Metron Development Environment Setup Instructions

The following provides instructions on how to set up your dev environment so you can start contributing to the Apache Metron project quickly.

The below instructions is with the IntelliJ as the IDE. However, you can use whatever IDE you would like to contribute to Metron.

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- Create a Pull Request

Pre-Requisites

- 1. Create an account on Githhub if you don't already have an account.
- 2. Download the latest version of IntelliJ

Setting up your Dev Env

The below provides instructions on how to setup your Dev environment with Github and IntelliJ

Fork the Metron Repo

We need to first fork the Apache Metron repo. Forking a repository allows you to freely experiment with changes without affecting the original project. See h ere for details on forking.

The below provides instructions on how to fork the Metron Repo:

1. Log into your github account

2. Go to https://github.com/apache/incubator-metron and click the Fork button and fork into your github account.

← → C	US] https://github.com/apache					☆
	This repository Search		Pull requests Issues	Gist		📌 +- 🛐-
	apache / incubator-m mirrored from git://git.apache.org/inc Code	subator-metron.git		⊙ Watch ▼	21 ★ Star 4	41 ¥ Fork 42
	Mirror of Apache Metron (In	cubating)				
	131 commits	β / 3 branch	98		की 14 con	tributors
	Branch: master - New pull	request New file Uplo	ad files Find file HT	TPS - https://github.com/ap	bache 🔂 🕁	Download ZIP
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	deployment	METRON-108 Create Fast Pack	et Capture Process (nickwal	en) closes apa		2 days ago
	metron-sensors	METRON-108 Create Fast Pack	et Capture Process (nickwal	en) closes apa		2 days ago
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	.gitattributes	Update license/notices with appr	opriate 3rd party bundled no	tices clo		16 days ago
	.gitignore	Metron 98 - Travis does not fail a	build if the integration tests	fai		8 days ago
	.travis.yml	METRON-107 Travis is not repo	rting a failed build when apa	he rat fai		4 days ago
		Adding DISCLAIMER				2 months ago
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	notices_dumper.py	Update license/notices with appr	opriate 3rd party bundled no	tices clo		16 days ago
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3. You should now have a fork like: <u>https://github.com/[github_user_name]/incubator-metron</u>

Clone the Metron repo to you local Dev Env

After forking, clone the repo to your local dev workstation. See following instructions:



2. Click File --> New --> Project from Version Control --> Github

3.	Configure the Github Repo URL that you forked earlier to clone.	
	request body ten ; v.	

	Clone Repository	
Git Repository URL:	https://github.com/gvetticaden/incubator-metron	Contract Test
Parent Directory:	/Users/gvetticaden/Dropbox/Hortonworks/Development/Idea Projects	
Directory Name:	incubator-metron-fork	
?	Cancel	Clone
	status_msy , vit ,	

Setup your Cloned Repo as an IntelliJ project

1. After the project has has been setup, you should see a prompt to add the cloned repo as a maven project. Click the "Add as Maven Project"

🚺 Non-managed pom.xml file found:	m
/Users/gvetticaden/Dropbox/Hortonworks/Development/IdeaProjects/incubator-metron-f Add as Maven Project or Disable notification	ork May
Add as maver roject of Disable notification	ven Pro
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- 3. Setup the Java SDK as 1.8 (if you don't have oracle jdk 1.8, please install it first)
 - a. File -> Project Structure --> Project Settings --> Project --> Select 1.8 as SDK
- 4. Setup the Project Structure correctly
 - a. Go to File --> Project Structure --> Project Settings --> Module
 - b. select plus sign and select "Import Module"
 - c. Go to the location where you cloned your fork on your local workstation and select the metron-streaming folder
 - d. Check the checkbox "Import module as from External Folder" and Select Maven

	Import Module	
odule from <u>e</u> xisting sources		
It setting on the import setting something like the following: +	gs page Project Structure Name: Metron-Topologies Source: Paths Dependencies	Previous Next
C Metron-DataLoads Metron-Elasticsearch Metron-Elasticsearch Metron-Indexing Metron-MessageParsers Metron-Service Metron-Solr Metron-Streaming Metron-Testing Metron-Topologies	Language level: 7 - Diamonds, ARM, multi-cato Mark as: \$curces]ests Resources //Users/gvetticaden/Dropbox/Hortonworks/ src imain classes generated-sources generated-test-sources test-classes	Test Resources 🛅 Excluded
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i. Our of the following folders under the cloned repo directory: deployment, metron-sensors, metron-ui and site k. Build the entire project and ensure that you have no errors: Build --> Make Project

How to Start Contributing

Now that you have setup your IDE environemnt and want to contribute on an enhancement, do the the following:

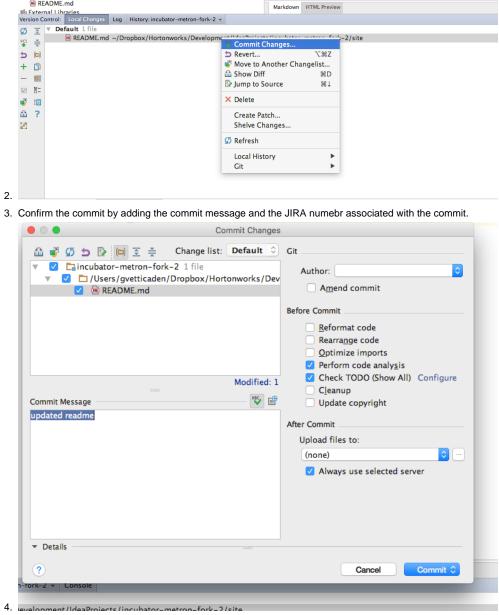
Create a JIRA Ticket

- 1. Create JIRA ticket in Metron JIRA for the enhancement that you want to work on if it doesn't exist.
- 2. Do your work within your Intellij project

Committing your changes to your Local Repo

After you have completed a small unit of work for the enhancement, you want to commit the changes to your local repo. Do the following

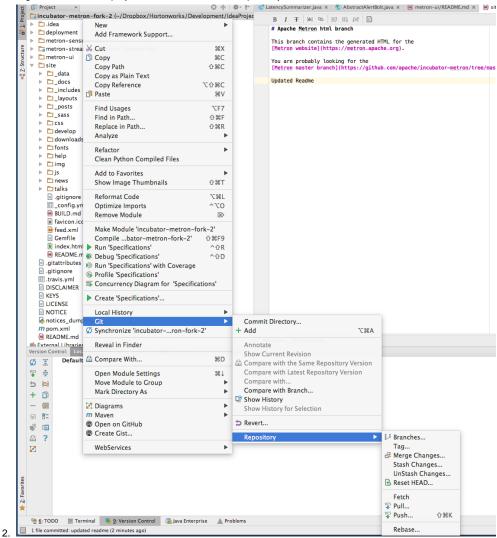
1. Go to version control tab --> local changes --> right on the files that you modified or created --> select commit changes



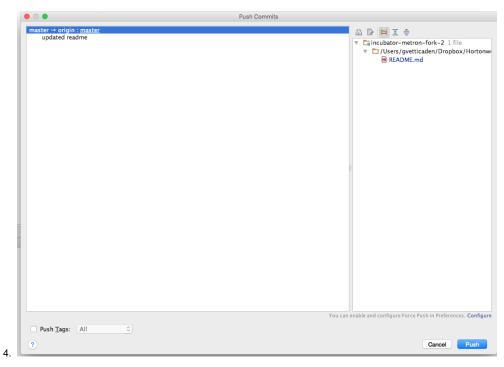
Pushing the Local Committed Changes to the Forked Github repo

Now that the changes have been committed to local repo. We want to push and commit those changes to your forked github.

1. Right Click on on the project in IntelliJ --> Git --> Repository --> Push



3. Click Push



5. You should now see the changes in the forked repo on your github account

Create a Pull Request

Pull requests let you tell others about changes you've pushed to a GitHub repository. Once a pull request is sent, interested parties can review the set of changes, discuss potential modifications, and even push follow-up commits if necessary.

- 1. Log into your github account and go to your forked repo.
- 2. Click the button "new pull request"

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	Webex M Hortonworks Cyb				2
	C This repository Search		requests Issues Gist		🖨 +- 👩-
	gvetticaden / incubat forked from apache/incubator-meti			⊙ Unwatch → 1	★ Star 0 ¥ Fork 42
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	132 commits	∦⁄ 3 branches	🛇 7 rel	eases	୍ଲୁ ଅନ୍ୟୁ 14 contributors
	Branch: master - New pu	I request New file Upload files	Find file HTTPS -	https://github.com/gvetti	😢 🙂 Download ZIP
	This branch is 1 commit ahead	of apache:master.			🕅 Pull request 📄 Compare
	gvetticaden updated read	me		Late	est commit b288caf 2 hours ago
	i deployment	METRON-108 Create Fast Packet Captu	re Process (nickwallen) close	apa	2 days ago
	metron-sensors	METRON-108 Create Fast Packet Captu	re Process (nickwallen) closes	зара	2 days ago
	metron-streaming	METRON-109 Maven checkstyle plugin is	s not checking test sources (m	herr	15 hours ago
	im metron-ui	Update license/notices with appropriate 3	3rd party bundled notices clo		16 days ago
	in site	updated readme			2 hours ago
	.gitattributes	Update license/notices with appropriate 3	3rd party bundled notices clo		16 days ago
	.gitignore	Metron 98 - Travis does not fail a build if t	the integration tests fai		8 days ago
	.travis.yml	METRON-107 Travis is not reporting a fail	iled build when apache rat fai		4 days ago
	DISCLAIMER	Adding DISCLAIMER			2 months ago
	E KEYS	Merging keys from https://dist.apache.org	g/repos/dist/release/incubato		2 months ago
		METRON-93: Generalize the HBase three	at intel infrastructure to suppo	r	8 days ago
	NOTICE	Update license/notices with appropriate 3	3rd party bundled notices clo		16 days ago
	E README.md	METRON-82 Enhance Travis CI Builds (r	nickwallen via cestella) closes	a	24 days ago
	notices_dumper.py	Update license/notices with appropriate 3	3rd party bundled notices clo		16 days ago
	pom.xml	METRON 86: Adding Solr indexing suppo	ort (merrimanr via cestella) clc	ses	10 days ago

- 3. BREADME.md
 4. Please be very careful to preface your PR with the full name of the JIRA so that the comments from github are replicated to the JIRA system for posterity. The name must be exact. If there is a JIRA, METRON-777, that is titled "Fix all the things!", please create your PR with the title: "METRON-777: Fix all the things!"
 5. Please fill out the PR template completely. For code submissions it will ask you not only to run full Unit Test, but also the integration test module, via
 - via

a.

mvn -q clean integration-test install && build_utils/verify_licenses.sh