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SQL SERVER 2019 BIG DATA CLUSTERS . 1



Budowa nowoczesnego systemu analitycznego i wdrożenie platformy przetwarzania różnych typów danych. Najważniejsze funkcje serwera, ich zastosowania, natywna integracja z systemem HDFS i technologiami big data



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Although IP protocol based communication has become a standard, companies are now using various communications tools, starting from traditional telephony, through various types of chats, to solutions supporting group work. We are comprehensively testing the innovaphone solution, myApps.

Unified communications

innovaphone myApps tools

Marcin Jurczyk

he communication platform of a business is an indispensable component for all companies alike, regardless of the company size or the type of company. This always applies, whether companies have implemented very basic solutions in their communication infrastructures and use traditional analog telephony, mobile telephony or whether companies make use of more advanced tools. Traditional analog telephony is slowly giving way to communication that occurs via IP protocol, which opens up many more options, such as video conferencing, application sharing or almost unrestricted mobility.

What is more, reaching for a traditional telephone handset, be it a traditional analog one or one using VoIP technology, does not happen as often as it did even 10 years ago. It is much more convenient to use software installed on a computer or smartphone, especially when the conversation takes place with a larger group of participants and documents have to be often shared. While communicating in such a manner, you can see your other participants in real time, which affects the relationships and is often the only way to "meet" someone



User interface is the same for be it either Windows, Android or iOS clients.

working on the other side of the globe. There are plenty of such platforms that are especially dedicated to business customers, although there are only a few leading global companies able to provide a solution both when it comes to suitable hardware and software. When the product by the German company innovaphone arrived at the editor's office, the first thing was to conduct research due to its low popularity on the Polish market. It turned out that the company is based in Sindelfingen and employs approx. 100 people and has operated in the field of widely understood integrated communication systems for over 20 years. It has a comprehensive portfolio, in terms of both hardware and software, and currently is attempting to appear on the Polish market.

> MYAPPS FEATURES

The myApps universal work environment is the latest product available in innovaphone's portfolio. At first glance, it is a rather vague description. What is more, the product is not fully independent and co-operates with other solutions from the producer's portfolio, in particular with the PBX switchboard. In practice, what we have is a client application for a widely understood unified communication system which can be implemented on client devices working under Windows, Android and iOS operating systems. In all other systems, for which there is no proper client version, you can use the client version available from your web browser (Chrome, Firefox, Safari or Edge - the latest possible version with running support for Java-Script and HTML5 Local Storage). Regardless of the myApps version used, the user interface and the available options are exactly the same. Furthermore, myApps is a unified communication system both for the users and administrators.

The individual application icons are available on the user's desktop, and the administrator decides how many of them there are and what functions they should provide. Applications are installed via the built-in App Store, where the producer has placed a predefined set of functions, e.g. a calendar, address book, devices, fax, recordings and voicemail, all in various languages. From the point of view of communication, applications enabling calls (voice and video) will be probably the most important and most used from the client level, as well as the chat application enabling text communication within the company. In order to be able to conduct voice calls, it is necessary to register at least one terminal device, which can be both an actual IP innovaphone telephone or of another producer, or a softphone in the case of mobile platforms. In our case, we carried out the test for all available versions of



myApps is not only a UC client for users but also an interface to administrators of installations

the client application, i.e. an iPhone, a Samsung smartphone, and also with the use of the client for Windows 10.

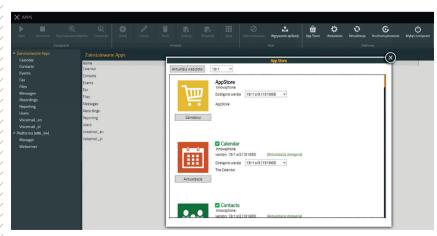
The producer has cloud preconfigured the virtual innovaphone PBX for the purposes of the test. This is one out of two implementation models for unified communication solutions from innovaphone. For this, the company uses the infrastructure of a cloud service provider. Another option is to implement an on-premise solution based on a virtual VoIP gateway in the form of Vmware or Hyper-V virtual machines or using one of innovaphone-'s hardware gates. Besides applications enabling voice and video calls, as well as performing instant messaging functions, it is also possible to conduct the following: video conferencing, screen sharing, faxing, voicemail management, and presence features.

myApps is not only a unified environment for end users. The system supports two-factor authentication, as well as additional security mechanisms, such as DTLS encryption. For faster calls and initiation of chats, users can set the availability status themselves, modifying their own desktop by arranging it depending on their needs by moving application icons or adding specific contact icons to their desktop. The desktop wallpaper can also be modified. The first time you log in, you must, of course, enter the PBX server address. It is a prerequisite for any communication.

> PLATFORM MANAGEMENT

At the level of the system administrator, there are applications available allowing for managing the PBX, the applications and users. Our test environment had no configured SIP trunks to external connection providers, and the only communication tests were carried out in an isolated environment that simulated real conditions as might be found in the company. There were some problems here – it turned out that push functions for mobile platforms were not configured, which resulted in user disappearance whenever the smartphone was blocked.

There are, however, plenty of configuration options at the central level and it is better to leave all modifications up to administrators' experienced in VoIP technology. In the case of myApps, the possibility to expand the



The administrator decides what applications will be available for the users.

platform with own applications via a shared SDK environment deserves special attention, which is a nod towards larger companies, with development resources or able to afford my-Apps platform integration with other third-party software. The integration and expansion options are almost unlimited and it is easy to imagine a scenario in which we have a view into the CRM base, the contact book from the sales system or integration with the video monitoring system from the level of myApps.

myApps as a UC client does not require any additional license itself, although some of the available applications may already be licensed. Depending on the needs and the implementation scenario, it might be necessary to purchase a license for functions such as softphone, conference calls, voicemail, fax, application sharing or call recording. Moreover, it might be necessary to purchase a licence for additional functions available at the administrator's workstation, working under Windows, like an operator console or call queue management. In the case of hardware implementation, there also is the issue of licences related to hardware so the final price may depend as well on the PRI/BRI channel or physical port license. Therefore, licensing is rather complicated and requires contact with the partner to calculate all options correctly. The manufacturer also has a simplified model for SMB companies (and also named SMB). However, the maximum number of ports has to be specified beforehand to let one obtain a more attractive unit price (from EUR 21 to 41 for a license instead of the standard EUR 54). However, if it turns out that the SMB licence package is not enough because of the company-'s business development, there will be a one-off payment for upgrade to the standard license amounting to EUR 860. All prices mentioned above are so-called recommended sales prices. Another option of implementing innovaphone VoIP is in the form of a rental, based on fixed monthly fees covering hardware and software.

> REMAINING FUNCTIONS

As mentioned before, myApps is only a user interface of a unified communication system based on other products of innovaphone PBX. The ecosystem consists of the entire product portfolio, from hardware VoIP gates addressing needs of various sizes, through media gateways and virtual PBXs, to IP telephones, DECT cordless telephones, Wi-Fi and analog adapters. The hardware works with software that operates based on an optimized

Linux kernel. The tested myApps tools are the latest proposal of innovaphone but you have to remember about other software components, such as myPBX, WebRTS, Reverse Proxy or Session Border Controller. Despite relatively low brand recognition on the Polish market, it seems to be a good idea to consider this VoIP solution provider, even for the sake of a complete product portfolio, when planning implementation of Unified Communication.

The author is an architect in an international IT company and is involved in network and server infrastructure, infrastructure virtualization and mass storage.

VERDICT

innovaphone myApps

Advantages

- a unified multi-platform communication desktop
- responsiveness;
- SDK, expansion and integration with other software
- a dedicated client for Android and iOS
- a complete UC portfolio

Assessment

- licensing procedure is too complicated;
- minor technical problems when it comes to mobile platforms;



SUMMARY

myApps is a solution that, apart from standard UC client functionality, provides ample options for expansion and integration with other software owing to a shared SDK. We did not attempt to implement own add-ons in the test environment, yet it seems that it might be an important element when choosing a UC platform for any demanding

company. Also remember that myApps does not exist without other innovaphone PBX components that in fact provide the full capabilities of the communication platform. The portfolio of innovaphone is comprehensive so it allows for building a completely new solution based on IP addresses. Integration of the existing solution with

the subsequent option of migration to all-IP is also possible. If it is necessary, for some reasons, to use IP telephones of other producers, innovaphone declares its assistance in such an implementation. In turn, licensing seems a bit too complicated. This part could be simplified a bit or packages composed of specific functions could be introduced.