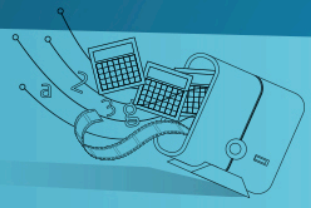
Post

M2M General



To boldly go where no man has gone

Tuesday, 11 September 2012

Image by NASA

On August 25, Neil Armstrong, the first man to walk on the moon, passed away. During his lifetime, after his moon walking years, he watched many frontiers being conquered, as NASA turned his attention from the Moon to Mars.

Back in 2005, Armstrong said that a manned mission to Mars will be easier than the lunar challenge of the cold war thanks to the overwhelming technological advance occurred since then. Probably, he was right: the crew of the Apollo XI managed to get to our satellite using a computer less sophisticated and powerful that today's washing machines.

While a manned mission to Mars seems a little away from realization, the machines have already conquered the red planet. Days before Armstrong's passing, Curiosity, the latest Mars rover, landed safely on the planet and started exploring the planet in search signs of past life in the now dead planet.

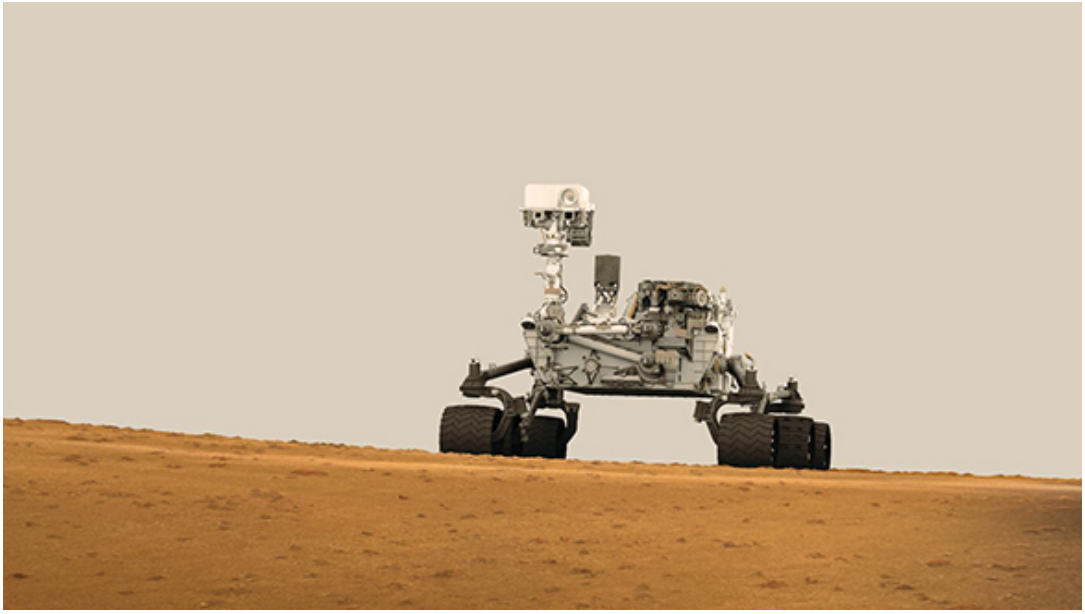
And how does the Curiosity works? Where the man isn't ready to go yet and effective real-time remote control is not really possible due to distance and interference of celestial bodies, the answer is autonomy, which is achieved through M2M technology.

Interplanetary wireless connectivity

Right after Curiosity landed, it spent the following 24 hours preforming self-evaluation tests, ensuring that all systems were functioning correctly –a machine taking care of itself using M2M technology.

Once everything was ready, Curiosity started his mission, consisting of 8 objectives that the rover has to accomplish by itself, making choices for the best place to perform every task and communicating both with Earth and its different instruments. Curiosity's findings may give us a straight answer to whether Mars harbored life at one point in History of not.

©Telefónica S.A | All rights reserved



During the next two years, the Curiosity will be on its own, tasked with sending valuable information to NASA using the most advance wireless satellite communications while surviving the environment of Mars. The engineers at NASA are constantly monitoring its status to avoid or solve specific technical problems, and give punctual instructions now and then, but everything else is on the Curiosity.

The prospect looks really good, and could not have been possible without NASA taking interest in M2M. In 2006 NASA started partnering with American company M2Mi to push the boundaries of machine-to-machine technology, applying it to space exploration. Since then, NASA has beentinkering with a technology we are already familiar with, intending to apply it to develop, for instance, low-orbit satellites that can diagnose –like the Curiosity rover did - and repair themselves.

Armstrong was probably right: getting the first man to Mars will be probably easier than the moon landing was. But when we are ready for the next great leap for mankind, it will be thanks in no small part to M2M technology.

©Telefónica S.A | All rights reserved

VIDEO

https://m2m.telefonica.com/m2m-media/m2m-blog/item/343-to-boldly-go-where-no-man-has-gone

---

Telefónica m2m Team

@m2mtelefonica

©Telefónica S.A | All rights reserved