



Whitepaper: VNC Clagoon

Key Insights on the Leading Secure Unified
Communication & Collaboration Suite

1 VNClagoon strategy

VNClagoon is a suite of leading, open source based, tightly integrated secure communication and collaboration products. All best-of-class core components used by VNClagoon have been - in parts heavily - modified by VNC to meet the expectations of professional usage scenarios.

But VNClagoon is much more. VNClagoon is a new way of doing software business.

A quick summary of what we mean by that:

- VNClagoon means software development innovation:
It is a new software development methodology.
And it is a new approach to efficiently develop software in virtual environments with teams spanning the globe.
And it is also a technical approach to automate the software development process as much as possible by reducing all information to the "atomic kernel", which is a "ticket". Everything is related to a ticket: user stories, specifications, road map and version planning, software code management, robot testing, release management, workload management of teams, time sheets, cost control and so on.
- VNClagoon means software technology innovation:
In VNClagoon, we totally separated business logic and UI.
We use VNCfluid as information aggregation hub.
Our top-notch search allows index based fast retrieval of any data stored in any product.
VNClagoon is open software because we believe that closed software is dead.
- VNClagoon means business model innovation:
We enable co-development based on VNCfactory for our customers and partners. For new components developed by partners can also offer revenue share models.
With best of class base technologies and the products / extensions developed by us and our partners we are able to outperform single-minded vendors who are trying to reinvent the wheel.

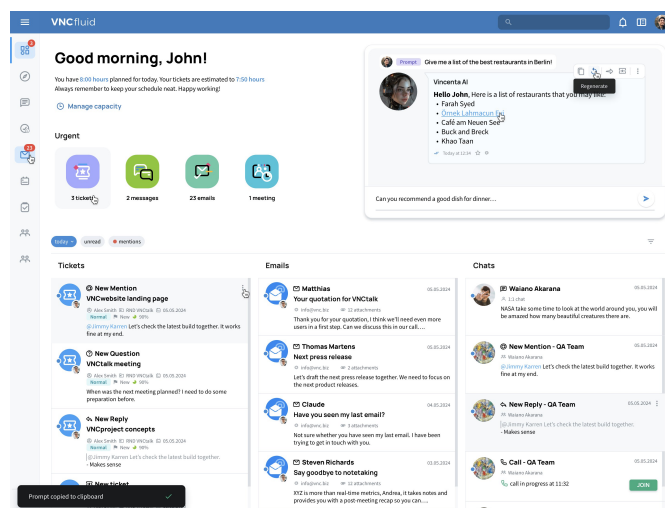
In our experience, being open source in itself won't win any projects. As with all innovative products and technologies, we have to be better than legacy products as well as the competition.

That is the reason why we don't stop at merely offering one single or a few products but aim for the real big thing.

2 VNClagoon products

The VNClagoon communication & collaboration suite comprises the following components:

- VNCfluid - dashboard
- VNCTalk - messenger, audio, video conferencing, screen sharing and more
- VNCchannels - content based collaboration
- VNCmail - scalable email server
- VNCcalendar - global calendar
- VNCcontacts - global address management
- VNCtask - professional task management
- VNCproject - professional project management (scrum, agile, waterfall), cost control, workload management and much more
- VNCcrm - customer relationship management
- VNCsafe - file sync and share
- VNCoffice - docs and spreadsheet based collaboration

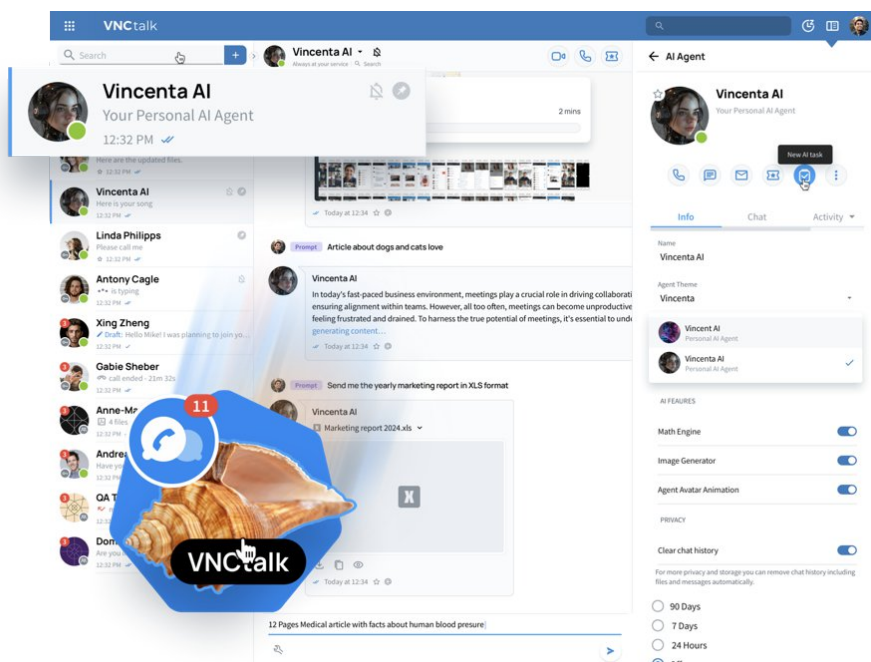


Please find more information on all our products here: www.vnclagoon.com

All of these components are not "simple feature" products. Each individual product is more than able to compete with other players in the market. Let's look at VNCTalk for instance.

2.1 VNCTalk

The goal of [VNCTalk](#) was to offer security and privacy-focused customers, such as those in finance, healthcare, and government sectors, a secure alternative other tools, which are viewed as a security risk. At the same time, VNCTalk aims to provide users with similar—if not superior—functionality and user experience



Look at some of the benefits VNCtalk is providing to our customers:

VNCtalk - unique selling proposition

VNCtalk at a glance.

- | | |
|---|---|
| <ul style="list-style-type: none"> ✓ Text chat:
1:1 or 1:n text chat – all you need is a browser. ✓ Audio and videoconferencing:
1:1 or 1:n video chat. Perfect audio and image quality. You will be amazed by this kind of virtual reality! Save travel costs and get hold of your team with one click. ✓ Screen sharing:
Screen Sharing in your browser – no extra tool or plugin required. Pure power of WebRTC. ✓ File transfer between users:
Send any file formats to your chat partners. | <ul style="list-style-type: none"> ✓ Collaborative document creation and editing:
Amazing way to brainstorm, discuss and collaborate on documents. With VNCtalk Enterprise Edition you even gain access to VNCoffice – the full feature Office Suite. ✓ Automatic contact list population:
Get access to your distribution lists and work groups thanks to the seamless integration with VNCmail. ✓ Works on mobile devices:
No need to use a laptop or desktop. VNCtalk runs on any browser and as an App. |
|---|---|

VNCtalk USPs:

- entirely open source based
- best of breed, best of class base technologies
- broad feature set (messenger & collaboration)
- highly customizable (UI + UX !)
- OEM / white labelling enabled
- integration with 3rd party products through open APIs
- one code base for all OS & devices (Angular & Cordova)
- most modern UI, similar to WhatsApp
- **VNCiom** - inter organizational messenger; distributed web communication across orgs / domains
- powerful, Enterprise grade DB & Index Server in the background
- fully transparent RESTful API
- notification like @mention, broadcast, missed message by mail digest

... for more features —> refer to [VNCtalk battle card](#)

2.2 VNCchannels

[VNCchannels](#) is your place to store data, to search and retrieve information and to generate knowledge – collaboratively!

Bring your community together and collaborate with your team productively. Share ideas, discuss animatedly, come to conclusions, reach decisions and move forward with a common purpose. This is how innovation happens!



2.3 VNCmail

Let's talk about another product: [VNCmail](#). We still believe that Zimbra is the top groupware system on the market. But we are not convinced that the current user interface as well as some of its embedded components (such as the Tasks functionality and the Chat Client) help to successfully compete with Microsoft and Google.

So we decided to develop our own frontend client based on one of the leading frameworks, Angular. By using some other great technologies we are able to deliver - based on a single source code base - various UI variations of VNCmail as:

- Web client (all common browsers)
- Desktop Client (Windows, Mac, Linux)
- Apps for iOS and Android (including offline features)

We strongly believe that this is the kind of technology that enterprises, governments and other

highly professional customers expect.

The VNCmail user experience is following the Google Material Design approach, thus we usually don't need any further user education, training or related requirements before rolling out and hereby replacing an existing mostly "UI outdated" mail or groupware system.



2.4 VNCfluid

Imagine you are using several VNClagoon products, which are integrated and you're able to switch between them easily. Wouldn't it be really nice, nevertheless, to have one place to go to get a quick overview of what's going on?

This is what VNCfluid is about.



The main features of VNCfluid are:

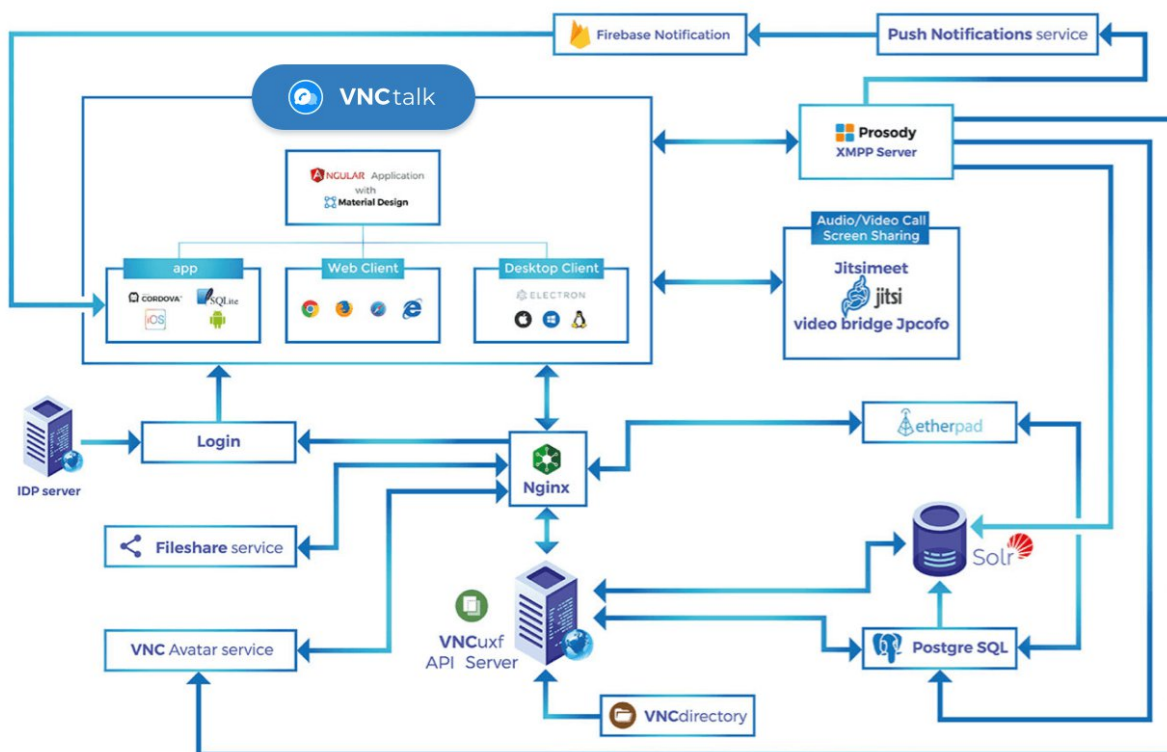
- **Unified Interface:** VNCfluid aggregates different VNClagoon modules (such as VNCmail, VNCtalk, VNCcalendar, etc.) into a single, cohesive interface, making it easier for users to manage communications, tasks, and projects in one place.
- **Real-Time Collaboration:** VNCfluid enables real-time collaboration, allowing users to work together on documents, share files, and communicate via chat or video conferencing without switching between applications.
- **Modular Integration:** One of its key strengths is the ability to integrate different VNClagoon components based on user needs. This modular approach means that organizations can customize their workspace by adding or removing tools as required.
- **Customizable Dashboards:** Users can create personalized dashboards with widgets to keep track of their most important tasks, messages, or ongoing projects, providing quick access to critical information.

3 VNClagoon technology

3.1 VNClagoon Collaboration Suite - backend architecture and components

Besides the front-end components, VNClagoon comes with a smooth authentication and / or registration backend to easily onboard new users - in case they are not automatically provisioned.

Take a look at the VNCtalk architecture, which, while complex, is highly scalable and designed to meet enterprise-level requirements.



The backend components in use by VNClagoon are called VNCaxf (VNC application exchange framework), which is a backend stack consisting of:

- VNCdb (PostgreSQL high power database)
- VNCindex (Solr Enterprise search)
- VNCmiddleware (business logic abstraction)
- VNCdirectory (internal & external user management component, contact management with CRM functionalities)

Our advanced backend architecture offers the advantage of enabling seamless workflows between applications while also allowing integration with customers' existing legacy systems and products.

3.2 VNClagoon frontend technologies

To achieve our most ambitious goal, which is the seamless integration of the VNClagoon applications, we had to develop our own frontend technology, which we call VNCuxf.

VNCuxf (VNC user experience framework) is the single page web front-end developed by VNC, allowing easy and nearly unrestricted development of customer specific UX (user experience) as well as UI (user interface / visual design) on top of VNClagoon business software products. Customers can differentiate themselves in the market by adding their own look and feel (CD/CI) on top of the set of products they have chosen. Contrary to implementing Microsoft Office 365 or Google Apps, our customers (e.g. Telcos) are not "just another" service provider for these hyperscalers but have the chance to be unique.

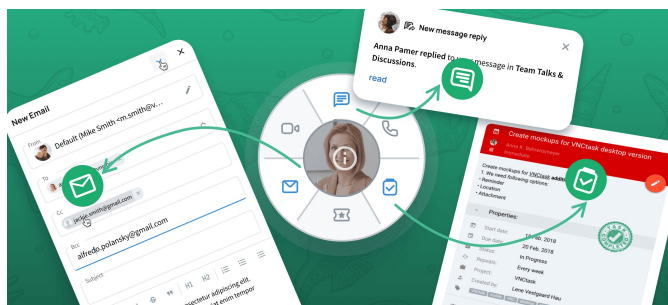
Core advantages / USP of VNClagoon Collaboration Suite:

- State of the art UI, brandable, customizable
- Available for Cloud providers and resellers / ISPs / IT service providers / OEMs
- Most flexible frontend options:
Web Client (all common browsers),
Desktop Client (for Apple, Windows and Linux; with extended offline functionalities),
mobile web client for smartphones and
Apps (for Android and iOS)
- Integration between VNClagoon products on the frontend & backend

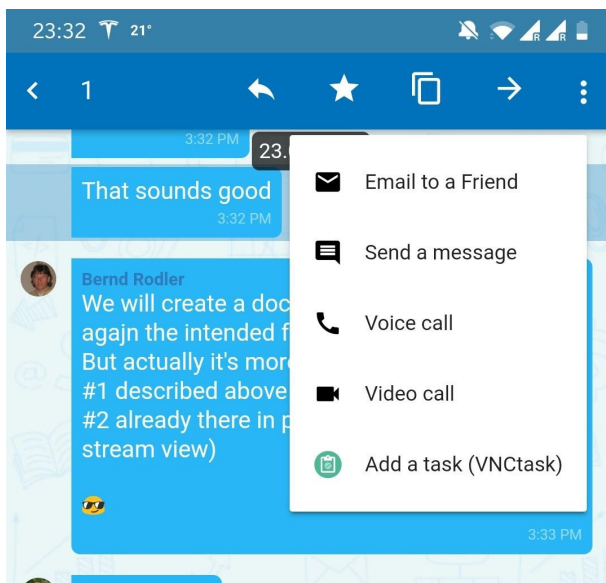
3.3 VNClagoon integration

VNClagoon offers various ways of integration between its components to enable a seamless collaboration suite experience:

- Integration of products with the option to switch between the different products, e.g. in the Desktop Client or in the Apps. For example, just click on the kebab menu in your VNCTalk App and you will see all the VNClagoon products you are subscribed to and you can switch between the Apps (from VNCTalk to VNCmail or VNCtask etc.)
- The VNClagoon **Action Wheel** is a visual interface tool within the VNClagoon suite that simplifies user navigation and interaction by offering quick access to various features and functions. The Action Wheel allows users to easily switch between different VNClagoon modules and tools, facilitating faster and more intuitive use of the platform's communication and collaboration services.



- Integration within the Apps to transcend the functionality of one product: for example, imagine you want to create an appointment from an email in VNCmail: you can simply highlight the email and create an appointment. Or you can start a group chat (VNCtalk functionality) from an appointment (VNCcalendar). Or you can create a task (VNCtask) from an email (VNCmail). This enables you to utilize highly professional collaboration features within VNClagoon!



- Enterprise search integration allows you to search across all subscribed products. We store all relevant information in a super fast Solr index. But you can as well use advanced search options to look up any kind of information in a subset of the products - e.g. just in VNCtalk and VNCmail.
- Integration of notifications and digests across products: for example message digest by email for missed chats in VNCtalk, or VNCtalk broadcast feature for company announcements and important tasks, upcoming appointments or emails with high priority.
- VNCcommander serves as another unique entry point to your VNClagoon collaboration suite: from VNCcommander you can access the stream of your latest emails, chats, tasks, appointments, etc. You can search for all items within the suite. And you can start various collaboration activities with just one click: write a new email, start a new chat, create a new task, and more.
- Meta information like for instance #tags are available in all products referring to one big VNCtag-cloud. It's easy to query all products in all clients to find all items (emails, chat messages, tasks etc.) with a given #tag.

- VNCdirectory allows you to handle internal as well as external contacts in one backend. CRM-like functionalities allow you to further classify your data. Changes of e.g. an address in a contact in VNCTalk will immediately be available in all other products such as VNCtask.
- Backend integration is done via a transparent RESTful API. Each and every VNClagoon component can be enhanced, the UI changed and any content residing in any of the products can be exposed to a specific frontend app or web / desktop client. One sample integration is e.g. VNCfluid.
- All VNClagoon products are managed in the VNCfactory, which is a huge repository built with Jenkins and a number of tools around it. This means that all components, modules, on client and backend side are robot tested to a high degree and deployed via Kubernetes - automatically to a preprod or test environment or packaged and thus ready to be deployed to a live system.

4 Target groups

4.1 VNClagoon for verticals

We have proven that VNClagoon offers unique advantages for a number of verticals, such as:

- Finance
- Healthcare
- Social / charity
- Sports

So, we know what makes the difference in order to meet vertical requirements.

We are able to customize our products on a granular level, we can integrate with various backend systems, we can adapt workflows, user interfaces and much more.

Get back to us for details!

4.2 Why should a Hosting Provider offer VNClagoon?

As a hosting provider you can use VNClagoon products to up-sell to your existing customer base.

Imagine adding real-time communication features to email-only users, for example. You will be able to add additional features from all VNClagoon products and offer enterprise plans as you see fit.

Also in your own brand, as we offer co-branding!

You will be able to compete with hosting options from Google or Microsoft - and you will be able to secure your client base!

Besides, all products are scalable to very large numbers of users, provide backend integration with e.g. provisioning systems, and can be integrated with existing products and infrastructures.

4.3 Why is VNClagoon a good match for ISVs?

With VNClagoon you not only get a best-of-class stack of communication and collaboration products to integrate with your products. You also get the real chance to co-develop new components and add-ons.

We offer co-development with access to the VNCfactory for code management, robot testing, packaging etc.

And we are offering revenue share models for new components developed by partners.

So, it's a real win-win!

5 Related links

Website: <https://vnclagoon.com>

Release Notes: <https://vnclagoon.com/release-notes/>

Downloads: <https://vnclagoon.com/downloads/>

Newsroom: <https://vnclagoon.com/newsroom/>

VNC Blog: <https://vnclagoon.com/blog/>

The VNC Story: <https://vnclagoon.com/the-vnc-story/>

VNC products in the Google Appstore:
<https://play.google.com/store/apps/developer?id=VNC+-+Virtual+Network+Consult+AG>

VNC products in the Apple Appstore:
<https://apps.apple.com/us/developer/vnc-virtual-network-consult-ag/id1321932949>

LinkedIn: <https://www.linkedin.com/company/vnc-ag>

Twitter: <http://twitter.com/VNCbiz>

Youtube VNC channel: <http://www.youtube.com/user/VNCchannel>

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