



Press release

IVèS, Sopra Steria, and IBM Join Forces to Create the World's First Conversational Assistant in Sign Language

Paris, April 25, 2024 - IVèS, a European leader in Deaf accessibility, Sopra Steria, a major player in European Tech, and IBM, a global leader in hybrid cloud and AI, announce the creation and implementation of the first conversational assistant for the deaf and hard of hearing. Named IRIS, the world's first "signbot" combines the power of AI solutions from all three tech players to enable digital sign language communication.

IVèS creates IRIS, the world's first conversational assistant in sign language, using Sopra Steria's Alive Intelligence (SSAI) solution. This solution integrates IBM Watson assistant's innovative technology. This innovation enables discussions in French Sign Language (LSF), Quebec Sign Language (LSQ), American Sign Language (ASL), and Tunisian Sign Language (LST) and can communicate and converse by signing in real-time.

"The conversational artificial intelligence **IRIS represents** a significant advancement in the field of inclusion and accessibility for the deaf and hard of hearing.



Deployable on various displays such as giant fixed screens, mobile tablets, or even in a web browser, IRIS enables seamless exchanges by transcribing speech into signs in real-time. This innovation provides a concrete solution to break down communication barriers related to deafness. We are very proud to contribute to the development of the IRIS Signbot, which perfectly illustrates how technology can be used for a more inclusive and accessible world," jointly comment Pascal Dupuy, CEO of IVèS, Mohammed Sijelmassi, CTO of Sopra Steria, and Xavier Vasques, VP & CTO of IBM France.

IRIS paves the way for new perspectives for deaf and hard of hearing individuals, allowing them to fully participate in everyday exchanges and activities. This technological advancement reinforces the commitment of IVèS, Sopra Steria, and IBM towards a more equitable and inclusive society.





Combining the Best of AI for Inclusion

The three AI players IVèS, Sopra Steria, and IBM have leveraged their expertise and technologies to create this first conversational assistant dedicated to sign language interpretation.

IVèS has mobilized all its expertise in terms of sign detection and recognition to create the IRIS signbot. Thanks to artificial intelligence, it is the first bot to understand sign languages AND to respond in sign languages. The power of its AI allows it to use any camera to capture key points of the user's movements and understand the request expressed in sign language. The rendering AI displays a realistic three-dimensional avatar that instantly produces a natural sign language response.

Sopra Steria's Alive Intelligence solution offers personalized and efficient digital assistant services to automate tasks, access expertise, and improve interactions between humans and machines through IBM Watson Assistant technology. It is already efficient and used by many clients, and is being put into practice in many different contexts. This solution has been upgraded with the sign language interpretation capabilities of the IRIS Signbot.

IBM's Watson Assistant technology is a powerful conversational agent that enables all the functionalities of conversational AI such as intention recognition and entity extraction implemented for Sopra Steria's Alive Intelligence solution and for the IRIS Signbot.

An upcoming version of Alive Intelligence, called nAIxus, implementing watsonx generative AI, will further extend its functionalities and performance, as well as those of the IRIS Signbot.

"By using sophisticated natural language processing and computer vision algorithms, IRIS can detect and interpret gestures, and interact in sign language with Deaf and Hard of Hearing individuals through an avatar. **These technologies are based on significant scientific advances in the field of artificial intelligence, they represent a pivotal breakthrough in movement recognition and modeling**," continue Pascal Dupuy, Mohammed Sijelmassi, and Xavier Vasques.

Implementation is Already Underway

Presented and awarded earlier this year at CES in Las Vegas, IRIS technology has been operational recently in IBM's Innovation Studio in Bois-Colombes and will soon also be available in Sopra Steria's premises in Paris. The IRIS avatar is also now accessible on various websites such as IVèS, Elioz, Orange, Mutuelle Intégrance, and aims to be deployed in various sectors and locations in the future.

"When dealing with invisible disabilities such as those of the Deaf and Hard of Hearing, awareness often arises following that discussion. **By developing this type of solution, we raise awareness and promote inclusion**. Digital technology is, first and above all, a tool. It is not so





much about making digital tech accessible but rather about streamlining relationships, customer journeys while raising awareness with as many people as possible," comments Pascal Dupuy, CEO of IVèS. "The collaboration with IBM and Sopra Steria has allowed us to promote inclusion for the deaf and hard of hearing, and we are now on the verge of a revolution for accessibility."

"As the evolution of artificial intelligence and generative AI raises many questions regarding corporate responsibility, initiatives such as the IRIS project demonstrate the positive potential of these innovative technologies. This project perfectly illustrates how AI can have a real beneficial social impact when it results from fruitful collaboration between different technological actors," comments Mohammed Sijelmassi, CTO of Sopra Steria. "Our 20 year long standing partnership with IBM is bearing fruit and leading to a true revolution in accessibility."

"This collaboration between IVèS, Sopra Steria, and IBM symbolizes **a significant advancement in accessibility and inclusion, perfectly illustrating how technology can positively transform the daily lives of deaf and hard of hearing individuals**," comments Xavier Vasques, Vice President and Technical Director at IBM Technology and R&D in France.

Click <u>here</u> to discover more pictures, and <u>here</u> for some videos of IRIS

About IvèS

IVèS pioneered the total conversation platform, allowing real-time simultaneous use of audio, text, and video to ensure accessibility for deaf or hard-of-hearing individuals in any conversation scenario.

In 2005, Pascal Dupuy, Didier Chabanol, and Emmanuel Buu reached a crucial realization: deaf and hard-of-hearing individuals in France encounter numerous challenges in their daily communications. Surprisingly, they lacked access to one of the most essential modern tools: the telephone. Their solution, both simple and groundbreaking, involved the deaf or hard-of-hearing individual initiating a video call to a sign language interpreter. This interpreter then relayed the call to the telephone of the hearing individual. Consequently, a conversation could unfold between the deaf person and their correspondent, facilitated by the interpreter serving as an intermediary. Since then, IVèS has expanded and enhanced its Elioz solution, catering to various forms of hearing impairment through a diverse array of communication methods. The Elioz solution, crafted by IVèS, is currently operational in more than 10 countries across the globe. For more information visit IVèS' website www.ives.fr

About Sopra Steria

Steria Sopra Steria, a major Tech player in Europe with 56,000 employees in nearly 30 countries, is recognised for its consulting, digital services and software development. It helps its clients drive their digital transformation and obtain tangible and sustainable benefits. The Group provides end-to-end solutions to make large companies and organisations more competitive by combining in-depth knowledge of a wide range of business sectors and innovative technologies with a fully collaborative approach. Sopra Steria places people at the heart of everything it does and is committed to putting digital to work for its clients in order to build a positive future for all. In 2023, the Group generated revenues of €5.8 billion.

The world is how we shape it





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About IBM

IBM is a leading provider of global hybrid cloud and AI, and consulting expertise. We help clients in more than 175 countries capitalize on insights from their data, streamline business processes, reduce costs and gain the competitive edge in their industries. Thousands of government and corporate entities in critical infrastructure areas such as financial services, telecommunications and healthcare rely on IBM's hybrid cloud platform and Red Hat OpenShift to affect their digital transformations quickly, efficiently and securely. IBM's breakthrough innovations in AI, quantum computing, industry-specific cloud solutions and consulting deliver open and flexible options to our clients. All of this is backed by IBM's legendary commitment to trust, transparency, responsibility, inclusivity, and service. Visit <u>www.ibm.com</u> for more information.

Press contacts

IVèS

Sami Chikhi Tél. : +33 7 67 11 28 73 <u>sami.chikhi@ives.fr</u>

Sopra Steria

Aurélien Flaugnatti Tél. : +33 7 85 20 73 16 aurelien.flaugnatti@soprasteria.com

IBM

Charlotte Maes Tél. : + 33 (0) 7 86 09 83 33 Charlotte.maes@ibm.com