

A technical description of the VATEUD PTD application

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Introduction

The VATEUD PTD application consists of a public frontend, available on ptd.vateud.net and a restricted backend at ptd.vateud.net/admin. The bulk of the action, all trainee management, record editing and housekeeping duties take place in the backend.

Backend

Authentication

The backend access to the application, available for administrators PTD staff, instructors and examiners is gated by an authentication system. New backend user records can only be created by existing app admins, sign up is not possible, password reset tool is provided. Passwords are stored as a random-salted SHA1 hash. No sensitive data is stored in plain text.

Dashboard

The dashboard is the starting place for admins and managers and lists a summary of all currently existing record types. The navigation menu on the left allows switching between the available record types.

Record management actions

The following common principles apply across the entire app:

For each **record type** there are several action tabs:

- **List / Index:** a paginated table overview of all available individual records for that type, including links/buttons to individual

record actions. Below is an example of the pilot trainees listing:

Dashboard / Pilots

List + Add new Export History Add filter Selected items

Filter Refresh Export found Pilots

ID	Name	Email	Rating	Vatsim ID	Division	Vacc	
17	addy aarts	sheaylen66@gmail.com	P1	1256929	VATEUD	-	
16	Andreas Demitzakis	andermizakis@gmail.com	P1	1210214	VATEUD	CVACC	
15	Robert Grech	grech001@gmail.com	P1	1199528	VATEUD	-	
14	Emre Kuyumcu	show_bard@hotmail.com	P1	1249559	VATEUD	Türkiye Vatsim	
13	Gokhan Gokcen	c-gokcen@hotmail.com	P1	1247621	VATEUD	-	
11	Levent Oner	namoner@hotmail.com	P1	1247621	VATEUD	Vatsim Türkiye	
10	Erkal SANLI	navigation@vatsimturkiye.org	P1	1008155	VATEUD	Vatsim Türkiye	
9	Orhan Gençer	klaver439@hotmail.com	P1	1207432	VATEUD	TR	
8	Fatih Mutlu Timurcioglu	admin@kazaam.gen.tr	P1	1120968	VATEUD	Turkish VACC	
7	Dogukan Demir	zafer_dogukan_demir_245@hotmail.com	P1	1024315	VATEUD	trvacc	
6	Marc Moskovitch	marcmoskovitch3@gmail.com	P1	1180169	Other	VATSAF	
5	Onur Karaosmanligi	1ourkaraosmanligi@gmail.com	P1	1188998	VATEUD	Vatsim Türkiye	
4	Angel Nikolov	angicha@gmail.com	P1	1082290	VATEUD	-	
3	Genadi Chankov	accbg1@vaccbul-avsim-bg.org	P1	1047528	VATEUD	VACCBUL	
2	Mehmetcan Ozdogan	memo_1996@msn.com	P1	1171435	VATEUD	VATSIM TURKIYE	
1	Swilen Vassilev	svilen@vaccbh.info	P1	1175035	VATEUD	VACCBH	

16 pilots

- **Add new** tab: a form for adding another individual record of the relevant type. Below is an example of the “Add new examination” form:

Dashboard / Examinations / New

List + Add new Export History

Date April 27, 2013 23:00 Required.

Departure airport LBSF Required. Length up to 255.

Destination airport LTBA Required. Length up to 255.

Examiner Search + Add a new Examiner Edit this Examiner Required.

Pilots Search

Robert Grech
Emre Kuyumcu
Gokhan Gokcen
Levent Oner
Erkal SANLI
Orhan Gençer
Fatih Mutlu Timurcioglu

Addy Aarts
Andreas Demitzakis

+ Add a new Pilot

Choose all Clear all Optional.

Save Save and add another Save and edit Cancel

- **Export** tab: allows exporting all or selected individual records of the relevant type to csv, xml or json formats. (See the “Data liberation” section below). Below is an example of the “Export examiners” tab:

Dashboard / Examiners / Export

List
Add new
Export
History

Select fields to export

☒ Select All Fields

Fields from examiners
☒ Id
☒ Name
☒ Vatsimid
☒ Email
☒ Created at
☒ Updated at

Fields from associated examinations
☒ Id
☒ Date
☒ Departure airport
☒ Destination airport
☒ Created at
☒ Updated at

Options for csv

Encode to
Choose output encoding. Leave empty to let current input encoding untouched: (unicode)

No header
Do not output a header (no fields description)

Column separator
Leave blank for default (",")

Export to csv
Export to json
Export to xml
Cancel

- History** tab: it displays a chronology of all “write” actions for the relevant record type (create, edit, delete), plus the details of the action (what was changed) and the backend user who changed it. Also see the “History Log” section below. Below is a “History” snippet:

History

User	Items	Changes
svilen@rubystudio.net	Addy Aarts	name: "addy aarts" -> "Addy Aarts", examination_feedback: nil -> "", notes: nil -> ""
burak.bugday@vate...	Andreas Dermitzakis	theory_passed: false -> true, theory_score: nil -> #<BigDecimal:bce9a7c,0.18E2,9(18)>
burak.bugday@vate...	Andreas Dermitzakis	token_issued: false -> true, examination_feedback: nil -> "", notes: nil -> ""
svilen@rubystudio.net	Svilen Vassilev	vatsimid: 1234567 -> 1175035
burak.bugday@vate...	Gokhan Gokcen	notes: "" -> "-waiting for problems regarding this pilot and atsimtest to be fixed (19/04/2013)"
burak.bugday@vate...	Examination #9	Created
burak.bugday@vate...	Miguel Frias	Created
burak.bugday@vate...	Examination #8	Created

- **Filter / Search** functionality: allows searching (filtering) the records by single or multiple criteria. The “Quick Filter” field will try to match the entered text against the data of *any* record field. Individual fields can be selected via the “Add filter” dropdown menu on the right. Below is an example of pilot records filtered by their desired pilot rank and division:

Dashboard / Pilots

List + Add new Export History

Rating: Contain P1

Division: Is exact VATEUD

Filter Refresh

Add filter

	Id	Name	Email	Rating	Vatsim ID	Division	Vacc
	17	Adity Aarits	sheayten66@gmail.com	P1	1256929	VATEUD	-
	16	Andreas Dermizakis	andermitzakis@gmail.com	P1	1210214	VATEUD	CvACC
	15	Robert Grech	greco01@gmail.com	P1	1199528	VATEUD	-
	14	Emre Kuyumcu	show_bard@hotmail.com	P1	1249559	VATEUD	Türkiye Vatsim
	13	Orhan Çakır	cakirand@hotmail.com	P1	1147521	VATEUD	-

Id
Name
Rating
Vatsim ID
Email
Vacc
Examination
Atc rating
Division
Theory passed
Practical passed
Upgraded
Token issued
Theory score

For each **individual record** there are several individual actions, accessible via the minibuttons in the list/index view. Below is a shot of the minibuttons linked to different actions:

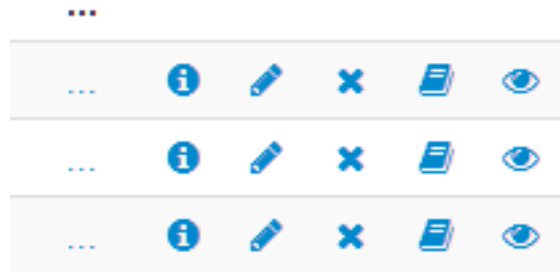


Figure 1: Minibuttons

- **Show** action: presents the details for the selected record. Below is an example of an examination “show” view:

[Dashboard](#) / [Examinations](#) / [Examination #8](#)

[Show](#) [Edit](#) [Delete](#) [History](#)

Basic info

Date

April 21, 2013 19:30

Departure airport

LPBJ

Destination airport

LPFR

Examiner

[Miguel Frias](#)

Pilots

[Levent Oner](#), [Erkal SANLI](#), [Orhan Gençer](#), [Angel Nikolov](#), [Genadi Chankov](#), and [Svilen Vassilev](#)

- **Edit** action: a form (with possible nested forms) to edit the record details. Below is part of a pilot “edit” view:

Dashboard / Pilots / Svilen Vassilev / Edit

[Show](#)
[Edit](#)
[Delete](#)
[History](#)
[Show in app](#)

Name:
 Required. Length up to 255.

Email:
 Required. Length up to 255.

Rating: [+ Add a new Rating](#) [Edit this Rating](#)
 Required.

Vatsim ID:
 Required.

Division: [+ Add a new Division](#) [Edit this Division](#)
 Required.

Vacc:
 Optional. Length up to 255.

Atc rating: [+ Add a new ATC rating](#) [Edit this ATC rating](#)
 Required.

Instructor: [+ Add a new Instructor](#) [Edit this Instructor](#)
 Optional.

Instructor assigned: -

- **Delete** action: allows deleting of a selected record:

Dashboard / Pilots / Addy Aarts / Delete

[Show](#)
[Edit](#)
[Delete](#)
[History](#)
[Show in app](#)

Are you sure you want to delete this pilot "Addy Aarts"? The following related items may be deleted or orphaned:

[Pilot Addy Aarts](#)

[Yes, I'm sure](#)
[Cancel](#)

- **History**: the historical log of the record (see the "History Log" section below)

Record groups

The record types are split in 2 groups: **administrative** records and **operational** records. The administrative records are not accessible to examiners, instructors and other non-admin managers, as they seldom require editing and define the general behaviour and available options of the application.

Administrative Records

- **ATC ratings**: a listing of all available VATSIM ATC ratings, to be used in forms and pulldown menus

- Divisions: a list of the divisions that are allowed to conduct their pilot training via the VATEUD ATO, to be used in forms and pulldown menus
- Ratings: a list of all pilot ratings that the VATEUD ATO is certified to provide training for
- Users: the user management panel for authorized backend users. Only accessible by the app admins.

Operational Records

Examiners Examiner records are created manually by the app administrators.

The following data is stored and can be manipulated for each record:

- Name
- VATSIM ID
- Email

Data available by association, and listed on each examiner's "show" page:

- Examinations

Instructors Instructor records are created manually by the app administrators.

The following data is stored and can be manipulated for each record:

- Name
- VATSIM ID
- Email

Data available by association, and listed on each instructor's "show" page:

- Pilots
- Trainings

Pilots Pilot (trainee) records are normally created automatically when a trainee submits the “Enroll” form from the frontend. It’s also possible to create pilots manually via the backend.

The following data is stored and can be manipulated for each record:

- Name
- Email
- VATSIM ID
- Desired pilot rating
- Division
- VACC
- ATC rating
- Instructor
- Instructor assigned date/time
- Token issued
- Token issued date/time
- Theory passed
- Theory passed date/time
- Theory score
- Examination
- Practical passed
- Practical passed date/time
- Practical score
- Examination feedback
- Upgraded
- Upgraded date/tme
- Notes

Some of this data is **automatically collected** and stored by the app without manual input. See the “Chronography automation” section below.

Changing some of this data triggers **email notifications**. See “Email automation” section below.

Data available by association, and listed on each pilot’s “show” page:

- Trainings

Examinations Examination records are created (scheduled) manually by the app administrators or by examiners.

The following data is stored and can be manipulated for each record:

- Date / Time
- Departure airport
- Destination airport
- Examiner
- Participating pilot(s)

Changing some of this data triggers **email notifications**. See “Email automation” section below.

Trainings Training records are created (scheduled) manually by the app administrators or by instructors.

The following data is stored and can be manipulated for each record:

- Date / Time
- Departure airport
- Destination airport
- Instructor
- Participating pilot(s)

Changing some of this data triggers **email notifications**. See “Email automation” section below.

Email automation

Emails are automatically being sent by the app in the following cases to the following recipients:

Upon pilot registration/enrollment

- When a pilot has *enrolled* for training by filling the form at <http://ptd.vateud.net> **OR**
- When a pilot record has been manually *created* on the backend by an administrator:
- A welcome email is sent *to the pilot* with his record details and general training instructions
- A notification email is sent *to all admin users* of the app, advising that a new pilot has enrolled for training and listing the pilot's details

Upon assigning an instructor to a pilot

- When a pilot record is edited to *assign/reassign an instructor* to a pilot:
- A notification email is sent *to the pilot*, advising him an instructor has been assigned for his training and providing the instructors details: name, VATSIM id, email
- A notification email is sent *to the instructor*, advising them they have been assigned a new pilot trainee and providing all the pilot details: name, id, email, requested rating, division, vacc, atc rating, etc.

Upon scheduling a training session

- When a new training session record is created and/or when an training date gets changed:
- A notification email is sent *to the instructor* assigned for the training, providing the necessary details: date, time, arrival and departure airports and participating pilot(s), additional notes
- A notification email is sent *to all pilots* involved in the training with all the aforementioned details

Upon issuing an exam token

- When a pilot's record is marked with the "Token issued" check-mark:
- A notification email is sent *to the pilot*, advising them they can now sit their theoretical test and giving them instructions on how to access and log into the test system (currently ATSimTest)

Upon passing the theoretical exam

- When a pilot's record is edited to acknowledge the passing of a theoretical exam and his mark:
- A notification email is sent *to the pilot* informing him that he has passed and about his mark
- A notification email is sent *to the pilot's instructor* informing him that his trainee has passed the test and about his mark

Upon scheduling an examination

- When a new examination record is created and/or when an examination date gets changed:
- A notification email is sent *to the examiner* assigned for the examination, providing the necessary details: date, time, arrival and departure airports and participating pilot(s)
- A notification email is sent *to all pilots* involved in the examination with all the aforementioned details
- A notification email is sent *to the instructor(s)* of all pilots involved in the examination with the aforementioned details

Upon passing the practical exam

- When a pilot's record is edited to acknowledge the passing of a practical exam and his mark:
- A notification email is sent *to the pilot* informing him that he has passed and about his mark
- A notification email is sent *to the pilot's instructor* informing him that his trainee has passed the examination and about his mark

Upon submitting a practical examination feedback

- When a pilot's record is edited to add practical examination feedback by the pilot's examiner:
- A notification email is sent *to the pilot* informing him of the received feedback and its contents
- A notification email is sent *to the pilot's instructor* informing him that his trainee has received examination feedback and its contents

Upon upgrading

- When a pilot's record is edited to mark him as an “upgraded”
- A notification email is sent *to the pilot* informing him of the rating upgrade

Overall, over the life-cycle of a single pilot training 17 different emails are being sent by the application to different recipients

Technical details regarding the emails

- All emails sent by the app are multipart consisting of html and txt parts to satisfy both email clients that use or don't use html

Chronography automation

The **dates and times** for the following events, related to the pilot records, are captured automatically without manual input and are available for reference and housekeeping:

- Pilot enrollment
- Instructor assigned
- Exam token issued
- Theoretical exam passed
- Practical exam passed
- Upgraded
- Last update of the pilot record (on any change)

History Log

Each “write” action to the database (creation, update, deletion) for any type of record (pilots, instructors, examiners, examinations) is **logged** together with the user who made the change, the date and time and the details of the change.

Data liberation

All records and record types can be either completely or selectively **exported** via the backend interface by any PTD admin to any of the following formats: csv, xml, json. **Note:** this is **not** a public API.


Frontend

All frontend pages update dynamically without manual input.

Enrollment form

New pilots sign up for training by filling in and submitting the enroll form at <http://ptd.vateud.net/>.

Enroll in the VATEUD pilot training program

* Name	<input type="text"/>
* Desired Rating	Please select... <input type="button" value="v"/>
* VATSIM ID	<input type="text"/> <input type="button" value="v"/>
* E-mail	<input type="text"/>
* Division	Please select... <input type="button" value="v"/>
VACC	<input type="text"/>
* ATC rating	Please select... <input type="button" value="v"/>
Spam protection:	
<div><div>agree</div><div>done</div><div><input type="text"/></div></div> <div> STOP SPAM. HOLD DOWN.</div>	
<input type="button" value="Enroll!"/>	

[Read the PTD documentation](#)

Pilot records

Each pilot is limited to only check their own record and history, by using a unique, non-reversible URL. This URL is initially emailed to the pilot with the welcome email after enrolling, and subsequently included in each notification email for the lifecycle of the training (see “Email Automation” section).

Frontend data tables

Abridged data listings are published on the frontend in reverse chronological order for the following data types: pilot trainees, examinations, trainings, PTD staff. Below is a snippet of the pilot's table (the links point to each pilot's [vataware](#) page):

VATEUD PTD Trainees						
Name	Vatsim ID	Rating	Division	vACC	ATC rating	Enrolled at
Addy Aarts	1256929	P1	VATEUD		OBS	2013-04-20 22:01:57 UTC
Andreas Dermitzakis	1210214	P1	VATEUD	CvACC	C1	2013-04-20 21:13:26 UTC
Robert Grech	1199528	P1	VATEUD		OBS	2013-04-20 04:47:56 UTC
Emre Kuyumcu	1249559	P1	VATEUD	Türkiye Vatsim	OBS	2013-04-19 16:30:37 UTC
Gokhan Gokcen	1247621	P1	VATEUD		OBS	2013-04-18 22:49:42 UTC
Levent Oner	1247621	P1	VATEUD	Vatsim Turkiye	S1	2013-04-18 22:02:43 UTC
Erkal SANLI	1008155	P1	VATEUD	Vatsim Türkiye	S3	2013-04-18 21:26:16 UTC
Orhan Gençer	1207432	P1	VATEUD	TR	S1	2013-04-18 18:50:52 UTC
Fatih Mutlu Timurcioglu	1120988	P1	VATEUD	Turkish vACC	S3	2013-04-18 17:48:45 UTC
Dogukan Demir	1024315	P1	VATEUD	trvacc	C1	2013-04-18 16:59:02 UTC
Marc Moskovitch	1180169	P1	Other	VATSAF	S2	2013-04-18 08:44:36 UTC
Onur Karaosmangil	1188998	P1	VATEUD	Vatsim Turkiye	S1	2013-04-17 14:18:30 UTC
Angel Nikolov	1082290	P1	VATEUD		S2	2013-04-17 14:17:45 UTC
Genadi Chankov	1047528	P1	VATEUD	VACCBUL	C1	2013-04-17 14:14:06 UTC
Mehmetcan Ozdogan	1171435	P1	VATEUD	VATSIM TURKIYE	S2	2013-04-17 14:13:05 UTC
Svilen Vassilev	1175035	P1	VATEUD	vACCBiH	S3	2013-04-16 23:19:18 UTC

Statistics

The “Statistics” page shows activity charts (monthly and yearly) depicting the dynamics of trainee records, examinations and trainings. Some numbers are also published: total pilots enrolled, pilots that have passed theory, pilot's that have passed practical exam, upgraded pilots, total numbers of examinations and trainings, etc

VATEUD PTD Statistics

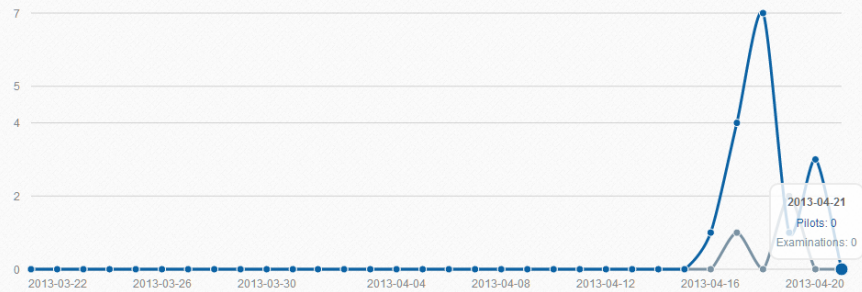
Trainee Statistics

- Total pilots enrolled: 16
- Passed theory test: 10
- Passed practical examination: 2
- Upgraded: 2

Other Statistics

- Total examinations held: 3
- Total trainings held: 0
- Total examiners: 2
- Total instructors: 2

Monthly Activity



Yearly Activity

