

Fact Sheet







Sipwise C5 Softswitch At a Glance

Sipwise Class 5 Softswitch is a turn-key, carrier grade VoIP Softswitch. It is the core system of our unified communication solutions. It is developed specifically for fixed, converged and wireless networks, as well as over-the-top operators, who support different types of access technologies (e.g. Cable, xDSL, FTx, Wifi and WiMax). The Class 5 switch is made to be scalable per the size of your business. Thus, it can handle different business levels, from a view thousand subscribers up to several millions, whether it is for residential or business market.

What the Sipwise Class 5 Softswitch Can Do

With the Sipwise Class 5 Softswitch, internet and telephony service providers will be able to offer excellent real-time communication services, such as cloud PBX, voice and video calls, voice conferences, instant messaging or presence. This allows your clients to truly tap into the world of unified communications with just one software installation from Sipwise. This also makes subscribers able to use voice over IP (VoIP) calls on their mobile phones. The system can be further expanded to cater the needs of network operators and providers with other products like Sipwise Class 4 and Sipwise CPBX.

Platform Design

The design focuses on easy manageability while still offering cutting edge next generation communication features.

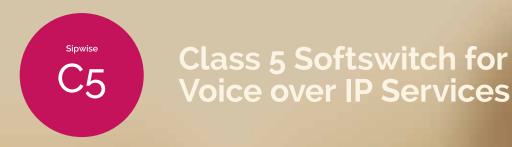
Our C5 platform provides an "all-in-one" system for fast and cost-effective deployment of various IP Telephony and "Rich Communication" services. All components of the C5 appliance are fully compliant to SIP and XMPP standards.

Deployment

In an NGN architecture, the C5 is a fully featured platform that can directly be connected to voice carriers using SIP trunks, to existing class-4 and class-5 soft-switches and media gateways, or to the PSTN via SS7 using Sipwise C4, which passes calls from and to the circuit switched network.

With a powerful configuration framework, well documented interfaces and the usage of fully standardized protocols our platform offers shortest time to market in the industry. The C5 platform can also be efficiently integrated in any IMS environment.





Modules

The platform integrates call routing services, Back-to-Back User Agent functionality, pre- and post-paid billing, monitoring and reporting systems and customer Web-interfaces designed for implementations in mixed VoIP/PSTN and pure VoIP Telecom Ecosystems.

Performance

Sipwise C5 supports 50 call attempts per second (CAPS) resulting in 180.000 busy hour call attempts (BHCA) per 50.000 subscribers, which are handled by one pair of proxy nodes in the system.

High Availability

High availability is guaranteed by services and data being available on each node of a pair in active and standby mode respectively. Synchronization runs via dedicated network link between the nodes of a platform pair. Signalling and media connections are preserved in case of fail-over.

Features



Service

Sipwise C₅ is designed to provide Next Generation Services for residential and business customers. Its features include:

- Voice and Video Telephony
- Instant Messaging (IM) and Presence
- 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)

- Inbound and outbound Call Blocking and anonymous Call Rejection
- CLIP/CLIR, DDI, DID and Extension Dialling
- Signalling over UDP, TCP, TLS, WS, WSS
- DTLS-SRTP transcoding for WebRTC bridging
- Source number discriminatory CF
- SMS send/receive/forward via SMPP



CE

Class 5 Softswitch for Voice over IP Services



Architecture

Our open architecture based on standardized protocols allows targeting new business models. By providing open APIs (Application Programming Interfaces), well-established services like Voice/Video Telephony and emerging technologies like Presence/IM and WebRTC can easily be integrated into existing ecosystems.

These APIs and protocols not only provide typical end-to-end services (like buddy lists, messaging, telephony etc.), but also support innovative push-services (subscriptions to online information, which is delivered on demand to soft-phones or mobiles) and find-me/follow-me solutions.



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 architecture of the Sipwise Web Interface also allows operators to offer their services white-labelled to resellers.

Resellers can perform administrator tasks within their reseller realm. The platform administrator may access the reseller interface and reseller data to provide operational support.



Provisioning

Well defined interfaces allow for customization and easy integration into existing IT infrastructure.

Standardized transport protocols like HTTPS and description languages like JSON-HAL simplify integration with third party applications and ensure minimum time to market. For security reasons, all requests to the provisioning system are encrypted and authenticated.



Monitoring

Efficient system monitoring and alerting is critical when providing highly available services to customers.

Sipwise C5 provides an SNMP interface to poll the status of every single element in the system to monitor the health of the platform and the availability of its services. Besides polling low-level metrics like CPU utilization, memory- and disk-usage and the status of all applications running on the platform, also high-level black-box tests are performed by routing SIP messages via different sub-systems to detect lock-ups and other service outages.



Customer Web Interfaces

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

Packs for English, Russian, German, Italian and Spanish are pre-installed. Additional language packs can be easily added.



Billing and Rating Engine

The centralized approach of our Sipwise C5 Platform using the SIP routing engine as data source, simplifies accounting processes and provides reliable and consistent ways of creating Call Detail Records.

By using a real-time rating engine, an up-to-date balance at millisecond precision can be provided to subscribers at any time with both prepaid and postpaid billing models.



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