

Orca: OBJECTS SPACE CATALOGUE SOFTWARE

GMV's **Orca** COTS software is a software application intended to **store a database of RSOs**, including associated object properties (Norad id, Cospar id, international name, name, mass, area, etc.), orbital information (estimated state vectors, ephemerides, mean elements), estimated and propagated orbits, manoeuvres, launches and any other related object information. The software provides operations to **store, retrieve, update and delete information** of the SST Objects Catalogue through a well-defined REST API.

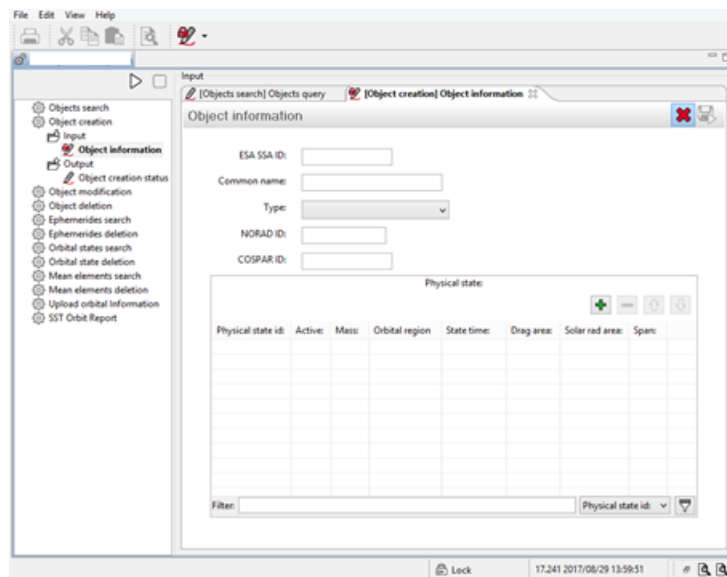


Figure 1: Example of query operation to the objects catalogue

The REST API is based on the OpenAPI Specification which eases the integration with other software components. It provides advanced filtering capabilities through RSQL expressions to query the orbital information.

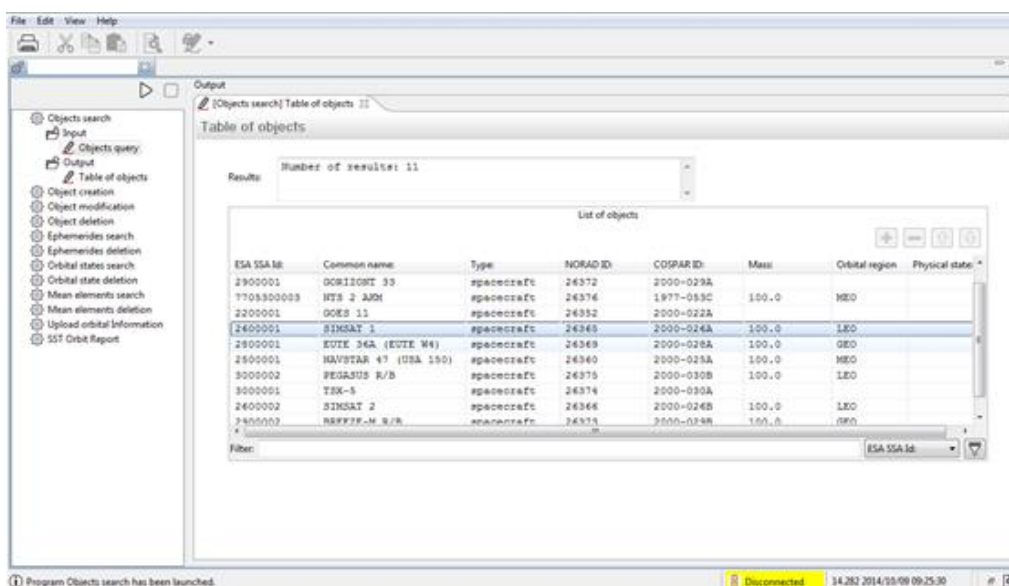


Figure 2: Example of information provided by the software