

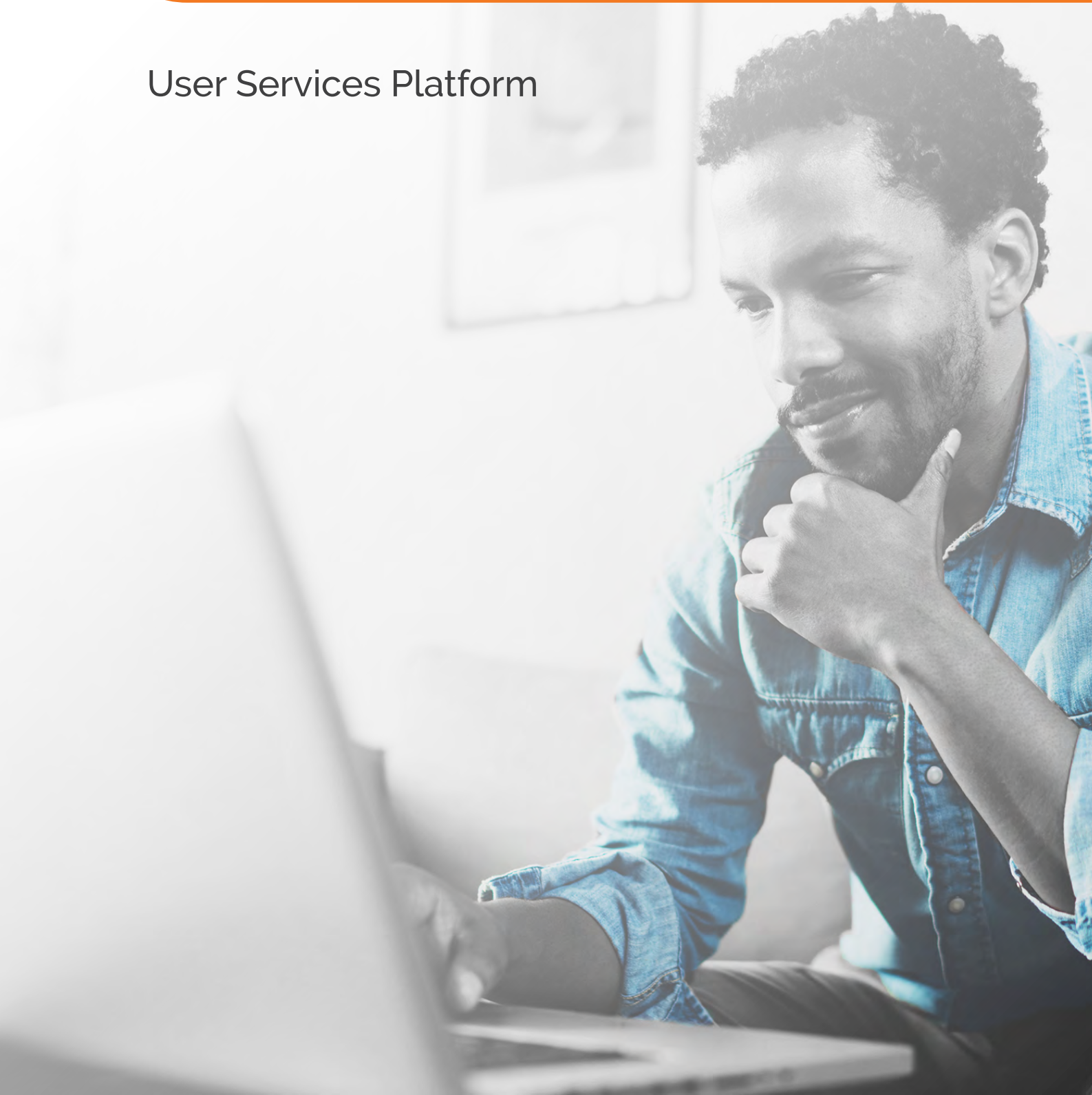


**friendly**  
technologies

The IoT & Device  
Management Company

# Friendly TR-369 USP

User Services Platform



# Launch New Services Leveraging Your TR-069 Platform

TR-369 User Services Platform (USP) is a standard defined by the Broadband Forum, evolving from the TR-069 (CWMP). The new standard is a more flexible, secure, and standardized way to manage both existing use cases of TR-069 and new connected services such as IoT and Smart Home, at scale.

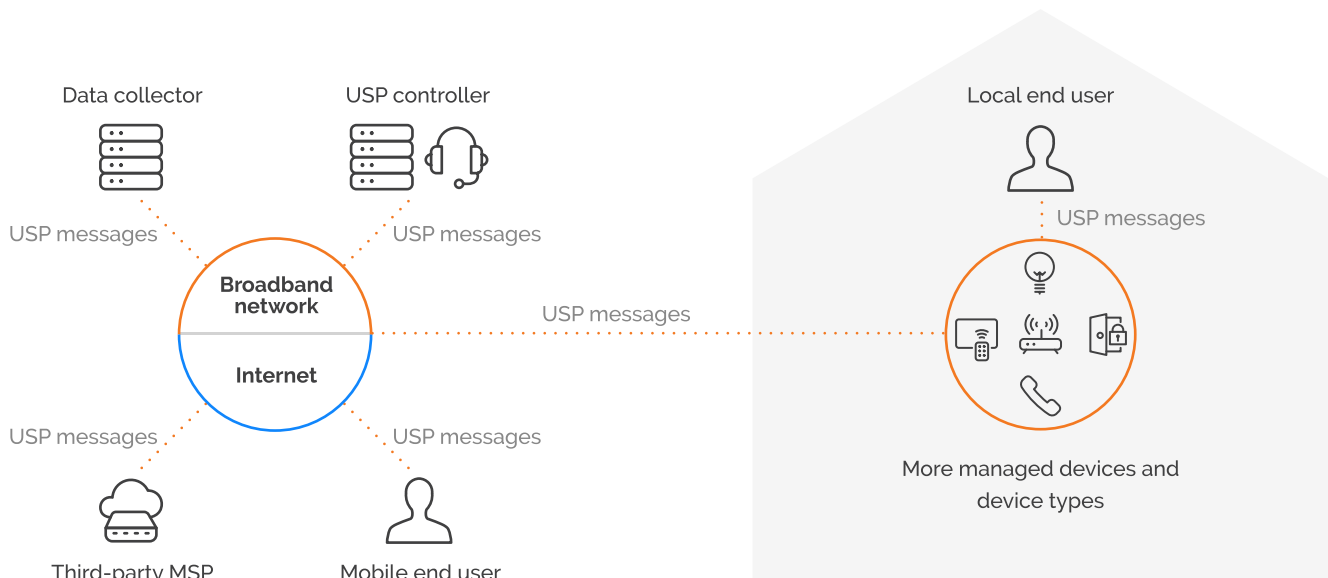
TR-369 USP is a natural evolution of the TR-069 standard that enables carriers and CSPs with an existing TR-069 solution to seamlessly migrate to TR-369 USP without a need for new integrations.

## The Friendly TR-369 USP Solution

Friendly's TR-369 USP is an integrated solution for implementation and management of connected devices. The solution leverages the TR-069 protocol specification and enables carriers and CSPs to transform consumer broadband networks into flexible and secure IoT-enabled solutions.

### Main Capabilities

- Managing additional types of devices – TR-369 USP supports the management of IoT devices in addition to standard telecom devices.
- Variety of third-party integration options - TR-369 USP provides freedom to add new customer services and third-party integrations.
- Coexistence with TR-069 (CWMP) systems - TR-369 USP meets the challenges of connected device management with an interoperable, non-proprietary standard, that easily evolves from existing TR-069 deployments.
- Service management – TR-369 USP has the ability to manage specific services individually.
- Security - TR-369 USP features an application-layer security, authentication, integrity, and privacy from the ground up.
- Management of containers and applications - TR-369 USP allows users to install, monitor, and manage the life cycle of software modules and execution containers on a system represented by a USP Agent, using objects, parameters, and operations built into the Device:2 data model.



## Architecture

- > USP networks consist of controllers and agents that enable management of service elements .
- > Connected devices - the solution supports a greater number and more types of devices:
  - TR-069-based devices
  - Proxied devices - Standardized interfaces for Wi-Fi, Pv4, IPv6, and IoT interfaces like ZigBee, Z-Wave, and MQTT - for diagnostic tests, firmware management, and upgrades, and more.
- > Multi-controller - a USP controller can be an existing TR-069 ACS, or any type of computing device in a data center, a back office, a smartphone, a laptop, etc. The USP agent can be accessed by multiple control points from a number of different stakeholders.
- > Customer controls and third-party apps - TR-369 USP enables Wi-Fi optimization, network security, parental controls, home automation and security, IoT services, and custom apps.

## Key Features

- › Standardized IoT management - unified management of devices based on non-IP protocols like ZigBee, Z-Wave, and others
- › Wi-Fi Optimization
- › Analytics collection and monitoring
- › Self-support app - monitoring, diagnostics and repair of connected devices and networks
- › Multi-tenant management
- › The application enabled Smart Gateways - device management and the life cycle management of third-party applications like security, Wi-Fi telemetry, and parental controls
- › Secure communication - encrypted communications channel via TLS/DTLS
- › Regular firmware upgrades to ensure that attack vectors are closed before there is a problem
- › Power management - advanced power usage options for IoT devices, sensors and meters
- › Based on TR-181 - the Friendly TR-369 USP can be implemented together with the TR-069 solution
- › Future-ready solution - freedom to offer new services, as they emerge

