



Connect services manage, update, remotely monitor, and collect & store data from smart devices; ranging from consumer wearables to large medical-grade systems, both Philips and 3rd party.

Value

- **Device management:** Highly scalable and secure services to manage connected devices for remote service, diagnostics, software updates, messaging, and device control
- **Collect health and wellness data:** Collect, store, validate, correlate and broker both personal (health) measurements and observations as well as device information and data
- **Third-party data integrations:** Access a wealth of data from third-party services and devices through Philips' partnerships with other industry-standard platforms

Features

Device Management

- **Master Data Management** service administers the configuration of master data for devices including device hierarchy and grouping, authorization master data, and firmware update master data. Clients who use Connect services can use the API's to create, read, or update the master data configurations of their devices
- **Provisioning** service allows devices and mobile apps to obtain their unique identity and key dynamically 'over-the-air', eliminating the need for devices to be provisioned upfront in the factory with a unique identity. All consuming entities – users, services, or devices – require this unique identity and key to use HSDP services
- **Authentication and Authorization** service enables device authentication and authorization using the following steps. A device uses the identity and key provided during provisioning to obtain an access token from HealthSuite Authorize – Identity and Access Management using the standard OAuth2 protocol. With this token, the caller can authenticate itself at any other HealthSuite service and get authorized based on permissions configured in Master Data Management
- **Discovery** service allows clients to dynamically discover and retrieve service endpoints (URLs) for their application, based on the configuration in Master Data Management. This provides flexibility for developers to dynamically configure and change services based on application-specific business rules

- **Firmware** service enables clients to update the firmware or software of their devices or mobile applications in the field. This allows them to update their installed base 'over-the-air' with new features, updates, or fixes. Customers can configure a firmware update request in Master Data Management
- **Control** service is a highly scalable messaging service that allows devices and applications to exchange events or messages and to control devices remotely in an easy and secure way using the MQTT protocol to send and receive messages. Applications or devices publish events to 'topics' and the messages are distributed to devices or apps that subscribe to a topic. Control service also supports sending mobile push notifications to mobile platforms
- **Data Broker** service is a highly scalable and secure message broker that allows devices and applications to send data and have it distributed (brokered) to subscribed receivers. Devices or apps can publish the data over the MQTT protocol or use the APIs to send the data over HTTPS. Based on configuration in Master Data Management, the Data Broker service distributes the data to one or more destinations. This can include customer endpoints, as well as endpoints that are part of HSDP-Store services

Device Data Integration

- **Data Integration** services support cloud-to-cloud integrations with third party clouds that are not connected natively to the Connect services. These device data integrations for importing, validating, and ingesting observations and measurements from Philips and 3rd party devices and services into HSDP. Includes Validic, Qualcomm 2Net and Samsung ARTIK

Consult hsdp.io for details