

UCGO Station, Mine or Factory SDK for Orbiter space simulator 2006 & 2010

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1-Introduction, the main idea !

Any orbiter object (vessel) can be defined with two lines in config file as resource supplier. Fuel, oxygen, gold, titanium, anything you want in fact only the keyword change. Any vessel that use UCGO SDK's function «`GetRessourceFromStationMineOrFactory()`» would be able to grabe ressource from such object.

You can see a demo of this feature in the scenario « Station - Refuel at ISS or gaz station« The Arrow Freighter can resupply from custom ISS or gaz station), in the future some other vessel may support it.

At first this feature may not seem so usefull but think about some ideas: One would be able to define for example a mining area (mesh, texture) in any scenario with some ressources (hydrogen, gold etc), now you can write say a cargo dll that would transform in mining derrick or litle factory once unpacked and « pump » hydrogen or gold cargo only when placed in this area. (SDK « `ScnEditor_AddCargoByConfigName`«)

You have the first step of a whole economic world ! Ressources , the key for future space exploration.



2-Cargo resource keywords

UCGO SDK functions allow vessels to consume resources. This is based on content keyword. Common examples would be to consume «fuel» or «oxygen» cargo to refill vessel's tanks.

But there is no limit on resource keyword. You can even define a cargo that contain «titanium» and vessel author would use this keyword to refill their «titanium» tank. However, in order to define a common standard for both vessel author and cargo author, I propose to all the following list of basic keywords:

oxygen, fuel, food, water, hydrogen, gold, helium, metal, rock, powercell

Using these keywords gives a greater chance that other authors have made mine, factory, cargo or station vessel can use them too.

3-Configuration file

To be recognised as unlimited resource supplier an object must have two config lines added:

1-Attachment line with ID « UCGOST »

If the config have no attachment simply add the lines below:

```
BEGIN_ATTACHMENT  
P 0.0 1.0 0.70 0 0 1 0 1 0 UCGOST  
END_ATTACHMENT
```

Else simply add this line in the attachment list:

```
P 0.0 1.0 0.70 0 0 1 0 1 0 UCGOST
```

2-Resource keyword:

Add this line with any resource keyword or any custom keyword if you know one vessel will use it:

```
UcDescription = [keyword] ; resource keyword
```

Example:

```
UcDescription = fuel oxygen hydrogen ; resource keyword
```

« Space era will only begin really when human will be able to use resources »

