

# QR Code Trace & Track

v1.0

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Client

YOUR COMPANY

YOUR ADDRESS

YOUR EMAIL

Contractor

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## Abstract

Petalliancenetwork (**PAN**) has developed a network of affiliates (**PA**) and pet service companies around the world. The PetDesk (**PD**) is an assistance program for moving pets all over the world - from Brazil to Melbourne, Canada to Germany, Switzerland to the US etc.

In addition, a system for tracking pets from the sender to the receiver should be implemented.

Each pet box will have a QR Code attached that will be scanned on different locations during the shipment to inform the pet owner (**PO**) about the current location of his pet. The tracking is done by affiliates who receive the pet box at a specific location. The tracking can be supervised by the PD. Once a pet box is delivered the attached QR Code is deactivated by the PD.

1. The PD can issue a QR Code for each pet or shipment to track all pet moves.
2. The PD sends a copy of the QR Code by email to the affiliate who will then print the QR Code and put it on the container/skybox (the pet travels inside).
3. Once the container is ready, the passenger and his pet will come to an affiliate or agent at any airport. If a pick-up service is called the transport company will come with the container.

The affiliate, who receives the pet, will scan the QR Code to initiate the location tracking. Every affiliate who is part of PAN will be able to scan the QR Code.

4. Once scanned, PD can access the client database and see where and when the QR Codes were scanned. The pet owner has also access and can follow the location of the last scan. The PD will have access to all shipments where as a pet owner can only see his shipment. Each shipment is individual and once delivered, the file is closed.

The tracking system will be hosted by the contractor for a monthly fee.

## Roles

### Pet Owner (**PO**)

After a PO initiates a pet transfer at PAN the PD will issue a QR Code to the PA who will receive the pet from the PO. The PO will also receive a unique tracking URL, where he can follow the shipment of his pet.

### Pet Desk (**PD**)

The administrator of the PD platform can manage PA and issue QR Codes to a PA.

PD can create user accounts for the PO and generate QR Codes for the PO for each pet transfer.

PD can track each pet transfer and change the shipment status, as well as close the transfer once delivered.

## Pet Affiliates (PA)

A PA will receive a QR Code by the PD and stick it on the pet container. He can scan the QR Code, submit the position and update the shipment status.

To scan a QR Code a PA affiliate needs

- a Smartphone with internet connection
- a QR Code Reader App (e.g. iNigma)
- turn the location services on to submit the position

There is no extra app necessary, since the QR Code redirects the PA to a landing page where he can change the shipment status after authenticating (see: Tracking & Shipment Status (PA))

## Shipment

The shipment has 5 stages:

- ASSIGNED: Item is assigned to a PA and PO by the PD. PD sends QR Code to PA.
- ITEM RECEIVED: Item is received by the sender. PA updates the status.
- ON ROUTE TO CUSTOMER: Item is on the way to the customer. PA updates the status.  
This event can occur 1 or many times by different PAs.
- DELIVERED: Item is delivered to recipient. PA updates the status.
- CLOSED: Item is closed by the PD

## Back Office

The PD can access the back office with the following functions:

### Dashboard

- A list of the most recent shipments is displayed.
- The shipments can be filtered having a specific status (Assigned, Delivered, Received...)
- A click on the shipment opens the details page for a shipment.

### Affiliates

- A list of affiliates is displayed. Each affiliate can be
  - Edited (name, e-mail, pin)
  - Removed
- An affiliate can be added
- A QR Code can be issued to a specific affiliate
- A click on an affiliate displays a list of QR Codes assigned to that affiliate

## Clients

- A list of clients is displayed. Each client can be
  - edited (first name, last name)
  - removed
- A client can be added
- A QR Code can be issued to a specific client
- A click on a client displays a list of QR Codes assigned to that client

## Issue QR Code

- A QR Code is issued for a specific PA and a PO.
- Once the QR Code is created, the code is emailed to the PA by the PD.
- The PA will also get a public tracking URL for the PO, so the PO can track the shipment status.
- The QR Code will now show up in the dashboard having the status ASSIGNED.

## Shipment Details

The PD can edit each shipment. On the detail page the PD can

- monitor the QR Code, the client,
- get the status of the shipment,
- set the status
- download the QR Code
- see the public tracking URL
- see the shipment history
- see a map with all checked in locations
- remove the shipment

## Tracking & Shipment Status (PA)

Once a QR Code on a shipping box is scanned by a PA, he can submit his GPS position. Then the status of a shipment can be updated by a PA. The status can be ITEM RECEIVED, ON ROUTE TO CUSTOMER or DELIVERED.

## Authentication

To update the status of a shipment the affiliate must enter his pin issued by the PD. The first time a PA scans a QR Code he also must select his username. Once the username has been selected, a cookie is stored on the mobile device to recognize the PA the next time he scans a QR Code.

## Tracking & Shipment Status (PO)

Once a QR Code is attached to a shipping box, the PO will get a unique tracking URL by the PA.

The URL leads to a status page where the PO can see the current shipment status and the locations of where the pet was shipped on a map.

## TBA

What happens if an affiliate is not in the PA database?

How can he change the status of a shipment when he is not able to authenticate?

## Costs

Task	€
Dashboard (List recent QR Codes, Filter)	300,00 €
Affiliates (List, Edit, Add, Issue QR Code)	400,00 €
Clients (List, Edit, Add, Issue QR Code)	400,00 €
Issue QR Code (to PA and PO)	300,00 €
Shipment Details (PD)	600,00 €
Landing page for PA submitting position	400,00 €
Landing page for PO to track his shipment	300,00 €
<b>Total (excl. VAT)</b>	<b>2.700,00 €</b>

Implementation is started when €1500,- are transferred to the bank account below.

Timeframe: 2 weeks

The hosting costs for the platform are € 20,- per month including up to 100 clients. Every new 100 clients will be additional €2,- per month.