

A decorative graphic consisting of several overlapping squares in shades of olive green and yellow-green, located to the left of the conference title.

USER CONFERENCE 2011

SAN FRANCISCO | APRIL 26 - 29

A decorative graphic consisting of several overlapping squares in shades of olive green and yellow-green, located in the lower middle section of the page.

Using git and github.com

DEVELOPER LOUNGE LAB

A solid dark grey horizontal bar at the bottom of the page.

Table of Contents

- Introduction 3
- Step 1: Setting Up Git 3
- Title Text Goes Here..... 3
- Step 2: Creating a Repository 4
- Step 3: Contributing a Change 4
- Step 4: Next Steps, Additional Resources, Etc..... 4
- Step 5: Get Beer 5

Introduction

git is a popular distributed source code management tool, in wide use today. MarkLogic uses git to manage a number of our open source projects. We also share code at Github where you'll find our projects underneath <http://github.com/marklogic>

For the uninitiated, git can appear complex (some say overly complex) at first. The purpose of this lab is introduce you to some of the basics to get you going – how to pull down a copy of a remote git repository, how to make and contribute back a change, and a few other tidbits.

If you're coming from a non-distributed system (like svn, cvs, or p4), you'll find several differences. One we'll see soon in this lab is that the process of committing a change is separate and distinct from the process of sharing that change with others. Another thing that can help you up front, is to be aware that git has an unusual (and unconventional) vocabulary. Some of the words you will be accustomed to from other systems (like checkout and commit) have different semantics in git..

There has been a lot written on git and this lab is not intended to replace much of that. For those interested in the path to ninja git skills, I strongly recommend learning how git works by reading John Wiegley's '*Git From the Bottom Up*' (<ftp://ftp.newartisans.com/pub/git.from.bottom.up.pdf>).

And for those interested in just a slightly more detailed introduction, Scot Chacon's Git Community Book (<http://book.git-scm.com/>) is a great resource.

Since we use Github at MarkLogic, this lab is oriented to using git and Github together as we do.

Step 1: Setting Up Git

Most Unix/OS X machines will include a git client.

```
% which git
/usr/bin/git
```

If this returns

```
% which git
git: Command not found
```

then you'll need to install git. The best instructions for this are at

```
http://help.github.com/set-up-git-redirect
```

This URL will redirect you to a page specific to your operating system (Windows, OS X, Linux).

If you're on Windows, there are several choices, but the easiest is to set up msysgit (a command line client). The link above will redirect you to

```
http://help.github.com/win-set-up-git
```

which will help you install msysgit.

Step 2: Creating a Repository

It is simple to set up a repository for new work. The steps online here show you how to create a remote repository at Github, a local one on your machine, and then how to commit and push up a change from your local repository to the remote one.

```
http://help.github.com/create-a-repo
```

After that, you can also try the simple README editor online at Github. Browse to

```
http://github.com/{your user name}/Hello-World
```

Click on the README and you'll see an 'Edit this file' button on the right hand side that will give you an in-browser text editor open on your README.

You can edit and save the change to your README right in the browser. After you do that, you can pull down the change to your local repository via

```
% git pull origin master
```

Step 3: Contributing a Change

Sometimes, instead of starting from scratch, you want to start with a copy of something else. If you want to add a feature or fix a bug and contribute the change back, this is the easiest way to do it.

```
http://help.github.com/fork-a-repo
```

Step 4: Next Steps, Additional Resources, Etc...

You can find additional information on MarkLogic and MarkLogic-related open source projects at the following locations:

- <http://developer.marklogic.com/code>
- <http://github.com/marklogic>

Step 5: Get Beer

