C-MP-1A : Concept behind classes in SCOM

This is a post in a series of posts titled “Custom Management Pack (MP) Development in SCOM”. If you would like to start from the beginning, please follow this link.

Class Basics

A Class represents a certain type of object that is discovered and monitored by SCOM, this could be anything from an application to a physical device. All items in a class will share common characteristics and properties which allow them to be grouped together.

Unlike MOM, SCOM offers a more granular monitoring solution and the tools needed to create them are more available to the public.SCOM classes follow the same rules as classes do in the programming world. Each class has properties, methods and interfaces that can either be public, private or internal.

Class Inheritance

When creating a new class in SCOM it needs to be related to some other declared class, form here SCOM uses the concept of inheritance in a similar way to many object orientated programming languages. When a new class is declared you need to provide a base class, your new class will then inherit all the characteristics from the base class. The following characteristics are inherited:

- Properties
- Relationships to other classes
- Discoveries
- Monitors
- Rules
- Tasks
- Diagnostics
- Recoveries
- Overrides

Inheritance is basically specializing a class in some way, normally by adding additional properties or methods to that class. Please refer to: http://www.authormps.com/dnn/Concepts/Classes/Basics/tabid/127/Default.aspx for a good example of this.

When you add a new class to SCOM it will never be populated until a discovery targeted at that class is added.

Finally every class in SCOM eventually inherits from System.Entity (found in Syetem.Library MP), if you want to create a new class in SCOM and don't want to extend an existing class you should base it off the System.Entity class.