
Subject: Re: distance between two objects c++
Posted by [Ephphatha](#) on Thu, 08 Jul 2010 14:41:02 GMT
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For those interested in the math, the distance between two points is the magnitude of the vector from point A to point B.

Taking the first example, the distance between obj1 and obj2 would be calculated:

```
Vector3 pos1, pos2;  
pos1 = Commands->Get_Position(obj1);  
pos2 = Commands->Get_Position(obj2);
```

```
Vector3 gap = pos1 - pos2; //Doesn't matter which order the subtraction is in.  
float dist = gap.length(); //Where length() returns the magnitude of the vector (is this in the sdk?)
```

And the magnitude is calculated by taking the square root of the sum of the square of each element.

```
class Vector3  
{  
public:  
    float x, y, z;  
  
    float length()  
    {  
        return sqrt(x*x + y*y + z*z);  
    }  
}
```

So if there is no length() or equivalent function, you can still get the distance if you have access to each element of the vector.
