

PSCustomObject Challenge

```
{  
  "host1": {  
    "ports": [22, 443, 3306]  
  },  
  "host2": {  
    "ports": []  
  },  
  "host3": {}  
}
```

C#, Java, Perl, Python import JSON into Dictionary/List:

Key	Value
host1	{[ports, System.Collections.Generic.List[System.Object]]}
host2	{[ports, System.Collections.Generic.List[System.Object]]}
host3	{}

TypeName: System.Collections.Generic.Dictionary`2...

Name	MemberType	Definition
Add	Method	...
Clear	Method	...
Contains	Method	...
Item	Method	...
Count	Property	...
Keys	Property	...
Values	Property	...

Apply:

\$obj.Count
\$obj.Keys
\$obj.Item



\$obj['host1']['ports'][1] => 443

Powershell operates PSCustomObjects

```
host1 : @{ports=System.Object[]}  
host2 : @{ports=System.Object[]}  
host3 :
```

TypeName: System.Management.Automation.PSCustomObject

Name	MemberType	Definition
Equals	Method	...
GetHashCode	Method	...
GetType	Method	...
ToString	Method	...
host1	NoteProperty	...
host2	NoteProperty	...

Apply:

```
$obj.Count  
$obj.PSObject.Properties.Name,Value
```

```
$obj | Get-Member -MemberType NoteProperty |  
ForEach-Object {...}
```



```
$obj.'host1'.ports[1] => 443
```

About

- <https://4sysops.com/archives/convert-json-to-a-powershell-hash-table/>
- `System.Management.Automation.PSCustomObject` is a default type when creating a custom object using the `New-Object`
- `PSCustomObject` directly derives from `System.Object`, does not implement any interface and does not have any fields or properties except the internal field `SelfInstance`