new business process flow in a short time, without impacting the DM enablers or vice versa. Uses library of adapters for easy integration with other platforms, such as over the air (OTA), open mobile alliance—device management (OMA DM) platforms, multimedia messaging service controller (MMS-C), automatic device detection components and other network elements, device library, operations support system (OSS), and business support system (BSS) subsystems.

Understand the functions

The engine is built using industry-standard tools. It is highly flexible, enabling you to modify your existing business process flows and roll out new process flows, based on your changing business requirements with minimal incremental effort. Its SOA facilitates interoperability and easy integration between different network elements, enabling you to add new services easily in a short time. It is completely agnostic of underlying DM enablers. You can define process flows that invoke services and interfaces of different systems within an operator's ecosystem and interaction with the device user.

Business rule manager is based on a rule engine and helps you seamlessly manage business rules. New rules rollout and modification time for existing ones are reduced to a few hours or days versus weeks and months. The solution comes with domain-specific, preconfigured generic rules that can be readily used.

User interaction module interacts with users, engaging explicit permissions for receiving automatic settings sent by the engine.

Asynchronous processor provides a way of querying the request for underlying DM enablers, providing additional flexibility to handle synchronous operations as an asynchronous operation.

Adapters enable fast integration into a customer's network infrastructure.

Reporting Module enables you to produce a rich set of reports by leveraging the data collected by the different mobile device management (MDM) solution components. The reports focus on analysis of:

- Operator's subscription—service and package
- Operator's handset portfolio
- System use

Review optional add-on modules

HPE Advanced Device Management Engine add-on modules are powerful marketing tools that help roll out new services, packages, and devices. They can be used for measuring service and device use, early adopters of services and devices, and more. They also help in content use and user demography analysis.

Campaign Manager provides the means to create bulk operations or campaigns for a defined set of devices. The campaign's target devices are passed as parameters or uploaded in a flat file that can be reused as many times as needed. Depending on the type of campaign selected, you can define several parameters. The Campaign Manager module includes throttling control features, prioritization, and peak-hours management.

You can start, suspend, resume, stop, and delete bulk in the Campaign Manager. You also can browse through the bulk-provisioning events and query the provisioning status for the campaign. Only recent campaigns are kept available. And, if a campaign fails for some of the targets, it is possible to create a new campaign, including only the failed targets.

Auto-Configuration Server for RCS services and IMS ones enables you to provision as per GSMA recommendations over the air via https the configuration parameters required for RCS-e clients on mobile devices to consume RCS-e services. It is designed in a flexible manner so that it can accommodate over end device provisioning use case also based on XML templates and https beyond RCS.

Enhanced EIR allows you to enhance a core HPE EIR platform or a legacy third-party EIR with additional functionalities, such as rich user interface, business logic, a set of adapters, integration to GSMA IMEI DB, or reporting.

Mobile Device Compliance Management allows for a telecom regulator to deploy a solution that will enable it to regulate its national mobile device market by blocking network access to noncompliant mobile devices on all mobile operators. It enables the regulator to fight against gray market and counterfeit devices-related issues.

Read about the features

- Automates complex device diagnostics and device configuration process that has more than a dozen steps and interaction with different systems
- Interacts with different heterogeneous DM enablers, such as OTA, firmware over the air (FOTA), master boot record (MB&R), device customization engine, software update, and more
- Orchestrates multiple DM enablers from different vendors for the same DM function (such as OTA)

- Uses a black list to manage misuse of DM functions
- Uses a white list for controlled DM functions rollout
- Provides history database to avoid repeated sending of settings that customer already has, and helps manage misuse of DM enablers
- Provides reporting tool for analysis and reports of device and service use and use of other related systems
- Uses Campaign Manager to roll out new services
- Uses a type approval code tracker for unknown makes and models of devices and makes and models of devices unsupported by the underlying DM enabler platforms
- Is highly scalable and provides near real-time response that is very critical for MDM domain to handle busy hour traffic

Gain these benefits

Saves on capital expenditures (CAPEX):

- Leverages existing investment by orchestrating multiple enablers for a single DM function
- Easily adds new DM enablers for additional functions
- Orchestrates multiple heterogeneous DM enablers and helps eliminate the need for enabler-specific workflow automation tool

Saves on operating expenditures (OPEX):

- Automates process for device diagnostics and device configuration on device change—decreases incoming calls drastically and reduces churn
- Adapts to change in business process based on changing business needs and optimization
- Adds or replaces DM enablers, without impacting operation—close to zero downtime
- Enables absorption of the changes in other system interfaces to a large extent because of its SOA
- Serves as a powerful marketing tool
- Provides different use reports that help analyze subscription, device, device-specific capability, and uptakes
- Provides different system use reports, without contacting different entities and departments

Enjoy these differentiators

- Works with heterogeneous systems from different vendors, and enables operators to define a DM roadmap of their choice, agnostic of underlying DM enablers
- Enables quick adaptation of changing business processes
- Sets standard for easy and fast integration
- Helps customers in their SOA rollouts

Learn more at
hpe.com/csp/devicemanagement



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