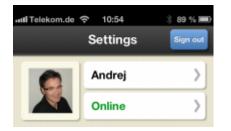
CommuniGate Pro: Unified Communications with Various Clients



Users depend more and more on various end devices: from stationary desktop PC over laptops to smartphones and tablets. If the access to a central messaging and groupware platform has to be secured, clients which provide the required functions on the essential end device types and involved operating systems are needed.

For the producers of such solutions, platform independent clients are an important differentiating factor compared with the market leader Microsoft Exchange with its Outlook Client, which only include limited support for operating systems and end device types.

Unified Communications in a Heterogeneous Environment.

<u>CommuniGate</u>, provider of the messaging and groupware systems of the same name, offers an entire range of client options for unified communication. The challenge is to provide all central functional systems on various end devices with different operating systems: E-mail, task management, address management, instant messaging, IP telephony, conferencing.

	HTML- CLIENT WEBUSER	WEB- CLIENT PRONTO! WEB	HTML5- CLIENT PRONTO! HTML5	DESKTOP CLIENT PRONTO! PRO	MOBILE APP PRONTO! MOBILE
Technique	HTML	Flash	HTML5	Air/Flash	Native App
End device	any (Browser)	any (Browser)	any (Browser)	Desktop	Smartphone, Tablet
Operation System	any	Windows, Linux	any	Windows, Linux, Mac OS	iOS, Android
Messaging (E-mail)	Yes	Yes	No	Yes	Yes
Contacts	Yes	Yes	Yes	Yes	Yes
Calendar	Yes	Yes	No	Yes	No
Tasks	Yes	Yes	No	Yes	No
Telephony	No	Yes	Yes	Yes	Yes
Instant Messaging	No	Yes	Yes	Yes	Yes
eDisc	Yes	Yes	No	Yes	Yes
Media Viewer	No	Yes	No	Yes	No
Social Media	No	Yes	No	Yes	No

Pronto! Clients

CommuniGate's client *Pronto!* is delivered in four models:

• as Web Client on the basis of HTML

- as Rich Media Web Client with Flash technique
- as Desktop program
- as native Mobile App

Thus, the system covers all essential application areas: the HTML Client is slim and can be used across multiple devices. The Desktop Program has been well integrated into the operating system and consists of the full range of functions. As an app, Messaging and Collaboration can be used by iOS and Android devices in a mobile manner.

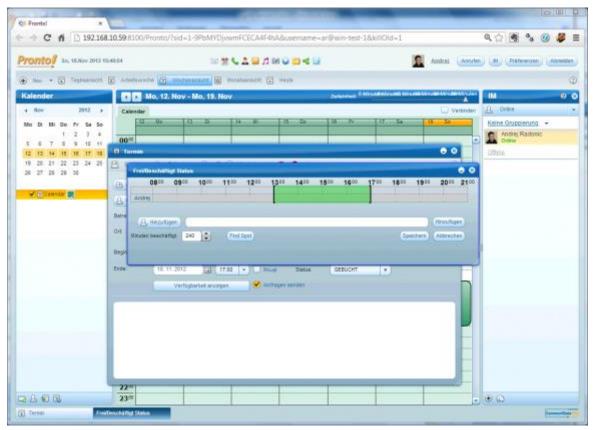
Pronto! uses the XIMSS Protocol for the connection to CommuniGate Pro. Based upon approvals in the CommuniGate account of the respective user, Pronto! Client may also serve as a mail program, appointment calendar, task manager, or it transfers presence information as well as Instant Messaging chats. If the PBX Service is approved for that user, he can answer and set up telephone calls via Pronto! and make use of further telephony services such as answering machines or the forwarding of calls.

Web-Client in 3 forms

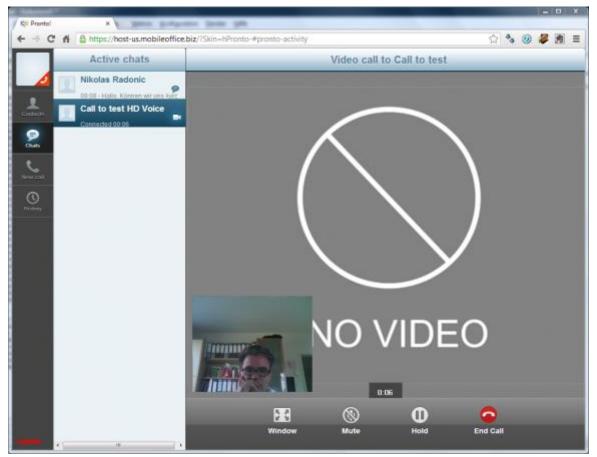
The pure HTML Client "WebUser" can be run on all established web browsers. But if its functional range is reduced, no telephony or instant messaging functions are available. However, users can make use of the central applications such as mail, calendar, addresses, tasks and even the <u>document administration</u> eDisc.

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Because of its large functional range, the Rich Media Web-Client *Pronto!* depends on the existence of a Flash Player on the end device, so that it will not run on all operating systems. For telephony, users have to download an additional plug-in and install it in the browser. The Flash Client serves primarily as a supplement or an alternative to Outlook, whereas CommuniGate promotes it as a fully adequate supplement for Microsoft Client.



The newly added *HTML 5 Client*, which was added to CommuniGate Pro in Version 5.4 extends CommuniGate Pro by an additional client option and will presumably sooner or later replace the two older web-fronted models (HTML and Flash). So far the functional range is still limited: basically, in the current Version 1.4, only the interactive communication applications for chat and (video) telephony including the administration of the contacts are available.



The advantage of the HTML5 Client is that - in contrast to *Pronto!* - it is based on web standards and does not require anything else but a modern browser. This is above all of great benefit to the hosting business, as providers cannot expect that the necessary runtime environment of Adobe is available on each client. So far, CommuniGate offered only an old fashioned static HTML interface for its clientele.

Furthermore, the new dynamic web client need not consult the server for each action, but can work off many tasks locally and thus exploit the computing power of the end device in a better way. This enables a very smooth working.

At the moment, the HTML5 Client is still under a magic cap and is not offered by default. It can be called up via the URL *https://communigateserver/?Skin=hPronto-#pronto-login*.

Desktop Client

The Desktop Client called *Pronto! Pro* does not depend on a browser and therefore offers the best possible integration with the local operating system. It includes the entire functional range of CommuniGate Pro – up to social media integration, conferencing, answering machine as well as media player for music, videos and presentations.

It is built upon Adobe Air, which has to be installed on the end device. This restricts the availability of the client to those operating systems for which Air support is available. Linux, for example, has not been supported by Adobe for a while, but *Pronto! Pro* is still executable under Linux.

Mobile App

Users of mobile devices such as smartphones or tablets can enjoy native apps for iOS and Android, which integrate a large transparent functional range on the device and leave a mature impression.

Concessions have to be made only at some elements, such as the use of files in the central document storage, which is a bit slimmed: files can still be uploaded, but they are always put in a given repository. Documents in the central repository cannot be viewed but only send to contacts. Furthermore, some peripheral applications such as the integration with social media are not aboard and tasks and calendar are missing. But mobile devices can manage these data in their apps via synchronisation. At the moment, there is no special iPad or Tablet App available.

Integration and Customization

The web-based models of Pronto! are designed to allow for adaptations: The client is conceived as a "White Label" program and offers various options for individual interface design and preconfiguration. Furthermore, Pronto! can be addressed by an open XML-API and thus be integrated with third-party applications. Such an integration already exists, for example for CRM systems.

Connection Options

Besides the native clients, CommuniGate Pro offers a wide range of interfaces, based upon common standards and protocols, which enable the use of other front ends. POP3 and IMAP serve for mail connections, WebDAV and CalDAV for the exchange of dates, SIP/RTP and XMPP for telephony and instant messaging. Instant messaging and presence information can be exchanged by the CG Pro Server by using XMPP and SIP also with other messaging platforms such as ICQ, AIM, Yahoo via respective gateways.

On demand, ActiveSync provided by CommuniGate ensures an automatic synchronisation of mails, appointments and contacts between server and mobile and thus roun out the client conection. Blackberries can be aligned over-the-air by using the optionally available AstraSync.

Thus, practically all common clients for mail, calendar management, messaging and alike have access to CommuniGate Pro. Outlook users, too, can stick to their favourite program and just have to download and install the MAPI plug-in for using CommuniGate. Also established XMPP and SIP clients enable access to the Unified Communication Server.