



Cassia
Networks

Overview of Cassia's Edge Computing

Making Bluetooth IoT Easy. Scalable. Secure.



Why Edge Computing?



Improved response time



Reduces cost of data transmission & cloud service



Improved reliability



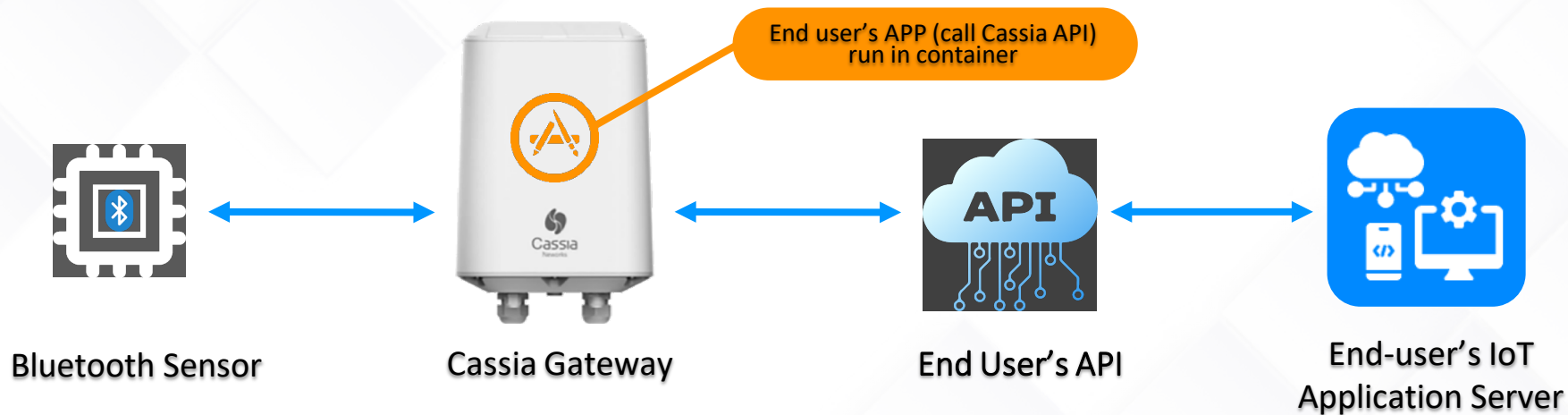
Improved security



Improved scalability



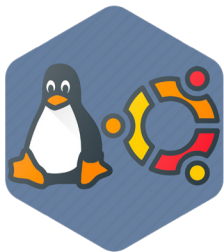
Cassia's Edge Computing Solution



Bluetooth data is collected, analyzed, encrypted and transmitted by the end user's own APP at the edge of the IoT network



Container Software Resource



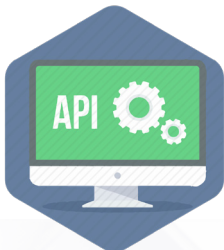
Operating System

Linux Ubuntu (lightweight version)



Utilities & Packages

Python, Node.js, C, C++, ASP.NET, etc.



Bluetooth API

Cassia RESTful API (recommended) and BlueZ



Configuration & Management

- The container and APP can be managed through **Cassia's IoT AC** and gateway's local console
- End-users can add **APP's** custom configuration options

PassInAndOut Config

ApId	LowerThreshold
<input type="text" value="1219040005"/>	<input type="text" value="-75"/>

Status Basic Service **Container** Logs Other

Actions


Operating System	Ubuntu 16.04.3 LTS
Container Status	running
Container Version	1.1.1
Storage Usage	916.7M / 2.3G
Transmit Rate	0.00KB
Transmit Bytes	0.54KB
Receive Rate	0.00KB
Receive Bytes	0.40KB
CPU Usage	9.75%
Memory Usage	3.43%

Installed APPs (1)

#	Name	Version	Action
1	api_local	2.0	<input type="button" value="Del"/>



Accessing Container Data

 Port Forwarding Configuration

Protocol	Port
TCP	60000
N/A	
TCP	
UDP	
N/A	

Protocol	Port
N/A	

Protocol	Port
N/A	

Apply

- End-users can configure a maximum of four TCP or UDP ports for container port forwarding
- With this feature, end-users can set up a server (e.g. **OPC UA server**) in the container and access container data via the gateway's private IP and the configured port



Key Differences between Gateways

Gateway	S2000	E1000	X1000	X2000/ATX2000
Supports Edge Computing	NO	YES	YES	YES
Container Memory	N/A	128MB	128MB	700MB
Container CPU	N/A	Two cores 1.5 GHz	Two cores 1.5 GHz	Two cores 1.5 GHz
Container Storage	N/A	2.3 GB	2.3 GB	2.3 GB

*All other edge computing functions are the same



Useful Links



[Cassia Edge Computing User Guide](#)



[APP Code Examples](#)



[Download Container \(Password Needed\)](#)



[Cassia RESTful API](#)





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Imagine The Possibilities!

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