

Local Variables and Sensing

```
catomID HOSTCATOM.getID();  
double HOSTCATOM.getBatteryLife();  
void HOSTCATOM.setBatteryLife(double);  
void HOSTCATOM.setColor(r,g,b,a); [0..255]  
bool HOSTCATOM.amPowered();  
bool HOSTCATOM.amOnFloor();  
bool HOSTCATOM.amOnSurface();  
bool HOSTCATOM.amMobile();  
bool HOSTCATOM.speak(int, char*);
```

Features and Neighbors

```
featureID HOSTCATOM.getNeatestFeature(Point3D);  
featureID HOSTCATOM.getFeatureTouching(catomID, catomID); [1..N]  
Feature* HOSTCATOM.getFeatureMap();  
Feature* HOSTCATOM.getFeature(featureID);  
Point3D HOSTCATOM.getNeighborCenter(featureID);  
catomID HOSTCATOM.getNeighbor(featureID);  
catomID HOSTCATOM.getNthNeighbor(int);  
featureID HOSTCATOM.getNthFeature(int);
```

Location and Movement

```
Point3D HOSTCATOM.getLocation();  
Point3D HOSTCATOM.getLocation(featureID); [1..M]  
bool HOSTCATOM.moveTo(catomID, featureID, bool, bool, bool);  
bool HOSTCATOM.moveTo(Point3D, dQuaternion, bool, bool);  
bool HOSTCATOM.moveTo(double, double, double, dQuaternion, booo, bool);
```



Notes