PER Auskunft

Building Block View
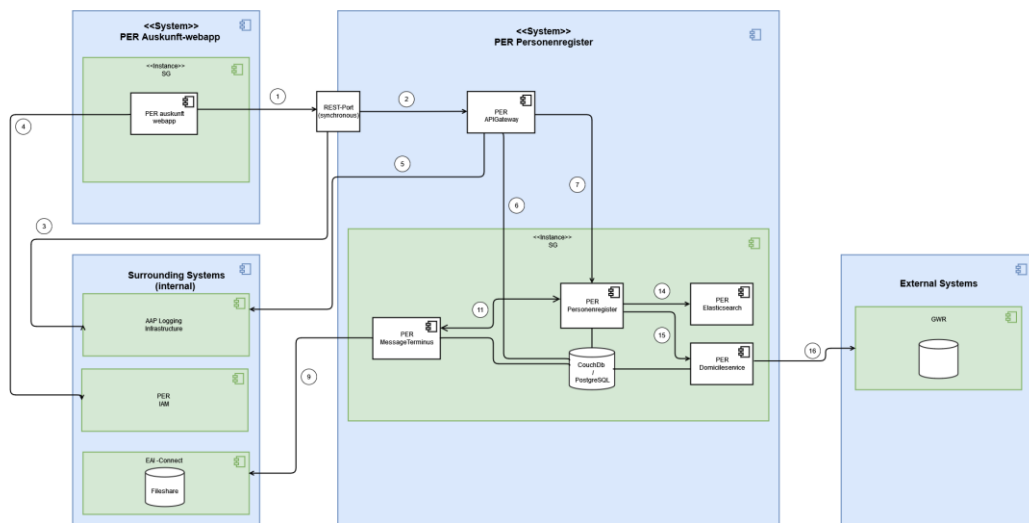
Classification	public
Version	1.0
Date	October, 31st 2024

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Contents

1. Overview PER Personenregister with PER Auskunft web application

The following Building Block View shows the system PER Personenregister in connection with the PER Auskunft web application.

2. Systems

The components have the following functions or responsibilities:

Name	Description	Technologies
PER Auskunft-webapp	• Front-end/web app for searching persons on level municipality • Includes fulltextsearch or extended search • Can display a person in different time periods	Angular
PER APIGateway	• Bridge between external and internal systems	Java
REST Port	• Central communication interface (handles connections form outside)	REST
CouchDb	• Stores all person data in one document for each person. • Allows quick access to person data using an internal key	CouchDB

Name	Description	Technologies
	• Provides a quick search for keys • Stores all relevant tables for the application	
PostgreSQL	Database for storing data that are similar to rows or relations (e.g. logs or batch jobs) • Stores technical logs • Saves progress of long-running operations	PostgreSQL
PER Personenregister	• Processes messages of person data • Verifies and manages the affilation of participants and person data • Handles requests for person data	Java
Elasticsearch	• Stores an index of searchable characteristics of person data • Allows complex search queries using wildcards etc. • Can handle non-Latin characters	Elastic / Elasticsearch
EAI Connect	• Fileshare for receiving and sending messages	Abraxas CONNECT
PER IAM	• Central identity provider (access system for PER Personenregister) of Abraxas	Abraxas SECURE Connect
AAP Logging Infrastructure	• Logging infrastructure including log monitoring and alerting	Misc. K8s Tooling
PER MessageTerminus	• Processes messages that are available as files in the EAI Connect (file share) • Prevents partially written files from being processed • Splits very large messages into smaller messages • Distributes the messages to different instances of PER Personenregister and minimizes conflicts that could arise if serveral messages about the same person were processes at the same time	Java
PER Messageoutlet	• Handles write operations (KeyExchanges, DataRequests, resceipts, etc.)	Java
PER Relay	• Forwards incoming messages to EAI-Connect for surrounding systems	Java

Name	Description	Technologies
PER Domicileservice	• Loads the current housing and building information from the Federal Statistical Office (GWR) on a daily basis • Stores the data in PostGres Table	Java
GWR	• External System from the "Bundesamt für Statistik Eidg. Gebäude und Wohnungsregister (GWR)" (Federal Statistical Office)	Webservice XML

3. Interfaces

The Interfaces show which systems communicate with each other.
The direction of the arrow indicates which system is responsible for establishing the connection or its initiator.
However, the arrows do not represent the data flow.

Number	Consumer System	Source System	Data format	Protocol	Description
1	PER Auskunft-webapp	REST-Port	JSON	HTTPS	PER Auskunft-webapp connects to REST-Port
2	REST Port	PER APIGateway	JSON	HTTP	REST-Port calls the API's from PER APIGateway
3	REST Port	AAP Logging	TEXT	syslog	The AAP Logging Infrastructure reads the text-based console output (server-side only) from REST Port
4	PER Auskunft-webapp	PER IAM	JSON	HTTPS	PER Auskunft-webapprequires PER IAM to allow users to log into the application
5	PER APIGateway	AAP Logging	TEXT	syslog	The AAP Logging Infrastructure reads the text-based console output (server-side only) from PER APIGateway

Number	Consumer System	Source System	Data format	Protocol	Description
6	PER APIGateway	CouchDb /PostgreSQL	JSON/binary	HTTP/TCP	PER APIGatewayreads configurations and general tables fromCouchDb /PostgreSQL
7	PER APIGateway	PER Personenregister	JSON	HTTP	PER APIGateway calls downstream PER Personenregister to fulfill request from the Webapp
9	PER Messageterminus	EAI Connect	XML	File exchange	PER Messageterminusreads messages fromEAI Connect
11	PER Personenregister	PER MessageTerminus	XML	HTTP	PER Personenregisterreceives incoming messages fromPER MessageTerminus
14	PER Personenregister	Elasticsearch	JSON	HTTP	PER Personenregister stores searchable characteristics toElasticsearch
15	PER Personenregister	PER Domicileservice	JSON	HTTP	PER Personenregister calls current housing and building information from <<component>>Domicilservice
16	PER Domicilservice	GWR	XML	HTTPS	PER Domicilservice loads building information from external provider GWR