



# Smalltalk Application Playground

Adriaan van Os  
Wouter van Zuilen

ESUG Conference  
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# Introduction

- Adriaan van Os

Smalltalk developer since 1995

Worked with VisualWorks and GemStone

VA Smalltalk nowadays

Developer of VASTgoodies.com

- Wouter van Zuilen

Product Owner of OHRA's Smalltalk team

Working at Delta Lloyd / OHRA / NN since 2003

Uses Smalltalk for private projects

# A Bit of History



## Ever Changing Company


- Noord Brabant Verzekeringen from 1843.
- Merged with Nationaal Spaarfonds in 1999.
- Nationaal Spaarfonds was absorbed in OHRA in 2009.
- OHRA was part of Delta Lloyd for a decade or two.
- Delta Lloyd was absorbed in NN Group (Nationale Nederlanden).
- OHRA is now part of NN Group.
- NN Group was part of ING before.

## Usage of Smalltalk


- Using VA Smalltalk since the mid 90's
- Two larger applications that are still in use
  - income insurances (Delta Lloyd / NN)
  - pet insurances (Nationaal Spaarfonds / OHRA)

# OHRA Pet Insurance

**Je huisdier**




Hond





Kat

Wat is de naam van je huisdier?

Wat is het ras van je huisdier?

Wat is de geboortedatum van je huisdier?  


Wat is je gezinssituatie?   


**Premie berekenen**


# OHRA Caravan Insurance

Dekking   Premie   Caravan   Gegevens   Betaling   Afronding

**Je caravan** ⓘ

 Toercaravan

 Vouwwagen

 Stacaravan

Wat is het bouwjaar van je caravan?

Wat is de nieuwwaarde van je caravan? (Inclusief eventuele mover) €  ⓘ

**Geef aan wat je extra wilt meeverzekeren**

Voortent ⓘ

Inventaris ⓘ

Aanbouw ⓘ

Waarvoor gebruik je de caravan?   ⓘ

**Volgende stap**

# Smalltalk Application Playground

**S** **TA** **P**



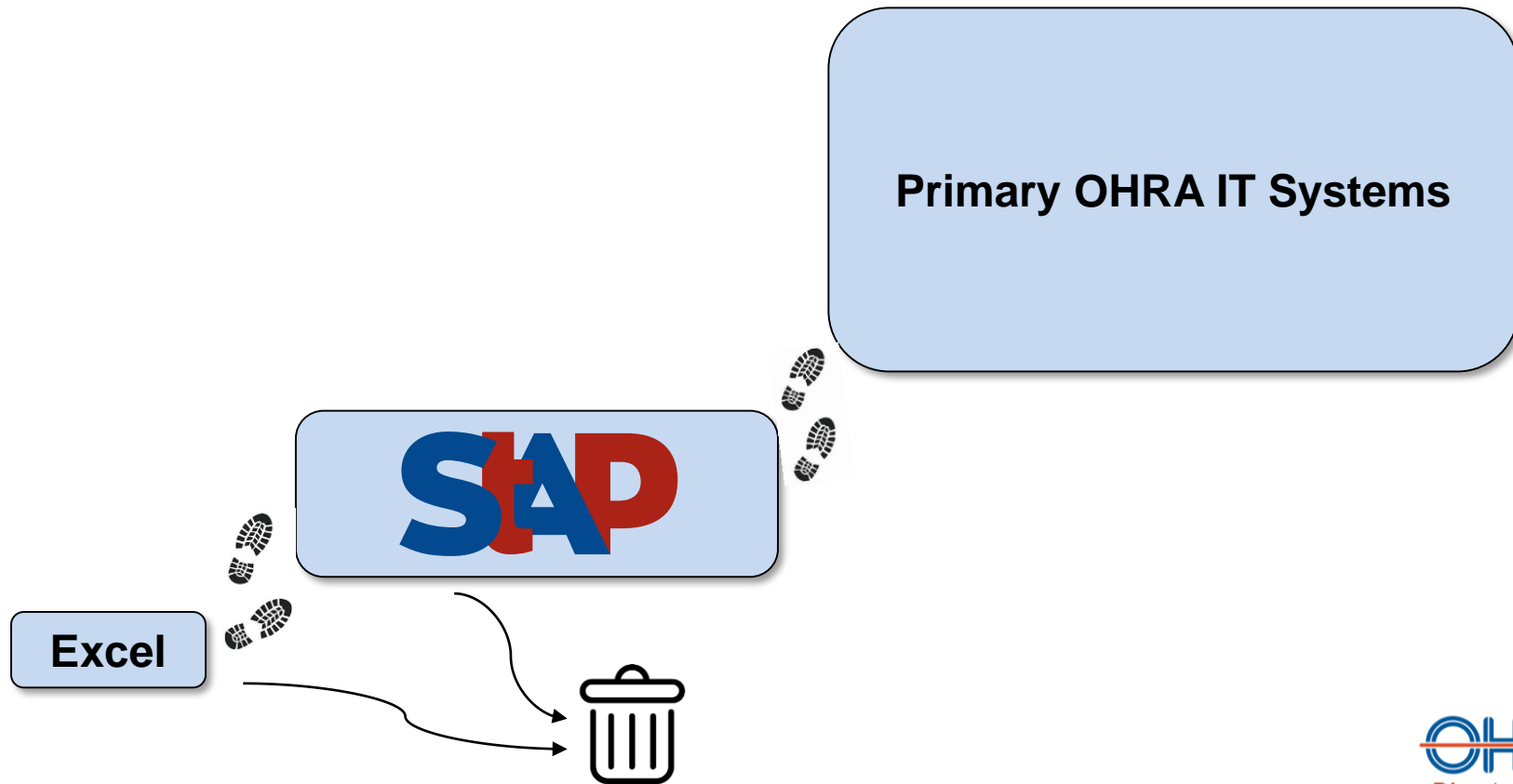
## What is StAP?

- An agile,
- moldable,
- extensible,
- sufficient complete,
- insurance application
- to experiment with
- new products and markets.

## Why StAP?

- Companies need to grow.
- But: insurance market is saturated.
- Therefore: experiment with new products and markets.
- While: not bothering the existing business
- And still being (more or less) compliant.

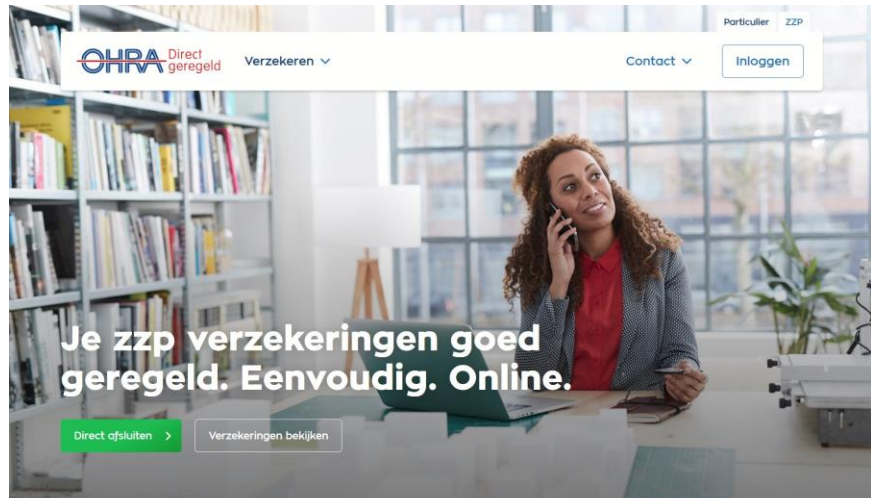
# Positioning of StAP



# Current Propositions in StAP

- Insurances for
  - freelancers / independent contractors: OHRA Zzp
    - 5 different *continuous* insurance products for *businesses* with *recurring premiums*
    - [www.ohra.nl/zzp](http://www.ohra.nl/zzp)
  - car sharing / borrowing: Clixx
    - a *pre-paid short-term* insurance for *consumers*
    - [www.clixx.nl](http://www.clixx.nl)

# OHRA Zzp for Freelancers / Independent Contractors



## Think Minimum Viable Product

- Only develop what is needed (just-in-time).
- After go live we get feedback from real life customers.
- Less waste if proposition fails.

## Proposition Tweaking

- OHRA Zzp started with a whitelist of acceptable professions.
- Customers just picked one from the list.
- Unwanted risks.
- Redesigning to use activities registered at the Chamber of Commerce.
- Again applied MVP: migrating profession-based policies postponed.

# Clixx for Car Sharing / Borrowing

**cliXX**

## Geen gedoe met een geleende auto

Verzeker je leenauto met Clixx, de autoverzekering die je per dag kunt afsluiten.

### Sluit direct af

Hoe wil je de auto verzekeren?

<b>Clixx compleet</b> voor niet All Risk verzekerde auto's Vanaf: € 7	<b>Clixx aanvullend</b> voor All Risk verzekerde auto's Vanaf: € 6
---	--

Selecteer aantal dagen:

− 1 +

**Bereken je premie**

Clixx is een verzekering van **OHRA** Direct geregeld

- ✓ Geen financieel nadeel bij schade
- ✓ Geen eigen risico
- ✓ Meerdere bestuurders toegestaan

**cliXX**

Verzekeren Hoe werkt het? Veelgestelde vragen Schade melden

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## Hoe werkt Clixx?

-  1. Kies de juiste dekking
-  2. Duur van de verzekering
-  3. Betaal met iDeal
-  4. Direct een digitale polis



## Why a New Implementation?

- Use the experience and good ideas, not the (often ancient) code.
- No more fat clients.
- Keeping things small and simple.
- Minimum changes to other's people code.
  - bug reports to Instantiations / Seaside (thanks for the fixes!)
- Cautiously chosen a limited number of frameworks / libraries.
- Some cherry picking from existing applications.

## Why (still) Smalltalk?

- Weapon of Choice of the team.
- “The thing is, any language which gains a following is better for *something* than what preceded it, ...” — *Andrew Glynn*
- The ideal language for exploring and shaping an unknown future.

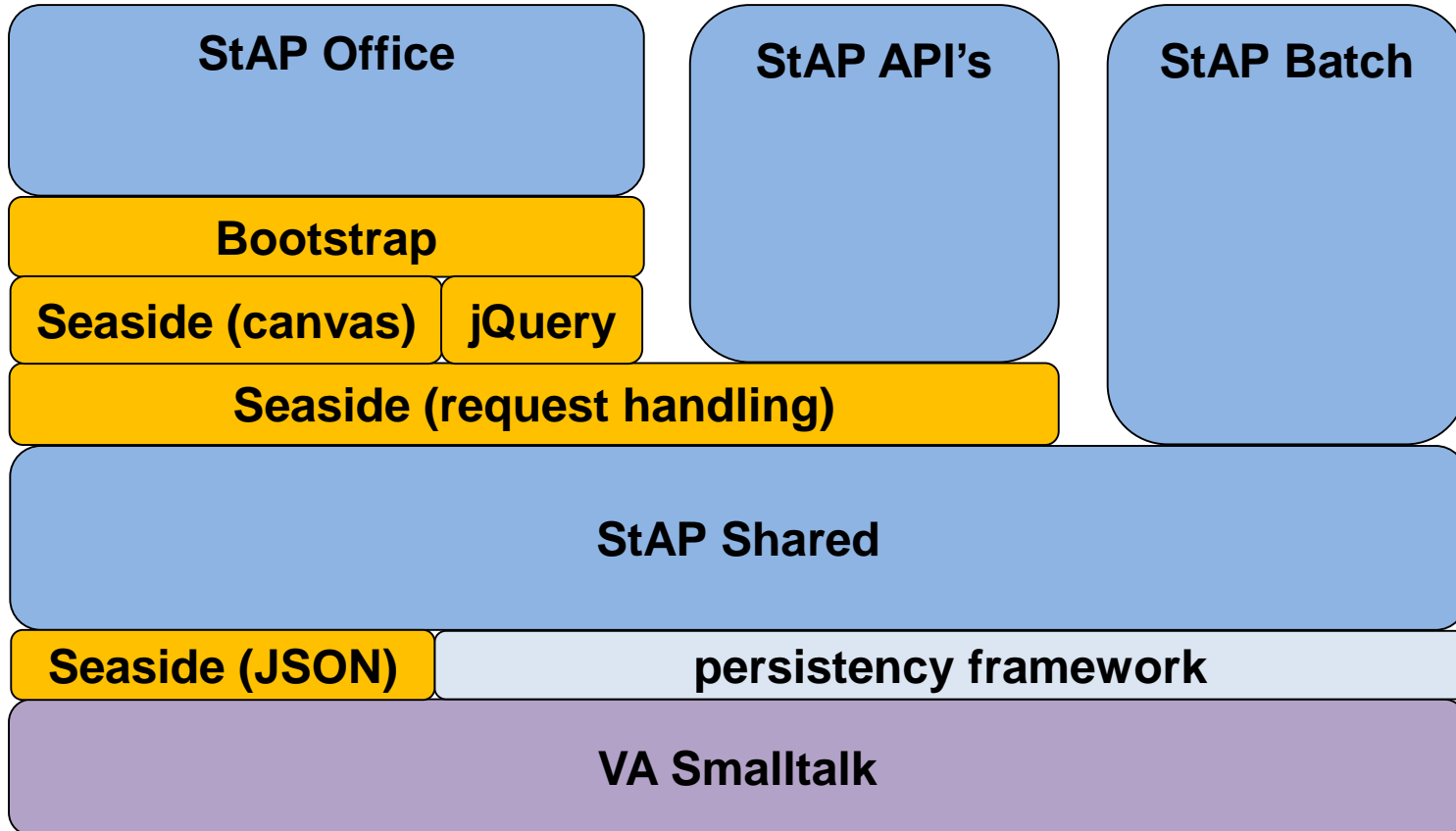
## Why (still) VA Smalltalk?

- Experience of the team
- Excellent database support
- Reliable
- Re-use of proprietary persistency framework
- Excellent product support
- Instantiations is alive and kicking more then ever
  
- Switching dialects without fat client is easier

## Architecture of StAP

- 3 deployable units (Windows)
  - StAP REST API's
  - StAP Office: Seaside application with Bootstrap
  - StAP Batch: processes batches and tasks

# StAP Smalltalk Application Stack



# StAP Office Search Results View



Berichten

Agenda

Finance



slotvraag

Adriaan van Os

## Zoekresultaten

Relatienr.	Portefeuille.	Naam	Straat en huisnr	Postcode	Plaats	E-mail	Telefoon	IBAN	Bedrijfsnaam	Kenteken
18960	Zzp	A. Slotvraag	Arnhemplein 9	1324 JM	ALMERE	tinus.testgeval@gmail.com	0612341234	NL32 INGB 0000 0123 45	Slotvraag	
18969	Zzp	A. Slotvraag	Arnhemplein 9	1324 JM	ALMERE	tinus.testgeval@gmail.com	0612341234	NL32 INGB 0000 0123 45	Slotvraag	
22282	Clix	A. Slotvraag	Arnhemplein 9	1324 JM	ALMERE	tinus@test.com	0612345678	NL17 RABO 0213 6984 12		83-ND-KX

1 tot 3 van 3 resultaten

# StAP Office Customer View

**SAP** Berichten Agenda Finance

Q slotvraag Adriaan van Os

## Relatieoverzicht

### Relatie

◀ ▶ ☰ ▶▶ ▶▶▶

Relatienummer: 22282 (Klant)  
Portefeuille: Clixx  
Aangemaakt op: 10-5-2019 16:40:58  
Aangemaakt door: StAP Systeem  
Naam: A. Slotvraag  
Geboortedatum: 1-1-1970 (49)  
Adres: Annhemplein 9  
1324 JM ALMERE  
E-mail: tinus@test.com  
Telefoonnummer: 0612345678  
IBAN: NL17 RABO 0213 6984 12  
t.n.v. T. TEST  
Toestemmingen: Post, SMS, E-mail, Telefoon en Marktonderzoek

### Aanvragen

Aanvraagnr.	Producten	Ingangsdatum	Ontvangsttijd	Status
1.236.684	Clixx Leenautoverzekering	10-5-2019	10-5-2019 16:40:58	Geaccepteerd

### Contacten

Soort	Omschrijving	Aanmaaktijd	Aangemaakt door	Referentie
Email	Clixx aanvraag	10-5-2019 16:41:10	Systeem	Welkomstmail

[Toevoegen](#)

### Verzekeringen

Polisnr.	Product	Ingangsdat.	Einddatum	Premie	Termijn	Polis
17553	Clixx Leenautoverzekering	10-5-2019	12-5-2019	€ 18,35	eenmalig	Polisblad 10-5-2019

### Schades

Schadenr.	Product	Schadedatum	Toedracht	Status
Geen resultaten aanwezig in de tabel				

### Financieel

Aanmaaktijd	Type	Bedrag	Status	Toelichting	Pogingen
10-5-2019 16:41:06	Incasso	€ 18,35	Geïncasseerd	Betaald via IDEAL	1

# Connectivity

- Propositions front-ends
- Mollie (online payments)
- NN Payment Factory (direct debits / disbursements)
- Mailroad (transactional e-mail)
- Acceptance Engine
- Chamber of Commerce
- iWelcome (identity & access manager)



# Technologies

- Packages / frameworks shipped by Instantiations
  - VA Smalltalk 9.1.1
  - Seaside
- Packages from VASGoodies.com
  - Seaside-Bootstrap (thanks to Torsten Bergmann / Joachim Tichel)
  - SpsPdfLib (for writing pdf's)
- Notable StAP components
  - Wrapper for Bootstrap Tables (<https://datatables.net/>)
  - TobSockets (for sending e-mails)
- Oracle database

# Future of StAP

- Enhance current propositions
- New propositions
  
- Amazon Web Services
- Migrate from Windows to Docker (Linux)
- Kubernetes
- Migrate from Oracle to MariaDB?
  
- Migrate from ENVY to Git?

# The Future: Working on it

The screenshot shows a Windows desktop environment with several application windows open. The background is the standard Windows 7 desktop wallpaper. The windows include:

- System Transcript@23f24a3c4265**: A text-based window showing logs for loading configuration maps for Seaside Core V 9.2.0, Seaside Development V 9.2.0, Javascript Core V 9.2.0, and JQuery Core V 9.2.0.
- Seaside Server Control Panel@23f24a3c4265**: A web-based interface with a menu (File, Edit, Manage, Configure) and a table showing server adaptor statistics.
- ENNY/Smalltalk Debugger on (08/22/19 09:50:38)@23f24a3c4265**: A debugger window showing a stack trace and a primitive failure message: "Primitive failed calling '"SOCKETS":gethostname from PlatformFunction>>callWithWith: due to OS error!' => UIProcess:(08/22/19 09:50:38)(suspended:3)".
- abrt@23f24a3c4265**: A terminal window showing VM options and command-line arguments.
- self (PlatformFunction)**: A debugger window showing the current state of the self object and the callWith: method call.

Server Adaptor	Port	Protocol	Current	Peak	Total	Start T...
UNSetServerAdaptor	8080	http	0	0	0	

```
VM Options {
  newSpaceSize set to 2
}
Commandline args {
  -i:/image64/abt.icx
  -ini:/image64/abt.ini
}
This is a trial copy of
Please refer to our web
information on how to p
UIProcess reportError:
go in argument 1
UIProcess reportError:
function>>callWithWith:
```

```
self (PlatformFunction)
callWith: arg1 with: arg2
"Issue the API call for the receiver."
<initializes UltrPlatformFunctionCall>
self primitiveFailed
```

## Conclusions

- Smalltalk flourishes with proposition prototyping.
- Continuously thinking MVP helps to keep things small and simple.
- Learning by doing helps an organisation going forward.
  
- Smalltalk continues to be valuable for our organisation.

# Questions?

## Thanks!

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