

VOTING Wahlvorschlag

Building Block View

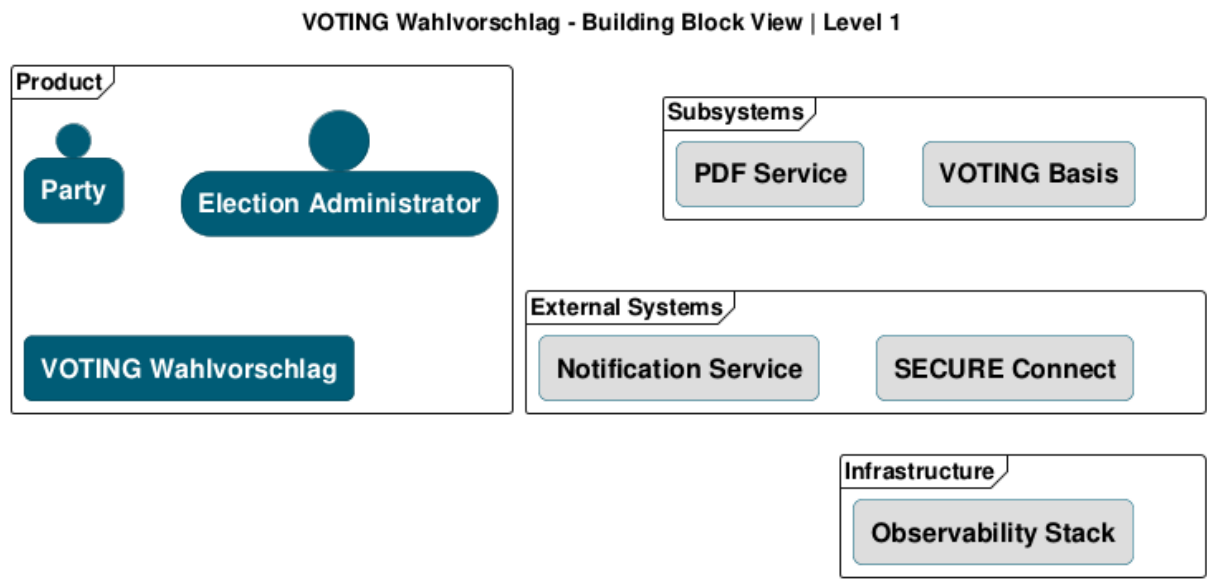
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1. Solution

1.1 Level 1



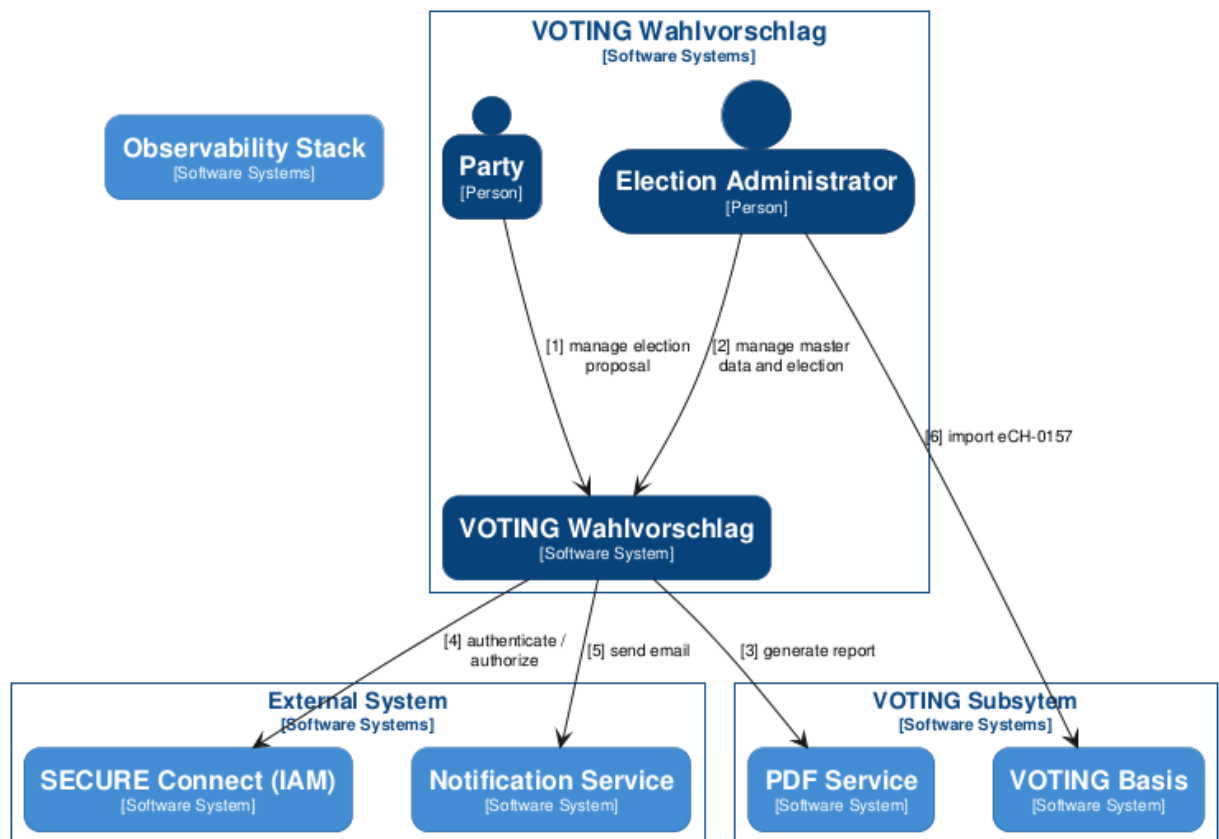
1.1.1 Solution Components

Group	Name	Description
Product	Party (<i>de: Partei</i>)	The party is responsible for managing lists and candidates as part of an election proposal. Multiple users may represent a party, each with individual responsibilities tied to specific elections.
	Election Administrator (<i>de: Wahlverwalter</i>)	The election administrator who is represented by a user from the superior authority is responsible for managing master data, creating new elections and assigning permissions to subordinate parties. The election administrator is responsible for creating parties, creating or deleting users and assigning users to authorized parties.
	VOTING Wahlvorschlag	The product for managing election proposals by a superior authority and responsible parties.
Subsystem	PDF Service	The output management service, responsible for generating PDF documents.
	VOTING Basis	Election proposals for majority and proportional elections may be exported with the elections interface standard eCH-0157 and re-imported into VOTING Basis for seamless integration.

Group	Name	Description
External System	SECURE Connect	Primary IAM system for authenticating users and managing user permissions and identities used by VOTING Wahlvorschlag.
	Notification Service	The notification service to send e-mails to request party creation/deletion or to be notified for updates in election proposals (e.g. new comments).
Infrastructure	Observability Stack	The observability stack including logging, monitoring and alerting features.

1.2 Level 2

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1.2.1 Communication Interfaces

Id	Sender	Receiver	Format	Protocol	Description
1	Party	VOTING Wahlvorschlag	Json / REST	HTTPS	Browser / backend communication.

Id	Sender	Receiver	Format	Protocol	Description
2	Election Administrator	VOTING Wahlvorschlag	Json / REST	HTTPS	Browser / backend communication.
3	VOTING Wahlvorschlag	PDF Service	Json / REST	HTTP	Generate PDF documents based on tenant specific templates (synchronously operation).
4.1	Party	SECURE Connect	Open ID Connect	HTTPS	User authentication (Authorization Code Flow with PKCE).
4.2	Election Administrator	SECURE Connect	Open ID Connect	HTTPS	User authentication (Authorization Code Flow with PKCE).
4.3	VOTING Wahlvorschlag	SECURE Connect	OAuth 2.0Json / REST	HTTPS	Verify user authentication. Read identity and permission user information. Request service user tokens.
5	VOTING Wahlvorschlag	Notification Service	Json / REST	HTTPS	Send email notifications via the notification service to inform responsible parties about relevant updates or master data requests.
6	Election Administrator	VOTING Basis	XML / File-based	HTTPS	Import a file-based eCH-0157 in VOTING Basis generated from an election proposal within VOTING Wahlvorschlag.

1.3 Level 3

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