

CiceroInfra

A Seamless User Experience



CiceroInfra is an integrated mobile VoIP client which leverages the native device applications (dialer and messaging editor) to route voice and SMS over a combination of Wi-Fi and circuit switched networks.

Designed specifically for mobile devices, CiceroInfra enables carriers to offer a totally seamless VoIP service to their corporate and residential customers. It is optimised to securely and intelligently route voice and SMS over the best available network (Wi-Fi, 3G, LTE and circuit switched) based on cost and quality factors.

CiceroInfra delivers significant benefits to carriers including

- ✓ Increased call origination and termination revenues
- ✓ Reduced network access costs
- ✓ Improved service in areas with poor cellular coverage
- ✓ Enhanced customer experience

Next Generation Communications

CiceroInfra delivers the next-generation of voice and messaging with the implementation of the core IMS functions of VCC and SMS over IP.

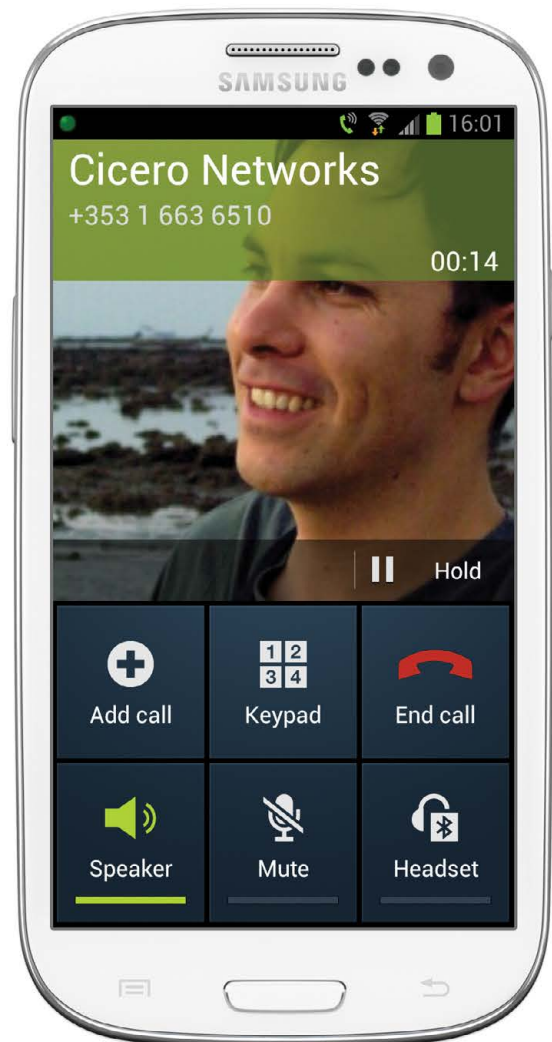
Voice Call Continuity

CiceroInfra uniquely supports voice call continuity (VCC) enabling in-call handover as a user moves between Wi-Fi and circuit-switched networks.

- ▶ Seamless user experience
- ▶ No dropped calls as you move between networks
- ▶ Multiple handover triggers, including signal strength and connection quality

Converged Messaging

- ▶ Use native messaging editor for SMS over IP
- ▶ No change in user behavior
- ▶ Intelligent message routing over IP and circuit-switched domains



CiceroInfra in-call screen

What Makes CiceroInfra Stand Out

- ▶ No change in user experience
- ▶ Wi-Fi/3G/Cellular roaming
- ▶ Seamless in-call handover between Wi-Fi and CS networks
- ▶ Dynamic routing in the handset
- ▶ Single & multi-number services
- ▶ Highly secure – DTLS, TLS, SRTP
- ▶ Superior audio quality
- ▶ Intelligent signal monitoring
- ▶ Multiple wireless bearer networks - Wi-Fi, 3G, LTE, GSM, CDMA

Benefits

Simple, Easy to Use

CiceroInfra is accessed from the native applications, so there is no change in behavior involved. The subscriber uses the handset exactly as before, with CiceroInfra routing traffic optimally over Wi-Fi and cellular networks on their behalf.

Reliable, High Quality Voice Calls

CiceroInfra is a mature and stable client and delivers carrier-grade voice quality across IP and CS connections. It was designed to run on mobile devices with limited capacity and operate in dynamic and unmanaged network environments.

Standards-based, Open, Interoperable Client

CiceroInfra works with the leading SIP & IMS platforms, SBCs, media gateways and IP PBXs. It is also qualified with leading VCC Application Server vendors and Cicero's own VCC AS, Cicero Controller.

Branding

CiceroInfra has a minimal UI footprint but there are minor elements, such as notifications, that can be customised and branded according to a carrier's requirements.

Specifications

SIP Compliance:

Interoperable with all standards-based SIP/IMS platforms

Connectivity:

Wi-Fi, 3G, LTE, GSM, CDMA

Codecs*:

G.711a-law; G.711 u-law; iLBC; GSM; G.729, AMR, SILK, OPUS

* certain codecs incur additional license fees

Features

Telephony (via native dialer)

- ▶ Dial, Hang-up, Redial
- ▶ Call Hold
- ▶ Call Waiting
- ▶ Multiple Calls
- ▶ Short Code Dialing
- ▶ Mute
- ▶ Speaker
- ▶ Last Number Redial
- ▶ Touch Tones (DTMF)
- ▶ Caller ID

Phonebook (via native app)

- ▶ Local Phonebook
- ▶ Call History

Additional Features

- ▶ Subscribe Notify (Indicates contacts subscribed to service)
- ▶ Acoustic echo cancellation/acoustic echo suppression
- ▶ Noise reduction
- ▶ In-call codec re-negotiation
- ▶ Nat Traversal
- ▶ Logging for technical troubleshooting
- ▶ Security and encryption via TLS, DTLS, SRTP

Voice Call Continuity

- ▶ Configurable handover thresholds
- ▶ No thrashing between networks
- ▶ 3GPP TS 24.206

Messaging over IP

- ▶ PDU mode, Text, Multipart
- ▶ Delivery reports
- ▶ Binary SMS (MWI, ringtones)
- ▶ 3GPP TS 24.341; 3GPP2 X.S0048

About Cicero Networks

Cicero Networks is a leading provider of mobile VoIP, converged messaging and video solutions for carriers and communication service providers. Designed to utilise multiple wireless networks including Wi-Fi, 3G LTE, GSM and CDMA, Cicero also support seamless in-call roaming between Wi-Fi and circuit switched networks. Running on the leading OS including Android, iOS and Windows Mobile, Cicero clients are interoperable with the industry leading SIP/IMS platform vendors. For further information visit www.cicronetworks.com

