



bttn for commerce API:

Enabling one-press experience for online ordering.

bttn for commerce is a new API provided by the bt.tn cloud service. It allows secure linking of **bttns** with your online ordering system to provide your customers a one-press ordering experience.

Benefits for merchants:

- 1 Easy deployment with customer self-provisioning:** You can distribute thousands of bttns to your customers without having to pre-configure them. Your customers just fill in a simple form to claim a device.
- 2 Secure transactions:** When a bttn is pressed, bt.tn cloud server passes a purchase request to your ordering system without sending any private customer data.

MOTIVATION

A connected push button is an ideal tool for ordering recurring kind of goods or services, such as refills, food, maintenance or transportation.

In our mission to allow merchants all over the world to harness the power of IoT and to give their customers bttns for super-simple and secure online ordering, we have identified two concerns that needed to be tackled:

- 1) How to easily link a btttn device to a customer without having to edit the properties of each device, and
- 2) How to make purchase requests from the bt.tn cloud server without storing or moving any sensitive customer data outside the merchant's own system.

btttn for commerce API has been crafted to address both concerns in a universally usable way.

This whitepaper presents the new API and a straightforward framework for a cloud to cloud integration of bt.tn and a merchant system.

- ✓ Easy deployment of btttns to support and boost your existing ordering processes
- ✓ Unique ID to ensure secure ordering without having to expose customer data to us or a 3rd party.
- ✓ Highly customizable API to support and fulfill any business, product, process, end-customer need or requirement
- ✓ Fun, Fast and Simple way to turn your business into an on-demand service!

INTEGRATION FRAMEWORK

1. Defining use case, requirements & action template

2. Implementing order automation in Merchant's system

bttn for commerce API:

3. Generating an API key

4. Linking a bttn device to a customer

5. Setting parameters to action template

Integration and user onboarding process ready

Step 1: Our technical experts help the merchant define the bttn use case and the functional requirements for cloud to cloud communication.

With this information, we can define an action template. The template contains the method of communication (typically HTTPS POST), target address, and parameters for the order request.

Step 2: Merchant implements order automation so that when bt.tn server makes a valid purchase request, the merchant's system places an order in the name of the customer.

- Depending on the system and use case, this may include automatic credit card billing and starting an order fulfillment process. These processes are implemented strictly inside the merchant's system.

Step 3: We provide the merchant an API key for authenticating requests from merchant system to bt.tn cloud.

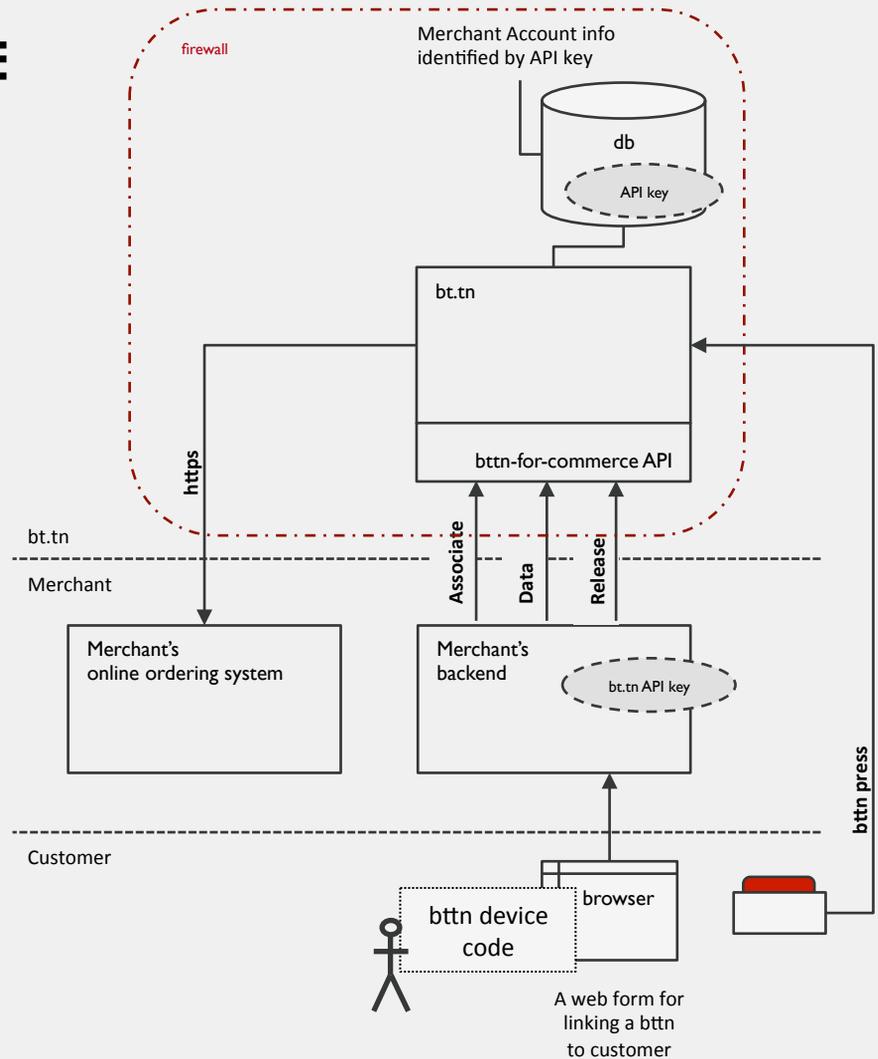
Step 4: To link a bttn device to a customer, the merchant system calls a method for generating a unique, random association ID. Similarly there is a method for releasing the association.

Step 5: Merchant system can call a method to populate the action template with the association ID, target address, and custom parameters as needed for the use case.

After all steps are complete, a push of a registered bttn will generate an order inside the merchant's system.

When integrating services according to this framework, private customer data never leaves the merchant's system.

ARCHITECTURE



Initial setup:

1. bt.tn cloud server generates a my.bt.tn account and an **API key** for the Merchant.
2. A number of bttns are attached to the Merchant's my.bt.tn account.
3. An action template is defined for the Merchant, based on the desired bttn use case.
4. Merchant distributes bttns to customers.

Linking a customer with a bttn device:

A customer registers a bttn by entering a **bttn code** (printed on each device), typically in a form at Merchant's website.

bttn for commerce methods:

- **Associate bttn with customer**
A method to validate & generate an Association Identifier (associd) based on the bttn device code. Merchant must store the associd returned by bt.tn for using as a reference to this customer-bttn pair.
- **Store merchant data**
A method to validate & set action template parameters and target address.
- **Release bttn association**
A method to remove the customer-bttn association and destroy the action parameters from the bt.tn db.