



The Future Of The German Business Register

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The Situation



The German Business Register

- **16** States (Länder)
- **116** Courts
- **2** Business Register Systems
 - ❖ RegisSTAR
 - ❖ Aureg

The History

1997

- Founding of the Developer Network RegisSTAR and Aureg

1999

- First test run of RegisSTAR

2003

- Implementation of RegisSTAR in North Rhine – Westfalia

2007

- Implementation of RegisSTAR and Aureg in all States

2011

- AUREG-States decide to join RegisSTAR

2014

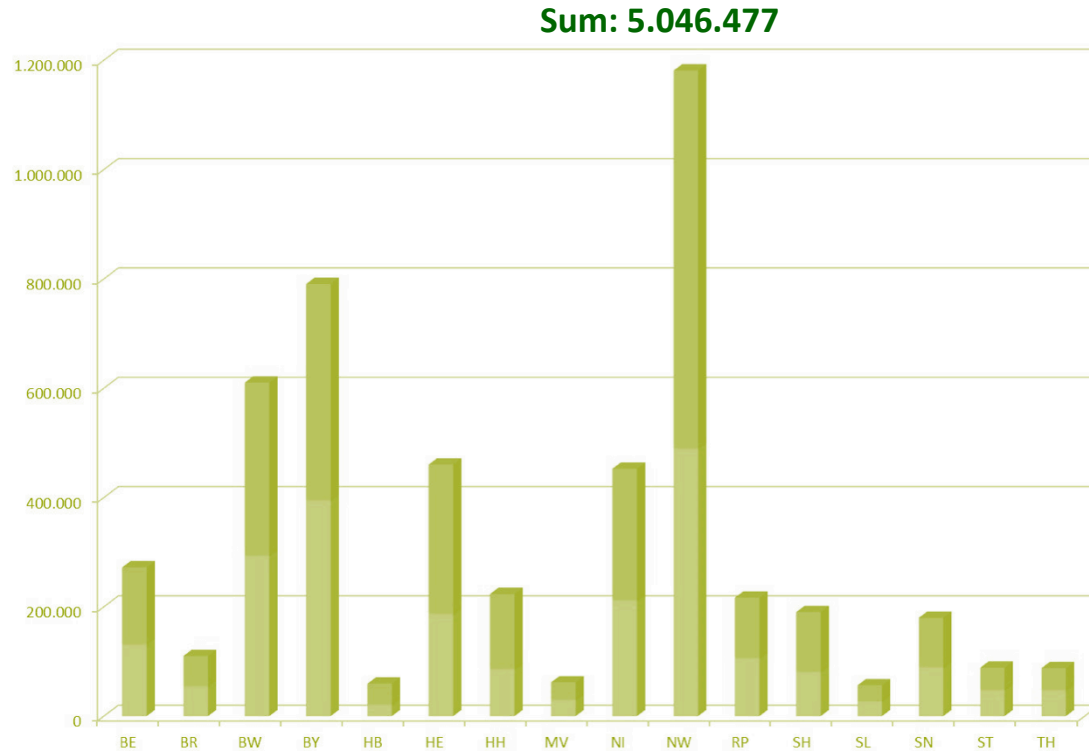
- Start of the Work on AuRegis

The Challenge

Can you modernize
the electronical Business Register System
within a local court system
with differing regulatory frameworks
in varying IT-Infrastructures
for all 16 states of Germany?

Challenges

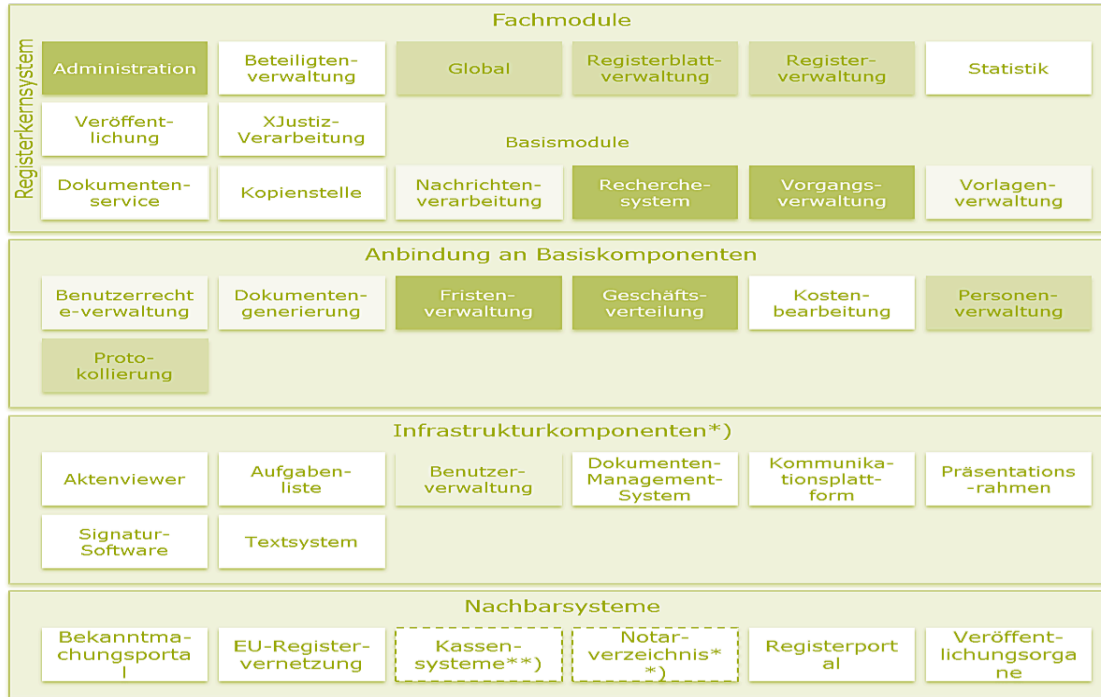
➤ Data Migration from Aureg and RegisSTAR



- 3 IT-Infrastructures
 - Reference Environment 1: **Oracle Stack**
 - Reference Environment 2: **Microsoft Stack**
 - Reference Environment 3: „**eAkte as a Service**“

Additional Challenges

➤ Service-Oriented Architecture (SoA)



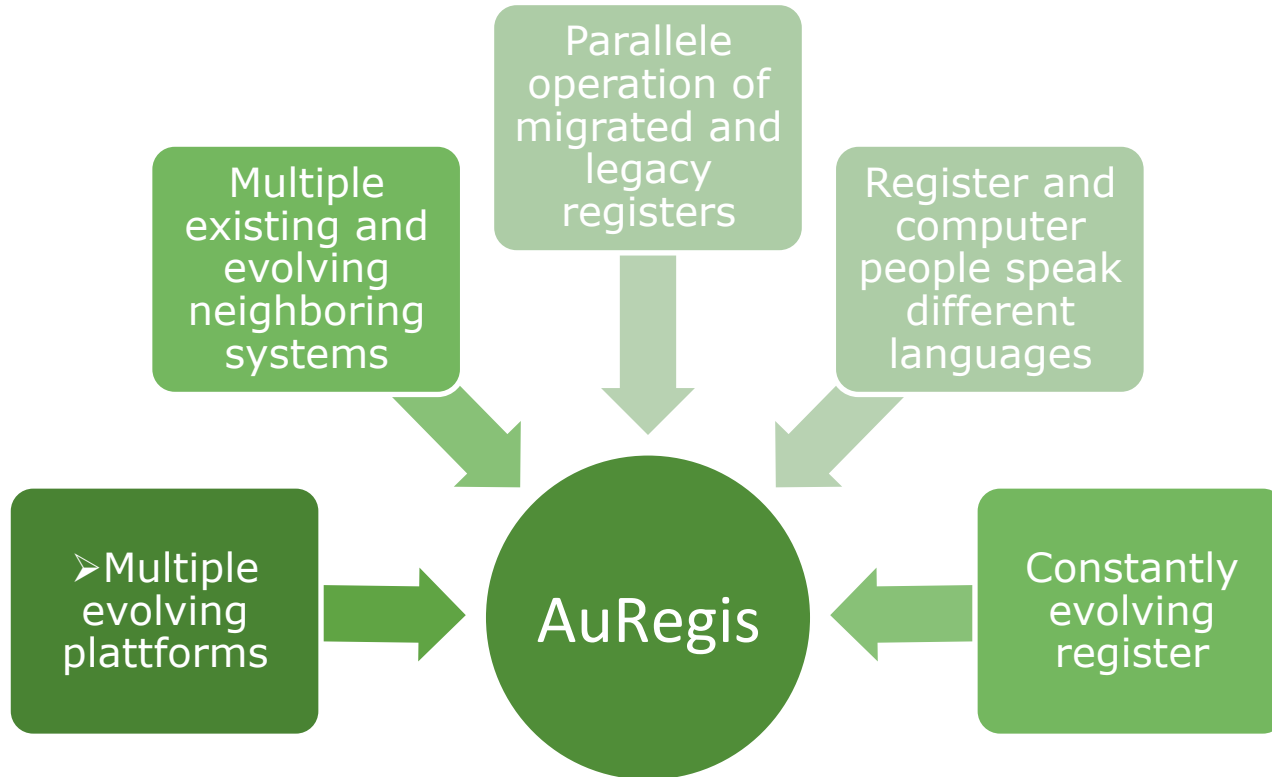
- Building Software Components in cooperation with the German Land Registry
 - User Authorization Administration
 - Person Administration
 - Document Generation
 - Logging
 - Administration of Dates and Deadlines
 - Cost & Fee Processing
 - Allocation of Duties Administration

Additional Challenges

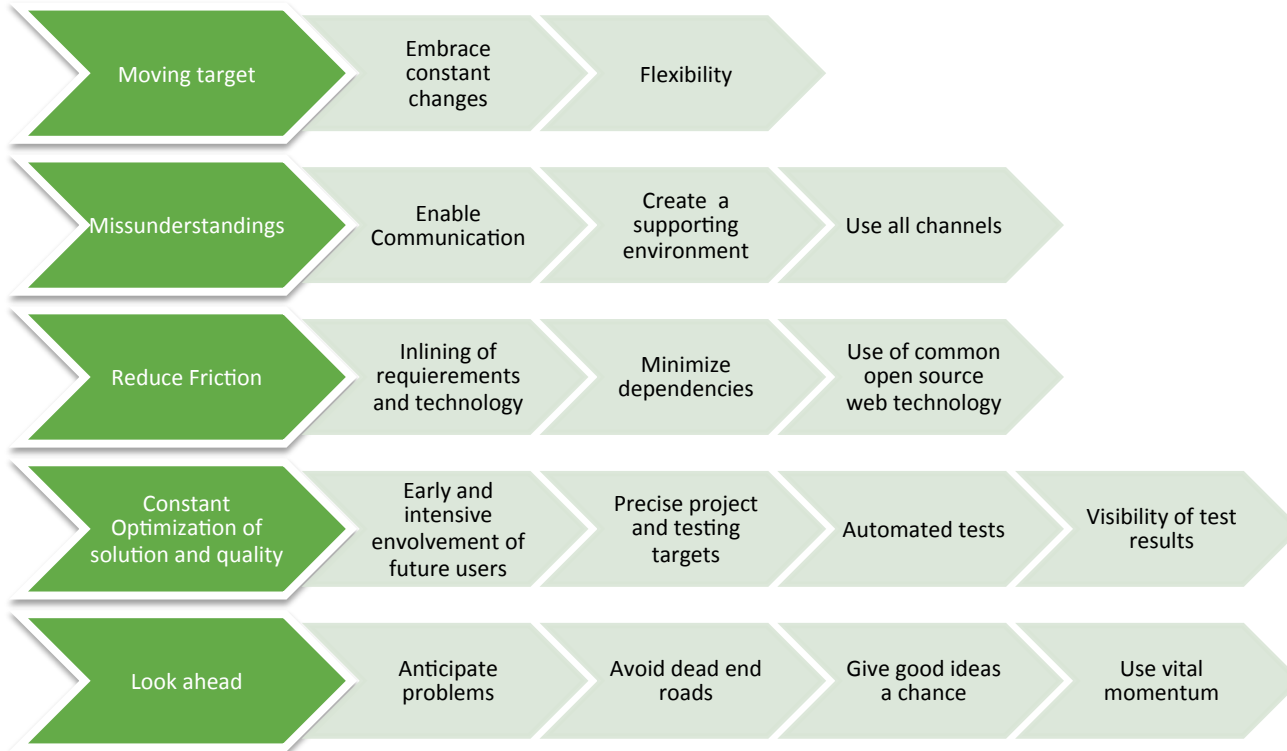
- Serving different File Management Systems
- Accessibility (BITV 2.0)
- Serving different Infrastructure Components

The Solution

Boundary Conditions



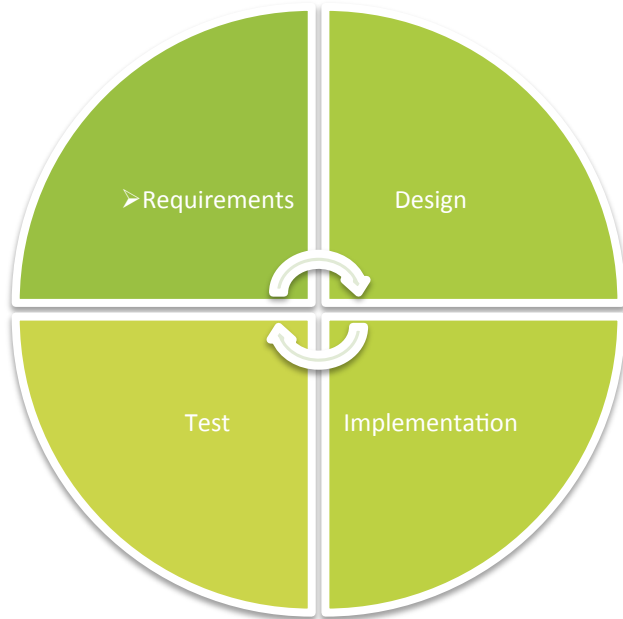
Reasoning + Conclusion



On project execution



Customer and Provider share the communication over all phases of the life cycle



➤ Meetings

- Mix of online and on site meetings

Language

- Training on UML and common elaboration of des. & doc.

Synchronisazion

- Milestone include a week of common evaluation

Domain knowledge

- Service matter experts among the programmers

Extend SoA wisely

- Search, Messaging, Object Store, etc.

Monitor

- Take appropriate Action

On technology

- SQL databases for register data
- Java for serverside logic
- HTML5/CSS3/JS in form of Angular for clients
- Elasticsearch, RabbitMQ, Redis, Jinja2
- Interfaces REST or massive language support
- Stay close to actual development, timely updates

On Technology Example OpenAPI Specification



swagger default (/v2/api-docs) api_key Explore

AuRegis* - Processing System API

AuRegis* API

| | | | |
|--------------------------------------|-----------|-----------------|-------------------|
| Abteilung | Show/Hide | List Operations | Expand Operations |
| Änderungsvormerkung | Show/Hide | List Operations | Expand Operations |
| Änderungsvormerkungstyp | Show/Hide | List Operations | Expand Operations |
| Anrede | Show/Hide | List Operations | Expand Operations |
| Anschriftstyp | Show/Hide | List Operations | Expand Operations |
| Art Der Sperre | Show/Hide | List Operations | Expand Operations |
| Bearbeitungsart | Show/Hide | List Operations | Expand Operations |
| Bearbeitungsbereich | Show/Hide | List Operations | Expand Operations |
| Befreiung181BGB | Show/Hide | List Operations | Expand Operations |
| Bemerkung | Show/Hide | List Operations | Expand Operations |
| BeteiligteverwaltungKonfigSchluessel | Show/Hide | List Operations | Expand Operations |
| Briefanrede | Show/Hide | List Operations | Expand Operations |
| Bundesland | Show/Hide | List Operations | Expand Operations |
| Eintragung | Show/Hide | List Operations | Expand Operations |
| Eintragungstatus | Show/Hide | List Operations | Expand Operations |
| Eintragungstext | Show/Hide | List Operations | Expand Operations |
| Eintragungstyp | Show/Hide | List Operations | Expand Operations |
| EintragungstypKonfig | Show/Hide | List Operations | Expand Operations |
| EintragungszusatzKonfig | Show/Hide | List Operations | Expand Operations |
| Erfeldigungsart | Show/Hide | List Operations | Expand Operations |
| Exportart | Show/Hide | List Operations | Expand Operations |
| Exportwertelisten | Show/Hide | List Operations | Expand Operations |
| Freitext | Show/Hide | List Operations | Expand Operations |
| FreitextFunktionKonfig | Show/Hide | List Operations | Expand Operations |
| FreitextPositionKonfig | Show/Hide | List Operations | Expand Operations |
| Freivermerkspruefung | Show/Hide | List Operations | Expand Operations |
| Gegenstand | Show/Hide | List Operations | Expand Operations |
| GegenstandKonfig | Show/Hide | List Operations | Expand Operations |
| Gesamtveroeffentlichungsstatus | Show/Hide | List Operations | Expand Operations |
| Geschäftsanschrift | Show/Hide | List Operations | Expand Operations |

swagger default (/v2/api-docs) api_key Explore

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| Änderungsvormerkungstyp | Show/Hide | List Operations | Expand Operations |
| Anrede | Show/Hide | List Operations | Expand Operations |

Anrede

GET /anreden [Liste aller Anreden](#)

Implementation Notes
Dies gibt als Ergebnis eine Liste aller Anreden zurück

Response Class (Status 200)
Anrede successfully read

Model | Model Schema

Inline Model [AnredePO]

AnredePO {
aktiv (boolean, optional): Indication if the item is active.,
anredeId (string, optional): BusinessKey of Anrede.,
className (string): discriminator is used to differentiate between other schema that inherit this schema.,
fiawert (boolean, optional): Indication if the item can be changed.,
geschlecht (integer, optional): ID for Geschlecht.,
id (integer, optional): Technical ID of the item.,
personentyp (integer, optional): ID for Personentyp.,
sortierschluessel (integer, optional): Order number, which is used for sorting (1-high prio).,
standardanrede (boolean, optional): Indication if the item is standard Anrede.,
text (string, optional): Description of Anrede.,
version (integer, optional): Version of item.,
}

Response Content Type application/json

Response Messages

| HTTP Status Code | Reason | Response Model | Headers |
|------------------|--------------------------------------|----------------------|---------|
| 400 | Business errors returned from server | Model Model Schema | |

```
{
  "errors": [
    {
      "code": "string",
      "description": "string",
      "params": [
        {
          "paramName": "string",
          "paramValue": "string"
        }
      ]
    }
  ]
}
```

401 Unauthorized

403 Forbidden

404 Not Found

500 Internal error on server side

[Try it out](#) [Hide Response](#)

Curl

```
curl -X GET --header 'accept: application/json' 'https://auregis.it-solutions.atos.net:443/PU-C03-auRegis-Server/api/anreden'
```

On technology example responsive design



AZ: HRB 184933 - Atos IT Solutions and Services... Vorgang: 36 Status: offen

Freivermerksprüfung - Suchfilter

Suchbegriffe

Firma / Name
Atos IT Solutions and Services GmbH - 2

Pseudonym

Schlagwörterzerlegung

Schlagwörter *
atos it solutions and services 2

Suchbegriffe verknüpfen mit:
 UND
 ODER

Sonstige Suchoptionen

Zusätzliche Registerart(en) prüfen Registerart(en)
VR

Zweigniederlassungen einbeziehen

Örtliche Begrenzung

Sitz / Ort der Niederlassung: München*

Gerichtsbezirk

AZ: HRB 184933 - Atos IT Solutions and Services... Vorgang: 36 Status: offen Server: DEV02 OK

AUREGIS

- Administration
- Vorgang
- Rechtsträger
- Rechtsträger anlegen
- Freivermerksprüfung
- Firma/Name
- Sitz/Ort der Niederlassung
- Gegenstand
- Kapital
- Geschäftsanschrift
- Rechtsform
- Nachschusspflicht
- Nebensitz
- Tag der ersten Eintragung
- Stammdaten
- Eintragungstypkonfigurationen

Freivermerksprüfung - Suchfilter

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Suchoptionen

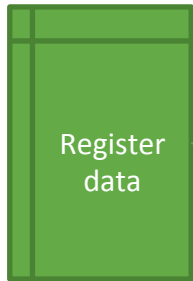
Exakte Suche
 Mit Ähnlichkeitensuche (phonetisch)
 Mit Ähnlichkeitensuche (Buchstabenähnlichkeit)
 Suche ohne Trenner

Suche starten

On technology example Elasticsearch

Definition

- data
- structure



Flexibility on

- Tokenizer
- Language
- Filters
- Synonyms
- Relevance
- Keywords
- Stopwords
- Scalability

Without need to change
the core system

On technology example Jinja2

Durch rechtskräftigen Beschluss des Amtsgerichts {{ m.txt(label='Ort des Insolvenzgericht') }} vom {{ m.dt(label='Beschlußdatum') }} {{ m.txt(label='Geschäftszeichen des Insolvenzgerichts') }} wurde die Eröffnung des Insolvenzverfahrens über das Vermögen der Gesellschaft mangels einer den Kosten des Verfahrens entsprechenden Masse abgewiesen.

```
{{ m.cb(option='Die Gesellschaft ist hierdurch aufgelöst.  
Gemäß § 60 Abs. 1 GmbHG i.V. § 65 Abs. 1 GmbHG von Amtswegen eingetragen.' )}}
```

Durch rechtskräftigen Beschluss des Amtsgerichts vom wurde die Eröffnung des Insolvenzverfahrens über das Vermögen der Gesellschaft mangels einer den Kosten des Verfahrens entsprechenden Masse abgewiesen.

Die Gesellschaft ist hierdurch aufgelöst Gemäß § 60 Abs. 1 GmbHG i.V. § 65 Abs. 1 GmbHG von Amtswegen eingetragen.

Created by user



Seamless integration
Into AuRegis

On technology Example Justice workspace

The screenshot displays a software interface for a justice workspace. At the top, a navigation bar includes a search field with the text "Pensum E2AAuregis", a dropdown menu for "Verfahren: HRB 1", and a status indicator "1/1 19.09.2017 1. DEV Kammer fü... keine". Below this, a toolbar contains icons for various functions like a folder, a lightbulb, a document, a pen, and application windows for Word and Excel.

The main workspace is divided into two panels. The left panel, titled "Rechtsträger anlegen" (Create Legal Entity), contains a form with the following fields:

- Firma / Name ***: A text input field with a red warning triangle and the message "Eingabe erforderlich" (Input required) and a character count of "0 / 264".
- Pseudonym**: A text input field with a character count of "0 / 264".
- Sitz / Ort der Niederlassung ***: A text input field.
- Rechtsform ***: A dropdown menu.
- Niederlassungsart ***: A dropdown menu.

At the bottom of the form are two buttons: "Anlegen" (Create) and "Abbrechen" (Cancel).

The right panel is a document viewer showing a blank white page with the text "Dies ist ein Word Dokument" (This is a Word document). It includes a toolbar with zoom and navigation icons and a page indicator at the bottom showing "Seite 1 / 1".

Thank you!

Questions?