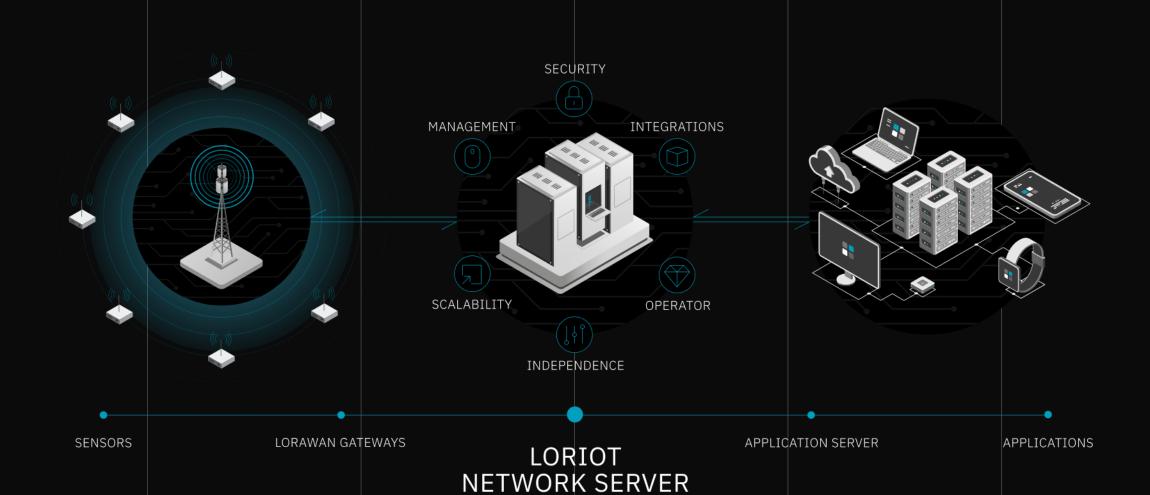
### LORIOT Network Server





#### LORIOT Network Server



IoT security at every stage of your product life-cycle. Enhanced, resilient end-to-end encrypted bidirectional data and device protection. LoRaWAN® AES 128 encryption combined with high-grade TLSv 1.2 communication. We build battle-tested security into the network server to safeguard your IoT data and assets.



#### MANAGEMENT

A complete network infrastructure and software suite, enables the efficient management of your IoT network. A user-friendly web browser interface removes the complexity of scaling, managing devices and processing data so that you can focus on building the network. User management, roles and multi-tenancy streamline the server for efficient network and user organisation.



#### SCALABILITY

A server architecture designed to grow with the network, from local deployments to national coverage, our network infrastructure and server distribution provides robust availability of all data. Built-in redundancy, high-availability and minimal maintenance guarantees the handling of thousands of gateways and millions of devices.



#### **OPERATOR**

A wide feature-list of operator systems for effective IoT network deployments; monitoring, logs, alerts, and powerful tools such as remote gateway management and multiple application outputs provide data regulation and valuable status information. Plus, filtering and search tools to rapidly analyse the network and find anomalies.





#### INTEGRATIONS

Flexible, access to data, our network applications integrate with virtually any IoT application. We enable easy interoperability with IoT platforms, user and billing systems or device provisioning at the end application. Standard APIs such as MQTT, HTTPs and WebSocket are supported, and fully backen d integrated platforms such as AWS IoT, Azure IoT, IBM Bluemix are available.



#### INDEPENDENCE

In the cloud or on-premise, managed or unmanaged, our network server deployment is highly adaptable and designed to give you complete freedom. When security and control are critical, our flexible network server deployments offer complete independence to manage your data. In the cloud or on-premise, we can hand over full control and are always ready to support.



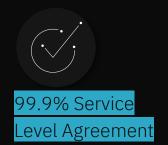
The new Professional Public Servers is the perfect solution to operate and scale your LoRaWAN® Network.

Professional LoRaWAN® network server with a 99.9% SLA, built-in redundancy and new accessible features to manage and scale a secure LoRaWAN® Network.

- FULL-FEATURED LORAWAN® NETWORK SERVER
- 99.9% UP-TIME GUARANTEE
- UNLIMITED NUMBER OF GATEWAYS & MESSAGES
- ORGANIZATION MULTI-TENANT TEAM ENVIRONMENT
- 4 PLANS FROM 250 UP TO 2500 DEVICES
- LOW LATENCY REGIONAL SERVER

Be confident in the delivery of your services and guarantee connectivity for your solution. Managing users, networks and applications at scale requires valuable operational tools and features.



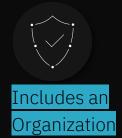


Your services connected without interruption. We guarantee server uptime to ensure your data is always available and routed to where it's needed.



Multi-tenant accounts

With multi-tenant access for your Organization, you can invite and create new user accounts with various access rights and resource permissions - Organization admins, users and read-only users.



An exclusive, isolated and secure environment to manage, operate and monitor your accounts, networks and applications. With your own server Organization, you have complete control to independently build, organise and manage your network.



Backend user management

Access to the administrator backend to manage all users, networks and applications within the Organization. Login, suspend and transfer resources between accounts are just a few of the available features.





Access the LORIOT Professional Public Server REST API documentation for provisioning gateways and devices, plus application, gateway and server event information.



Additional advanced features

Reverse SSH tunnel
Increased data verbosity
Multiple application outputs
LORIOT WebSocket applications
Advanced multicast



Gateway and

Organization Roaming

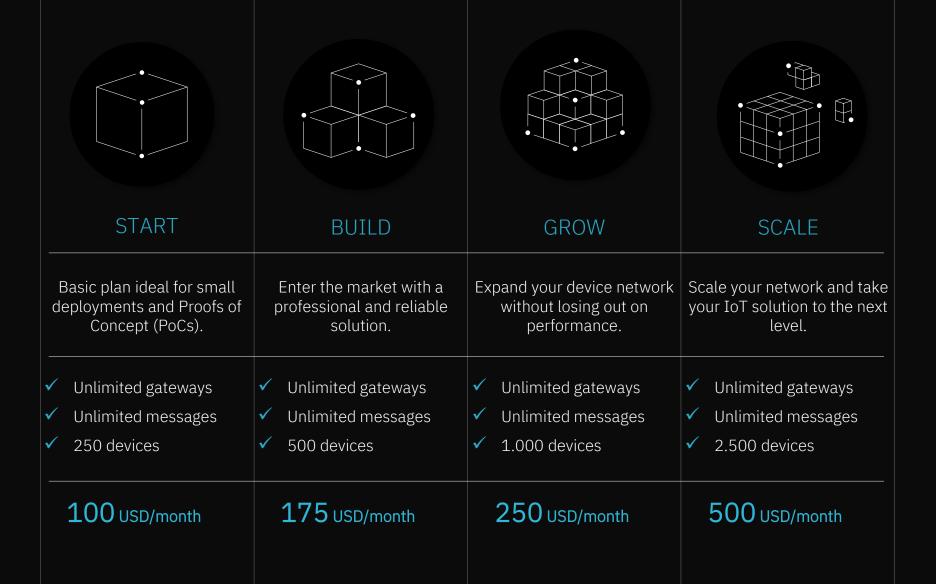
Your network is greater than the sum of its parts. Unlimited potential for your coverage to expand with roaming on any of the thousands of LoRaWAN gateways connected to the Professional Public Server.



Data Security

We build additional security layers at every level of network communication and data handling. TLS 1.2 encryption, our secure LORIOT gateway software, custom packet forwarder, secure APIs and more.







		START	BUILD	GROW	SCALE
+	STANDARD FEATURES				
+	LORAWAN®				
+	APPLICATIONS				
+	GATEWAY MANAGEMEN	<b>I</b> T			
+	USER MANAGEMENT				
+	SECURITY				
+	SERVER DEPLOYMENT				
+	INTEGRATIONS				
+	SERVER OPERATOR				
+	SUPPORT				



	START	BUILD	GROW	SCALE
STANDARD FEATURES		-		
Unlimited User Accounts	V	<b>v</b>	V	<b>V</b>
Unlimited Applications	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Unlimited Gateways	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Unlimited Messages	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Multitenancy	V	<b>V</b>	<b>V</b>	<b>V</b>
Included Devices	250	500	1.000	2.500
Included Gateways	V	<b>V</b>	<b>V</b>	<b>V</b>
Service Level Agreement	99,9%	99,9%	99,9%	99,9%
Cloud Deployment	Worldwide Professional Servers	Worldwide Professional Servers	Worldwide Professional Servers	Worldwide Professional Server
On-Premise Deployment	×	×	×	X
LoRaWAN® Network Operator	×	×	×	×
White Label + Custom Domain				
Technical Support	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Test Server	-	-	-	-
Pricing –	100 USD/month	175 USD/month	250 USD/month	500 USD/month



		START	BUILD	GROW	SCALE
	LORAWAN®				
	LoRaWAN® 1.0.x	<b>V</b>	<b>V</b>	<b>V</b>	<b>v</b>
	LoRaWAN® 1.1.x		<b>V</b>	<b>V</b>	<b>✓</b>
	Class A device		<b>V</b>	<b>V</b>	<b>∨</b>
	Class B device	<b>V</b>	<b>V</b>	<b>V</b>	<b>∨</b>
	Class C device		<b>V</b>	✓	<b>V</b>
	Activation By Personalisation (ABP)	<b>V</b>	<b>v</b>	<b>v</b>	V
	Over The Air Activation (OTAA)	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
	Adaptive Data Rate		<b>V</b>	<b>V</b>	<b>V</b>
+	APPLICATIONS				
+	GATEWAY MANAGEMEN	NT			
+	USER MANAGEMENT				
+	SECURITY				



	START	BUILD	GROW	SCALE
APPLICATIONS				
Unlimited device numbers (240)	×	×	×	×
Uplink/Downlink	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Multicast	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Multiple Application Output	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Device Location Map	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Custom Payloads	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Private/Public Applications	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Automated device provisioning	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
REST API Device Provisioning	✓	<b>V</b>	<b>V</b>	<b>V</b>
Cryptographic Key Management	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
MAC Commands Log	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Debugging Features	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Firmware Over The Air updates (FOTA)	V	V	<b>V</b>	<b>V</b>
LoRa Geolocation	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>



	START	BUILD	GROW	SCALE
— GATEWAY MANAGEMEN	Т			
LORIOT Gateway Binary sw	V	<b>V</b>	<b>V</b>	<b>V</b>
Worldwide Radio Bands supported	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Remote Access SSH Tunnel	<b>✓</b>	<b>V</b>	<b>V</b>	<b>V</b>
Automatic Updates	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Gateway Location Map	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Data Stream	V	<b>V</b>	<b>V</b>	<b>V</b>
Community Gateway Access On/Off	×	×	×	×
Private/Public Networks	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
REST API Gateway Provisioning	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Gateway Logs	V	<b>V</b>	<b>V</b>	<b>V</b>
Alert Notifications	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Adaptable Transmit Power	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Enhanced Radio Information	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
+ USER MANAGEMENT				



	START	BUILD	GROW	SCALE
USER MANAGEMENT				
Admin Accounts	<b>V</b>	V	V	V
Reseller Functionality	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Multitenancy	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
REST API User Provisioning	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Billing System	<b>~</b>	<b>V</b>	<b>V</b>	<b>V</b>
Read-Only Users	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
User Rights Management	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Resource Transfer	×	×	×	×
+ SECURITY				

SERVER DEPLOYMENT

**INTEGRATIONS** 

SERVER OPERATOR



	START	BUILD	GROW	SCALE
- SECURITY				
Join Server	<b>V</b>	V	V	<b>V</b>
TLS v1.2 Transport	<b>V</b>	<b>✓</b>	<b>V</b>	<b>V</b>
Administrator Web Interface	<b>V</b>	<b>∨</b>	<b>V</b>	<b>V</b>
Enhanced Gateway Security Binary	<b>V</b>	V	V	<b>V</b>
Two-Factor Authentication	<b>V</b>	V	<b>V</b>	<b>V</b>
User Access Controls	<u> </u>			
SERVER DEPLOYMENT				
Managed/Unmanaged Service	_	-	-	-
Cloud (Azure etc.)	-	-	-	-
On-Premise	-	-	-	-
Distributed Server Architecture	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Fail-safe Server Redundancy	<u> </u>	<b>V</b>	<b>V</b>	<b>V</b>
+ INTEGRATIONS				



	START	BUILD	GROW	SCALE
- INTEGRATIONS				
HTTP Push	×	×	×	×
MQTT		<b>V</b>	<b>V</b>	<b>√</b>
WebSocket	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
TLS Socket	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
CoAP Push	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Iron.io IronMQ		<b>V</b>	<b>V</b>	<b>V</b>
Microsoft Azure IoT Hub	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Amazon AWS IoT		<b>V</b>	<b>V</b>	<b>V</b>
IBM Bluemix		<b>V</b>	<b>V</b>	<b>V</b>
Google IoT Core		<b>V</b>	<b>V</b>	<b>V</b>
Cayenne myDevices		<b>V</b>	<b>V</b>	<b>✓</b>
PubNub		<b>V</b>	<b>V</b>	<b>V</b>
AllThingsTalk		<b>V</b>	<b>V</b>	<b>V</b>
TagoIO	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
+ SERVER OPERATOR				



	START	BUILD	GROW	SCALE
<ul> <li>SERVER OPERATOR</li> </ul>				
Full REST API Access	<b>v</b>	V	V	V
Test Server		_	-	_
User Web Interface	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Admin Web Interface	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Server Insights App				_
SUPPORT  Service Level Agreement (SLA)	<b>√</b>	<b>V</b>	<b>V</b>	<b>√</b>
Technical Support	<u> </u>	<b>V</b>	<b>V</b>	<b>V</b>
Documentation & Guides	<u> </u>	<b>V</b>	<b>V</b>	V
Single-point Contact	×	×	×	<b>V</b>
Server Migration	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>
Consulting/Education		<b>V</b>	<b>V</b>	<b>∨</b>

### Contact



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Web

<u>contact us</u> <u>brochure</u>

General Inquiries

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