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SPACE CLOUD AS SERVICE : THE NEW SERVICES IN THE NEW SPACE FOR THE MISSIONS

Abstract

New Space and the services to the ground creates datasets useful for astronauts missions. Its concerns the data availabilities for missions in the International Space Station and the Space flight to execute tasks in Space and on the ground. The data volume on Earth reaches a high rate of production via the networks and the level of bandwidth. To store them the new solutions have emerged by the data centers in which services can be developed and used for many user cases : applications, consultation, data visualization, remote communication. The monitoring and control on the ground uses the terrestrial networks to catch the data sets needed to the missions. And the astronauts deals with the data too with this close the distances create the Space Cloud as service for the requirements of the missions. The Space Cloud as service means the capacity to connect with the datasets on the terrestrial infrastructure and to transfer them fastly to Space for flight or experience on real-time on board the Spacecraft or station. The Space Cloud solution as service is also a storage of assets easily used for the New Space, increasing the operationality of missions in Space by the abilities to gather and to secure the data from many partners. In this way, the Space missions are oriented in the New Space where the data access change the operations between the ground, the Space and the user segment.