

~~Stock Analysis DSL~~ Generating Plugin Frameworks

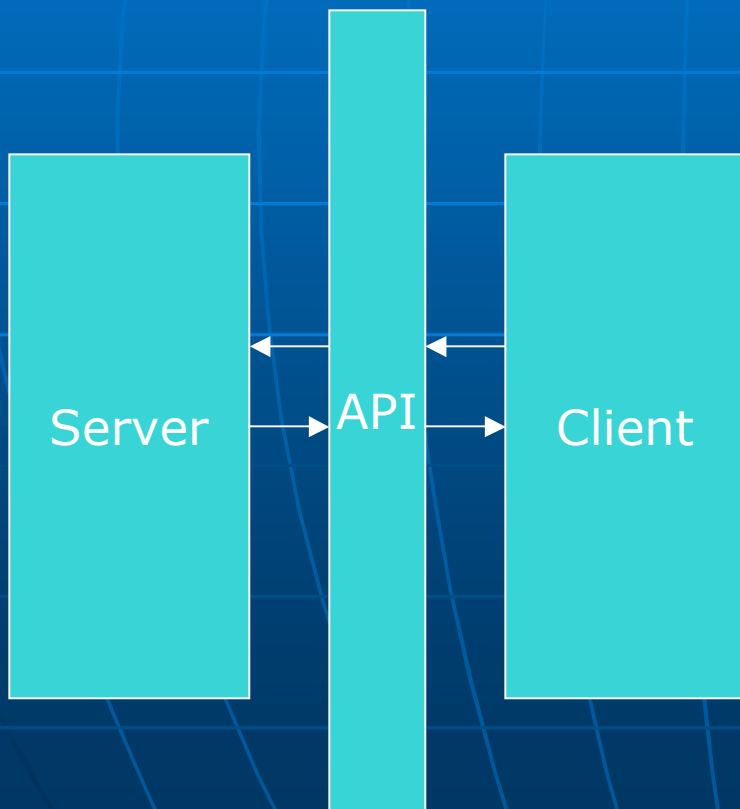
Patrick Christmas

Agenda

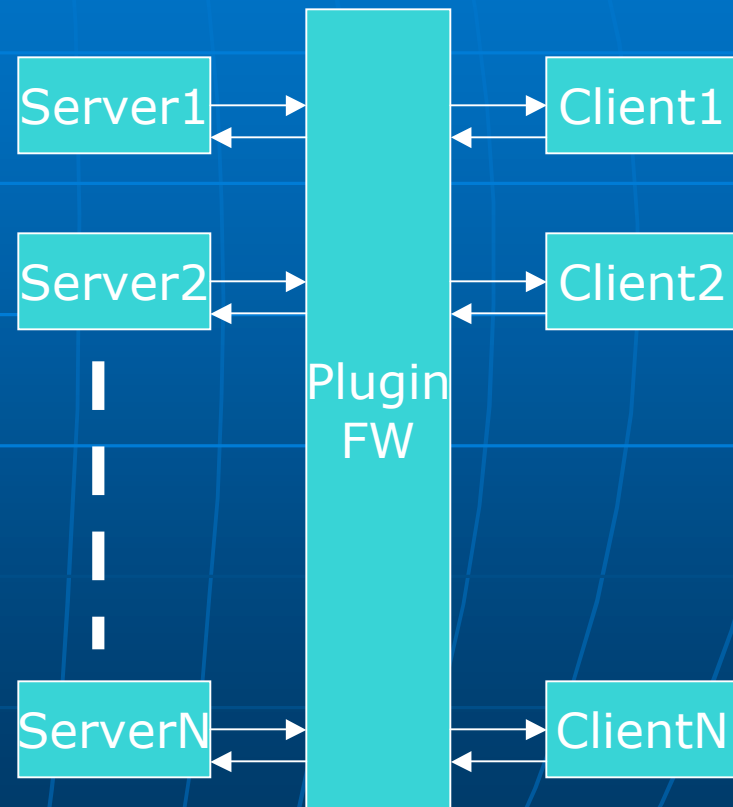
- What are Plugin Frameworks?
- Why use them?
- Example implementation
- Demo
- Lessons learned/Todos

What are Plugin Frameworks?

- Interface programming



- Plugin Framework



Why use Plugin Frameworks?

- You write a module that will be reused in other contexts
- You write a context that needs pluggable behavior
- As a method for managing complexity
- As a method for managing large projects (large # of developers)
- Ease of adding new functionality
- Easy to code to, hide details of who is providing functionality

Why not use them?

- Overhead of creation is bigger than task warrants.
 - This could change in the future.
Grafting on later is an option, but harder.
- Thus my project – generating plugin framework to make startup cost smaller.

Implementation (FW)

- PluginModule (Load)
- PluginManager (Manage set)
- Bindable (Aggregated onto PluginItems)
- PluginFW (Glue code)

Implementation (generator)

- Top level macros
- Lower level IDL based
 - Using pluggable idl reader to generate skeleton code.
 - Could embed contract validation into this layer.

Demo

Lessons Learned & Todos

- Many options with Pluggable IDL generator. Would like to create tool for creating generators.
- Todos:
 - Aggregation
 - Notifiers
 - Interface validation
 - Leak checking for bound objects

Questions?