

## Talkonaut 4.15 for Windows Mobile platform

Talkonaut 4.15 WCE is an Instant Messenger client for Jabber networks (IM networks based on XMPP standard) made to be run on Windows Mobile based devices. It supports many XEP extensions, such as multi-user conferences, file transfer and gatewaying to other well known legacy IM networks, including MSN, Yahoo, ICQ and AIM, through GTALK2VOIP IM transport.

### Technical requirements for mobile platform:

1. Windows Mobile 5.x or 6.x (both PPC and Smart-phone editions are supported).
2. 200MHz CPU.

### Connectivity features:

1. Standard TCP connection over port 5222/tcp.
2. Standard SSL 3.0 connection over port 5223/tcp.
3. HTTP Binding connection: relaying XMPP stanzas over HTTP protocol on 80/tcp port.
4. HTTP Binding with modified User-Agent to pass through some WAP access points.
5. File transfer over SOCKS5.

### Authentication mechanisms:

1. MD5-DIGEST
2. PLAIN-TEXT
3. X-GOOGLE-TOKEN

### Traffic compression:

1. Standard ZLIB (RFC-1950) stream is used for XMPP traffic compression.
2. A large set of Speex codecs are used to compress voice traffic, including the following bitrates: 2.15k, 3.95k, 5.95k, 8k, 11.5k.

**Main features:**

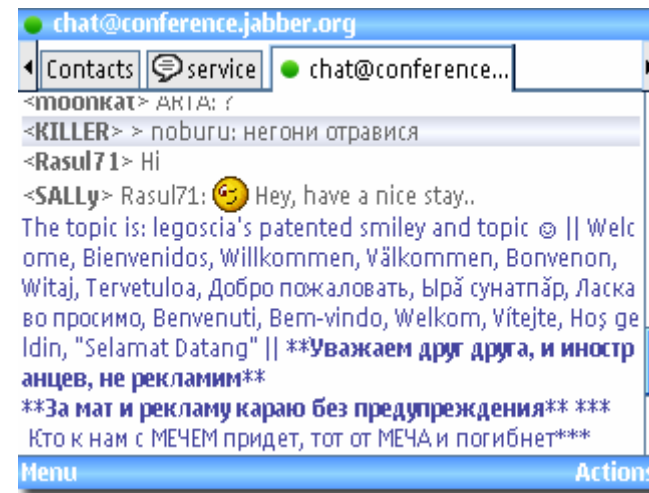
1. Sending and receiving IM messages over XMPP/Jabber protocol.
2. Contact management, including: adding, renaming, removing of contacts and subscription management.
3. Contact group management.
4. In-band account registration.
5. Extended set of graphical smiles.
6. Audio- and vibro- notifications.
7. Custom-defined presence status.
8. VCard support.
9. File sharing: sending and receiving files.
10. Sorting of contacts by status or by name.
11. Multi-user conference rooms.
12. Conference room administration and moderation utilities.
13. Typing notification.
14. Service discovery.

**Voice features:**

1. Initiating and receiving peer-to-peer calls over GPRS, EDGE, 3G or WIFI to Google Talk, Talkonaut or other Jingle base jabber clients.
2. Initiating and receiving calls over GPRS, EDGE, 3G or WIFI to PSTN (mobile and landline phone numbers) through GTALK2VOIP gateway.

3. Initiating and receiving calls over GPRS, EDGE, 3G or WIFI to legacy IM networks: MSN, AIM, ICQ and Yahoo.
4. Initiating and receiving calls over GPRS, EDGE, 3G or WIFI to SIP URI or any SIP device.
5. Callback initiated calling to PSTN (mobile and landline phone numbers).
6. Callback initiated calling to Google Talk and other Jingle based jabber clients.
7. Callback initiated calling to legacy IM networks: MSN, AIM, ICQ and Yahoo.
8. Callback initiated calling to SIP URIs.

\* **NOTE:** All voice calling to legacy IM networks are made through GTALK2VOIP gateway.



**Graphical user interface:**

1. Full-screen graphics based on unique GUI framework..
2. Adjustable font size for list of contacts, chats and menu.
3. Fast menu access through pre-defined hot-keys.
4. Extended set of graphical smiles.
5. Tabbed roster.
6. Contact search.
7. IM and user-defined groups.
8. Clickable URLs (web links).
9. Right-to-Left text input.

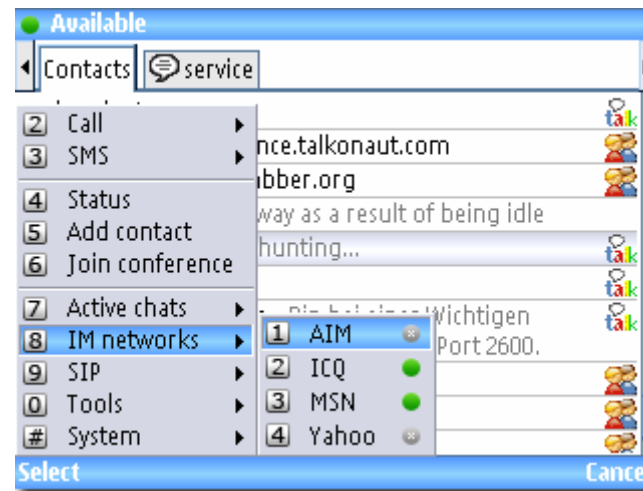
- Italian
- Germany
- Russian
- Ukrainian
- Chinese Simplified
- Arabic

**Input methods:**

1. Qwerty input.
2. Stylus input.
3. Joystick navigation.
4. Support for navigation by key-pad for devices not equipped with/ or broken joystick.

**Supported languages:**

- English
- Spanish
- Polish

**Supported legacy IM networks:**

1. Support for MSN: adding, renaming, removing contacts, accepting invitations.
2. Support for ICQ: adding, renaming, removing contacts, authorizing invitations, requesting extended contact information.

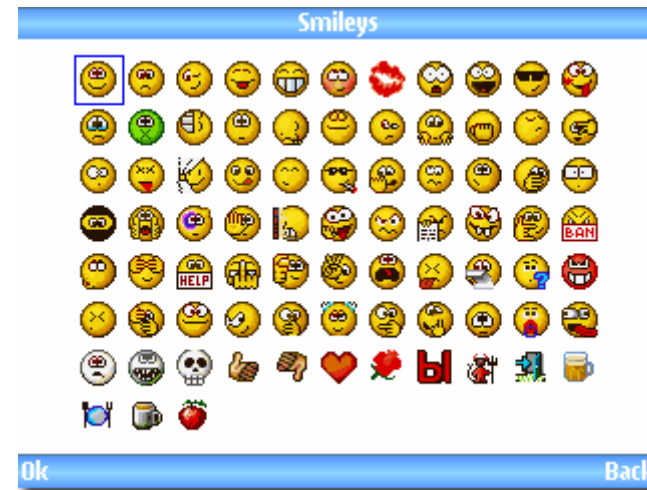
3. Support for AIM: adding, renaming, removing contacts, accepting invitations.
4. Support for Yahoo: adding, renaming, removing contacts, accepting invitations.

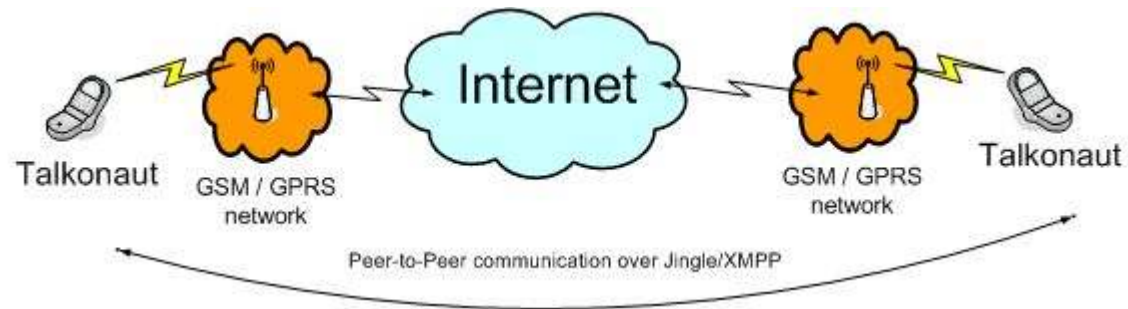
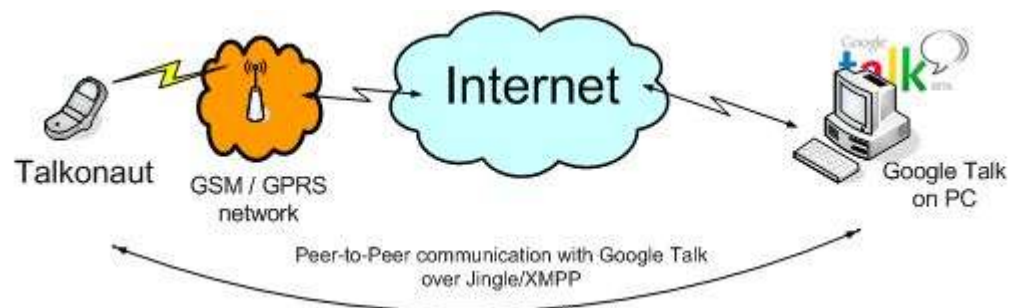
\* **NOTE:** Gatewaying to legacy IM protocols is made through GTALK2VOIP transport over proprietary XMPP extension protocol.

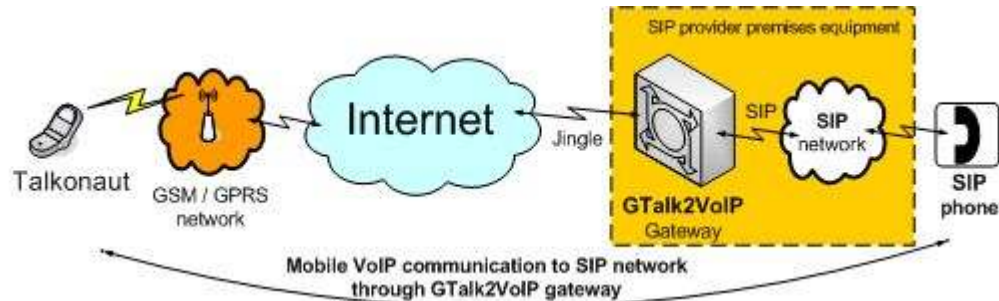
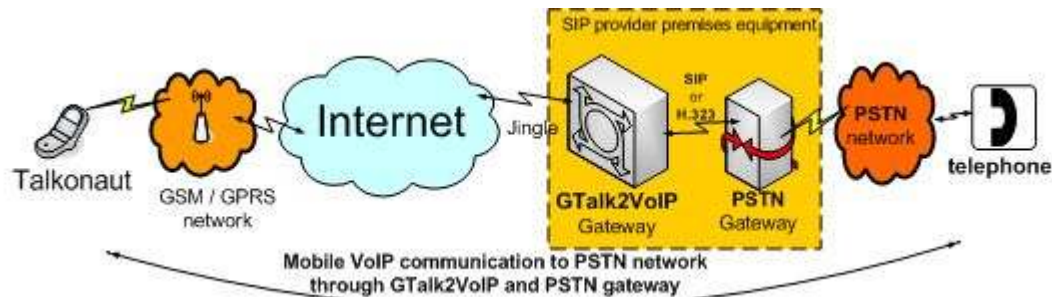
### Supported standards and XMPP extensions:

1. RFC-3920: Extensible Messaging and Presence Protocol (XMPP): Core -- the core protocols for XML streaming, including strong authentication, channel encryption, and internationalized addressing.
2. RFC-1950: ZLIB Compressed Data Format Specification.
3. XEP-0030: Service Discovery -- a robust protocol for determining the features supported by other entities on an XMPP network.
4. XEP-0004: Data Forms -- a flexible protocol for forms-handling via XMPP, mainly used in workflow applications and for dynamic configuration.
5. XEP-0045: Multi-User Chat -- a set of protocols for participating in and administering multi-user chat rooms, similar to Internet Relay Chat but with stronger security.
6. XEP-0047: File Transfer -- In-Band Bytestreams (IBB).
7. XEP-0065: File Transfer -- SOCKS5 Bytestreams.

8. XEP-0096: File Transfer -- a protocol for transferring files from one XMPP entity to another.
9. XEP-0077: In-Band Registration.
10. XEP-0124: HTTP Binding -- a binding of XMPP to HTTP rather than TCP, mainly used for devices that cannot maintain persistent TCP connections to a server.
11. XEP-0054: vcard-temp.
12. XEP-0092: Software Version.
13. XEP-0138: Stream Compression.
14. XEP-0166: Jingle Audio.
15. RFC-3489: Simple Traversal of User Datagram Protocol (UDP) Through Network Address Translators (NATs).
16. RFC-3550: RTP: A Transport Protocol for Real-Time Applications.



**Possible mVoIP interconnection schemes:****Calls between Talkonaut users:****Calls between Talkonaut and Google Talk users:**

**Calls between Talkonaut user and SIP device (SIP URI):****Calls between Talkonaut user and PSTN subscriber:****Calls between Talkonaut user and user of MSN/Yahoo/AIM/ICQ network:**