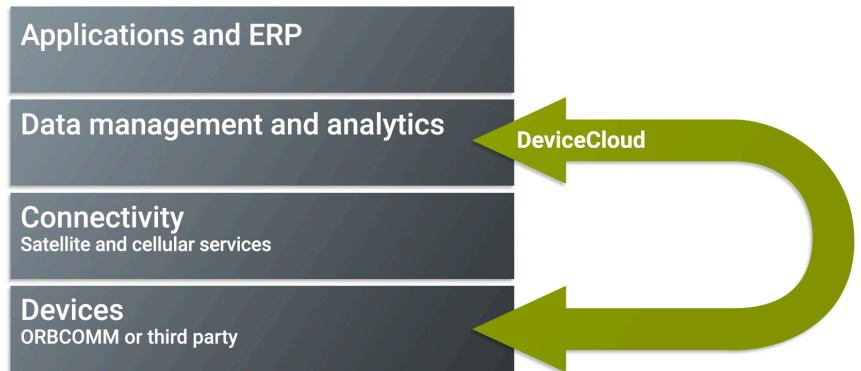


DeviceCloud

Device lifecycle and data management that ensures seamless information delivery between device and application.



Device Cloud serves applications by providing the link between two layers of the IoT stack – devices and data management

DeviceCloud provides life-cycle management of both ORBCOMM and third party devices, including configuration and monitoring, firmware upgrades and key data functionality such as transforming raw data into actionable information and generating alerts. DeviceCloud provides your application with a single and simple interface to multiple networks and devices. This allows you to streamline your development and replace, upgrade or add devices in the future without having to update your application.

Paired with DeviceCloud, ORBCOMMconnect can complete your device integration with subscriber and connectivity management capabilities.

Device lifecycle management

Authenticate: Trust is ensured within the device network by requiring the device to communicate credentials over the network for validation by DeviceCloud.

Control: Configure and re-configure deployed devices for application-specific operation. DeviceCloud can be used to create device profiles and control the behaviour (including reporting rates, geofencing, alerting criteria, etc) of a single device or a group of the same devices. Firmware upgrade campaigns can also be performed.

Monitor: Monitor the operation of the devices in order to assure a healthy network. DeviceCloud can provide location and status dashboards, automated reports and alerts.

Data management:

DeviceCloud manages the data sent to and received from your devices, and can extract meaningful contextual information from it. Data can be viewed through the DeviceCloud portal, or accessed through:

- pre-configured device feeds that push data to the application upon subscription
- a generic API that pulls data from the DeviceCloud

DeviceCloud can transform the device data into a device-agnostic format, reducing the dependency of your solution on a particular hardware device and allowing smoother future deployments. DeviceCloud can also extract user-defined

Interface through web-based dashboard or APIs

Device authentication and identity management

Device configuration and firmware updates, one-by-one or in batches

Rapid deployment of existing and new hardware

Alarm processing and alert configuration

Supports add-on modules and connectors

Secure, scalable, redundant and highly available cloud infrastructure



actionable data and trigger alerts or event notifications, as well as associate meta-information with this data (ie. qualifying a received digital high/'1' signal as being the back door has been opened). In this case, your application only sees your asset, and not the device connected to the asset.

Device data is encoded and retained within ORBCOMM's SAS70-certified secure data centers, offering data of the highest integrity and scalability to your applications.

Building your IoT Solution

Assembling an IoT solution appears straightforward; you'll require a device to provide situational awareness and perhaps respond to commands, a means to communicate with it, and an application that can transform the data into actionable information that will serve your business.

But it's not as simple as it sounds.

What happens when your device requires a critical firmware upgrade to address a security flaw? What happens if you have thousands deployed?

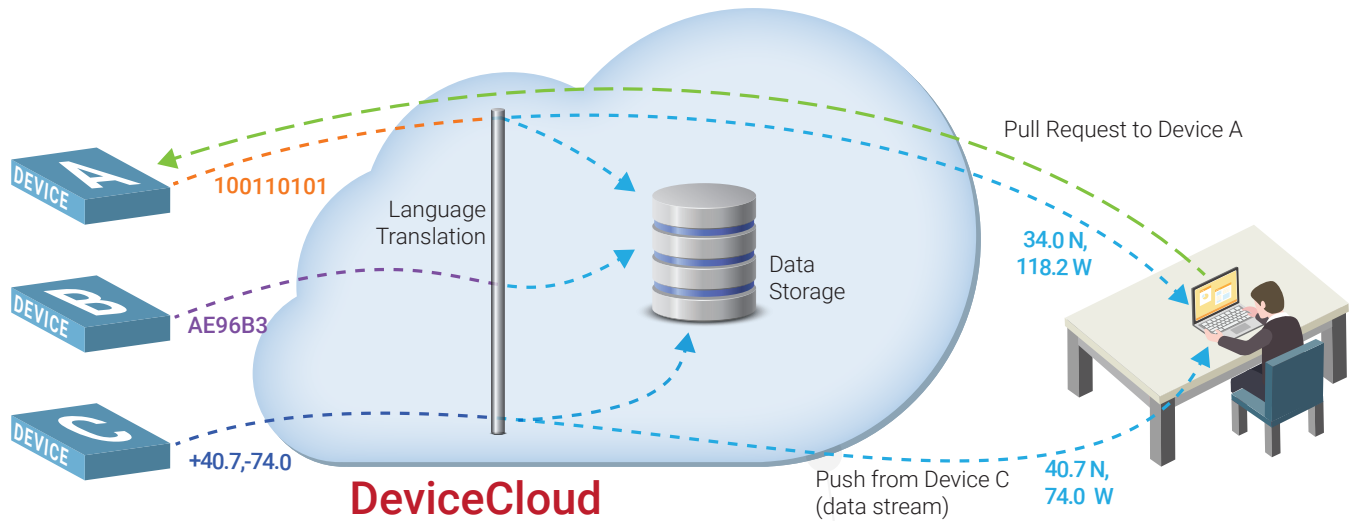
How will you manage your infrastructure if you need to rapidly scale your solution?

What happens if your existing devices are no longer available, and you need new, legacy-incompatible devices?

DeviceCloud reduces solution development time, manages the lifecycle of your devices, streamlines your device deployment strategy, and manages data flow, interpretation and storage. But most importantly, by simplifying your device integration, DeviceCloud allows you to focus on your business.

Supports multiple messaging protocols: SOAP, HTTP(S), Web Services, JMS, MQ series, MSMQ, SMTP, SFTP, FTPS, File

Supports XML and JSON payloads



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