

VOTING Stimmunterlagen Online

Authorization Model

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Contents

1.	VOTING IAM	3
1.1	Applications	3
1.2	Roles	3
1.2.2	Permission Inheritance	4
1.3	Tenants	4
1.4	Users	4
2.	Authorization Table	5
2.1	API Specification V1	5
2.1.1	Conditions	5
2.1.2	Authorization.....	1

1. VOTING IAM

1.1 Applications

The following applications are available for VOTING Stimmunterlagen:

Application ID	Description
VOTING-STIMMUNTERLAGEN	Application for managing master data for voting eligibility to be able to obtain information on voting rights on a daily basis, in real time and based on saved filters.

1.2 Roles

A role is always linked to a tenant context and therefore requires explicit authorization to access tenant data. Exceptions are explicitly mentioned in the description of the role. The following roles are available for the application VOTING Stimmunterlagen:

Application ID	Role	Description
VOTING-STIMMUNTERLAGEN	Wahlverwalter	A user with the role <i>Wahlverwalter</i> is responsible for preparing the 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.
	Auftragsmanager	<p>A user with the role <i>Auftragsmanager</i> (order manager) is responsible for the voting card order management. The user is responsible for managing the printing orders for voting cards and enclosures as well as for generating the invoices for authorities.</p> <p>The order manager holds privileged access that allows access to orders from all tenants across the system, regardless of whether the order manager is authorized specifically for each tenant or not.</p>

1.2.2 Permission Inheritance

The roles do not inherit from each other. Every role is explicitly authorized for the desired actions.

✓ Indicated that this role applies permissions directly.

	Wahlverwalter	Auftragsmanager
Wahlverwalter	✓	-
Auftragsmanager	-	✓

1.3 Tenants

In the context of VOTING, the tenant is reflected by a political unit such as a canton or municipality. An example configuration is shown below:

Tenant	Application ID	Available Roles	Unit
State Chancellery of Canton A <i>Staatskanzlei Kanton A</i>	VOTING-STIMMUNTERLAGEN	Wahlverwalter	Canton
Municipality of B <i>Gemeinde B</i>	VOTING-STIMMUNTERLAGEN	Wahlverwalter	Municipality
Municipality of C <i>Gemeinde C</i>	VOTING-STIMMUNTERLAGEN	Wahlverwalter	Municipality
Abraxas Informatik AG	VOTING-STIMMUNTERLAGEN	Auftragsmanager	Printing Center

1.4 Users

User accounts are managed in VOTING IAM. An example configuration is shown below:

User	Tenant	Application ID	Role ID
Barbara Burger	State Chancellery of the Canton A	VOTING-STIMMUNTERLAGEN	Wahlverwalter
Franz FÜRER	Municipality B	VOTING-STIMMUNTERLAGEN	Wahlverwalter
	Municipality C	VOTING-STIMMUNTERLAGEN	Wahlverwalter
Erika Moore	Abraxas Informatik AG	VOTING-STIMMUNTERLAGEN	Auftragsmanager

In addition, it is possible to have multiple roles with the same combination of application and client. Thus, a user could simultaneously have the roles *Wahlverwalter* and *Auftragsmanager*

for different tenants assigned to the application VOTING-STIMMUNTERLAGEN. In practice, however, such combinations rarely occur in the VOTING environment.

2. Authorization Table

2.1 API Specification V1

This chapter provides an overview of all actions that can be executed on the frontend and API level. The listed actions can only be executed when all conditions are fulfilled. If a condition is empty, it is considered fulfilled.

The `<package-v1>` placeholder for the API specification V1 is defined as *abraxas.voting.stimmunterlagen.v1* and part of the fully qualified API method that is represented by a package, service and method:

- API Syntax: `<package-v1>.{service}.{method}`
- API Sample: *abraxas.voting.stimmunterlagen.v1.ContestService.List*

2.1.1 Conditions

The following conditions are re-used for several API calls. They are described once and referenced by corresponding keys in the chapter *Authorization*.

Reference Key	ACL Expression (pseudo code)	Comments
HasAccessToContest	IsAssignedAsAuthorityInAnyContestDoiLevel && (IsContestManager IsContestAttendee)	A user has access to a contest if the operating tenant is either the responsible contest manager or assigned with the role contest attendee. A contest attendee is identified as an authority at a lower level in the domain of influence hierarchy tree (DOI). Code reference: ContestQueryableExtensions.WhereHasAccessToContest
IsContestManager	contest.DomainOfInfluence.TenantId = TenantId	The responsible authority of the contest DOI must correspond to the current tenant. DE: Zuständige Behörde
CanViewPoliticalBusiness	PoliticalBusinesses.Permissions.Contain(TenantId)	The tenant must have access to the political business associated with the contest via the DOI hierarchy tree.

2.1.2 Authorization

Action (Name)	API (Method)	Use role	Additional Conditions	Comments	Consumer
Urnengänge ContestService					
Urnengang lesen	Get	Wahlverwalter	HasAccessToContest		Submenu <Stimmrechtsunterlagen vom mm.dd.yyyy>
		Auftragsmanager		The contest is accessible independently of the responsible authority	Submenu <Stimmrechtsunterlagen vom mm.dd.yyyy> Print Job Management [Attachment]
Urnengänge lesen	List	Wahlverwalter	HasAccessToContest		Main menu <Übersicht Urnengänge>
		Auftragsmanager		All contests are accessible independently of the responsible authority	Main menu <Übersicht Urnengänge>
Fristen setzen	SetDeadlines	Wahlverwalter	IsContestManager		Wizard step <4. Fristen>
Gut zum Druck zurücksetzen	UpdatePrintingCenterSignUpDeadline	Wahlverwalter	IsContestManager		Wizard step <4. Fristen> Wizard step <5. Übersicht> (Dialog Gut zum Druck zurücksetzen)
Wahlkreis DomainOfInfluenceService					

Wahlkreis lesen	Get	Wahlverw alter			Wizard step <8. <i>Stimmjournal</i> >
Verwaltende Wahlkreise lesen	ListManagedByCurrentTenant	Wahlverw alter			
Verwaltende E-Voting Wahlkreise lesen	ListEVoting	Wahlverw alter			
Untergeordnete Wahlkreise lesen	ListChildren	Wahlverw alter			
Wizard Step StepService					
Steps lesen	List	Wahlverw alter	IsDomainOfInfluence Manager		Wizard step status manager
Step Genehmigen	Approve	Wahlverw alter	IsDomainOfInfluence Manager		Wizard step status manager
Step Zurücksetzen	Revert	Wahlverw alter	IsDomainOfInfluence Manager		Wizard step status manager
Steps synchronisieren	Sync	Wahlverw alter			Wizard step status manager
Geschäfte PoliticalBusinessService					
Geschäfte lesen	List	Wahlverw alter	CanViewPoliticalBusiness		Wizard step <1. <i>Geschäfte</i> >
Dynamische Bausteine Wahlkreis DomainOfInfluenceVotingCardBrickService					
Bausteine lesen	List	Wahlverw alter	HasAccessToTemplateByTenantId	ACL is part of DmDoc and dependant on the given user context (ref: DmDocUserNameProvider)	Wizard step <2. <i>Layout SRA</i> >
Editor URL lesen	GetContentEditorUrl	Wahlverw alter	HasAccessToTemplateByTenantId	ACL is part of DmDoc and dependant on	Wizard step <2. <i>Layout SRA</i> >

				the given user context (ref: DmDocUserNameProvider)	
Inhalt aktualisieren	UpdateContent	Wahlverwalter	HasAccessToTemplateByTenantId	ACL is part of DmDoc and dependant on the given user context (ref: DmDocUserNameProvider)	Wizard step <2. Layout SRA>
Urnengang Layout Stimmrechtsausweise ContestVotingCardLayoutService					
Layouts lesen	GetLayouts	Wahlverwalter	IsContestManager		Wizard step <2. Layout SRA>
Templates lesen	GetTemplates	Wahlverwalter	IsContestManager		Wizard step <2. Layout SRA>
Layout setzen	SetLayout	Wahlverwalter	IsContestManager		Wizard step <2. Layout SRA>
PDF Preview lesen	GetPdfPreview	Wahlverwalter	IsContestManager		Wizard step <2. Layout SRA>
Wahlkreis Layout Stimmrechtsausweise DomainOfInfluenceVotingCardLayoutService					
Layouts lesen	GetLayouts	Wahlverwalter	HasAccessToLayout, doi.TenantId == TenantId		Wizard step <3. Zuweisung SRA> Wizard step <5. Gut zum Druck>
Urnengang Layouts lesen	GetContestLayouts	Wahlverwalter	IsContestManager		Wizard step <3. Zuweisung SRA>
Layout setzen	SetLayout	Wahlverwalter	IsContestManager		Wizard step <3. Zuweisung SRA>

Überschriebenes Layout setzen	SetOverriddenLayout	Wahlverwalter	IsDomainOfInfluenceManager		
Templates lesen	GetTemplates	Wahlverwalter	HasAccessToContest		Wizard step <3. Zuweisung SRA>
Template Daten lesen	GetTemplateData	Wahlverwalter	OwnsTemplatebyDoiAndTenantId		
Template Daten setzen	SetTemplateData	Wahlverwalter	IsContestManager		
PDF Preview lesen	GetPdfPreview	Wahlverwalter	HasAccessToContest		Wizard step <3. Zuweisung SRA>
Beilagen AttachmentService					
Beilage erstellen	Create	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>
Beilage bearbeiten	Update	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>
Beilage löschen	Delete	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>
Beilagen Übersicht lesen (Contest)	ListCategorySummaries	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <5. Übersicht> Wizard step <3. Beilagen>
Beilagen Übersicht lesen (Contest)	ListCategorySummaries	Auftragsmanager			Print Job Management [Attachment] Print Job Management [Jobs]
Beilagen Übersicht lesen (DOI)	ListDomainOfInfluenceAttachmentCategorySummaries	Wahlverwalter	HasAccessToContest		Wizard step <3. Beilagen>
Politisches Geschäft zuweisen	AssignPoliticalBusiness	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>

Zuweisung Politisches Geschäft aufheben	UnassignPoliticalBusiness	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>
Anzahl Beilagen setzen	SetDomainOfInfluenceAttachmentRequiredCount	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>
Station für Druck von Beilage setzen	SetStation	Auftragsmanager		The attachment is accessible independently of the responsible authority	Print Job Management [Attachment]
Status von Beilage setzen	SetState	Auftragsmanager		The state can be set independently of the responsible authority	Print Job Management [Attachment]
Anzahl Beilagen lesen	ListDomainOfInfluenceAttachmentCounts	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>
Beilagen bearbeiten (DOI)	UpdateDomainOfInfluenceAttachmentEntries	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <3. Beilagen>
Fortschritt Beilagen lesen	GetAttachmentsProgress	Wahlverwalter			Wizard step <3. Beilagen>
Stimmregister Verwaltung VoterListService					
Stimmregister Liste lesen	List	Wahlverwalter			Wizard step <4. Stimmregister>
Stimmregister Liste bearbeiten	UpdateLists	Wahlverwalter			Wizard step <4. Stimmregister>
Politisches Geschäft zuweisen	AssignPoliticalBusiness	Wahlverwalter			Wizard step <4. Stimmregister>

Zuweisung Politisches Geschäft aufheben	UnassignPoliticalBusiness	Wahlverwalter			Wizard step <4. <i>Stimmregister</i> >
Stimmregister Import VoterListImportService					
Stimmregister manuell importieren	POST: /v1/voter-list-import (<i>REST API</i>)	Wahlverwalter	IsDomainOfInfluence Manager	The manual import of eCH-0045 is forbidden if the electoral registration connection (VOTING Stimmregister) is enabled for the domain of influence. Only the responsible authority of the contest is authorized to activate manual uploads for individual DOIs.	Wizard step <4. <i>Stimmregister</i> >
Stimmregister Import lesen	Get	Wahlverwalter	IsDomainOfInfluence Manager		Wizard step <4. <i>Stimmregister</i> >
Stimmregister Import löschen	Delete	Wahlverwalter	IsDomainOfInfluence Manager		Wizard step <4. <i>Stimmregister</i> >
Stimmregister Anbindung ElectoralRegisterService					
Verfügbare Filter lesen	ListFilters	Wahlverwalter && SR:Reader	VOTING Stimmregister Authorization Model (Data Access Authorization)		Dialog <i>Stimmregister</i> abrufen (1/2)

Filter Metadaten lesen	GetFilterMetadata	Wahlverwalter && SR:Reader	VOTING Stimmregister Authorization Model (Data Access Authorization)		Dialog <i>Stimmregister abrufen (1/2)</i>
Filter Versionen lesen	ListFilterVersions	Wahlverwalter && SR:Reader	VOTING Stimmregister Authorization Model (Data Access Authorization)		Dialog <i>Stimmregister abrufen (1/2)</i>
Filter Version lesen	GetFilterVersion	Wahlverwalter && SR:Reader	VOTING Stimmregister Authorization Model (Data Access Authorization)		Dialog <i>Stimmregister abrufen (1/2)</i>
Neue Filter Version importieren	CreateVoterListImportWithNewFilterVersion	Wahlverwalter && SR:Manager && SR:ApiExporter	IsDomainOfInfluence Manager && VOTING Stimmregister Authorization Model (Data Access Authorization)		Dialog <i>Stimmregister abrufen (2/2)</i>
Stimmregister mit neuer Filter Version aktualisieren	UpdateVoterListImportWithNewFilterVersion	Wahlverwalter && SR:Manager && SR:ApiExporter	IsDomainOfInfluence Manager && VOTING Stimmregister Authorization Model (Data Access Authorization)		Dialog <i>Stimmregister abrufen (2/2)</i>
Generierung Stimmrechtsausweise Wahlkreis DomainOfInfluenceVotingCardService					
Konfiguration lesen	GetConfiguration	Wahlverwalter	IsDomainOfInfluence Manager		Wizard step <5. Gut zum Druck>
Konfiguration aktualisieren	SetConfiguration	Wahlverwalter	IsDomainOfInfluence Manager		Wizard step <5. Gut zum Druck>

PDF Preview lesen	GetPdfPreview	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <5. Gut zum Druck>
E-Voting ContestEVotingExportJobService					
Job lesen	GetJob	Wahlverwalter	IsContestManager		Wizard step <4. E-Voting>
Job erneut versuchen	RetryJob	Wahlverwalter	IsContestManager		Wizard step <4. E-Voting>
Druckauftrag VotingCardGeneratorJobsService					
Aufträge lesen	ListJobs	Wahlverwalter Auftragsmanager	IsDomainOfInfluenceManager		Wizard step <6. Druckauftrag> Print Job Management [Jobs]
Aufträge erneut versuchen	RetryJobs	Wahlverwalter	IsDomainOfInfluenceManager		Wizard step <6. Druckauftrag>
Nachdruck ManualVotingCardGeneratorJobsService					
Manuelle Jobs lesen	List	Wahlverwalter	IsJobOwner && IsDomainOfInfluenceManager		Wizard step <7. Nachdruck>
Manueller Job erstellen	Create	Wahlverwalter	IsDomainOfInfluenceManager	By creating a manual voting card this service implicitly returns the PDF as part of the gRPC response.	Wizard step <7. Nachdruck>
Stimmjournal VotingExport					
Stimmjournal exportieren	POST: /v1/voting-export (REST API)	Wahlverwalter	IsDomainOfInfluenceManager	Available voting export types: Abstimmungsjournal, Abstimmungs Statistik,	Wizard step <8. Stimmjournal>

				Statistik nach Konfession	
Aufträge PrintJobService					
Druck Job lesen	Get	Wahlverwalter Auftragsmanager			Print Job Management [Jobs]
Druck Jobs lesen	List	Wahlverwalter Auftragsmanager			Wizard step <5. Übersicht> Print Job Management [Jobs]
Generierte Stimmrechtsausweise lesen	ListGenerateVotingCardsTriggered	Wahlverwalter			Wizard step <5. Übersicht> Dialog Gut zum Druck zurücksetzen
Status zurücksetzen	ResetState	Auftragsmanager		The order manager has no restriction for the jobs accessibility and thus, may manage orders for different tenants.	Print Job Management [Jobs]
Prozessstatus starten	SetProcessStarted	Auftragsmanager		The order manager has no restriction for the jobs accessibility and thus, may manage the state of orders for different tenants.	Print Job Management [Jobs]

Prozessstatus beenden	SetProcessEnded	Auftragsmanager		The order manager has no restriction for the jobs accessibility and thus, may manage the state of orders for different tenants.	Print Job Management [Jobs]
Prozessstatus abschliessen	SetDone	Auftragsmanager		The order manager has no restriction for the jobs accessibility and thus, may manage the state of orders for different tenants.	Print Job Management [Jobs]
Stimmrechtsausweise Export Job VotingCardPrintFileExportJobService					
Export Jobs lesen	List	Auftragsmanager			Print Job Management [Jobs]
Jobs erneut versuchen	Retry	Auftragsmanager			Print Job Management [Jobs]
Rechnungen AdditionalInvoicePositionService					
Verfügbare Materialien lesen	ListAvailableMaterial	Auftragsmanager			Print Job Management [Invoices]
Zusatzpositionen lesen	List	Auftragsmanager			Print Job Management [Invoices]
Zusatzposition erstellen	Create	Auftragsmanager			Print Job Management [Invoices]

Zusatzposition aktualisieren	Update	Auftragsmanager			Print Job Management [Invoices]
Zusatzposition löschen	Delete	Auftragsmanager			Print Job Management [Invoices]
Rechnung exportieren	POST: /v1/invoice-export (<i>REST API</i>)	Auftragsmanager			Print Job Management [Invoices]