

CommandBox



-
- **CFML CLI, REPL,
and Package Manager**

Who am I?

- **ColdFusion Architect (12 years)**
- **Geek**
- **Android Lover**
- **Blogger (codersrevolution.com)**
- **ColdBox Platform Evangelist**
- **Musician**
- **Shade-Tree Mechanic**
- **Husband (11 years)**
- **Dad (3 beautiful girls)**



Professional Open Source

- ✦ **Company backing and funding**
- ✦ **Professional Training Courses**
- ✦ **Books**
- ✦ **Support & Mentoring Plans**
- ✦ **Architecture & Design Sessions**
- ✦ **Server Tuning & Optimizations**
- ✦ **Code Reviews & Sanity Checks**
- ✦ **Dancing lessons**



How Do We Work?

- **Tools!**
 - **IDE**
 - **RIAForge**
 - **Copy/paste**
 - **Scribble page/site**
 - **Ant**
 - **Grunt/Gulp**

How Should We Work?

- **Better!**
 - **Automation**
 - **Share code with community**
 - **Manage external libs**
 - **Powerful and expressive tools**
 - **Easily test out code**
 - **Scaffolding**

Introducing CommandBox!

- **Command Line Interface (CLI)**
- **Package Manager**
- **Read, Eval, Print, Loop (REPL)**



Introducing CommandBox!

- **Native executable for Windows, Mac, Linux**
- **First of its kind for CFML devs**
- **Fills in the missing tooling gaps**



Introducing CommandBox!

- **For ANY CF dev, not just *Box users**
- **Operation System integration for executing commands**
- **ForgeBox integration for cloud package management and installations**
- **ColdBox Platform, TestBox, and ContentBox CMS Integrations**

Introducing CommandBox!

- **Embedded CFML server**
- **Ability to create command recipes and execution**
- **Built-in Help system**
- **Ability to create and execute commands built using ColdFusion (CFML)**

Let's Get Started!

- **Usage Docs:**

<https://www.ortussolutions.com/products/commandbox/docs/current>

- **Command API Docs:**

<http://apidocs.ortussolutions.com/commandbox/current>

Installation

- **Download from Ortus Solutions site**
- **Only 33MB and comes with CF server embedded!**
- **Simply download and run executable**
- **Optionally put “box” binary in your system path**
- **Update later from CLI via “upgrade” command**

Usage - General

- **Multiple commands inside the Box shell**
- **“One-off” commands from OS shell**
- **Current Working Directory**
- **Work with output with grep, more, and file redirection**

Usage – Commands

- **Help**
- **Namespaces**
- **Aliases**

Usage - Parameters

- **Named parameters**
- **Positional parameters**
- **Boolean flags**
- **Escaping input**
- **Required values**
- **File paths**

Usage – Tab Completion

- **Command**
- **Parameter**
- **Custom**
- **Files path**

Usage – History

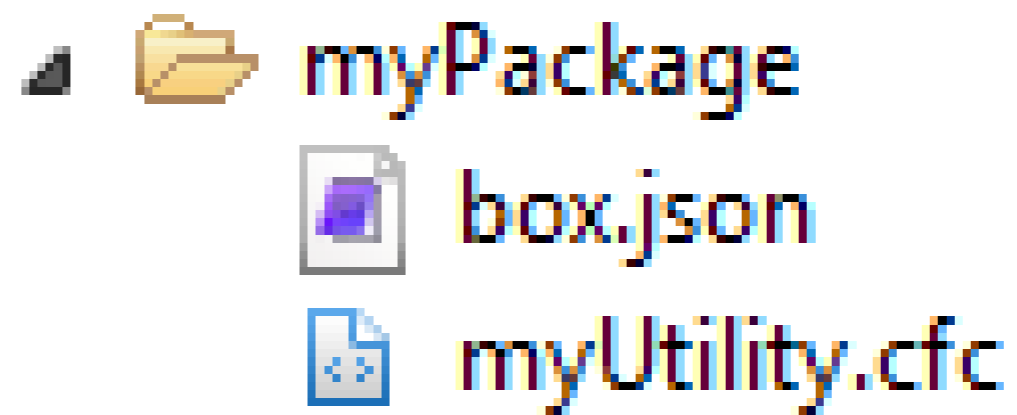
- **Command**
- **REPL**
- **Managing history**

REPL

- **Run CF code from the command line**
- **Supports CFML or CFScript**
- **REPL has its own history**

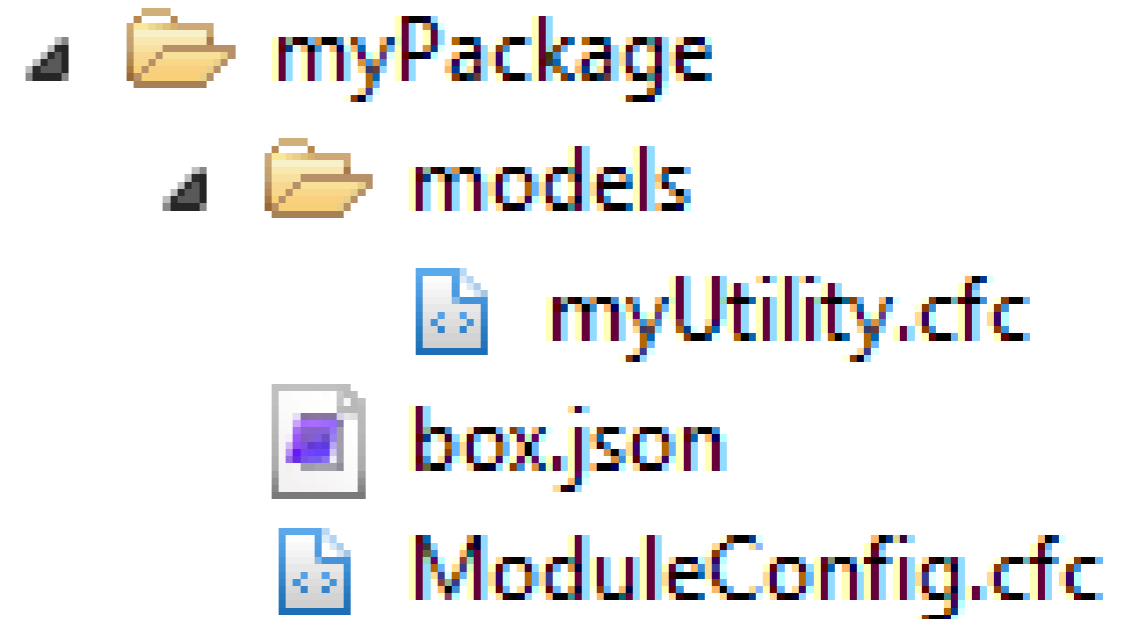
What's A Package?

- **A folder**
- **Some code**
- **A box.json**



What's A Module?

- **A “smart” package**
- **Has a ModuleConfig.cfc**
- **Has optional conventions**
- **Auto-registers itself with ColdBox**



Conventions Are Good!

- **A common way of doing things**
- **Makes everyone's code compatible**
- **Standardizes extension points**
- **Most all current languages enforce conventions**
- **Increases automatability**
- **91,000 Node modules can't be wrong!**

What is `box.json`

- **A standard package descriptor**
- **Declares common package meta data**
- **Name**
- **Slug**
- **Version**
- **Author**
- **Dependencies**
- **Installation details**

What is box.json

```
{  
  "name"      : "Weather By IP",  
  "author"    : "Brad Wood <brad@codersrevolution.com.com",  
  "version"   : "1.0.0",  
  "slug"      : "weather-lookup-by-ip",  
  "shortDescription" : "Look up local weather by IP address.",  
  "type"      : "modules",  
  "engines"   : [  
    { "type" : "railo", "version" : ">3.1" },  
    { "type" : "adobe", "version" : ">9.0" },  
    { "type" : "coldbox", "version" : ">4.0" }  
  ],  
  "dependencies" : {  
    "geolocation-lookup-by-ip" : "2.0.0"  
  }  
}
```

What is ModuleConfig.cfc?

- **Tells the ColdBox app how to load the module**
- **Settings**
- **auto-map CFCs with WireBox**
- **Auto-create app-specific mappings**
- **Add SES routes**
- **Add menu contributions (ContentBox)**

What is ModuleConfig.cfc?

```
component {  
    this.title           = "Weather By IP";  
    this.author         = "Brad Wood";  
    this.description    = "Look up local weather by IP address.";  
    this.version        = "1.0.0";  
    this.autoMapModels  = true;  
    this.modelNamespace = "Weather";  
    this.cfmapping      = "/weather";  
  
    function configure() {  
        settings = {  
        };  
    }  
  
    function onLoad() {}  
    function onUnload() {}  
}
```


ForgeBox

- **Web GUI**
- **Online code repo for ANY package**
- **Searchable**
- **User-maintained**
- **ForgeBox commands**
- **Install packages**
- **Save dependencies to box.json**
- **Uninstall packages**

Artifacts Cache

- **Local storage for packages**
- **Download only necessary if not in cache**
- **Cache location**
- **“artifacts” commands to manage**

Generators

- **Ability scaffold out entire apps**
- **Quickly create app bits and pieces**
- **Interactive commands collect info**
- **Completely scriptable**
- **Generators built for ColdBox and TestBox**
- **More to come (contributions welcome!)**

Let's Build An App!

- **init**
- **coldbox create app**
- **coldbox create handler**
- **coldbox create module**
- **install testbox**
- **package show/set**
- **testbox run**

Recipes – Yummy!

- **Like a “batch” file**
- **Runs multiple commands at once**
- **Can accept parameters**
- **Great for automation**
- **myRecipe.boxr**

Packaging with box.json

- **Dependencies are stored in box.json when installed**
- **You can distribute your app without its dependencies**
- **Dependencies can have dependencies (inception)**
- **Use “install” to install them**

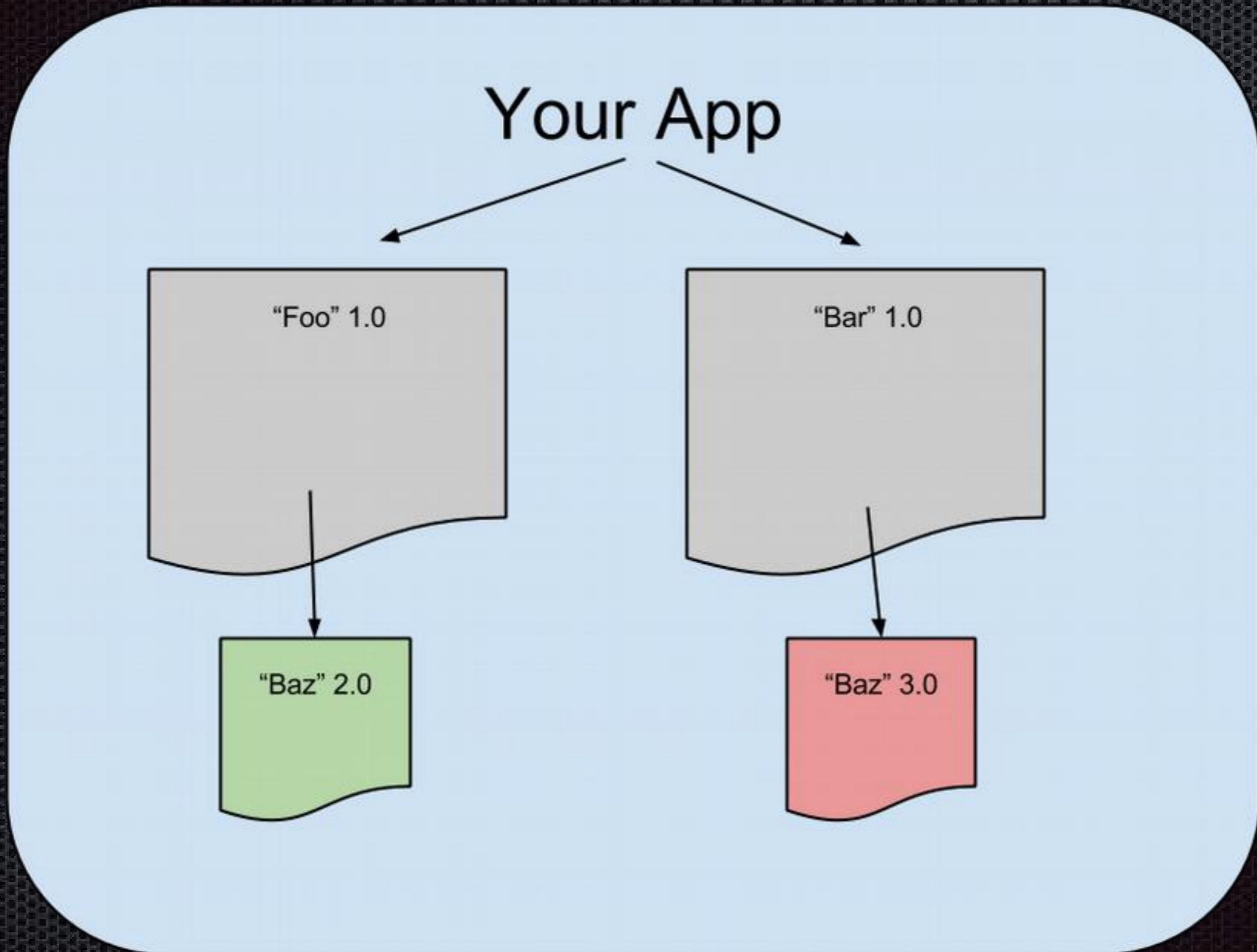
Packaging with box.json

- **Weather sample app depends on ColdBox**
- **Also depends on weather lookup**
- **Weather lookup depends on GeoLocation**
- **Developing on the app depends on TestBox**
- <https://github.com/bdw429s/ColdBox-Dependency-Sample-App>

Coming Soon!

- **Task Runners/build tools (Ant, Grunt, Gulp)**
- **Install repo adapters (Git, RIAForge, Corporate, etc)**
- **ForgeBox 2.0**
- **More generators and integrations (fw/1 CFWheels)**
- **ContentBox integrations**
- **More embedded servers supported**
- **Multi-version dependencies**

Multi-Version Dependencies



Developing Commands

- **CommandBox commands are just CFCs**
- **Extend BaseCommand**
- **Implement “run()” method**
- **Print object for output**
- **Managed by WireBox for DI**

Snake throwdown

- **Nothing like old school ASCII games**
- **Stress reliever**
- **Don't let your boss see**
- **Can you beat my high score? (141)**

Preso Links

■ **Download CommandBox**

- <http://www.ortussolutions.com/products/commandbox>

■ **Source Code**

- <https://github.com/Ortus-Solutions/commandbox>

■ **Forgebox**

- <http://www.coldbox.org/forgeBox>

■ **Sample App w/Dependencies**

- <https://github.com/bdw429s/ColdBox-Dependency-Sample-App>

CommandBox Resources



✦ **Official Site**

<http://www.ortussolutions.com/products/commandbox>

✦ **Documentation**

<http://apidocs.ortussolutions.com/commandbox/1.0.0/index.html>

<https://www.ortussolutions.com/products/commandbox/docs/current>

✦ **Google Group**

<https://groups.google.com/a/ortussolutions.com/forum/#!forum/commandbox>

✦ **Training**

<http://www.ortussolutions.com/services/Training>

✦ **Professional Support**

<http://www.ortussolutions.com/services/support>

Brad Wood &
Ortus Solutions, Corp
brad@ortussolutions.com



Q & A

