



Build a CRM system based on Drupal Commerce

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PRESENTATION AGENDA

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Recent project case:
Swiss NGO –
**ONLINE CRM
SYSTEM
INTEGRATED WITH
AN ONLINE SHOP**

1

Client profile & requirements (Ilona)

2

Project challenges (Ilona)

3

Data migration from old CRM system to new (Mike)

4

Custom accounting reports & Invoice reminder letters (Mike)

5

Payment and invoicing with payment slips and FDS for payment status (Giannis)

6

CRM system demo (Mike & Giannis)

CLIENT PROFILE & REQUIREMENTS

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Client Profile

- Swiss non-profit-organisation affiliated to foundation
- trades over 500 products (books / ebooks / publications / memberships etc.)
- Switzerland & internationally



Requirements

- Online CRM System integrated with an online shop
- Invoicing and payment solution
- Accounting requirements
- Digital Marketing and self-administration



2 MAIN AREAS OF CHALLENGE




Data import from existing systems:

- Contacts from old CRM system
- Products and clients from Drupal 7 online shop (Ubercart)
- Privat contact lists from employees



Technical & architecture challenges

- New CRM and online shop built on Drupal 8 and Drupal Commerce
- Drupal 7 Website has to be kept temporarily and the new online shop integrated in this main website
- No Drupal module for Commerce and payment provider (i.e. PostFinance)

A nighttime photograph of a city, likely Zurich, with numerous illuminated buildings and a prominent church spire. In the background, dark, forested mountains are visible under a twilight sky. The image has a blue color cast and a semi-transparent dark blue overlay at the top.

**Data migration:
from old CRM system to new**

DATA MIGRATION



From Old CRM

- The client was using a custom CRM solution
- They delivered a single CSV file with 15000 rows
- We used this file to generate current and old subscriptions and user profiles

From D7 Übercart website

- Migrated user profiles
- Migrated around 1000 products, images, taxonomy terms

CHALLENGES



- The profile data structure is complex
- The profiles from CSV were matched against the profiles from Drupal 7 and the contents were merged
- The CSV file was manually processed

MIGRATE MODULE

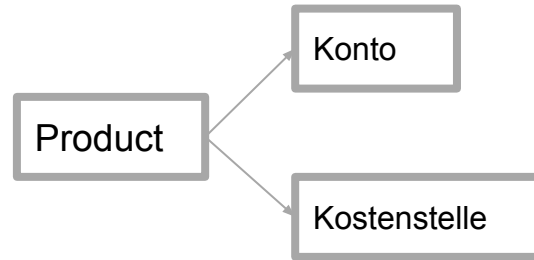
- The migrate module is very flexible. Used it in combination with
 - migrate_plus
 - migrate_tools
 - migrate_source_csv
 - commerce_migrate

A wide-angle, nighttime photograph of a city, likely Zurich, Switzerland. The foreground and middle ground are filled with numerous buildings, many of which are illuminated from within, creating a warm glow against the dark night sky. Several tall, modern skyscrapers stand out among the more traditional European-style buildings. In the background, a range of dark, forested mountains is visible, with some peaks covered in snow and partially obscured by a light mist or haze. The overall atmosphere is serene yet vibrant due to the city lights.

Custom reports

USE CASE (ACCOUNTING)

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- ❖ Due Value
- ❖ Value Paid
- ❖ Value Pending

- ❖ Vat standard
- ❖ Vat reduced

- ❖ Vat standard paid
- ❖ Vat reduced paid

- ❖ Value paid for CH
- ❖ Value paid for World
- ❖ Value paid for members
- ❖ Value paid for non members
- ❖ Due value member
- ❖ Due value non-member
- ❖ Dates

OUR SOLUTION



- Created a custom entity
- Completely denormalized data structure
- Everything became a property of the entity

Advantages

- We were able to use views for displaying, sorting, filtering and aggregating
- Effortless extensibility

Disadvantages

- We had to create and maintain a custom entity
- We had to implement views integration
- We need to keep the reports in sync with the current information

DRUPAL CONSOLE

- Drupal console is command line interface (CLI) for Drupal
- Works only with Drupal 8 and does a heavy use of Symfony components
- Has some functionality overlapping with Drush
- Is mainly used for generating boilerplate code

Create an entity

- Entities creation is very simple
- Drupal Console will ask a series of question about your new entity and will generate the boilerplate code

```
→  git:(ZP-4677) ✗ vendor/bin/drupal geco

// Welcome to the Drupal Content Entity generator
Enter the module name [address]:
> generic

Enter the class of your new content entity [DefaultEntity]:
> DefaultEntity

Enter the machine name of your new content entity [default_entity]:
> default_entity

Enter the label of your new content entity [Default entity]:
> Default entity

Enter the base-path for the content entity routes [/admin/structure]:
> /admin/structure

Do you want this (content) entity to have bundles (yes/no) [no]:
> no

Is your entity translatable (yes/no) [yes]:
> no

Is your entity revisionable (yes/no) [yes]:
> no
```


A wide-angle, nighttime photograph of a city, likely Zurich, Switzerland. The foreground and middle ground are filled with illuminated buildings, including several modern high-rises with glowing windows. The city is nestled at the foot of dark, forested hills. In the far background, a range of mountains is visible, their peaks covered in snow and partially shrouded in a light mist or haze. The sky is a deep, dark blue. The overall atmosphere is serene yet vibrant due to the city lights.

Invoice reminder letters

USE CASE



- The client wanted to be able to generate up to 3 invoice reminder letters (letter + order items + invoice slip)
- The letter must be different for each reminder
- They wanted to be in charge of the process, manually generating the letters
- They wanted to be able to download all the reminder letters in a single pdf

What we did:

- We created different reminder states for the order and per user language
- The client can generate a reminder either per order or in bulk via a specific view
- We assigned a letter template for each state
- We provide a views bulk operation to trigger a reminder letter generation
- We provided another bulk operation for downloading the PDF

INVOICE REMINDERS

[Ansicht](#)[Mahnungen](#)[Rechnungen](#)[Devel](#)[Switch](#)

[Startseite](#) » [Verwaltung](#) » [Commerce](#) » [Bestellungen](#) » 92666

Reminder State: 3. Mahnung

Reminder	Generation date
erinnerung.pdf	Fr, 08/03/2019 – 13:52
2-mahnung.pdf	Fr, 08/03/2019 – 16:20
3-mahnung.pdf	Fr, 08/03/2019 – 16:21

[Set to Letzte Erinnerung](#)

Order ID

Status Mahnungen

- Any -

Rechnungsdatum vor

dd/mm/yyyy

Anwenden

Action

-- Select action --

Apply to selected items

<input type="checkbox"/>	ORDER ID	RECHNUNGSDATUM	ADRESSE	MAHNUNGEN	STATUS	OPERATIONEN
<input type="checkbox"/>	92666	19/02/2019 - 09:55	4d AG Giannis Pagonas strasse 18 LI-9490 Vaduz	<ul style="list-style-type: none">erinnerung.pdf (24.13 KB)2-mahnung.pdf (24.17 KB)3-mahnung.pdf (24.08 KB)	3. Mahnung	Bearbeiten
<input type="checkbox"/>	92667	19/02/2019 - 11:50	4d AG Giannis Pagonas strasse 18 LI-9490 Vaduz	<ul style="list-style-type: none">erinnerung.pdf (24.26 KB)2-mahnung.pdf (24.3 KB)	2. Mahnung	Bearbeiten
<input type="checkbox"/>	92668	19/02/2019 - 13:35	4d AG Giannis Pagonas strasse 18 LI-9490 Vaduz	<ul style="list-style-type: none">erinnerung.pdf (24.26 KB)	Erinnerung	Bearbeiten
<input type="checkbox"/>	92669	19/02/2019 - 13:35	4d AG Giannis Pagonas strasse 18	<ul style="list-style-type: none">erinnerung.pdf (24.25 KB)	Erinnerung	Bearbeiten

A nighttime aerial view of a city, likely Zurich, with numerous illuminated buildings and a prominent church spire. In the background, dark, forested hills and snow-capped mountains are visible under a twilight sky. The image has a blue color cast and a semi-transparent dark blue overlay at the top.

Payment & invoicing with payment slips FDS for payment status

THE PROBLEM



- Limited Drupal 8 modules for integration of various Payment Gateways
- Complex integration with Postfinance API
- Complex implementation of offline Invoice Payment Slips with ISR
- Complex implementation of Postfinance FDS for automatic payment update

THE SOLUTION



- Use of Wallee, a 3rd party service which integrates easily with various different Payment Gateways
- Creation of a Drupal 8 module which integrates Wallee with Drupal Commerce

USE CASE

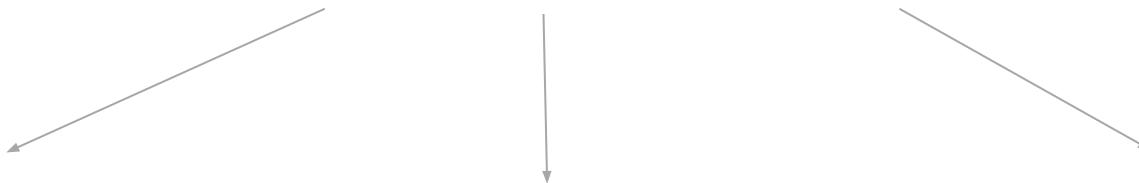
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- Integrate Commerce payments with PostFinance
- Use offline payments (invoice with ISR slip)
- Use online payments (Visa & Mastercard)
- Easily configure and use Invoices

WALLEE: EFFORTLESS PAYMENTS EASY SETUP

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With wallee we could easily configure all of the above requirements:



1. PostFinance ISR Processor

Simple configuration of offline payments via Invoice with ISR

2. PostFinance E-Payment E-Commerce

Simple integration with Postfinance for Credit Card online payment

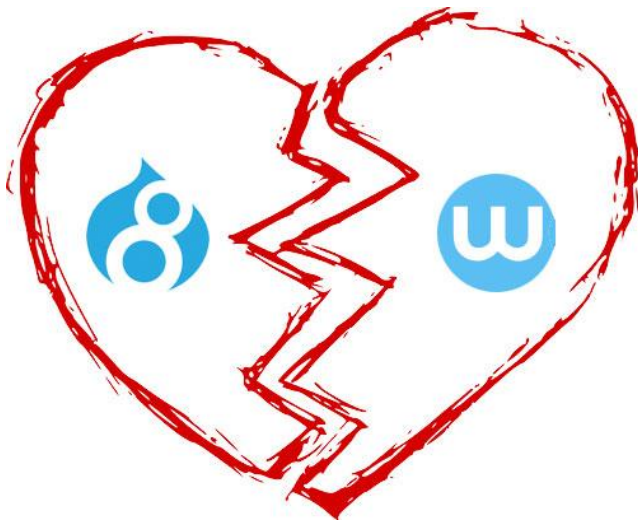
3. Invoice Templates

Configure custom Invoice templates using twig

WALLEE INTEGRATION VIA WALLEE PHP API

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Currently no Wallee - Drupal integration



MEET WALLEE D8 MODULE OVERVIEW

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01 

Connection to wallee

02 

Provides Offline Payment Method
(via invoice with ISR)

03 

Provides Online Payment Method (via
PostFinance Credit Card payment)

04 

Automatically update Drupal invoice
and order state, when a payment is
made

MEET WALLEE D8 MODULE

WALLEE CONNECTION

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01



wallee
connection

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Space ID

Wallee Application User Id

Wallee Application User Password

Webhook Identity Key

Customer Email *

In case the custom has no email, currently wallee needs an email otherwise it crushes.

MEET WALLEE D8 MODULE

PAYMENT METHOD MAPPING

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01 

payment
methods
mapping

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PAYMENT METHODS

Wallee Invoice Payment Method ID

Credit Card Payment Method ID

Payment Success URL

Payment Failure URL

MEET WALLEE D8 MODULE AUTOMATION CONFIGURATION

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01 

automation
configuration

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AUTOMATIC INVOICE CREATION

Create Invoice Automatically when Order state goes to :

pending

Comma separated state ids e.g. pending,paid

Create Invoice Automatically ONLY for the following Payment Gateways :

credit_card_payment

Comma separated payment gateway ids e.g. invoice,credit_card_payment

When Invoice state changes, trigger an Order state change

PAID,paid

Comma separated state ids e.g. INVOICE_NEW_STATE,DRUPAL_ORDER_NEW_STATE

MEET WALLEE D8 MODULE

OFFLINE PAYMENT (INVOICE WITH ISR)

02 Offline Payment (via Invoice), step 1

Ansicht
Bearbeiten
Mahnungen
Rechnungen

Masquerade as...
Switch

Startseite » Verwaltung » Commerce » Ordini » 92552

Wallee Transaktion-ID	Zeitstempel Transaktion	Rechnungsstatus
Keine Rechnungen vorhanden		

Create/Update Invoice

MEET WALLEE D8 MODULE

OFFLINE PAYMENT (INVOICE WITH ISR)

02 

Offline Payment (via Invoice), step 2

Ansicht

Bearbeiten

Mahnungen

Rechnungen

Masquerade as...

Switch

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 [Verwaltung](#) »
 [Commerce](#) »
 [Ordini](#) »
 92552

Wallee Transaktion-ID	Zeitstempel Transaktion	Rechnungsstatus
1602100	03-02-2019 08:02:21	Invoice is being prepared Refresh State

Create/Update Invoice

MEET WALLEE D8 MODULE

OFFLINE PAYMENT (INVOICE WITH ISR)

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02 Offline Payment (via Invoice), step 3

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Wallee Transaktion-ID	Zeitstempel Transaktion	Rechnungsstatus
1602100	03-02-2019 08:02:21	OPEN

Invoice Preview

Kundennummer 2000189 Rechnungsdatum 03.02.19 Rechnungsreferenz 92552				
Giannis Pagonas APOLLONOS 18 GR-15351 Pallini				
BESCHREIBUNG	MENGE	STÜCKPREIS	STEUERSATZ	TOTAL
KdS 136 BE V Wangen	1	60.00 CHF	0 %	60.00 CHF

MEET WALLEE D8 MODULE

ONLINE PAYMENT (CREDIT CARD)

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03 

Online Payment (via Postfinance Credit Card)

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37.00 CHF

KARTENBRAND *



ZAHLN

[Transaktion stornieren](#)

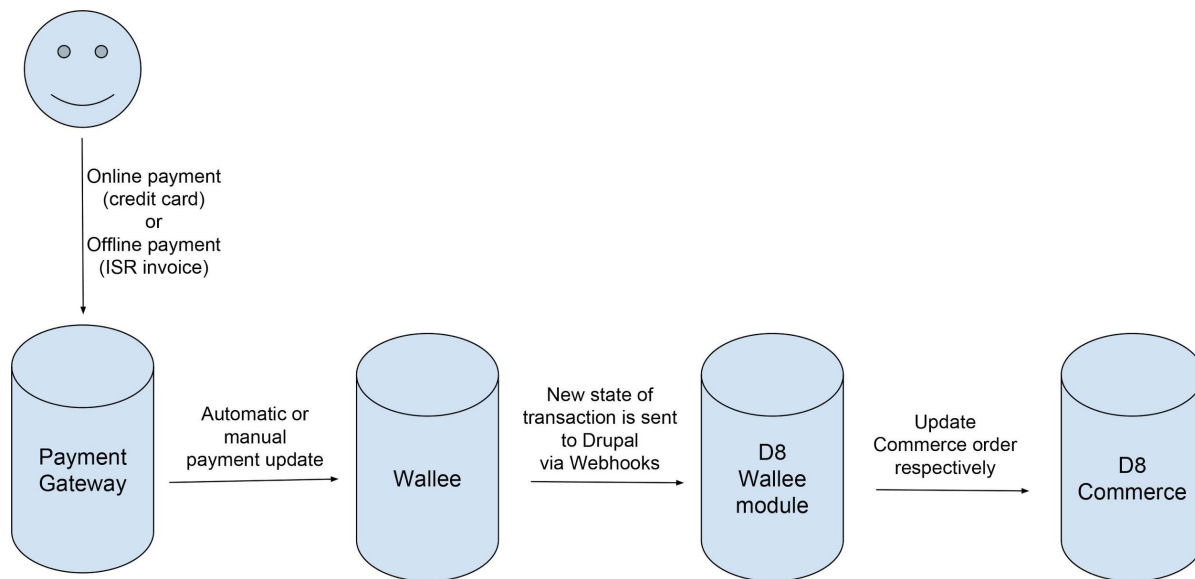
MEET WALLEE D8 MODULE

AUTOMATIC PAYMENT STATE UPDATE

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04 

Automatic Invoice & Order state change upon payment



A wide-angle, nighttime photograph of a city, likely Zurich, Switzerland. The foreground and middle ground are filled with numerous buildings, many of which are illuminated from within, creating a warm glow against the dark night sky. A prominent, tall, dark building with many lit windows stands on the left. In the background, a range of dark, forested mountains is visible, with some peaks covered in snow and partially obscured by a light mist or haze. The overall atmosphere is serene yet vibrant due to the city lights.

CRM system demo

CRM SYSTEM DEMO

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1

Front End: Online shop

2

Backend: Contacts & Commerce

3

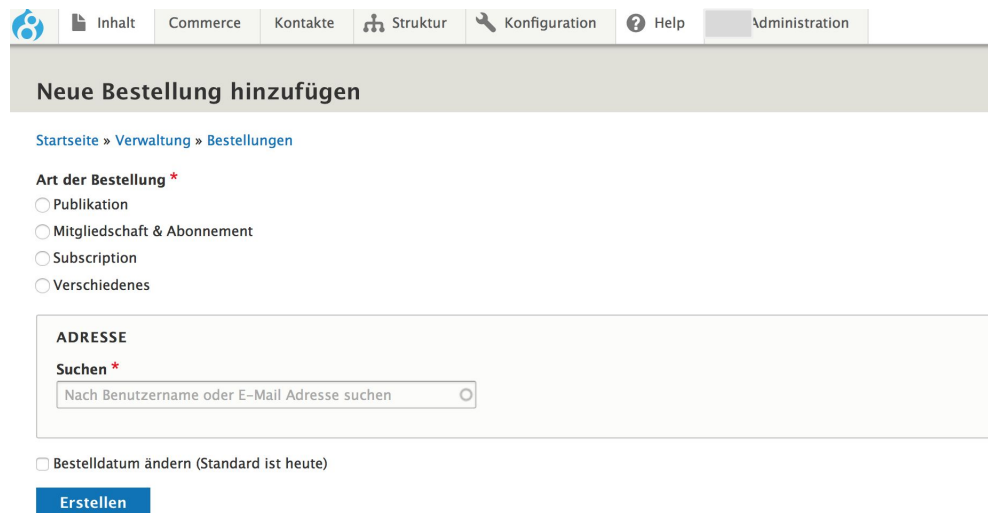
Backend: Adding a contact

4

Backend: Adding a order

5

Backend: Accounting & Reminders



The screenshot displays the CRM system's user interface. At the top, a navigation bar includes a logo and menu items: 'Inhalt', 'Commerce', 'Kontakte', 'Struktur', 'Konfiguration', 'Help', and 'Administration'. The main heading is 'Neue Bestellung hinzufügen'. Below this, a breadcrumb trail reads 'Startseite » Verwaltung » Bestellungen'. The 'Art der Bestellung' section features four radio button options: 'Publikation', 'Mitgliedschaft & Abonnement', 'Subscription', and 'Verschiedenes'. The 'ADRESSE' section contains a 'Suchen' field with a search icon and the placeholder text 'Nach Benutzername oder E-Mail Adresse suchen'. At the bottom, there is a checkbox for 'Bestelldatum ändern (Standard ist heute)' and a blue 'Erstellen' button.

A wide-angle, nighttime photograph of a city, likely Zurich, Switzerland. The foreground and middle ground are filled with illuminated buildings, including several modern high-rises with glowing windows. The city is nestled at the foot of dark, forested mountains. In the far distance, snow-capped mountain peaks are visible under a deep blue twilight sky. The overall atmosphere is serene yet vibrant due to the city lights.

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MEET ZEHNPLUS: LEADING DIGITAL SERVICE PROVIDER



- **Founded in 2008, Zürich:** a unique blend of IT and service experts with **over 10 years** experience delivering projects for customers.
- In-depth knowledge of digital solutions, **using both transformational and latest AI technologies** for optimising all processes.
- Successfully digitalised many systems and environments for **customers of all sizes**.
- **Experts in process integration** together with flexible and fast support.
- **Drupal Profis** with over 10 years of experience.

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ZEHNPLUS CUSTOMERS: THEY ALREADY TRUST US





BUSINESS SERVICES & PRODUCTS OVERVIEW

01

We provide **strategic consultancy** in Digital Transformations, IT and Knowledge Management.

02

We build **custom digital solutions**, from E-commerce CRM platforms through billing systems to self-care portals. (customer facing)

03

We build **data management & customer service platforms** to make businesses more efficient.

04

We are continuously investing in revolutionising technologies in the field of **AI, robotics** and **automation**.

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A nighttime photograph of a city, likely Zurich, with numerous illuminated buildings and a dark mountain range in the background under a twilight sky.

Thank you

*Transform your business model for the future and
overcome your competitors with our help.*

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