Mixins and Plugins a11y.text Mixins and Plugins A Quick Diversion into Ruby a11y.text A Quick Diversion into Ruby Every Class only has one parent A class may include many Modules Modules can add new methods Modules can overload old methods Metasploit modules inherit Msf::Module and include mixins to add features. Ruby : Mixins and Plugins | Metasploit Unleashed Metasploit Mixins a11y.text Metasploit Mixins Mixins are quite simply, the reason why Ruby rocks. Mixins include one class into another This is both different and similar to inheritance Mixins can override a class' methods Mixins can add new features and allows modules to have different †flavors'. Protocol-specific (HTTP, SMB) Behaviour-specific (brute force) connect() is implemented by the TCP mixin connect() is then overloaded by FTP, SMB, and others Mixins can change behavior. The Scanner mixin overloads run() Scanner changes run() for run\_host() and run\_range() It calls these in parallel based on the THREADS setting The BruteForce mixin is similar Metasploit Plugins a11y.text Metasploit Plugins Plugins work directly with the API. They manipulate the framework as a whole Plugins hook into the event subsystem They automate specific tasks that would be tedious to do manually Plugins only work in the msfconsole. Plugins can add new console commands They extend the overall Framework functionality class MyParent

```
def woof
```

puts "woof!―

end

end

class MyClass > MyParent

end

object = MyClass.new

object.woof() => "woof!―

\_\_\_\_\_

```
module MyMixin

def woof

puts "hijacked the woof method!―

end

end
```

class MyBetterClass > MyClass

include MyMixin

end Next Metasploit Fundamentals Prev Metasploit Object Model