Yonoton Technical Service Description

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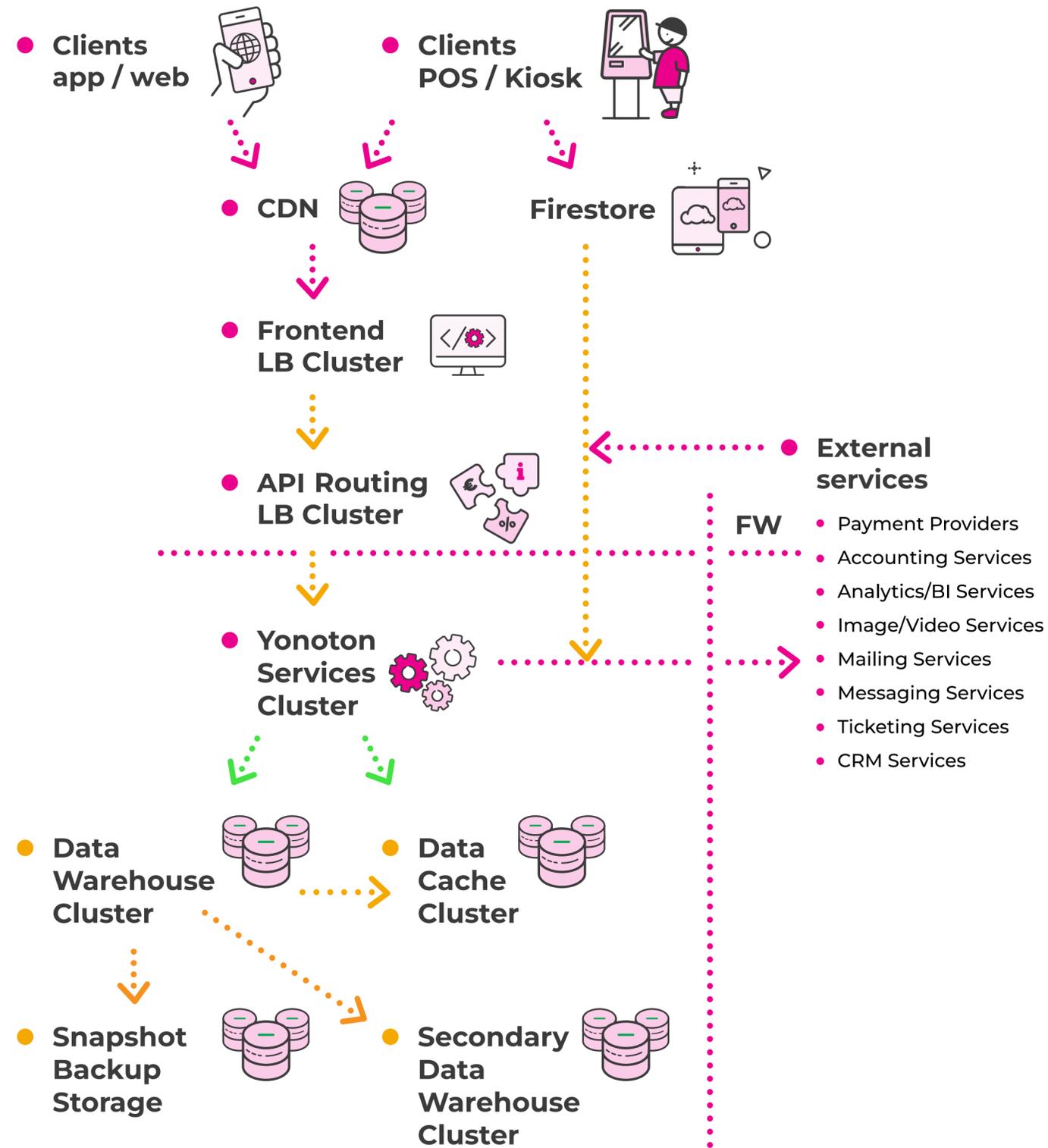**powered by yonoton**

Technical Service Description

The Powered by Yonoton -framework is a complete set of tools and services for operating a revenue driven application.

All parts of the framework are built to work with each other providing a seamless service experience.

All parts of the framework are continuously maintained and further developed to provide a future proof solution.

Yonoton Backend Services

Yonoton backend services provide the backbone for all Powered by Yonoton -applications. The core of the Yonoton services run at Amazon Web Services.
All data is maintained within the EU.

- Clients app / web
- Clients POS / Kiosk
- CDN
- Firestore
- Frontend LB Cluster
- API Routing LB Cluster
- External services

FW

- Payment Providers
- Accounting Services
- Analytics/BI Services
- Image/Video Services
- Mailing Services
- Messaging Services
- Ticketing Services
- CRM Services

- Yonoton Services Cluster
- Data Warehouse Cluster
- Data Cache Cluster
- Snapshot Backup Storage
- Secondary Data Warehouse Cluster

APIs

A comprehensive set of Application Programming Interfaces (APIs) are available to interact between client side interfaces and backend services. The APIs are utilized by Yonoton and the fully documented APIs can be securely utilized by 3rd party systems as well.

Payment systems

Payments within Powered by Yonoton -applications are handled via payment providers (gateways) to be in compliance with PCI and other industry standards and regulations. Yonoton provides ready-made integrations to all major payment methods and gateways such as:

- Nets / Netaxept (credit cards)
- Paytrail (e-commerce)
- Viva (credit cards, Apple Pay, Google Pay, others)
- Adyen (credit cards, Apple Pay, Google Pay, others)
- Vipps / MobilePay (direct integration)

Integrations

Yonoton provides a set of documented integration APIs for generic integrations to other external systems. It offers various options to interact and integrate with external systems. Webhooks are available to provide near real-time interaction between systems.

Ready-made and supported integration frameworks are available for:

- Product information
- Accounting data exporting
- Sales data importing
- Sales data exporting
- Ticketing information
- Site information
- External user authentication (SSO and other options)
- Reservations
- Student status
- Membership status
- And many others

Integrations typically include systems such as:

- point-of-sale (POS)
- ticketing
- resource management and reservation
- user management
- e-mail and marketing
- analytics and reporting
- accounting

Integrated services are often tailored to customer needs. Ready-made integrations exist for systems such as:

- Microsoft (SSO)
- Slack
- Various Google services
- Herales (EDI)
- Visma
- Netvisor
- Mews
- Wolt
- Foodora
- Zoined
- Opintopolku (student status)
- Algolia
- Reztic
- Cloudinary
- Liana (Postiviidakko)
- Proximiio
- And many other

Data model

Yonoton data model is built with a business driven mindset to have the most appropriate data in place. In the center of the data model, Yonoton has the data related to purchases and payments. This core is supported by various models critical for a successful operation in a truly omni-channel manner.

The data model readily supports:

Channels

- POS, self service kiosk, web and mobile app
- Configurable channels to support omni-channel operations
- Configurable on application and merchant level

Sites

- Merchant specific sites (shops, restaurants, etc.)
- Point of interest -type of sites (attractions, facilities, etc.)
- Configurable set of features for each site
- Weekly opening hours with support for exceptions
- Site types and tagging
- Site grouping (e.g. a chain with multiple sites)
- Location by address or specific coordinates for mapping and routing
- Images supporting site's main image, logo image, gallery images with descriptions

Merchants

- Support for multi-merchant setup
- Fully customizable set of payment options per merchant
- Customizable integration options per merchant
- Customizable reporting/accounting options per merchant
- Configurable currency per merchant

Outlets

- Configurable set of features per outlet:
    - reporting options
    - payment capturing options
    - order flow options
    - delivery options
    - preparing and delivery times

Cashiers

- Merchant specific cashiers
- Cashier importing
- Manageable and automated cashier expiration

Orders

- Configurable order flows for different purposes
- Timed orders with specific delivery time or predefined timeslots
- Supports pickup and delivery
- Supports eat-in, takeaway

Timeslots

- Timeslots supported on all channels including orders from external systems
- Timeslots based on:
    - Weekly schedule including exceptions for specific dates
    - Supports temporary adjustments by cashier/staff
- Capacity per slot
- Slot length

Tables

- Easy to manage table map and list of tables
- Configurable table states
- Shared real-time table state on all devices
- Fully integrated with kitchen screens and kitchen receipt printing
- Moving tabs from table to table
- Splitting and merging between table and seats

Product catalogue

- Enables sharing of product data between merchants
- Sharing of product data is configurable on data field level

Product class

- Product class to easily manage basic product parameters such as VAT rates, sales and VAT accounts, type and external reference codes

Data model

Products

- Support for multilingual content
- Availability times
- Weekly availability hours (e.g. lunch products)
- Weekly pricing schedule (e.g. happy hour products)
- Delivery options
- Add-on products (available only with main product)
- Product options:
  - Support for multi-level options
  - Support for priced product options
- Categories, tags and sorting options
- Support for diets, allergens and alcohol percent
- Combination products (e.g. a meal with burger and fries)
- Recommended products (e.g. fries recommended with burger)
- Default price and support for price category

Price categories

- Price categories with ability to limit to selected merchants
- Price category with a possibility to set price for product and category using:
  - Fixed price (e.g. 5€)
  - Price discount relative to product's main price (e.g. -5€)
  - Price discount percent relative to product's main price (e.g. -50%)

Warehouse

- Merchant specific warehouse
- Warehouse products
  - Supports unit, weight and volume based stock keeping
  - Supports batch level costs and other parameters
  - Supports multiple cost factors (eg. transfer, customs, additional)
- Stocktaking
- Internal orders (between merchants)
- External orders, manual and automated (EDI)

Calendar and events

- Timed events with customizable set of features

Images

- Image gallery with tags
- Images can be used to all content
- Highly optimized and high speed delivery via content delivery network

Purchases and payments

- Support for multiple stored payment methods (e.g. credit cards)
- Support for one time payment methods (e.g. Apple Pay, Google Pay, Vipps/MobilePay, etc.)
- Support for multi-currency, currency set on merchant level
- Item level reporting with support for all item level discounts and delivery/service fees
- Support for refunding and refund reporting
- Support for invoice as payment method
- Support for pay at site

Multilingual

- Supports multiple user interface languages
- Supports multilingual content on products

Exchange rates

- Configurable exchange rates for multi currency sales

Customer accounts

- Customer accounts for invoicing purposes
- Consolidated invoice reports

Users

- Profile data
- Favorite sites and events
- Geolocation and geofencing status
- Purchase history
- Member level
- Administration access and roles
- Coupons, tickets and stampcards

Data model

Coupons and benefits

- Availability times
- Configurable options for consuming in app and outside app purchases
- Support for various types of benefits such as:
  - Single use coupons
  - Multi use coupons
  - Season and membership coupons
  - Lunch compensation benefits
- Support for limiting coupon usage by specific merchant, product, site and member levels
- Support for coupons in coupons to group benefits (e.g. VIP card enables various benefits in different sites)

Stampcards

- Availability times
- Support for limiting stampcard usage by specific merchant, site and member levels
- Configurable number of stamps for each stampcard
- Configurable amount for auto generating a stamp
- Configurable benefit when reaching the stamp count

Activation codes

- Availability times
- Support for coupon, discount and membership activation codes
- Support for predefined and generated codes
- Configurable options for once per user and for first purchase only

Shopping cart

- Delivery options such as pickup, seat/room, home delivery and virtual
- Pickup type options such as eat-in and takeaway
- Payment method options
- Delivery time options
- Item counts and options
- Support for discounts, student and employee compensations and benefits

Data security

Any data operated by Yonoton is managed and operated in highly reliable data warehouses within the EU. All data is fully replicated within multiple regions to provide protection against a failure in a single datacenter. All data is backed up daily and full daily backups are stored in minimum for a period of seven days.

All systems in use are built to support industry standard compliant data encryption both in transit and at rest.

General Data Protection Regulation (GDPR)

Special terms and conditions under General Data Protection Regulation (GDPR) shall apply when Yonoton (Supplier) processes personal data on behalf of the Client under the agreement of the parties have concluded. In this case, the Client acts as the controller and the Supplier acts as a processor of personal data. Parties shall make a Data processing agreement.

As part of end user applications, users may provide personal data regulated by GDPR for legitimate purposes. This typically includes information such as name, email address, phone number, address, postal code and city. If any personal data is collected, a clear consent for Terms of Use and Privacy Policy from a user is required. Collecting personal data is a decision made by the Client (controller).

Yonoton provides means to clear out personal data when so requested by the user. Clearing personal data complies with the "Right to be forgotten" without disrupting historical data required for other purposes such as accounting, reporting and analytics.

By default, data exported to external systems is anonymized unless otherwise decided.

Yonoton does not collect or store any highly confidential information such as credit card details or personal identification numbers. Such information may be stored and processed by industry standard compliant (e.g. PCI-DSS) payment providers when applicable.

Yonoton Admin Console

A web based Yonoton Admin Console allows administrators to operate and manage all Yonoton data and features with ease.

Yonoton POS

The Yonoton POS is an Android application which can be installed on various Android models from handheld mobiles to desktop devices. Yonoton POS can be used to operate in a cashier operated POS mode or as well as a self-service kiosk.

The Yonoton Point of Sale system is fully integrated with the Yonoton platform to offer all the capabilities at the site.

Different payment methods out of the box

Yonoton POS supports payments with various methods such as integrated terminals, cloud terminals, external terminals, giftcards, NFC chips, QR codes for Vipps and MobilePay, invoices as well as cash.

External systems can be linked to provide more customized logic for giftcards, invoices and other methods.

Device Integrations

Yonoton POS supports a number of devices including printers, cash registers, nfc readers and barcode scanners. See list of supported devices.

Cashier profiles

Cashiers can be assigned with different roles and can e.g. save their favourite products on the device so they can be found easily. Cashiers and staff can be managed from the Yonoton Admin console.

Offline support

Some payment methods support offline payments in case of poor internet connection and Yonoton POS supports offline purchases.

Discounting

Yonoton PoS supports multiple different discount categories such as list price discounts, loyalty discounts, coupons etc. In addition the cashier may enter a manual discount on the spot.

Order History and Refunds

Once in our backend, all purchases can be reviewed from the purchase history section. There you can also reprint receipts and make refunds.

Authorities

All purchase and other data is integrated into the relevant tax authority's systems depending on country/region.

Second Screen

Many tablets support a second, customer-facing screen. Yonoton POS can display different data here such as an order summary, QR-codes for payment etc.

Yonoton Kiosk

Yonoton Kiosk is essentially a part of Yonoton POS. Yonoton POS can be easily switched between POS and Kiosk modes.

Yonoton Kioks includes the same shopping cart system, supports a subset of the same, fully configurable payment methods and integrates to the same external devices (printers, readers etc). The User Interface however can be configured to have the desired look and feel, for example similar to the client's mobile application.

The functionalities include the following:

- Displaying commercials when the tablet is idle
- Product options
- Recommended products to include in the order (configurable in the Yonoton Admin console)
- Scanning discount coupons
- Various payment methods including integrated terminals, mobile payments via QR code (for example Vipps), and NFC payments
- Receipt printing via integrated or USB printers
- Sending orders to Yonoton order management

Yonoton Order Management (Yorma)

Yorma is part of the Yonoton POS application and it is used for operating kitchen and behind the desk flow.

- order management
  - The orders made on any channel (Web, app, kiosk, POS, external) can be managed in the Yorma. Once the order arrives in Yorma, its stages can be changed according to the process. Such as: Future → In process → Preparing → Ready → completed orders. Once the stage of the order changes, it can trigger various actions such as push notification to the customer, printed ticket to the kitchen and so on.

- outlet specific product limitations (e.g. out of stock)
- entrance and other ticket checking
- member level checking
- stampcard management
- RFID wristband payments
- daily summary reporting

Hardware

Yonoton POS is available to install by request from Yonoton. Yonoton can also use MDM (mobile device management) software to install the software remotely and can also set the software to kiosk mode, where users can only do the actions desired on the device. It can be used on any major Android device running Android 8.0 or newer. Additionally Yonoton offers a set of hardware especially designed to support features such as:

- QR and barcode readers
- RFID wristband readers
- printers and other peripherals
- ethernet
- power over ethernet (PoE)
- mounting with VESA standard

Yonoton Checkout

Yonoton Checkout provides an interface for interacting with a user when no point-of-sale personnel is directly involved with the purchase. It offers a way to validate a purchase made on a mobile device.

See how the Yonoton Omnichannel works in real life

watch video →

The Digital Platform

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