

List of Existing Assets within the NASA XOSS MarsXR Engine

The assets below are available for participants to use in their submissions, assets can be modified and enhanced as part of a team's submission.

Interactable (includes physics):

- A. HTC Vive Tracker Mocap system that works with 0, 4, 7 tracking modes
- B. Server hosting client for Multiplayer Capability
- C. Fast Teleport System to Regions of Interest
- D. Multi-point manipulation of objects that include tools, rocks, instruments.
- E. Teleport System for participant mobility
- F. Day / Night Cycle
- G. Lava Tube
- H. Mars 1/3 gravity and Physics
- I. Dust Storm
- J. Dust Devil
- K. 400 sq km (approximately 154 miles²) of Jezero Crater terrain. MRO Hi-RISE data with a Resolution of 1x1 m
- L. Apollo Lunar Surface Experiments Package (ALSEP)
 - a. Central Station Model (functional lights for connection detection)
 - b. Radioisotope thermoelectric generator (RTG)
 - c. Solar Wind Experiment model
- M. Cable Cap Models (for cables and instrument connectors)
- N. Cable Models (Used to connect components)
- O. Crates with inventory system - used to hold/transport cables, instruments, tools
- P. Mobility - Multi-Mission Space Exploration Vehicle (MMSEV) Rover with 6-axis System and PhySX (Limited at this point - requires some multiplayer updates)
- Q. Valkyrie Robotic Assistant
- R. Air Lock - LaRC (Evolvable Mars Campaign) - Limited Functionality
- S. xEMU, (NASA's next-generation spacewalking suit) Astronaut Model (rigged) - Model Scales to the user based on height
- T. Camera - photos taken are stored as images on the local hard drive
- U. XRF - Handheld X-Ray Fluorescence Spectrometer (samples rocks and provides element information)
- V. Spacesuit lights for night cycle
- W. Navigation/light beacons

Static models (no functionality):

- X. Habitat - LaRC (Evolvable Mars Campaign)
- Y. Centaurs Rover
- Z. Rake
- AA. Scoop
- BB. Pistol Grip Tool (PGT)
- CC. In-Situ Resource Utilization (ISRU) station
- DD. Solar panels
- EE. Various surface packages
- FF. Inflatable habitat field modules