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Telepresence systems are complex and expensive video communication systems that allow users to get the impression during an online meeting that they are communicating with their interlocutors live – as in a face-to-face meeting in real life. Telepresence systems are usually used to organize highlevel meetings, such as board meetings, negotiations with the heads of foreign companies, etc. The effect of presence in video conferences is achieved due to the unification of the environment (the participants of the video conference are in identically decorated rooms) and are displayed on large screens in full size. The transmission of video and sound takes place as a «High Definition» to convey the smallest nuances of facial expressions, gestures and voices of all participants in the discussion.

Cisco and Polycom boast of their telepresence systems, but they are far from the Google system codenamed Project Starline, which the company presented at the Google I/O 2021 conference. It is a video booth in which a dozen depth sensors and cameras are installed, as well as a 65-inch screen. Sensors capture photorealistic images of a person, which are first transmitted to Google servers, where they are «stitched» into a 3D model, and then sent with minimal delay to the same huge display in another booth. As a result, you see a realistic hologram of the interlocutor in front of you, as if he is sitting opposite you. They say Google already uses several of these booths in its office, however, it is possible that while they work the same way as in the TV series «Silicon Valley».

Polycom has released the Polycom CX7000 Unified Collaboration System telepresence system, designed specifically for full integration with Microsoft Lync. The solution recreates the interface familiar to Lync users, including tools for monitoring online status, instant messaging, web conferences, and document collaboration. Cross-platform interaction with Lync is also implemented for the entire family of Polycom UC Intelligent Core telepresence solutions (from desktop and group to full immersion systems). Polycom also plans to integrate its solutions with the Lync Online cloud services included in the Microsoft Office 365 package.

One of the biggest problems of telepresence systems is that solutions from different vendors are incompatible. As a result, having bought one system from one vendor, the company is forced to buy the second and subsequent ones from him. And video communication between different companies becomes problematic at all. The second problem is that the existing systems are designed only for room-to-room video sessions and do not allow users of computers and mobile devices to connect. FuzeBox wants to solve both of these problems in one fell swoop with the help of its new Fuze Telepresence Connect service. This service allows you to establish communication between Tandberg, Polycom, LifeSize, etc. telepresence systems, as well as connect to video conferencing from PC, Mac, Android and iPhone. Note that Cisco has always dreamed of being such a bridge. Orange Business Services will implement telepresence systems based on Cisco Telepresence in Russia. This is the first company in the country that is both a telecom operator and an integrator, installing equipment and providing the necessary communication channels optimized for video transmission. Recall that Cisco Telepresence provides the transmission of a

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full-size image of each participant of the meeting with high resolution and surround directional sound, which creates a sense of personal communication with people who are actually in other cities and countries. Depending on the modification of the solution, the Telepresence room can comfortably accommodate up to 12 participants. A demonstration room is already operating in Orange's central office in Russia.

Tandberg has released the EX90 personal telepresence system, which is designed for personal meetings in offices and home offices. This EX90 desktop system provides high-quality sound, high-definition video image, which, of course, will improve the image of its user when communicating with customers and partners. The system includes an eight-inch TANDBERG InTouch touch control screen, a 24-inch HD screen and a built-in PrecisionHD camera. The system also offers the possibility of connecting a second monitor on which you can display presentation data or any multimedia information. According to Tandberg, EX90 can work with any video or telepresence systems developed on the basis of open standards.

The TelePresence two-way video communication technology developed by Cisco creates a complete illusion of personal presence at negotiations and will certainly find application in large companies, government organizations, research institutes, health services.

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