DataBot TODO

* Add a “max executions” configuration element. The internal machinery is already implemented.
* Investigate projects/events-agent and consolidate with DataBot, if possible. Get rid of events-agent.
* Consolidate all CSV support in events-api and events-core and fix the current defect that breaks output for “test.domain:service=Mock,something=somethingelse/TestAttribute” field. The comma and the “.” should be enclosed in quotes. Then go to below:
* Connect to the local JBoss over JMX from databot, and get correct CSV output.
* **Configuration File Classpath Extensions**
  + **Environment Variable Support in configuration file classpaths.** Currently the wrapper script does not resolve environment variables.
  + **Eliminate Redundant Classpath Elements.** Currently the wrapper script will add to classpath a JAR every time it sees is, even if it seen it before. Filter out the JARs that already exist.
* **Sensitivity to $JBOSS\_HOME.** If using JBoss controllers as metric sources, databot is sensitive to the value of JBOSS\_HOME. Investigate why is that and fix.
* (..) **-f malfunctions**. -f should also send the results to stdout and avoid creating the CSV file. Currently it does not.
* **Reduce JBoss CLI client console verbosity**. Currently the JBoss CLI client sends this to stdout. Make it not to, or at least to send it to file only:  
    
  WARN: can't find jboss-cli.xml. Using default configuration values.

INFO xnio: XNIO Version 3.0.16.GA-redhat-1

INFO nio: XNIO NIO Implementation Version 3.0.16.GA-redhat-1

INFO remoting: JBoss Remoting version 3.3.9.Final-redhat-1

* Restore JBoss CLI functionality and test to work end to end.
* JMX
* Test JMX with:  
    
  databot -f -v -c ./databot.yml  
    
  with ~/tmp/databot.yml
* **Logging Configuration.** Logging should be configurable from the .yaml file. I should be able to specify at least the location of the log file and the verbosity, even if all the details can still be specified in $DATABOT\_HOME/lib/log4j.xml
* Find the best way to express JBoss metrics

sources:

remote-jboss:

host: 172.1.2.3

port: 9999

username: jmx

password: jmx123!

local-jboss:

metrics:

- PhysicalMemoryTotal

- test:

source: remote-jboss

definition: /something/something:count

* Longs do not display correctly because the field is interpreted as Map. Fix that.
* It should be able to replace all individual JBoss JARs with just one jboss-cli-\*.jar.
* Extract JBoss support from “events” and create a new “events-jboss” module.

\* Some OS metrics can be obtained from the JVM:

<pre>

conf:

- include:

domain: java.lang

bean:

- java.lang:type=OperatingSystem

- java.lang:type=Threading

attribute:

OpenFileDescriptorCount:

alias: jmx.OpenFileDescriptorCount

metric\_type: counter

MaxFileDescriptorCount:

alias: jmx.MaxFileDescriptorCount

metric\_type: counter

TotalStartedThreadCount:

alias: jmx.TotalStartedThreadCount

metric\_type: counter

PeakThreadCount:

alias: jmx.PeakThreadCount

metric\_type: counter

</pre>

\* 10/15/16 Does not work with JDG 7:

<pre>

@Timer-0 07:14:05,153 WARN [DataCollectionTimerTask] failed to collect data: org.jboss.as.cli.CommandContextFactory.newCommandContext(Ljava/lang/String;ILjava/lang/String;[CZZI)Lorg/jboss/as/cli/CommandContext;

</pre>

\* 10/04/16 os-stats failed to gather correct CPU consumption data from top. It seems to read a constant value. Troubleshoot and fix. Possibly calculate the values the same way top does, by reading from /proc files.

\* Explore using [[iftop]] to gather up/down bandwidth usage for each host:port pair.

\* '''JDG testing'''

\*\* Network bandwidth statistics, integrate <tt>iftop</tt>.

\*\* Access to MBeans. Paul's e-mail ''The mbean of the transport for the bridge channel exposes the attributes: num\_bytes\_sent and num\_bytes\_received''.

\* For four CLI metrics (2 for one instance and 2 for another, I get 4 cli.xml warnings. Normally I should get only 2 because I should share the clients.

<pre>

[fsgapp@ln001xsjdg0003 etc]$ WARN: can't find jboss-cli.xml. Using default configuration values.

@Timer-0 17:28:55,620 INFO [xnio] XNIO Version 3.0.14.GA-redhat-1

@Timer-0 17:28:55,623 INFO [nio] XNIO NIO Implementation Version 3.0.14.GA-redhat-1

@Timer-0 17:28:55,634 INFO [remoting] JBoss Remoting version 3.3.5.Final-redhat-1

WARN: can't find jboss-cli.xml. Using default configuration values.

WARN: can't find jboss-cli.xml. Using default configuration values.

WARN: can't find jboss-cli.xml. Using default configuration values.

</pre>

\* Fix logging, get rid of:

<pre>

NOMBP2:tmp ovidiu$ @Timer-0 18:37:22,052 INFO [xnio] XNIO Version 3.0.15.GA-redhat-1

@Timer-0 18:37:22,058 INFO [nio] XNIO NIO Implementation Version 3.0.15.GA-redhat-1

@Timer-0 18:37:22,080 INFO [remoting] JBoss Remoting version 3.3.7.Final-redhat-1

</pre>

\* Disconnect the JBossCliMetricSource instances on os-stats shutdown.

\* <span id="n3jHG32">'''Support for password externalization'''. Then update [[Os-stats\_Metric\_Reference#JBoss\_CLI\_Metrics]] with details.</span>

\* Warn if the collection time takes so long that it interferes with sampling interval length. Tests.

\* Implement <tt>os-stats --help metrics</tt> that introspects and displays the list of built-in metrics.

\* Current OSBase.execute() implementation is naive, implement it correctly.

\* Integrate the functionality and get rid of https://github.com/NovaOrdis/shell-tools/blob/master/jboss-os-memory-stats.sh