

**INDUSTRY**

The National Programme of Antarctic Research (Programma Nazionale di Ricerche in Antartide -PNRA) began in 1985 with the objective of ensuring Italy's participation in the Antarctic Treaty and to develop scientific research in that continent. Every year since, there were scientific expeditions, the results of which have helped bring Italy to the level of the other most important nations. This has led to the creation of a coastal station open during the southern summer, and - in conjunction with the French program - a permanent station on the plateau ice, operational in the summer and winter. The mission has also developed various technologies, such as telecommunications and automation needed to further their research.

CommuniGate Systems and Answer VAD deliver robust, efficient e-mail solutions to ENEA (National Agency for New Technologies Energy and Sustainable Economic Development) in Antarctica.**BACKGROUND**

ENEA switched from Sendmail about ten years ago for their operations in Italy. At that time their reason for switching was the need for an independent platform that delivered the most practical and efficient service, including WebMail. ENEA then chose CommuniGate Pro, based on its operational simplicity, its high availability and the quality of technical support given by CommuniGate Systems.

CHALLENGE

ENEA initially deployed twelve instances of CommuniGate Pro, one in each of their offices across Italy, but in 2009 Answer VAD migrated their entire platform to single high-availability (HA) server, in a central location with the aim of reducing their total cost of ownership (TCO) and to be able to provide better quality of services, relying on the scalability and high-availability that CommuniGate Pro is able to provide.

As the ENEA project grew in both Italy and Antarctica, reliability and security became even more of a priority, with the added complexity of having to rely on intermittent and expensive satellite communications for the links with remote stations.

SOLUTION

In 2011, Answer VAD was asked to help ENEA deploy e-mail systems across the Italian land bases, their two Antarctic bases and their ship, using satellite data links for the communications channel.

All users receive an e-mail service, with quality standards identical to those occurring in the ENEA Centre. CommuniGate Pro enables ENEA to minimize the cost of the satellite connection by dynamically managing restrictions on mailbox size, message download and attachments. CommuniGate Pro has been configured to provide offline WebMail access to the Antarctic bases even when the satellite link is not available, synchronizing with the ENEA Centre servers based in Italy to deliver and retrieve messages when possible.

BENEFITS

"Our confidence in the potential of CommuniGate Pro led us to choose it in such an extreme situation as the mission in Antarctica", said Piero Angelo Cavoli of the Antarctic Technical Unit of ENEA, "Where reliability and secure communications is of utmost importance, it simply could not be questioned."

