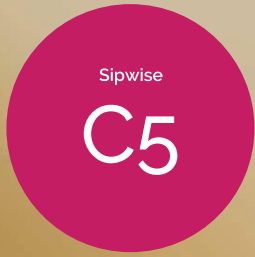




Sipwise

C5



Class 5 Softswitch for Voice over IP Services



Sipwise C5 Softswitch at a Glance

Sipwise Class 5 Softswitch is a turn-key, carrier grade VoIP Softswitch and as such the core system of our unified communication solutions. It perfectly fits the requirements of fixed, converged and wireless network operators and serves as an enabler platform for over-the-top services. The Class 5 switch is highly scalable. Thus, it can handle more than one million subscribers, for both, the residential and business markets.



What the Sipwise Class 5 Softswitch Can Do

The Sipwise Class 5 is, out of the box, a highly scalable SIP Softswitch which serves the needs of many residential and business voice solutions. Due to its modularity, the Sipwise Class 5 can be easily expanded by simply enabling various software modules, which are already part of the initial deployment.

With these modules the C5 can be converted into a powerful cPBX platform. It can also act as termination platform for mobile SIP clients, which can be deployed on 3G/4G/5G mobile phones. With that, the Sipwise C5 is a great choice for those service operators who want to step into the world of Fixed Mobile Convergence (FMC).



Architecture and System Design

The open architecture of the C5 is based on standardized protocols and open APIs (Application Programming Interfaces). This allows fast and cost-effective deployments of various IP Telephony and "Rich Communication" services like Video Telephony, Presence/IM and WebRTC based Applications and Services.

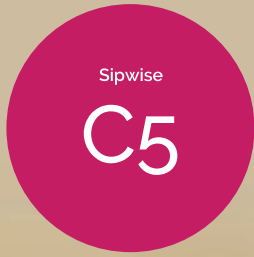
These APIs and protocols do not only provide typical end-to-end services (e.g buddy lists, messaging, telephony etc.), but also support innovative push-services as well as find-me/follow-me solutions.



Deployment

The C5 is a carrier grade NGN platform that can be deployed at a single site, or as a multi-site, geo-redundant system. In case of node failure, call continuation and Call Data Record (CDR) consistency are guaranteed via data synchronization over dedicated network links. Voice peerings can be established either by SIP trunks straight from the C5 or via 3rd party SS7/TDM gateways towards the PSTN network.

With a powerful configuration framework, well documented interfaces and the use of fully standardized protocols our platform offers the shortest time to market in the industry. The Sipwise C5 can also be deployed as a fully virtualized solution, or can act as an Application Server in an IMS environment.



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Performance

On one proxy node, 100 call attempts per second (CAPS) with a maximum of 500 registration attempts per second (RAPS) are supported. This results in roughly 100,000 provisioned subscribers and about 4,000 concurrent calls (precise performance figures must be calculated based on the traffic model of the customer).



Features

Sipwise C5 is offering an extensive number of features for end users but also for operators and system administrators.

Customer Features

- Voice and Video Telephony
- XMPP and instant messaging
- Voice/IM conferencing
- Interactive Voicebox and Voice-to-mail
- Fax-to-mail, Mail-to-fax, Webfax and Fax Clients
- Serial and Parallel Call Forking
- Periodic, time-based Call Forwarding (CFU, CFB, CFNA, CFT, CFS)
- Call hunting
- Malicious Call Identification (MCID)
- Inbound and outbound Call Blocking and anonymous Call Rejection
- CLIP/CLIR, DDI, DID and Extension Dialling
- Call recording
- SMS send/receive/forward via SMPP
- 3rd party call control through a Call Admission Control server

Operator Features

- Access control for SIP calls (black list, NCOS, IP address restriction)
- LNP (local LNP DB or external LNP DB via LNP API)
- Emergency number mapping
- Peer probing
- SIP loop detection
- Calling card application
- Invoices/invoice templates
- Vertical service code interface
- LCR



Modularity and additional Components

Our C5 platform is an "all-in-one" system with the ability to add further components and modules, providing enhanced features and functionality, like transcoding, SIP header manipulation and SIP traffic capture capabilities. To manage the platform, various operator and customer facing web interfaces are essential elements of the Sipwise C5 platform.

The appearance of the user interfaces can be customized, supporting the look and feel of the corporate identity. Multiple languages are supported through language packs including resource files, localized images and voice prompts.

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Customer Self-Care (CSC) Interface

With the webRTC based Customer Self-Care panel, the customer will be able to configure his services in an easy and intuitive way. Cutting edge services like browser-based voice and video calls, collaboration and conferencing services are lifting the user experience to a next level.



Administrator Web Interface

The Administrator Web Interface provides system administrators and customer support agents with access to the platform's configuration and troubleshooting applications through a standard Web browser.



Reseller Web Interface

The hierarchical, object-oriented interface of the Sipwise C5 gives operators the possibility to offer "white level" services to resellers. Resellers can perform administrative tasks within their reseller realm, with the option, to give the platform owner access to the various interfaces for operational support.



Provisioning

Well defined interfaces allow for customization and easy integration into existing IT infrastructure. Standardized interfaces like REST/ JSON-HAL simplify the integration with third party applications and ensure a minimum time to market. For security reasons, all requests to the provisioning system are encrypted and authenticated.



Billing and Rating Engine

By using the SIP routing engine as data source, a reliable and consistent way of creating Call Detail Records (CDR) can be ensured. An up-to-date balance can be provided to subscribers at the precision of millisecond, by using the real-time rating engine. This works for both, the prepaid and post-paid billing model.



Monitoring and Lawful Intercept (LI)

Sipwise C5 provides an SNMP interface to monitor the health of every single element and service of the system. Besides polling low-level metrics like CPU utilization, memory/disk-usage and the status of all running applications, also high-level black-box tests are performed by routing SIP messages via sub-systems to detect lock-ups and other service outages. Further to that, the Sipwise C5 comes with an ETSI and 3GPP compliant LI interface.



Need help? Contact us!

sales@sipwise.com

or give us a call

+43 / 1 / 252 15 23

www.sipwise.com