

An aerial view of a city with a river, overlaid with a digital network of glowing blue nodes and white connecting lines. The nodes are positioned at various points across the city, with lines arching between them, suggesting a network or data flow. The city buildings are rendered in a semi-transparent, golden-brown color, and the overall scene is bathed in a blue light.

**IOT ENABLEMENT PLATFORM
FOR DIGITAL PRODUCTS**

THE SELF-SERVICE CLOUD

Avantune's mission is to enable companies with a new pattern of consumption and supply of technology: the Self-Service Cloud.

Our Orchestration Platform enables a Self-Service Cloud that can deliver services and products on-demand products, through a simple and intuitive interface. Services of Provisioning, Metering / Monitoring, Billing and Catalog, enable the efficient and transparent management of the Hybrid Cloud. It also allows you to manage bid application services and infrastructure resources end-to-end.

The Metering and Monitoring modules enable users to detect information about IP devices, equipment, sensors, and devices. Users can also identify failure patterns and have a complete and updated view of the status of each component.

Thanks to Business Intelligence and Customer Dashboards, data can be re-aggregated to calculate SLA, statistics and predictive analysis.



CATALOG



PROVISIONING



METERING



BILLING

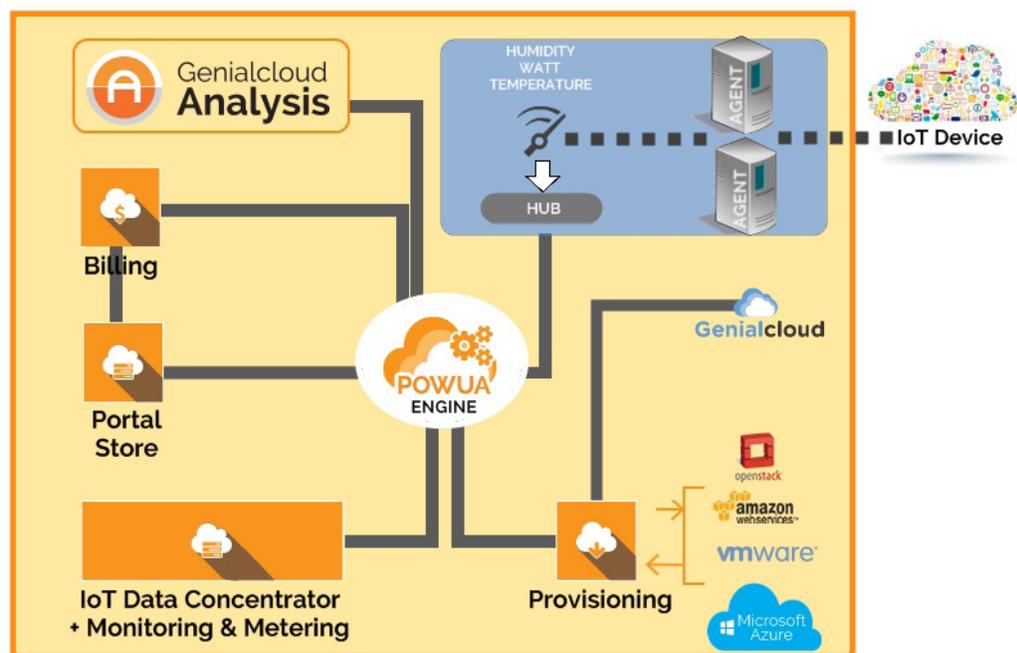
SELF-SERVICE IOT: OPTIMIZE AND REDUCE MAINTENANCE COSTS

Powua Self-Service Cloud enables new scenarios for managing devices and equipment.

Thank Powua and the integration with our Business Intelligence solution, companies will monitor in real-time a set of devices and sensors, and measure their performances.

Optimal alarms' management, centralized data collection, and processing, the transformation of data into meaningful information, allow organizations to make better and faster business decisions, optimizing their production and reducing maintenance costs.

The ability to manage data created from any device or sensor opens to multiple scenarios, like industrial, home automation, and retail.



WHY POWUA?

The complexity of managing Cloud platforms and the inadequacy of current systems management solutions makes extremely difficult to deliver Cloud services. To fix these problems we designed and developed Powua, a Cloud Management platform to provide end-to-end solutions for Public and Private Cloud.

The Self-Service approach can address monitoring, predictive maintenance, and provisioning for IoT.

VALUE PROPOSITION

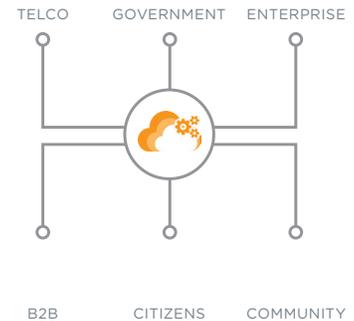
In the IoT, Powua enables organizations to manage and control their hardware and software in a self-service model.

With the Metering and Monitoring modules, Powua provides real-time information about the status of the assets and a graphic representation through the dashboards.

The integration with the Billing module allows translating consumptions into costs.

Powua also allows users to set alarm thresholds and corrective actions based on specific events.

Through the integration with Business Intelligence Analysis, it allows users to turn data into relevant information, to compile statistics and formulate a predictive analysis.



IOT BENEFITS



Enhance security by monitoring the IoT environment (Sensors, devices, gateway, Network, Server)



Aggregate problems to control and generate complex alarms



Minimize costs and time for maintenance through identification of malfunctions



The IoT measurements can be used to define innovative policy, chargeback or calculation of costs through the billing module

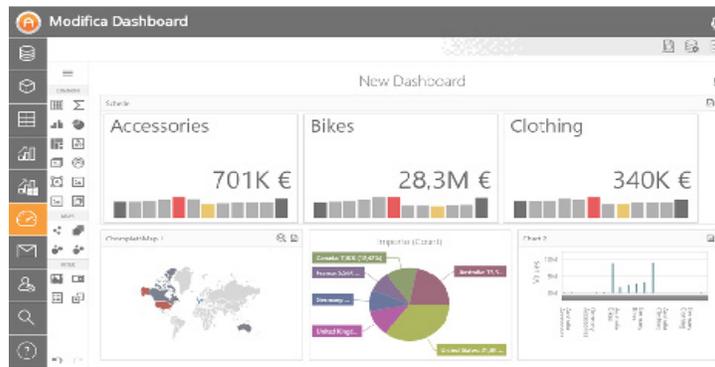
genialcloud ANALYSIS

METERING

Get information from any device. Show its status and check to Define alarm thresholds Efficiency

LEARNING

Turn data into information. Plan ordinary and predictive maintenance



MONITORING

Highlight problems and malfunctions. Moreover, automate feedback

REPORTING

Graphics and reports available. Create and share interactive reports.

HOW DOES IT WORK

Powua plays a crucial role in the transition to Cloud Computing.

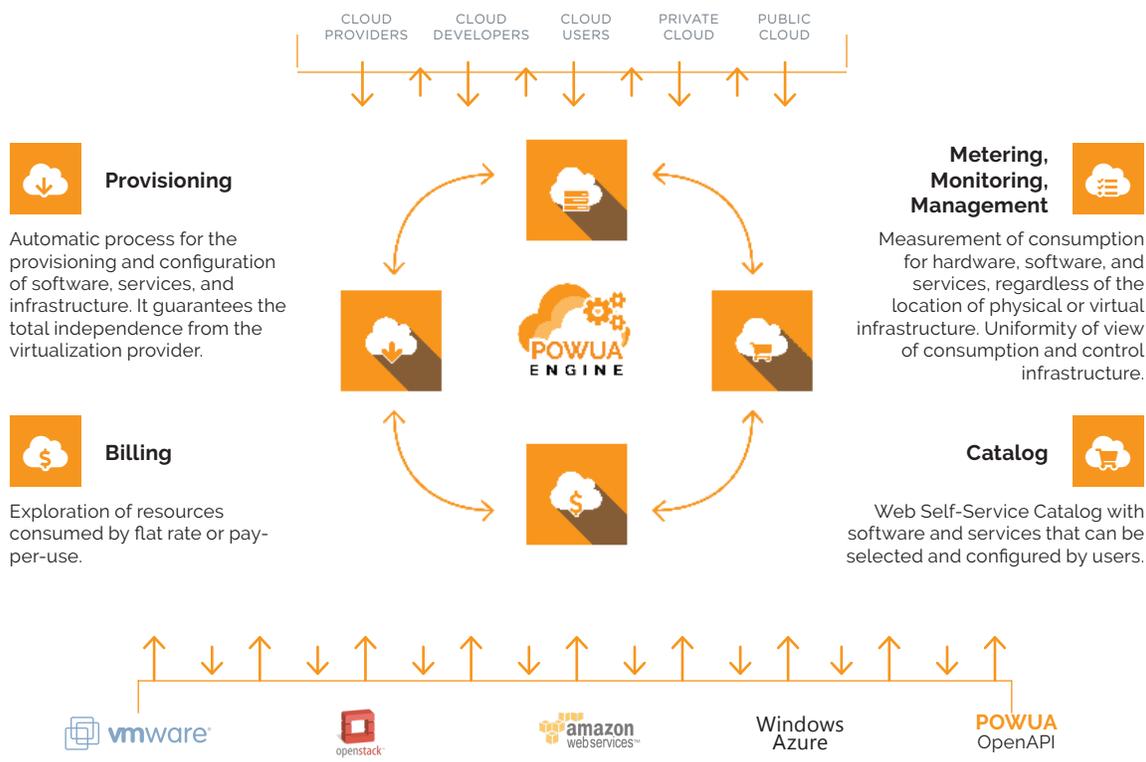
Acting as web software engine, Powua provides powerful and flexible API provisions that allow the measurement of consumption and performance of any software and service.

Powua accepts SOAP calls, keeps track of all open application sessions and converts this information into billable data.

From the user's perspective the cloud is extremely simple:

1. The user's access to the Store to see what services are available and their policies for consumption.
2. The users choose the services they need and buy a certain number of credits.
3. Powua automatically performs provisioning of services.
4. Through the console Powua, users check and verify the number of credits used for selected services.

Cloud Providers and Application Service Providers can monitor usage of data, performance, and billing of services through the Powua console that is very simple to use.



POWUA®: A PATENTED TECHNOLOGY

The Powua platform supports major virtualization solutions and offers innovative ability to integrate into hybrid modes (Hybrid Cloud) resources and infrastructures in the most critical global cloud providers such as Amazon Web Services, Microsoft Azure and Google Cloud. Powua allows users to independently create new application resources and choose the location with no need for technical skills.

Users can easily transfer applications currently on-premise or integrate cloud solutions such as Microsoft Office365, Google Apps or Amazon S3. Through the Metering and Monitoring modules, users can monitor the progress of services constantly measuring the consumption of natural resources such as CPU, storage, bandwidth, memory and application consumption, number of transactions and modules used.



CATALOG

eStore self-service

Self-service for software and services. The users, based on their permissions, can select and configure the desired functions. Powua Catalog allows you to map complex organization for a Private Cloud or different types of customers for a Public Cloud. It has security features and user profiling. The system is integrated with the most popular electronic payment platforms. From their private area, users can access to useful information and reports, such as a list of purchased services, available services, budgets allocated resources, the budget allocated, consume resources and economic aspects related to the consumption.

- ✓ Fully configurable to provide diversified services for different categories of users.
- ✓ The access point and single authentication: single sign-on.
- ✓ Complete management of the purchased services: change and share with others



METERING/MONITORING/ MANAGEMENT

Measurement and management of resources

METERING

Measurement of the consumption of hardware, software, and services, regardless of the location of physical or virtual infrastructure.

- ✓ Accurately measure the resource usage of products services selected.
- ✓ Collect real-time information on the consumption of physical resources (CPU, storage, bandwidth, memory), machine-level and a single process.
- ✓ Define the aggregation criteria of the detected consumption (e.g., At the level of groups, services, organizations).
- ✓ Integration with the billing for the translation costs of any measurement.
- ✓ Based on Agent-based / Agent-less technology it is independent of the operating platform (virtual or physical).

MONITORING/MANAGEMENT

Complete control of infrastructure, hardware, software, and services, regardless of the location of physical or virtual infrastructure. Standard visualization of consumption.

- ✓ Asset management.
- ✓ Monitoring the status of hardware devices and services, a reachability and operation level.
- ✓ Definition of alarm thresholds and automation actions following the events occur.
- ✓ Notifications depending on the type of event.
- ✓ SLA reporting for defined components and services.



PROVISIONING

Automatic Deployment Services

Automatic process for provisioning and service configuration, software or selected infrastructure through Powua Store. Quick and efficient distribution of selected services, eliminating the need for manual intervention, and any costs associated with human error. It guarantees the total independence from the virtualization provider.

- ✓ Integrated connectors to the all major providers / virtual environments (OpenStack, Azure, VMware, Amazon Web Services and others). Standardized communication and independence from the specific provider.
- ✓ Make the distribution and configuration of services, both in the 'public' scenario 'private' cloud (SaaS).
- ✓ Configuration and management of virtual infrastructure (IaaS).
- ✓ Multi-site deployment scenarios and multi-region services and support.
- ✓ Completely manageable from back-office.



BILLING

Resource costs Calculation

Exploitation of resources consumed.

- ✓ Assign a value to the purchased, consumed and measured resources and infrastructures through Metering.
- ✓ Use the IoT measurements to define innovative chargeback policy or calculation of the costs.



TECHNOLOGICAL ADVANTAGES

- ✓ Independence from infrastructure hardware and virtualization systems.
- ✓ Automatic and autonomous provisioning of services.
- ✓ 100% cross-platform Java: Powua is 100% Java. Therefore, it ensures installation in any platform/hardware that supports Java Runtime 1.7 or higher.
- ✓ Multi-tenant Architecture: Powua allows the management of multiple providers.
- ✓ Deployability of the modules on different physical or virtual systems: the whole system is divided into installable modules on different platforms to ensure the highest level of flexibility in the distribution of workloads.
- ✓ Full Independence of modules: each module is independent and can be used individually in all the cases where integration with third-party products is necessary.
- ✓ Availability of the functionality of each module via web services: all modules are exposed as real services and accessible as web services (soap and restful), to ensure the highest level of compatibility and integration with other systems.
- ✓ Administrative Console entirely web-based: the administrative console for the management and configuration of all modules is fully accessible by the browser.



Powua is the self-service platform for cloud services and IoT.

Powua implements configurations of private or public cloud and Hybrid Cloud. It supports all service models, including SaaS (Software as a Service), IaaS (Infrastructure as a Service) and PaaS (Platform as a Service).

+1 (647) 925-3163

www.powua.com

AVANTUNE AMERICAS

TORONTO
BOSTON
SAN FRANCISCO
MEXICO CITY

AVANTUNE EUROPE

ROME
MILAN
CAGLIARI
SPOLETO



Avantune is the inventor of the self-service cloud. Thank Powua, the development platform for the self-service cloud, and Genialcloud, the suite of business solutions in self-service mode, you can reduce and eliminate the complexity and the costs of infrastructure and technological resources, making your organization faster and more flexible, and enabling people to remote collaboration.

Headquartered in Toronto, the company operates in Italy, the US, and Mexico.

Avantune. Innovation Without Complexity.