



**Rock Developer Environment**



# Overview

- What are your goals/objectives?
- They will dictate the approach you might use
- Some tools you may want



# What Are Your Goals?

- Just tinkering
- Want to contribute pull requests to core
- Want to build stuff for my organization
  - Simple
  - Sophisticated



# Rockit SDK vs the Rock Repo

Two distinct, but related things



# Rockit SDK

Register for pre-CITRT Rock Day on October 21

Hello Nick Spark Development Network

ROCK

ms

FeaturesLearnAskConnectInvestDeveloper

Rockit

You are here: Home / Developer / Rockit



Let us kick start your development by creating a custom project for you with all the right details in all the right places.

Your Organization Name

Your Domain Name

e.g., rocksolidchurch.org

Create My Project

# Rock Github Repo

This repository Search

ExploreGistBlogHelp

nairdo

+

SparkDevNetwork / Rock

Unwatch32Unstar76Fork52

An open source CMS, Relationship Management System (RMS) and composable application framework.  
<http://www.rockrms.com> — Edit

8,377 commits23 branches30 releases14 contributors

branch: masterRock / +

- Update migration helpers to work correctly after removing category ...

azturner

 authored 16 days ago latest commit 48982b1c4c

Applications/Wpf

 - Update version to 1.0 18 days ago

Build

 - Adding doc version number to copyright footer of SHFB 6 months ago

Checkin Labels

 - change to label file 3 months ago

Design Assets

 - update to the blue crystal theme a month ago

Dev Tools

 - added Dev Tool SQL View\_Categories.sql 23 days ago

Documentation

 - Sample data can now add existing Group Location Schedules. 2 months ago

DotLiquid

 - added new lava filter of ToCssClass 21 days ago

Installers

 - fix installers so they all say "Rock RMS" instead of "RockRMS" 18 days ago

Quartz

 - Update all the Nuget packages. Started with just WebApi, but ended ... 6 months ago

Rock Client

 Update code generation 19 days ago

Rock CodeGeneration

 - Remove file 17 days ago

Rock.Migrations

 - Update migration helpers to work correctly after removing category ... 16 days ago

Code

Issues32

Pull Requests0

Wiki

Pulse

Graphs

Settings

HTTPS clone URL

https://github.com/!

You can clone with HTTPS, SSH, or Subversion.

Clone in Desktop

Download ZIP



# Rockit SDK

- The Rockit SDK [rockrms.com/Rock/Developer/Rockit](https://rockrms.com/Rock/Developer/Rockit) is a small VS web project that includes:
  - a custom starter/sample project (in your namespace) which demonstrates custom entities
  - the RockWeb folder with the Rock DLLs for the latest, particular version of Rock

## NOTE:

- There is a [Rockit Github repo](#) but the Rockit SDK consumes it to build the custom project.
- Source code for the Rock DLLs are not included in the SDK.



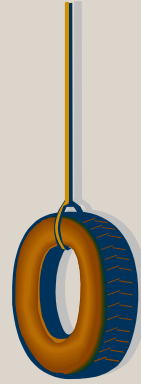
# Rock Github Repo

- The Rock Github repo [github.com/SparkDevNetwork/Rock](https://github.com/SparkDevNetwork/Rock)
  - Includes all the source code except the contribution statement generator code



# Just Tinkering

Goal





# Have Fun

- But still follow naming conventions and guidelines
  - Write clean code
  - Use proper namespaces
  - Use correct folder names
- Recommend download Rockit SDK  
[rockrms.com/Rock/Developer/Rockit](https://rockrms.com/Rock/Developer/Rockit)





# Contribute to Core

Goal



# Not quite there

- **Bugs** only -- not really looking for **features** this way
- We're not fully ready to process these quickly
- I'll be the traffic cop on these and will probably deal with them on Fridays



# So you want to help?

- Fantastic! Be sure...
- You've read our [Coding Standards](#)
- You've read our [Naming Conventions](#)
- You've read the code
- You like to replicate existing patterns
- You understand the way we think



# Don't use Rockit SDK

- Clone the main repo  
[github.com/SparkDevNetwork/Rock.git](https://github.com/SparkDevNetwork/Rock.git)
- Follow git-flow approach  
<http://nvie.com/posts/a-successful-git-branching-model/>
  - Branch off the develop branch
  - Branch naming (i.e., feature-*na-featurename*)



# Submit Pull Request

- High Level Steps
  - Fork/clone
  - Branch off master
  - Code (& test) *one feature/bug at a time*
    - Be sure to *Find All References* (shift F12)
  - Commit last... one single descriptive commit
  - Submit Pull Request
- Pull requests are pretty easy from Github
- But SmartGit 5/6 now includes this too



# Github

- <https://help.github.com/articles/using-pull-requests/#initiating-the-pull-request>
- The easiest way of thinking about the branch range is this: the *base branch* is **where** you think changes should be applied, the *head branch* is **what** you would like to be applied.



# From SmartGit

- Verify the branch you are requesting the Pull Request from is up to date from upstream/develop
- Go into 'Log' (Query | Log) or ('Log' button)
- Select the branch you are requesting the Pull Request from (you feature branch, for example)
- Click 'Review | Create Pull Request...'
- In the dropdown, select the branch you are sending the Pull Request to (for example, upstream/develop)
- Enter a detailed Title and Description
- Click 'Create'







# Simple Production

Goal



# Prod Lite

- Start with the Rockit SDK
- Change your web.config encryption keys to match production
- Add your custom stuff locally
  - But still commit to your source control
- Manually deploy your changes to your prod via xcopy, etc.



# Prod Lite (cont)

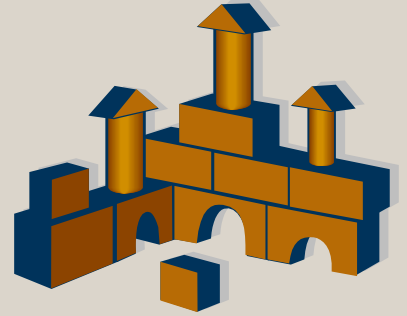
- Update Releases
  - Update your dev environment via **Rock Update**  
Suggest using our beta release  
*General Settings > Update Server URL*  
<http://update.rockrms.com/F/rock/api/v2/>
  - Test & fix your code
  - Commit (perhaps to release-1.y.z branch)



# Prod Lite (cont)

- Update Releases (cont)
  - Once beta is released, use **Rock Update** on prod
  - then deploy your local changes





# Production Ready & Structured

Goal



# Production Sophisticated

- Start with the Rokit SDK
- Change your web.config encryption keys to match production
- Develop your custom plugins
- Commit to your develop branch
- **Never use Rock Update on your prod server**
  - Replace Update Server URL with “donotuse”



# Production Solid (cont)

- When ready to release to production,
  - Take backup / snapshot of prod
  - Use service like AppVeyor to deploy from your Git repo master branch to production
- Merge changes to your master branch
  - NOTE: Create an App\_Data/Run.Migration flag file



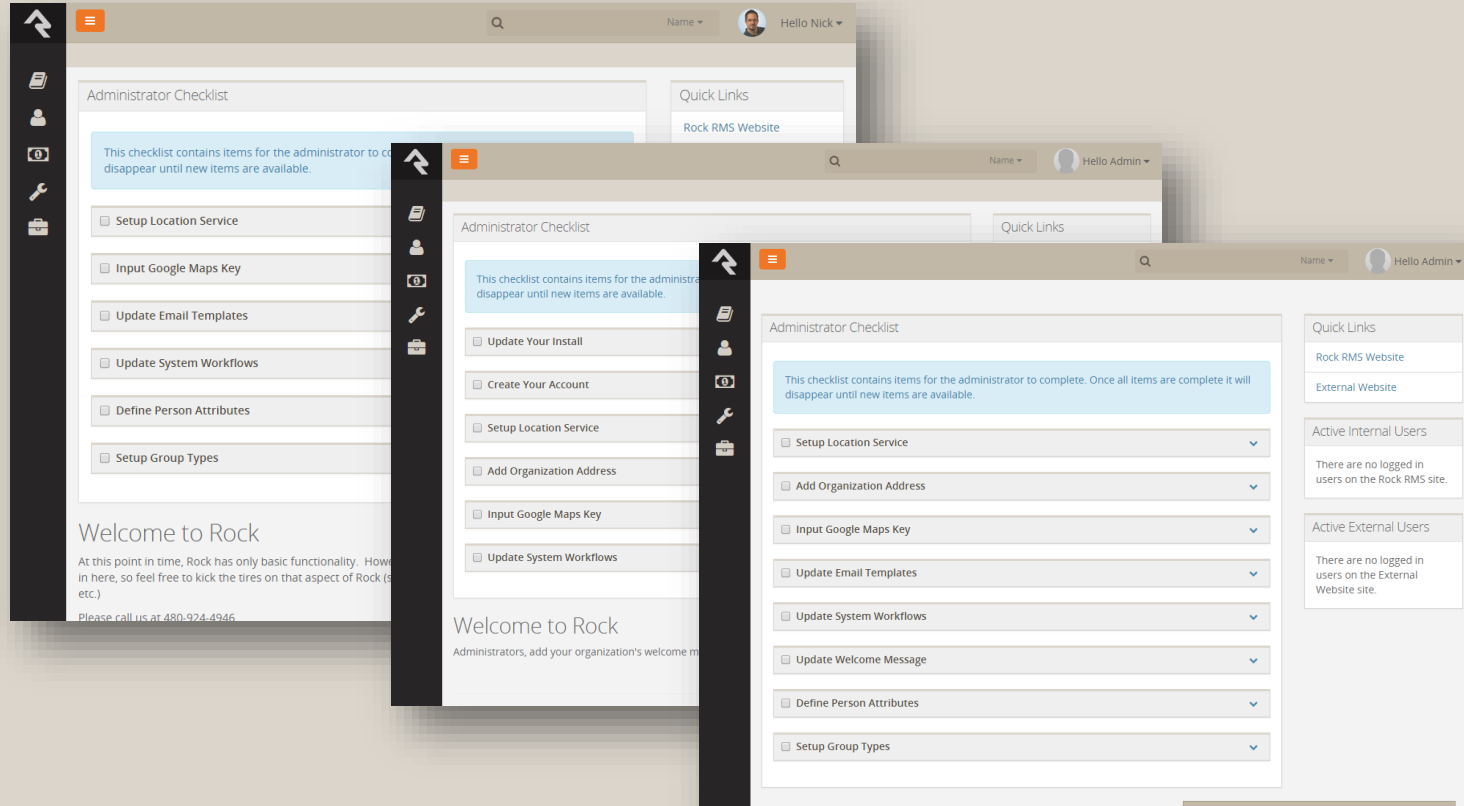
# **WARNING!**

And now a little advice

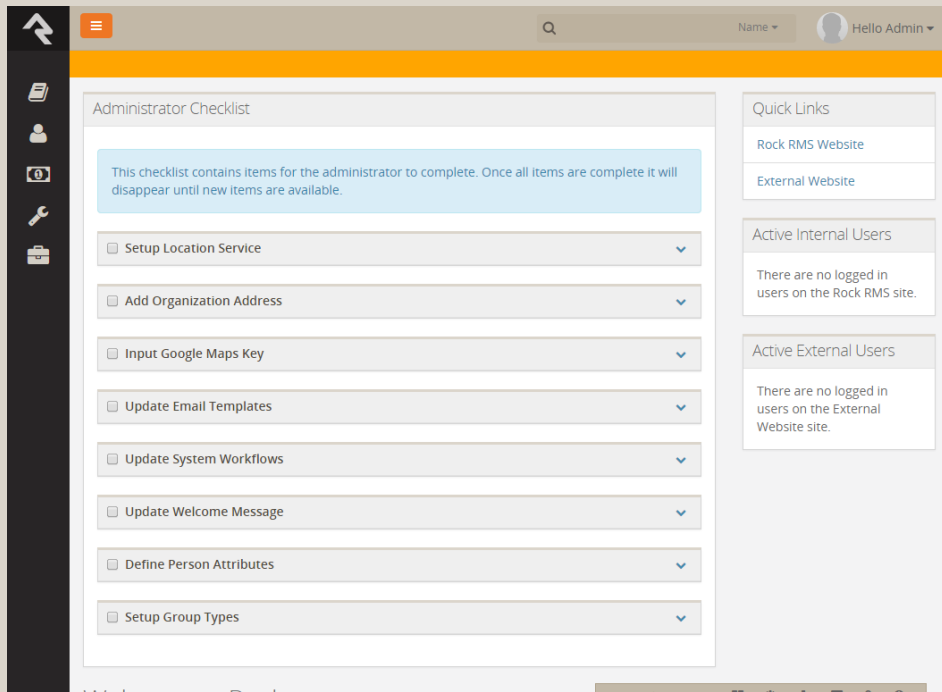




# All Rocks Look Alike



# Colorize Your Dev



- Either add an HtmlContent block to the site's layouts
  - Or some other approach like change style sheet
- ```
#content-wrapper #page-title {  
    background-color: orange;  
}
```
- (use your own theme)



# Tips

A few handy...



# Db Madness

- When running in a fresh db, add a comment to tell you what it's for:

```
<connectionStrings>
  <!-- The 0910 is where I'm setting up the new Photo Request Workflow stuff
        that I'll build a migration for later
  -->
  <add name="RockContext" connectionString="Data Source=localhost;Initial
Catalog=Rock2014_0910; User Id=RockUser; ...
```

1124



# Tell Yourself to Remember

- Run.Migration

```
<connectionStrings>  
  <!-- REMEMBER: Don't forget to App_Data/Run.Migration -->  
  <add name="RockContext" connectionString="Data Source=localhost;Initial  
Catalog=Rock2014_0910; User Id=RockUser; ...
```

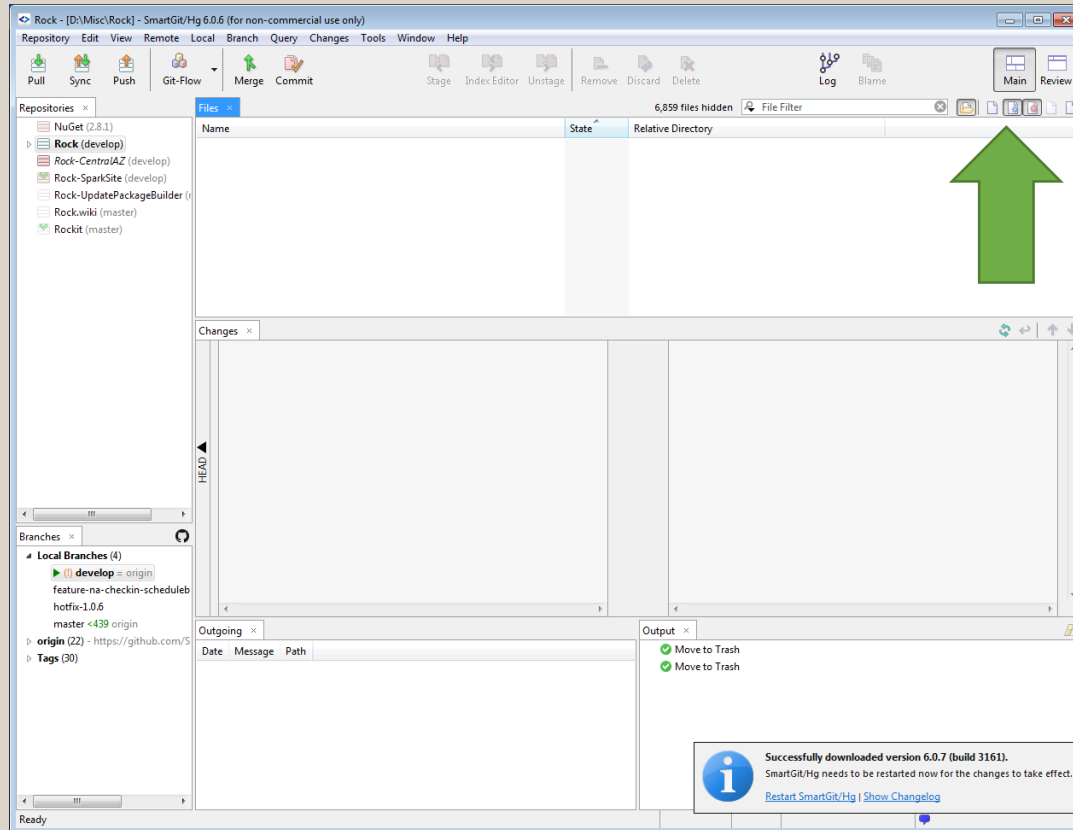


# Tools

Extras

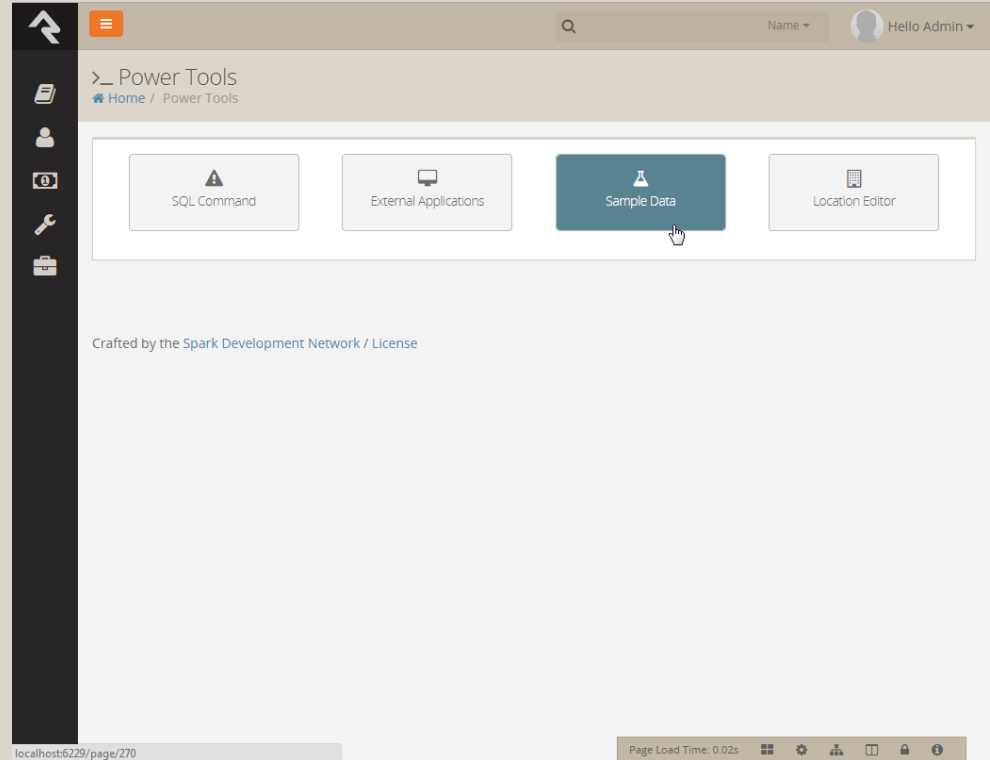


# SmartGit - free



# Sample Data -free

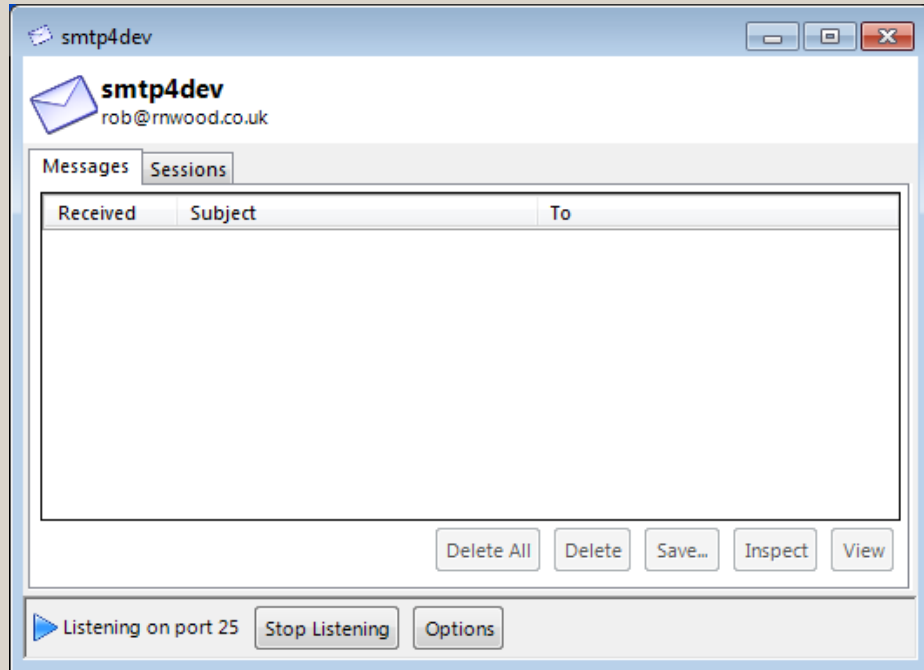
- The AdventureWorks of Rock
- Enable stopwatch setting for some debug info





# Smtplib4Dev - free

- Portable (no install),  
lightweight SMTP listener
- So email code can deliver



# SQL Scripts - free

- Rock\Dev Tools\Sql
  - **Enable\_LocalhostDevTesting.sql** to change certain rock settings to localhost
  - **Populate\_Plethora\_of\_Person\_wRandomNames.sql**



# Less Compiler - free

- WinLess - add screenshot



# End

the

