## **VOTING-Services**

## **VO Ausmittlung - Transport Security (en)**

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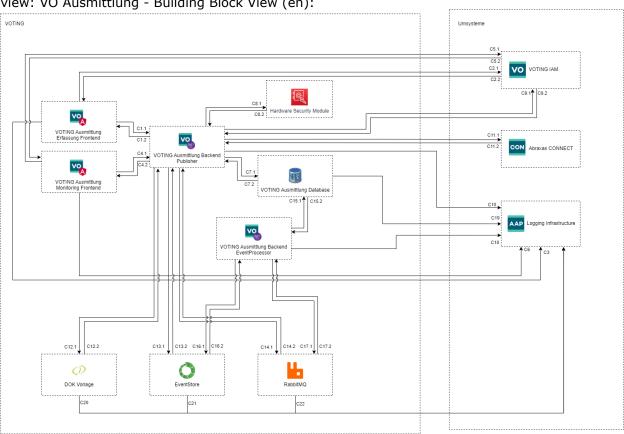
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## **Overview**

In the following section, the transport security, i.e. the connection security, between the various system components is shown. The basis for this is the data flow diagram of the module view: VO Ausmittlung - Building Block View (en):



ID	Data flow	Consumer System	Source system	Encryp- tion	Cluster internal*	Authoriza- tion mechanism	Comments
1	C1.1, C1.2	VOTING Ausmittlung Erfassung Frontend	VOTING Ausmittlung Backend Publisher	HTTPS	No	User-Account (JWT)	
2	C2.1, C2.2	VOTING Ausmittlung Erfassung Frontend	VOTING IAM	HTTPS	No	User-Account (JWT)	
3	C3	VOTING Ausmittlung Erfassung Frontend	Logging Infrastructure	-	Yes	_	

ID	Data flow	Consumer System	Source system	Encryp- tion	Cluster internal*	Authoriza- tion mechanism	Comments
4	C4.1, C4.2	VOTING Ausmittlung Monitoring Frontend	VOTING Ausmittlung Backend Publisher	HTTPS	No	User-Account (JWT)	
5	C5.1, C5.2	VOTING Ausmittlung Monitoring Frontend	VOTING IAM	HTTPS	No	User-Account (JWT)	
6	C6	VOTING Ausmittlung Monitoring Frontend	Logging Infrastructure	-	Yes	-	
7	C7.1, C7.2	VOTING Ausmittlung Backend Publisher	VOTING Ausmittlung Database	-	Yes	Database user (username + password)	
8	C8.1, C8.2	VOTING Ausmittlung Backend Publisher	HSM		Yes	PIN	The communicatio n with the HSM library is done via PKCS #11. The documentatio n of the manufacturer (Utimaco) does not show how the HSM library accesses the HSM itself.
9	C9.1, C9.2	VOTING Ausmittlung Backend Publisher	VOTING IAM	HTTPS	No	Service- Account (JWT)	
10	C10	VOTING Ausmittlung Backend Publisher	Logging Infrastructure	-	Yes	-	
11	C11.1, C11.2	VOTING Ausmittlung Backend Publisher	Abraxas CONNECT	-	Yes	Service- Account (JWT)	

ID	Data flow	Consumer System	Source system	Encryp- tion	Cluster internal*	Authoriza- tion mechanism	Comments
12	C12.1, C12.2	VOTING Ausmittlung Backend Publisher	DOK Vorlage	-	Yes	Service- Account (Username + Token)	
13	C13.1, C13.2	VOTING Ausmittlung Backend Publisher	EventStore	HTTPS	Yes	Service- Account (Username + Passwort)	
14	C14.1, C14.2	VOTING Ausmittlung Backend Publisher	RabbitMQ	-	Yes	Service- Account (Username + Passwort)	
15	C15.1, C15.2	VOTING Ausmittlung Backend EventProcessor	VOTING Ausmittlung Database	-	Yes	Database- Benutzer (Username + Passwort)	
16	C16.1, C16.2	VOTING Ausmittlung Backend EventProcessor	EventStore	HTTPS	Yes	Service- Account (Username + Passwort)	
17	C17.1, C17.2	VOTING Ausmittlung Backend EventProcessor	RabbitMQ	-	Yes	Service- Account (Username + Passwort)	
18	C18	VOTING Ausmittlung Backend EventProcessor	Logging Infrastructure	-	Yes	-	
19	C19	VOTING Ausmittlung Database	Logging Infrastructure	-	Yes	-	
20	C20	DOK Vorlage	Logging Infrastructure	-	Yes	-	
21	C21	EventStore	Logging Infrastructure	-	Yes	-	
22	C22	RabbitMQ	Logging Infrastructure	_	Yes	-	

<sup>\*</sup>Internal to the cluster are all data flows that do not leave the VOTING cluster and thus the internal network.

The data flows CX.2 each represent the responses of the source system to calls initiated by the consumer system. Log outputs are read unencrypted on the server side and forwarded to the central, cluster-internal logging infrastructure.