

# **VOTING Stimmunterlagen Online**

## **Building Block View**

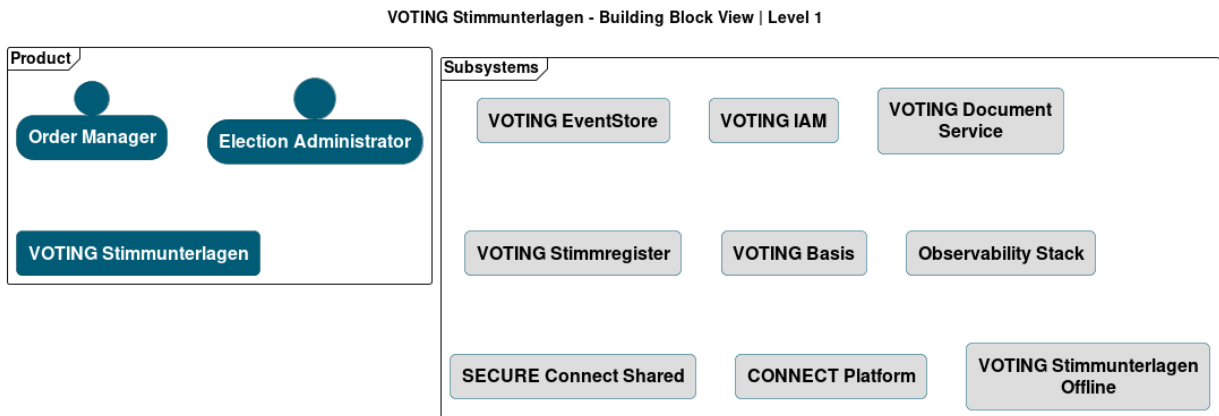
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# 1. Solution

## 1.1 Level 1

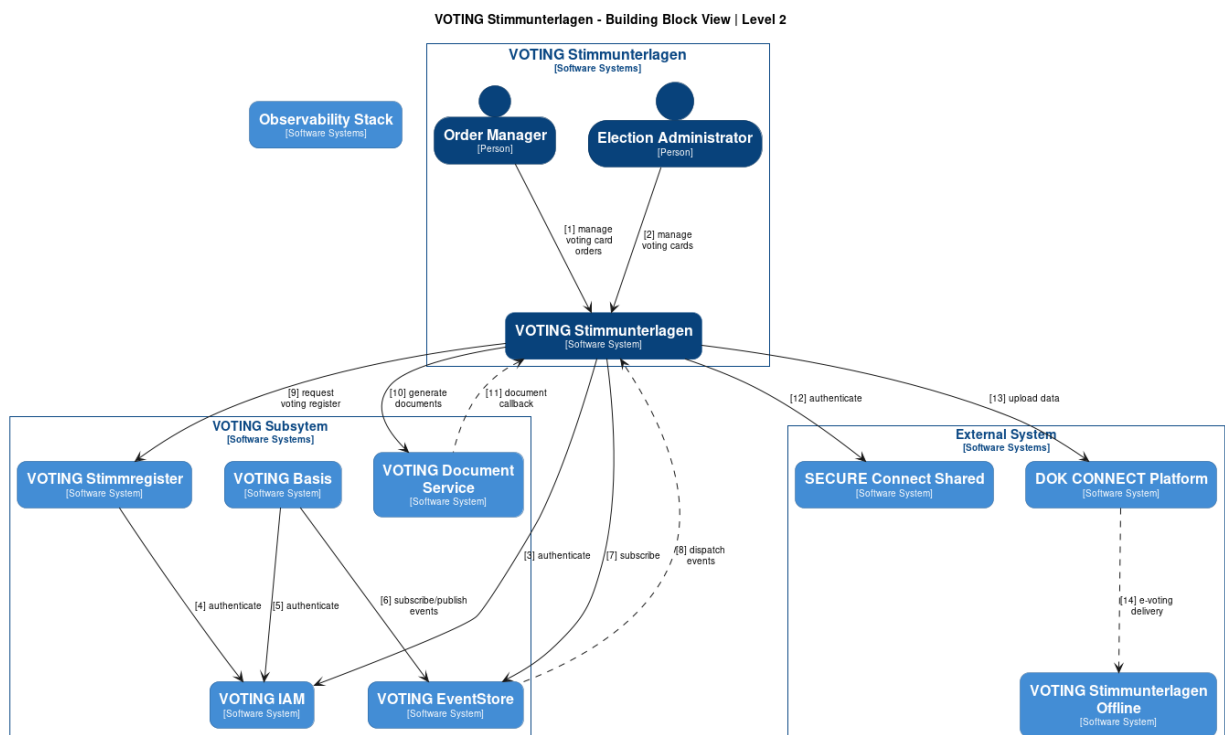


### 1.1.1 Solution Components

Group	Name	Description
Product	Order Manager	A person who is responsible for the voting card order management. The person is responsible for managing the printing orders of voting cards and enclosure as well as generating invoices for authorities.
	Election Administrator	A person who is responsible for preparing voting cards for the printing order. The preparation includes verifying political businesses, selecting the layout of the voting cards, defining the enclosures, importing the voting register, approving the good for printing, creating the print job and, if necessary, placing the order for reprinting.
	VOTING Stimmunterlagen	The product for managing voting cards.
Subsystem	VOTING Document Service	The output management service for generating PDF documents (e.g voting cards, invoices, etc...)
	VOTING Stimmregister	The service for managing voting registers for individual tenants, contests and domain of influences. This service is integrated into VOTING Stimmunterlagen.
	VOTING Basis	VOTING Basis manages the master data in the VOTING environment. This includes, for example, contests, votes and elections.

Group	Name	Description
	VOTING IAM	Primary IAM system for authenticating users and managing user permissions and identities used by VOTING products and subsystems.
	VOTING EventStore	EventStore cluster for storing and managing events used by the VOTING event sourcing system.
External System	SECURE Connect Share	The shared IAM instance used by external cross-section solutions.
	CONNECT Platform	The external service is responsible for a secure file transfer to external or internal stakeholders.
	VOTING Stimmunterlagen Offline	Frontend / desktop application for securely generating e-voting voting cards. Refer to: <a href="https://github.com/abraxas-labs/voting-stimmunterlagen-online-docs">https://github.com/abraxas-labs/voting-stimmunterlagen-online-docs</a>
Infrastructure	Observability Stack	The observability stack including logging, monitoring and alerting features.

## 1.2 Level 2



### 1.2.1 Communication Interfaces

<b>Id</b>	<b>Sender</b>	<b>Receiver</b>	<b>Format</b>	<b>Protocol</b>	<b>Description</b>
1	Order Manager	VOTING Stimmunterlagen	gRPC Web	HTTPS	Browser / backend communication
2	Election Administrator	VOTING Stimmunterlagen	gRPC Web	HTTPS	Browser / backend communication
3.1	Order Manager	VOTING IAM	Open ID Connect	HTTPS	User authentication
3.2	Election Administrator	VOTING IAM	Open ID Connect	HTTPS	User authentication
3.3	VOTING Stimmunterlagen	VOTING IAM	OAuth 2.0 Json / REST	HTTPS	Verify user authentication. Read identity and permission user information. Request service user tokens.
4	VOTING Stimmregister	VOTING IAM	OAuth 2.0	HTTPS	User authentication
5	VOTING Basis	VOTING IAM	OAuth 2.0	HTTPS	User authentication
6	VOTING Basis	VOTING EventStore	Protobuf	HTTPS/2 (gRPC Native)	Publish events generated by VOTING Basis and subscribe to incoming events published by other stakeholders.
7	VOTING Stimmunterlagen	VOTING EventStore	Protobuf	HTTPS/2 (gRPC Native)	Create EventStore subscription to handle incoming events.
8	VOTING EventStore	VOTING Stimmunterlagen	Protobuf	HTTPS/2 (gRPC Native)	Dispatch and handle incoming events.
9	VOTING Stimmunterlagen	VOTING Stimmregister	Protobuf	HTTPS (gRPC Web)	Create and import a voting register from VOTING Stimmregister for a specific tenant and contest.
10	VOTING Stimmunterlagen	VOTING Document Service	XML, PDF	HTTPS	Generate PDF documents based on tenant specific templates asynchronously.

<b>Id</b>	<b>Sender</b>	<b>Receiver</b>	<b>Format</b>	<b>Protocol</b>	<b>Description</b>
11	VOTING Document Service	VOTING Stimmunterlagen	PDF	HTTPS	Callback notification channel for finished documents.
12	VOTING Stimmunterlagen	SECURE Connect Shared	Json / REST	HTTPS	Service user token request and authentication
13	VOTING Stimmunterlagen	DOK CONNECT Platform	binary / REST	HTTPS	Securely transfer voting card documents or e-voting resources to the recipients.
14	DOK CONNECT Platform	VOTING Stimmunterlagen Offline	file	Storage	Forward E-Voting delivery through CONNECT ecosystem.

## 1.3 Level 3

### VOTING Stimmunterlagen - Building Block View | Level 3

