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\* Rock ChMS

\* Developer

\* Handbook

\*/

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# **Keeping Developers Happy**

Developers are fickle and that’s OK. They have good and bad habits, and have opinions on how things should be done. Unfortunately if left untamed, this can lead to a state of unhappiness for everyone. For example, attempting to perform diffs against code whose tab-spacing changes from version to version makes developers unhappy.

This handbook will contain the **rules and regulations** which are intended to keep everyone happy and it will also explain some of the environment setup needed to get started with developing.

# Setting Up Your Development Environment

## Getting Git

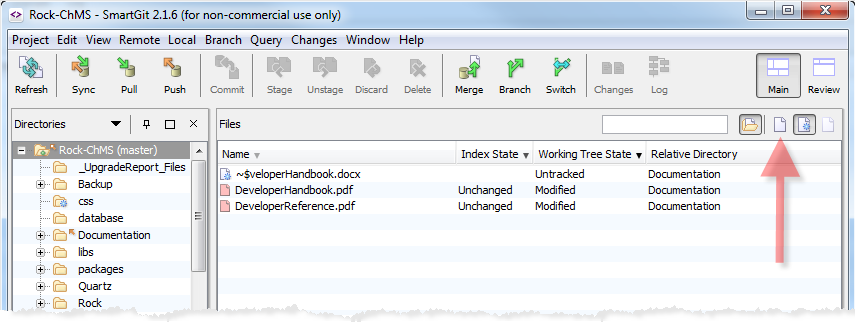
[SmartGit](http://www.syntevo.com/smartgit/index.html) is a Git client for Windows, Mac OS X and Linux. It provides a GUI to the Git command-line interface. We recommend SmartGit because it’s free for non-commercial use.

1. Download and install “**Git for Windows**” from here <http://code.google.com/p/msysgit/> with all the default settings.
2. [Download](http://www.syntevo.com/smartgit/download.html) and install SmartGit.
   1. Follow this to install Git <http://help.github.com/win-set-up-git/>
3. Run SmartGit to complete SmartGit setup using the defaults except where noted below:
   1. For the **Type of Usage** step you will probably want to select the third option, “Non-Commercial Use Only” as long as you’re only working on the non-commercial Rock-ChMS project.
   2. For the **Git & HG Executables step,** verify that the Git Executable path is filled in with the path to where you installed Git from step 1.
   3. For the **User Information** step, use your GitHub account name and email.
   4. For the **Hosting Providers** step, select GitHub as your main hosting provider.
   5. For the Master Passwords… step, we **do not** recommend choosing the “Don’t use a master password” option.
   6. In the Welcome to SmartGit window, if asked “What do you want to do?” just cancel/close that window and proceed to the next section.

## Getting RockChMS

1. Locate the project’s Git repository by visiting <https://github.com/SparkDevNetwork/Rock-ChMS>.
2. Find the project’s repository read-only URL address (it will be something like <https://github.com/SparkDevNetwork/Rock-ChMS.git>) if you’re on the Rock developer core team you can use your read-write Url or if you’ve forked the Rock-ChMS repo, you can use the read-write Url to your forked repo.
3. In SmartGit, go to “Project” » “Clone” (or choose “clone existing repository”) and use the default settings except where noted here:
   1. In the **Repository Url** field, enter “[https:// github.com/SparkDevNetwork/Rock-ChMS.git](https://User@github.com/SparkDevNetwork/Rock-ChMS.git)”
   2. In the **Local Directory** step, locate or create a folder on your computer where you’ll store your Git Working Tree, e.g., C:\projects\Rock-ChMS.

**NOTE**: Most of us find it’s best to unselect the “show unchanged files” option (Crtl+1) in SmartGit.



## Getting Started

### Database

You’ll need to create an empty “RockChMS” database on your local system with a default user (owner) of “RockUser”. The first time you run RockWeb, the EF framework will create all the needed tables and data.

Note: Make sure your SQL Server properties Security’s Server Authentication is set to “SQL Server and Windows Authentication mode”. You’ll also need to enable TCP/IP and Named Pipes in your SQL Server Client Protocols (if you have not already done this before).

### Web Config

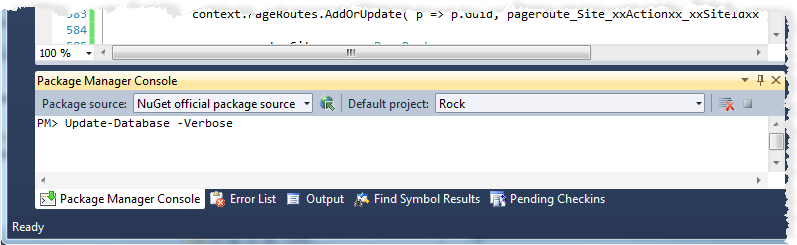
If it does not exist, create an empty web.connectionString.config file under your RockWeb project. Add with something like:



Replace <Password> with the one you created in the Database step above.

### First Time – Creating and Seeding the Database

Start Visual Studio and open the Package Manager Console window and run “Update-Database” (you can pass the –Verbose flag if you wish) as shown below. *Make sure you’re Default project is set to Rock as shown above in this screenshot.*

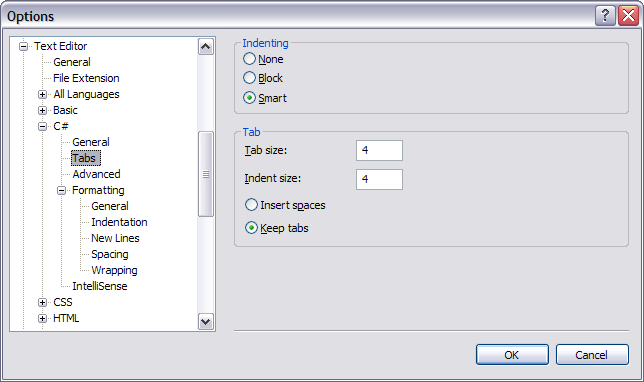


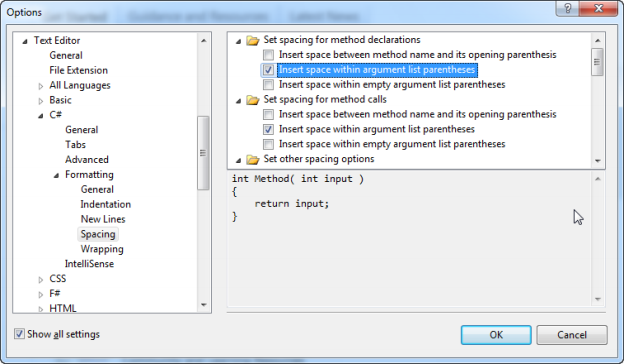
Once you do this, your RockChMS database should have all the required tables and initial seed data required to be able to run Rock as the Administrator user. (TBD – Need to explain how to login as the Administrator).

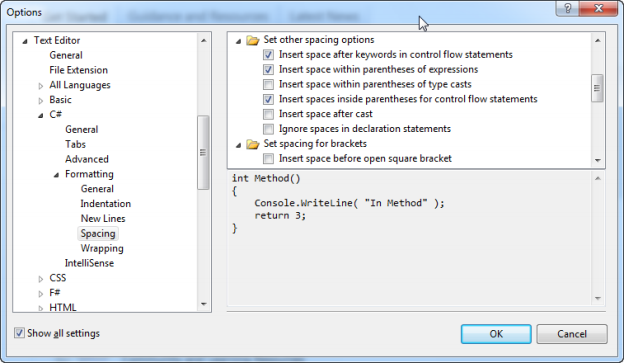
# **Coding Standards**

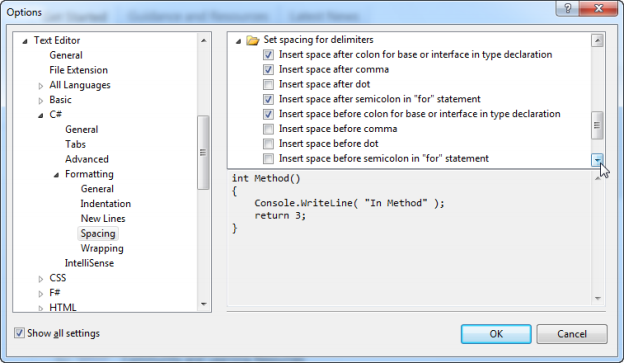
The following are the adopted coding standards:

* First and foremost, follow the established patterns you see in the existing code base. Don’t invent your own patterns.
* See <http://www.dotnetspider.com/tutorials/CodingStandards.doc>
* Follow the Naming Conventions and Standards outlined by items 1 through 11 in section 7.
* Follow the Indentation and Spacing outlined in section 8. Use Spacing Settings for Visual Studio. Under Options, Text Editor, C#, Spacing checkbox the following (you may need to check the “Show all settings” checkbox in the lower left corner if you don’t see these settings):









# **Task Tracking & Communication**

We use [GitHub for tracking public issues](https://github.com/SparkDevNetwork/Rock-ChMS/issues), Trello for tracking project team tasks, and are currently using Campfire for immediate team member Q & A communications and [Basecamp](https://sparkdev.basecamphq.com/) general purpose, large team communications as well as technology/feature discussions and witeboarding.

Team communications

http://campfirenow.com/images/logo_campfire-full.png

Instant Q & A communications

Public issue reporting

Task tracking

# Required Reading

## This Handbook

Ok, you’re almost done so don’t get too flustered about it.

## Developer Reference

|  |  |
| --- | --- |
|  | Found in the **Documentation** folder, the Developer Reference is not only good for you, it is required reading. Seriously though – it is the best way to get ramped up developing proper in Rock ChMS. |

## The Framework API

This is found in your Documentation folder’s SandCastle\index.html

## The REST API

This is found on your Rock environment under ~/REST/help

## Highly Recommended

## Recommended

# **Developer Communication**

Here are the best ways to communicate with the team and the Rock ChMS developer community.

|  |  |
| --- | --- |
| http://www.37signals.com/svn/images/campfire-logo-for-fluid.png | Developer Lounge in Campfire  <https://sparkdevnetwork.campfirenow.com/40198> |
|  | IRC Channel #RockChMS irc://chat.freenode.net/#RockChMS |
|  | Twitter - Follow us:  [[@Rock](http://twitter.com/airdo)ChMS](http://twitter.com/rockChMS)  [@SparkDevNetwork](http://twitter.com/#!/SparkDevNetwork)  [@RefreshCache](http://twitter.com/refreshcache) |
| Spark Dev Network | TBD - Developer forums on our community site |
|  | Github Wiki (use when you need to document something you create)  <https://github.com/SparkDevNetwork/Rock-ChMS/wiki/Reference> |