



Professional add-ons for the Cloud of Things

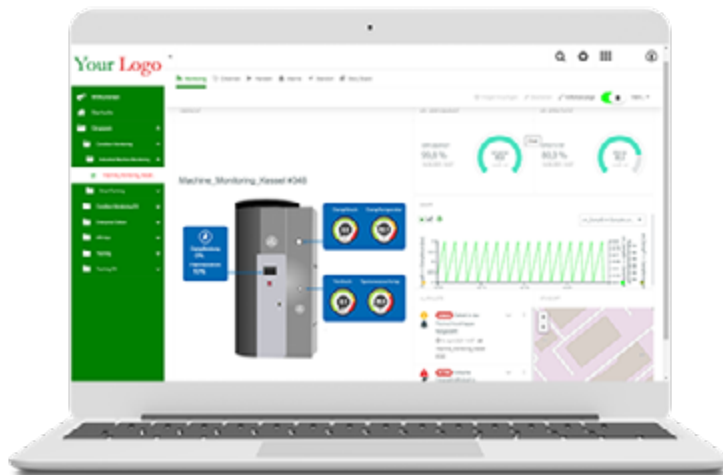
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Branding Manager

Fully customize the look and feel of Cloud of Things easily to reflect your brand identity



Target groups:

- Companies that need a branded cloud platform (in their own design rather than Magenta)
- Resellers or integrators who would like to use their own or their customers' branding
- Multi-brand companies who need an individualization for every sub-brand

Available for:

- Cloud of Things Enterprise

Details:

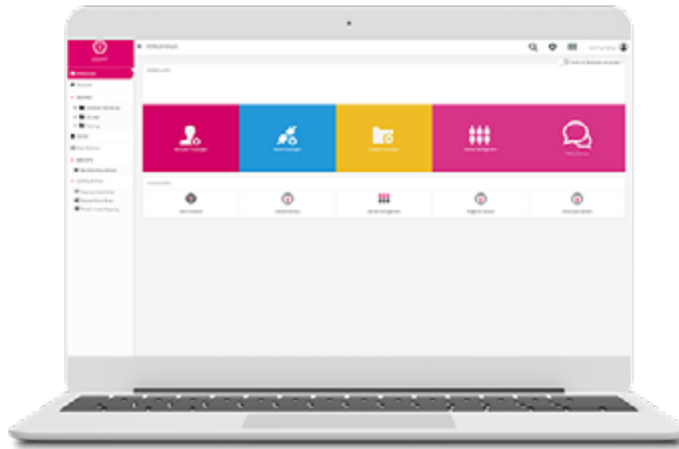
- Individually rebrand the graphical user interface according to your brand standards
- Use your brand assets (logos, colors, fonts)
- No Telekom branding visible
- Allows to create white label solutions

Technical Data:

- Custom logos
- Custom colors
- Custom fonts

Custom URL

Use your own (sub-)domain as the URL to your Cloud of Things tenant



Target groups:

- All users who would like to have individual URLs
- Resellers or integrators who would like to provide IoT platform services under their own or their customers' URL

Available for:

- Cloud of Things Enterprise

Details:

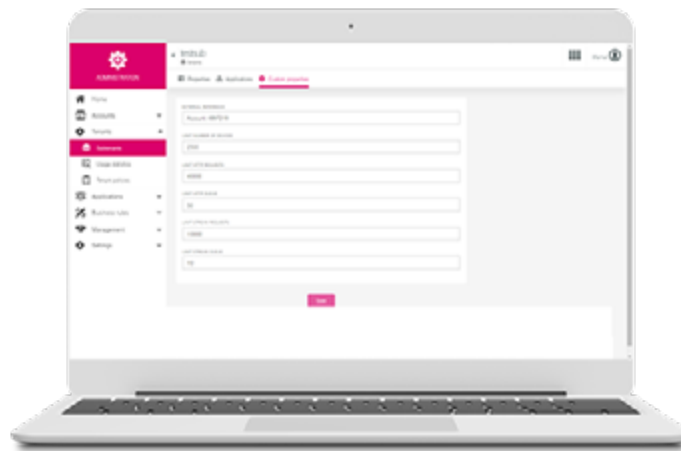
- Use your own domain name (or a subdomain)
- Only available as part of Cloud of Things Enterprise
- Allows to create fully white-label solutions
- Without this feature: Something like <https://mycompany.ram.m2m.telekom.com>.
With this feature:
<https://iot.mycompany.com> or <https://tenant.iot.mycompany.com>

Technical Data:

- It is required that a customer must have a registered domain name and has access to the Domain Name Server (DNS)
- Customer uploads the SSL certificate for the domain in the Enterprise Tenant
- Validation and activation of the URL is done automatically by Cloud of Things
- Subtenants always get a prefix to the main tenant's domain. Prefix must not contain a dot (".")

Subtenancy

Manage subtenants which are encapsulated from each other using advanced user hierarchy management



Target groups:

- Large organizations who would like to structure sub brand, countries or branches in separate tenants with the option to combine specific information
- Resellers and integrators who need separate tenants for different customers

Available for:

- Cloud of Things Enterprise

Details:

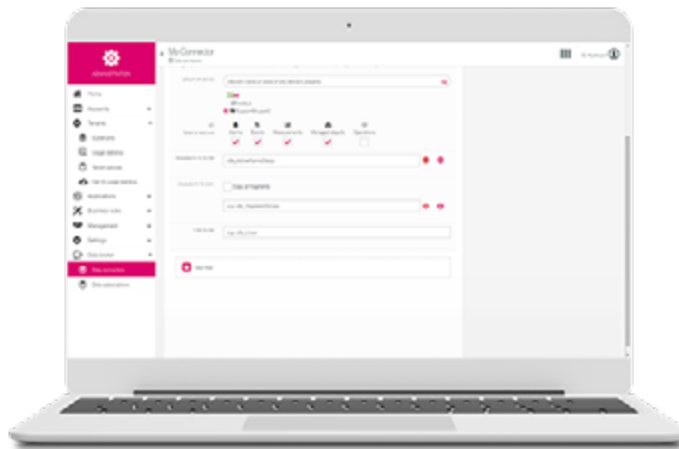
- Only available as part of Cloud of Things Enterprise
- By default, master tenant has no insight into subtenant data and subtenants have no mutual insight into their data, user administration and the like (unless Data Broker is used and subtenant has given permission)
- Raw usage information for billing

Technical Data:

- Several subtenants
- Unlimited number of users per subtenant
- One level of subtenants (more levels are possible but require additional Enterprise subscriptions)
- Functions for managing subtenants
- Provided usage information for billing

Data Broker

Secure data sharing between subtenants, either between an Enterprise master tenant and its subtenants, or the Local Cloud Extension



Target groups:

- Resellers
- Integrators
- Large organizations who would like to structure sub brand, countries or branches in separate tenants with the option to combine specific information

Available for:

- Cloud of Things Smart
- Cloud of Things Enterprise
- Cloud of Things Private

Details:

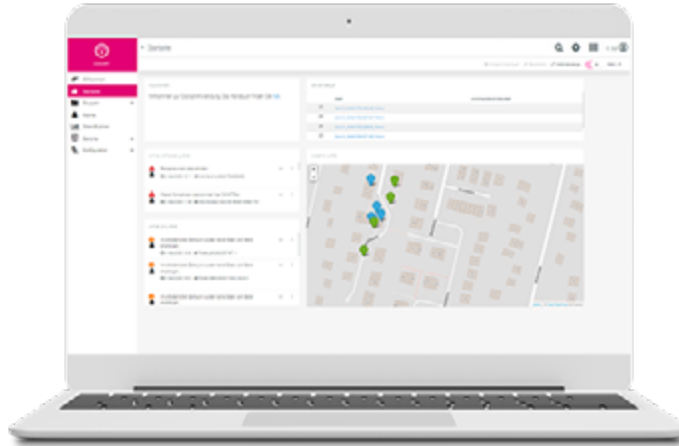
- Included in Cloud of Things Enterprise and in Cloud of Things Private
- Easy to share selected information between one tenant and other tenants
- You can share devices (and more generically, managed objects), events, alarms, measurements, operations

Technical Data:

- Data Broker enables the tenant to access data of subtenants
- Devices used in subtenants can be replicated
- Approval to do so has to be given by the subtenant administrator

Mobile Network and WLAN Localization

Determine the geographical position of your IoT devices when no GPS is available/allowed, using cellular network or WLAN information



Target groups:

- Customers who want to track devices and machinery that are not equipped with GPS
- Low-cost and very energy efficient battery-powered tracking devices that are not equipped with GPS

Available for:

- Cloud of Things Smart
- Cloud of Things Enterprise

Details:

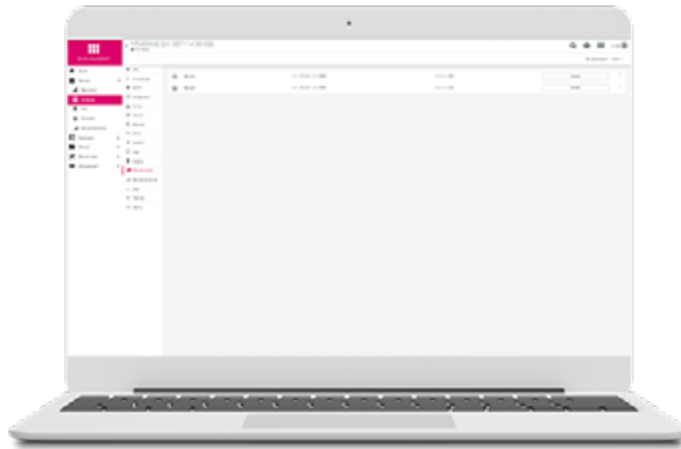
- Determine the geographic location of devices
- No GPS needed, hence very energy and cost efficient devices possible

Technical Data:

- Devices need cellular modem or WLAN
- The signal strength of mobile phone base stations or WLAN access points is used to determine the position of the devices
- Triangulation is used for higher accuracy of site determination using the signal strength of at least three base stations or WLAN access points

Remote Control

Control and configure managed devices securely, easy and fast from within the Cloud of Things portal remotely from anywhere



Target groups:

- Users who want to have remote access to their equipment
- IT technicians, dispersed teams who need to manage remote systems

Available for:

- Cloud of Things Smart
- Cloud of Things Enterprise

Details:

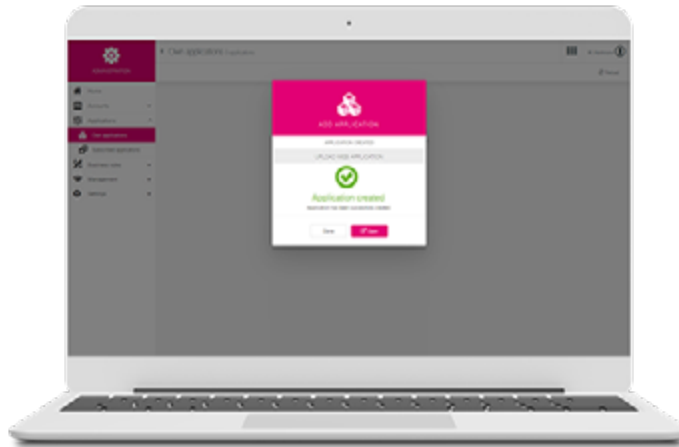
- From within the Cloud of Things user interface, administrators can access the graphical user interface of remote devices (machines)
- VNC protocol

Technical Data:

- VNC protocol
- Prerequisite is the installation of a VNC server on the device to be controlled

Microservice Runtime

Extend Cloud of Things functionality with your own microservices running in Docker containers on a Kubernetes cluster



Target groups:

- Developers at system integrators and solution providers wishing to extend Cloud of Things functionality with their own microservices
- Developers with very specific needs, writing own microservices to extend Cloud of Things

Available for:

- Cloud of Things Smart
- Cloud of Things Enterprise

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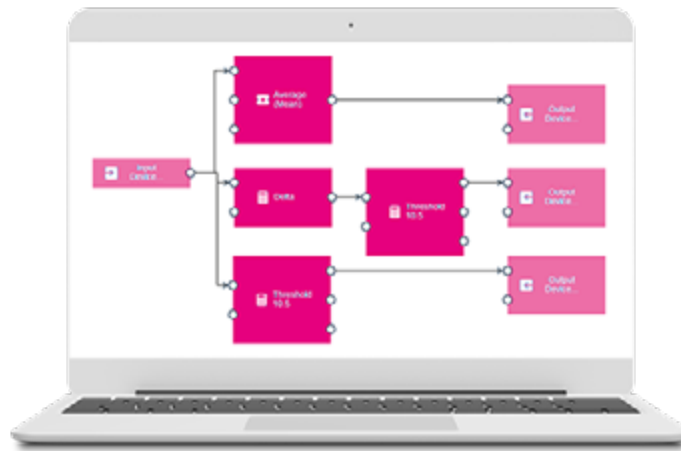
- Includes resource package of 2 cores, 4 GB memory (Smart and Enterprise), 1 core (Local Cloud Extension)
- Extension packages of 2 cores, 4 GB memory available (Smart and Enterprise), 1 core (Local Cloud Extension)
- Prerequisite: Privacy and Security Approval (PSA) by T-Sec

Technical Data:

- Single or Multi Mode: Single instance for all subtenants or each tenant uses a separate copy (optimizing cost vs. performance)
- Individual resource assignment possible (CPU, memory)
- Resource packages sharable between microservices

Advanced Rules

Get the most out of your data with Advanced Rules (powered by Apama) by using unlimited custom graphical Analytics Builder blocks, and by coding own rules in Event Processing Language (EPL)



Target groups:

- Cloud of Things users who need more complex rules (beyond what is possible by default with Smart Rules and Analytics Builder) to be applied to incoming data in near real time
- Integrators which build solutions that require the immediate processing of incoming data with advanced (programmed) rules

Details:

- Get meaningful insights on machine status for immediate processing of incoming data
- Extend the graphical Analytics Builder with your own Analytics Builder blocks
- Code your own rules using Event Processing Language (EPL)
- Trigger specific actions automatically based on pre-defined events/thresholds
- Highly individual data analytics approaches; the use of Event Processing Language (EPL) requires programming/development skills
- Powerful logical operators available to create and combine sophisticated rules and analytics

Technical Data:

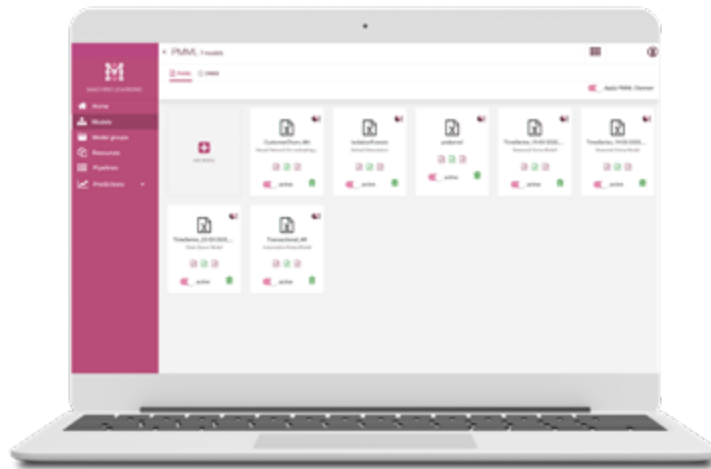
- Powered by APAMA by Software AG, a powerful and proven real-time stream analytics engine originally developed for real-time financial trading
- Deploy unlimited number of graphical Analytics Builder models
- Define own Analytics blocks with the Analytics Builder SDK
- Develop own functionalities/methods beyond the capabilities of the graphical Analytics Builder using Event Processing Language (EPL), e.g. Fourier transformation of high frequency sensor data

Available for:

- Cloud of Things Smart
- Cloud of Things Enterprise
- Cloud of Things Private

Machine Learning

Quickly deploy, execute and manage predictive models that deliver instant insights your business can act on using Machine Learning (powered by Zementis)



Target groups:

- Data analysts looking for an easy way to run predictive models on Cloud of Things to improve business decisions and generate predictive insights from connected devices
- Integrators

Available for:

- Cloud of Things Smart
- Cloud of Things Enterprise

Details:

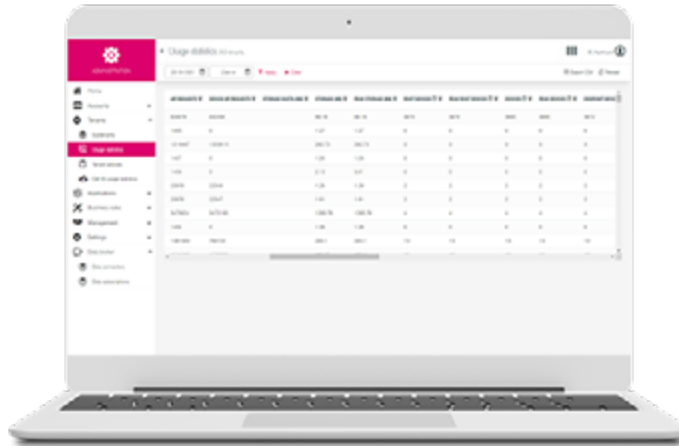
- Common, standards-based framework to harness the power of collected data to rapidly deliver insights and support informed business decisions based on predictive analytics
- Accelerates time-to-insight from predictive analytics for big data and creates a scalable capability for predictive analytics while also reducing IT cost
- PMML (Predictive Model Markup Language) open standard facilitates interoperability across applications and vendors

Technical Data:

- Executes predictive models be written by customer/integrator using tools like e.g., Python/R and to be exported to PMML (Predictive Model Markup Language)
- Data is scored against the model in batch-mode or in near real time through one of two convenient options: the web console or via web-service calls
- Two major deployment options: Analytics Server or Analytics plugin on Edge devices

Local Cloud Extension

Process data in near real time on shop floor level, hybrid on your own server and connected to the Cloud



Target groups:

- Manufacturers with a focus on heavy industry
- Industrial equipment manufacturers
- Energy management and utilities
- Remote standalone applications with no full-time access to a wide-area network (e.g., vessels)

Available for:

- Cloud of Things Smart
- Cloud of Things Enterprise

Details:

- Pre-processing of data on the premises of the customer
- Only selected/preprocessed data will be sent to the cloud
- Reduces cost for connectivity and cloud resources
- Reduces data latency
- Addresses the needs of corporate data security and data privacy policies

Technical Data:

- Available for Cloud of Things Smart and Enterprise
- 1 server with 2 cores
- Either software only or pre-installed configurations on HPE industrial servers
- Typical configuration: 1 server with 2 cores can serve up to X,000 on-premise devices (depending on usage pattern)

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online services here.

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