



# VNClagoon Backend Technologies

Professional backend components and  
platforms for true scalability.





# VNCdirectory

Full-blown directory tools for all VNClagoon applications

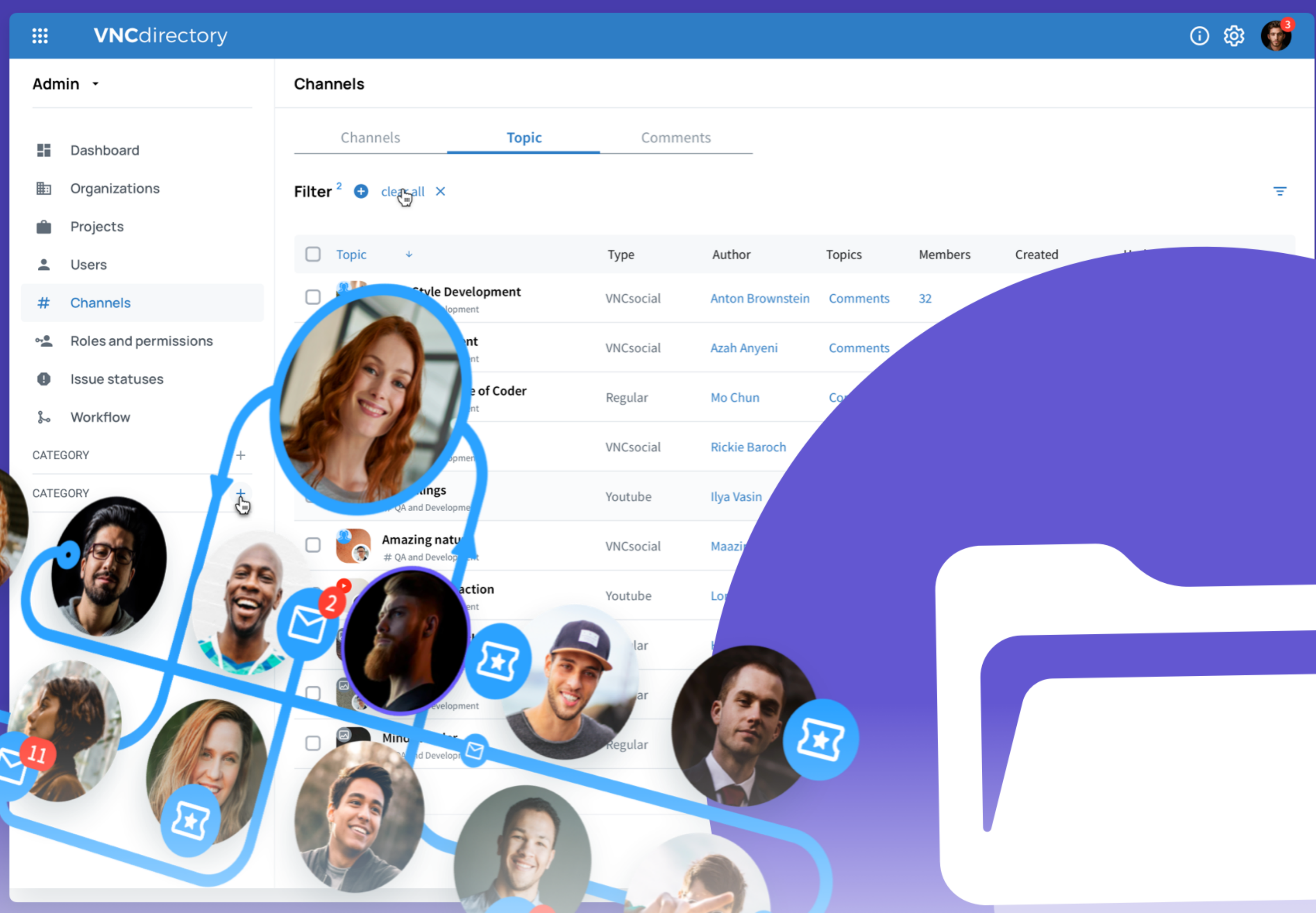
VNCdirectory is the professional directory service for VNClagoon.

VNCdirectory enables the full VNC software stack to be used with Single-Sign-On (SSO) and one set of credentials. With VNCdirectory, the creation and management of new users boils down to a few clicks in one centralized admin-interface in contrast to adding the user in each application. It provides user provisioning procedures for all VNClagoon products, also integrated with external directories.

Users can be managed in organisations, departments and teams with granular roles and permissions.

The VNClagoon Start Page, from where you can navigate to the VNClagoon products you are subscribed to, is also managed within VNCdirectory.

Optionally, VNCdirectory includes an ITIL-based Helpdesk module, with which you can manage your VNClagoon support tickets professionally.

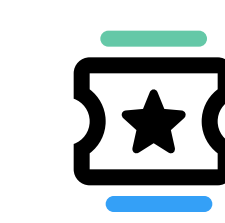






## The professional directory service for VNClagoon

- Single-Sign-On to all VNClagoon products
- Single-Log-Out
- 2-Factor Authentication
- integration with directory services
- user management
- exchange authentication data between VNClagoon products
- user provisioning
- syncing clients
- syncing passwords
- directory schemas

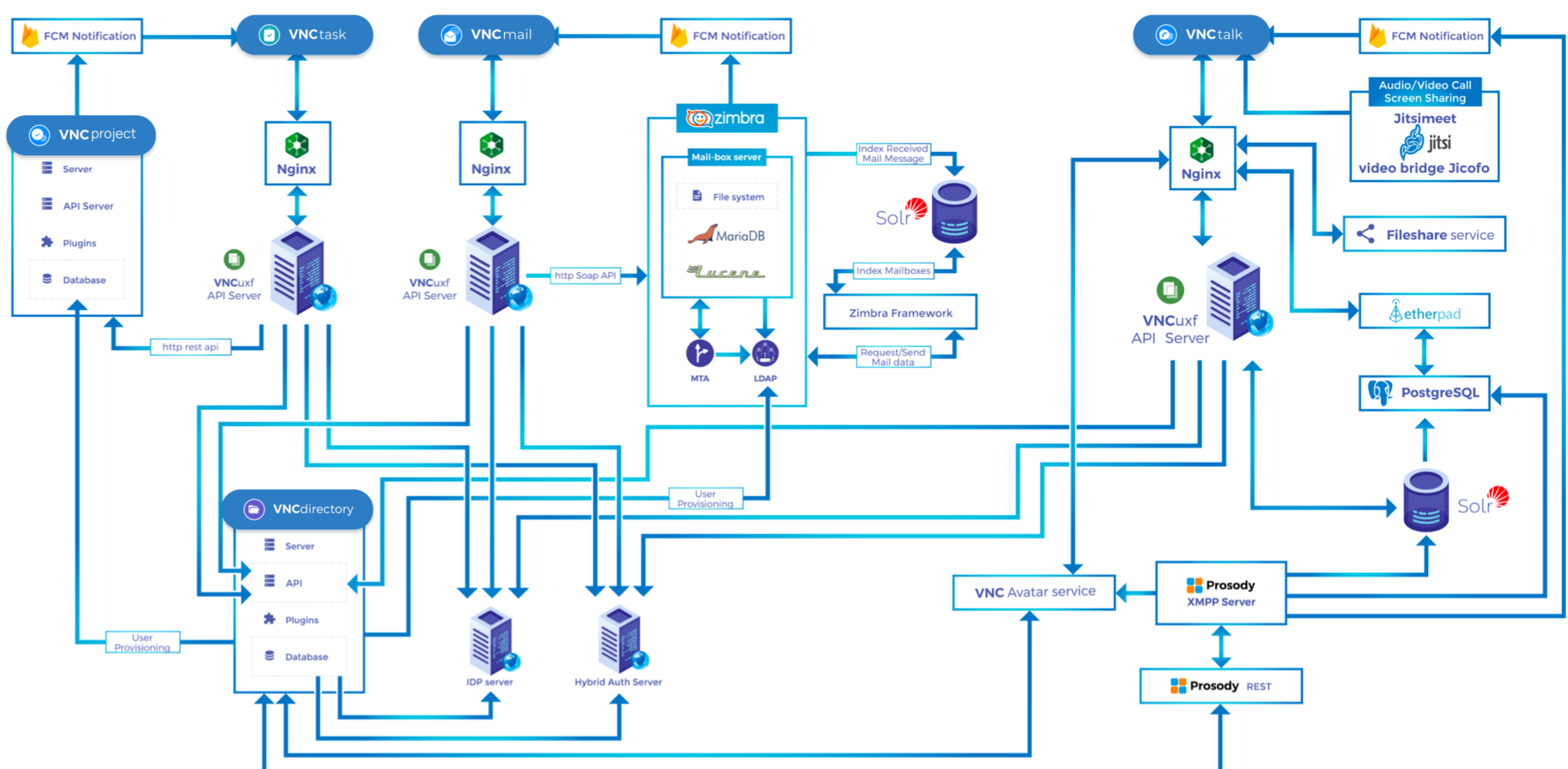


### Secure Account Management

All VNClagoon accounts are managed within one secure backend.

## VNCdirectory Architecture

This Architecture Chart provides a comprehensive overview of the architecture of the VNCdirectory software system, the integrated products and components, databases, servers, interfaces and services.







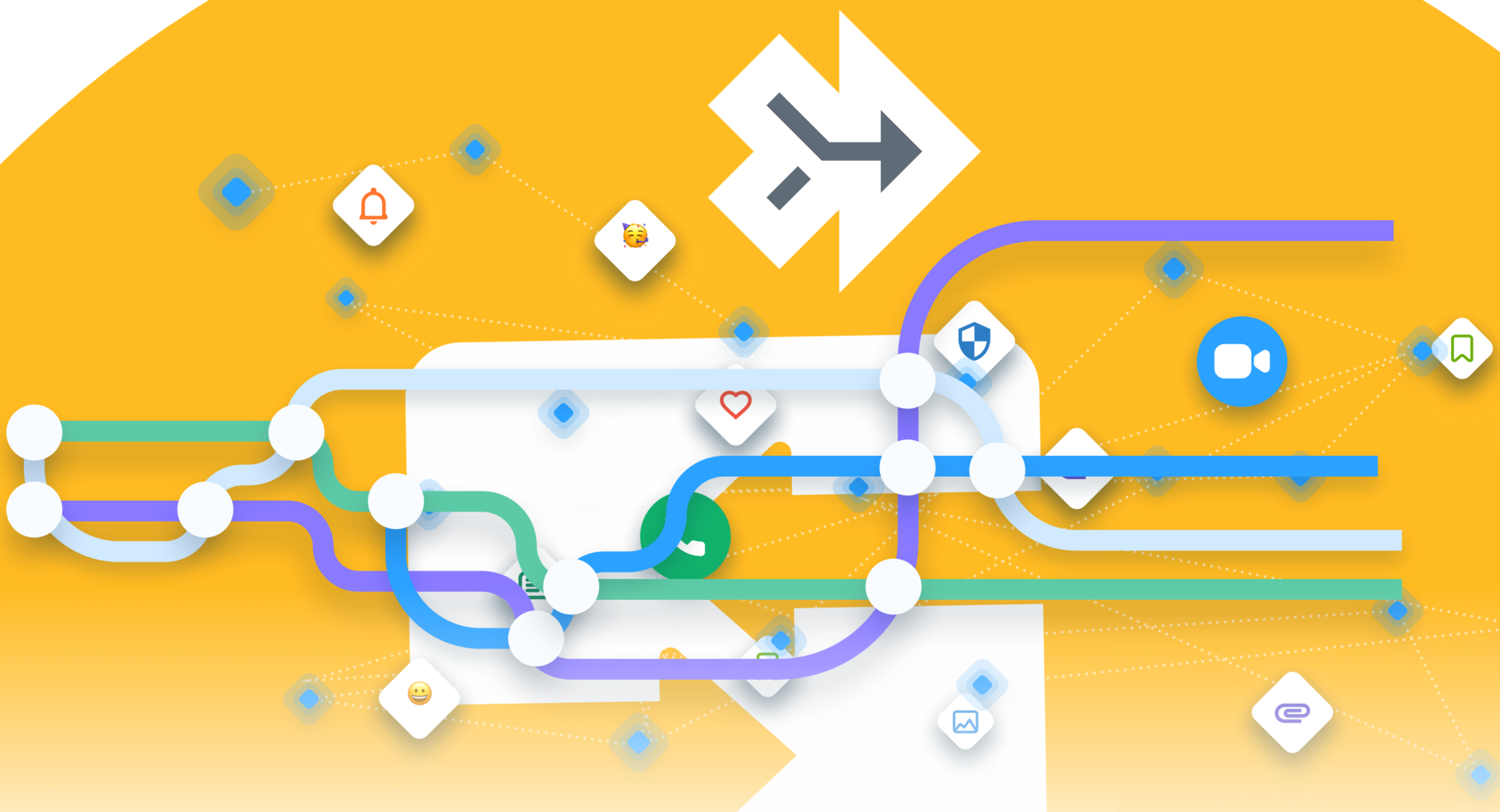
# VNCaxf

The enterprise backend framework for  
VNClagoon

VNCaxf stands for Application Exchange Framework and is the backend framework of VNClagoon, which consists of services and protocols.

This enterprise framework has the aim to integrate the applications in our stack with the following effects:

Reutilization of data between any application through mutual synchronization and referencing, consistent interfaces to have access to any data out of any application, exchange/linkage of data between several sites, open for 3rd party developments of random clients and interfaces to other systems.







# The VNClagoon Application Exchange Framework

The VNClagoon middleware is a powerful solution that enables easy customization, extension and automation of VNClagoon environments. Its open, modular architecture makes it easy to extend with numerous functionalities, and to integrate it with virtually any existing system environment. The utilization of standard interfaces significantly reduces implementation time.



## Unique, persistent URL for each item

Mailbox, Mail, Appointment, Calendar, File, Contact, your fridge, etc.



## Site-specific Data Modelling

Independent from the data model in the back end applications.



## VNCdirectory

Fine grained per-item and per-operation access control.



## Vertical data Integration

Objects of the same type from multiple instances of the same application as a unified collection.



## Simple & homogeneous operations on all nodes

Add child, Delete node, Modify node.



## WebSocket & HTTP Interface

Providing communication channels .



## Extendable with New Nodes

Open for 3rdParty extensions and clients.



## Dynamic Frontend

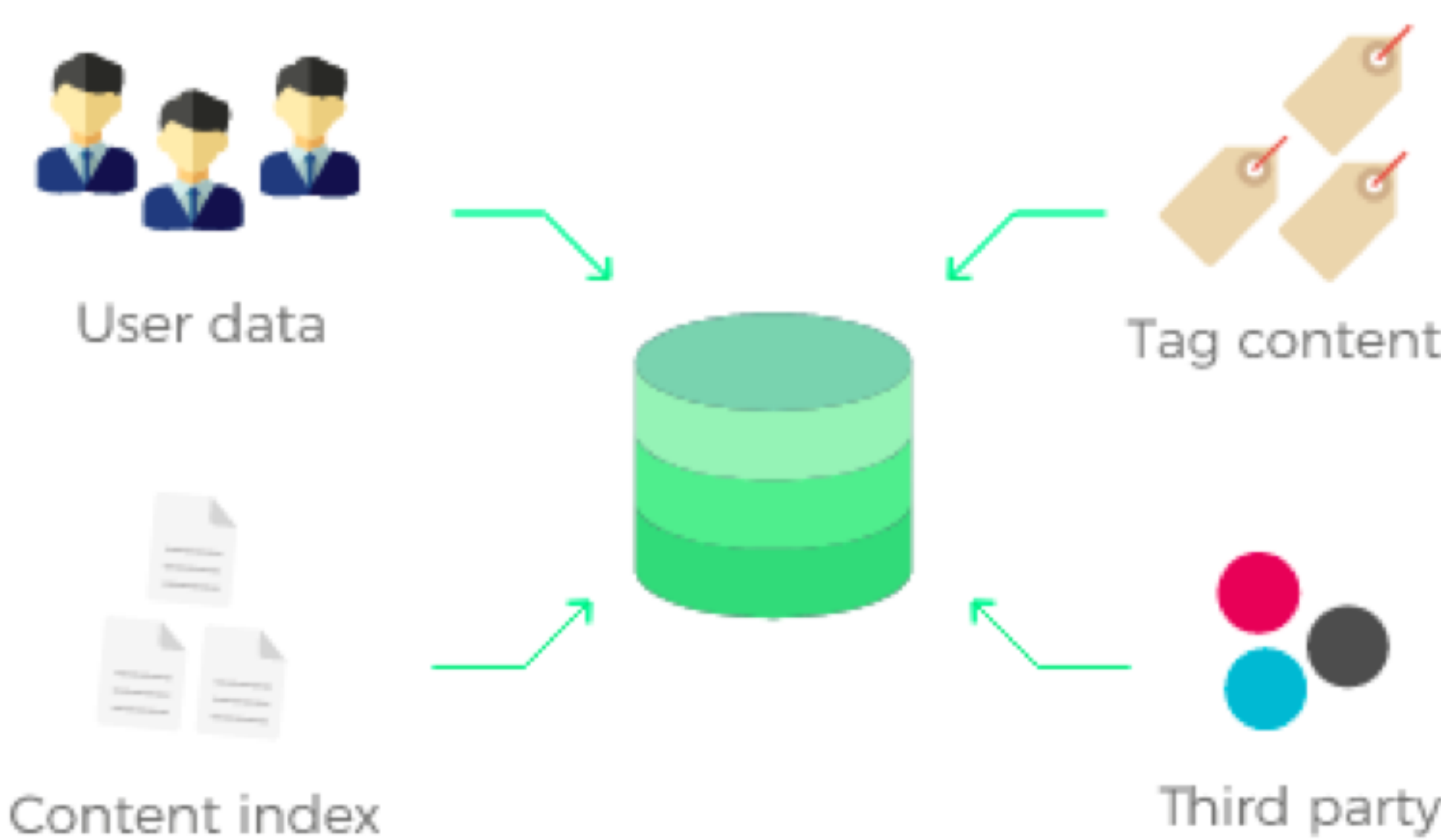
For simple changes in the data model no need to change the corresponding clients.



## Search operations at any point

Supported by VNClagoon Advanced Search

**VNCaxf** – the application exchange framework.



### Advantages:

- ✓ seamless product integration on middleware layers
- ✓ meta data and content management
- ✓ scalable without limits





# VNCTrustbase

The framework for encrypted email communication

VNCTrustbase is a framework for secure communication, based on VNCmail. It enables your organization to establish tap-proof, closed communication groups, integrate legally binding digital signatures and end-to-end encryption for email messages and unequivocally identify clients using Web RTC.

The strict utilization of Commercial Open Source components guarantees you full transparency and the protection of your existing investments.

VNCTrustbase includes all components needed for secure communication in organisations and enterprises – and is fully customizable to meet your specific requirements.

The framework's modular architecture enables IT managers to limit implementation to only those components needed at one moment – with the option to extend its functionality easily at any time.







## Integrated. Modular. Secure.

VNCtrustbase provides secure communication channels which can be adapted to highly complex security requirements. Based on the VNClagoon Communication & Collaboration Suite with its state of the art software components, it enables the setup of closed communication groups with strong data leakage prevention and a centralized management of users and access rights.



### Secure Communication

Secure communication channels which can be adapted to highly complex security requirements.



### Zero Footprint Technology

Can be used on any internet-enabled device and significantly reduces the security risks.



### Secure e-mail Gateway

Secure end-to-end encryption for your email messages when using external email clients.



### Flexible Interfaces

Can be integrated with any existing IT environment due to standard interfaces and APIs.



### VNCmail Client

Enterprise-Class E-Mail, Calendar and Collaboration solution with outstanding functionality.



### Multi-Level Registration

Trustful communication by unequivocally inking a user's identity to its digital counterpart.



### Transparent Source Code

Can be audited for compliance policies, enables customization to meet specific requirements.



### Datacenter of your choice

On Premise or with your trusted hosting provider.



### End-to-End Encryption

Encrypts when data is stored, sent and received, covering the entire route of transmission.

Closed communication groups make sure that messages can only be exchanged between authorized partners. That way, they provide excellent protection from unwanted leaks of information within and outside an organisation.



“VNC challenges the software giants that are oppressing the market with their expensive, inflexible and uninventive proprietary solutions. It’s time for open-source applications to finally replace them. We use VNC’s collaboration tools ourselves, including VNCtalk and, most recently, VNCchannels. The tools have made the transition to working from home extremely easy. The comprehensive VNClagoon product suite is a real highlight in terms of functionality and operation.”

Alain Blaes, Managing Director of PR-COM Beratungsgesellschaft für strategische Kommunikation mbH

**PRCOM**

“The federal state church intranet should strengthen communication and cooperation within the state church. The basic aim is to provide all full-time employees and volunteers of the regional church with access to an innovative, modern and unified communication and collaboration infrastructure. The VNClagoon products are particularly well suited for this, because they allow us as a state church – in addition to the many functionalities provided – the possibility of customization options to individual needs within our church. “

Tabea Langguth, Project Manager  
Landeskirchenweites Intranet, EKBO

**EVANGELISCHE KIRCHE**  
Berlin-Brandenburg-schlesische Oberlausitz

“VNC and DFB GmbH have been working together intensively for many years. We want to continue and expand this. The DFBnet mailbox developed and implemented by VNC has enormously accelerated and simplified our internal communication. With this, we see ourselves well prepared for future requirements.”

Steffen Iredi, authorized signatory at  
DFB GmbH and responsible Director  
Technology & Operations



“My team and I are very thankful for being able to count on the professional and sophisticated VNC team. VNC has supported us with a series of important projects, always exceeding our high expectations.”

Marius Hjelset, Project Head Hosted  
Services, Vodafone Group

**vodafone**





# Thank you for your Interest!

VNC – Virtual Network Consult AG is a leading developer of open source-based enterprise applications and positions itself as an open and secure alternative to the established software giants. With VNClagoon, the organization with its global open source developer community has created an integrated product suite for enterprises, characterized by high security, state-of-the-art technology and low TCO. VNC's customers include system integrators and telcos as well as large enterprises and institutions.

**Book a meeting**

[calendly.com/vnclagoon](https://calendly.com/vnclagoon)

**Contact Us**

[info@vnc.biz](mailto:info@vnc.biz)

