RESOLVED

2.9.0, 3.0.0-beta1, 2.8.2

Fixed

Public signup for this instance is **disabled**. Go to our Self serve sign up page to request an account.

Status:

Resolution:

Fix Version/s:



Hadoop YARN / YARN-6930

Admins should be able to explicitly enable specific LinuxContainerRuntime in the NodeManager

Details

Type: 1mprovement

Priority: Signal Major

Affects Version/s: None

Component/s: nodemanager

Labels: None
Target Version/s: 2.8.2
Hadoop Flags: Reviewed

Description

Today, in the java land, all LinuxContainerRuntimes are always enabled when using LinuxContainerExecutor and the user can simply invoke anything that he/she wants - default, docker, java-sandbox.

We should have a way for admins to explicitly enable only specific runtimes that he/she decides for the cluster. And by default, we should have everything other than the default one disabled.

Attachments

YARN-6930.001.patch	22 kB	07/Aug/17 21:42
	24 kB	10/Aug/17 18:26
YARN-6930.003.patch	24 kB	12/Aug/17 11:30
YARN-6930.004.patch	28 kB	28/Aug/17 18:17
YARN-6930.005.patch	28 kB	29/Aug/17 13:25
YARN-6930.006.patch	28 kB	30/Aug/17 14:05
YARN-6930.branch-2.001.patch	24 kB	07/Sep/17 12:59
YARN-6930.branch-2.002.patch	23 kB	07/Sep/17 14:57
YARN-6930.branch-2.8.001.patch	20 kB	10/Oct/17 15:16
YARN-6930.branch-2.8.002.patch	13 kB	10/Oct/17 22:52
	13 kB	09/Oct/17 13:00

Activity

Shane Kumpf added a comment - 02/Aug/17 19:56

I can take this one.

Miklos Szegedi added a comment - 02/Aug/17 20:38

JavaSandboxLinuxContainerRuntime already works like this. See yarn.nodemanager.runtime.linux.sandbox-mode for details. It is disabled by default. I suggest updating the title to DockerLinuxContainerRuntime only.

Shane Kumpf added a comment - 03/Aug/17 16:07

Thanks miklos.szegedi@cloudera.com for pointing that out. It seems that sandbox-mode is a bit different than what is being asked for in this issue. The sandbox-mode configuration is used to set the mode that is used within the policy (enforcing, permissive, or disabled - with disabled being the default) vs disabling the runtime all together.

▼ ○ Miklos Szegedi added a comment - 03/Aug/17 17:05 - edited

The disable config is actually smart enough to set the mode in one configuration, when it is enabled. Are you saying that a user will need to enable sandbox with two different config knobs just because of this? There is no way to use the runtime, when it is disabled. See pickContainerRuntime()

Shane Kumpf added a comment - 03/Aug/17 17:47

Thanks miklos.szegedi@cloudera.com - I did notice how it is being used after my comment. With the approach taken by JavaSandboxLinuxContainerRuntime, each runtime is now responsible for providing configuration knobs to disable that runtime. That means if the author of a new runtime forgets, there is no way to explicitly disable that runtime. It seems a global runtime whitelist would eliminate that concern, but having two configuration knobs isn't ideal either. What is your preference?

▼ ○ Miklos Szegedi added a comment - 03/Aug/17 23:34

Can you use yarn.nodemanager.runtime.linux.sandbox-mode and yarn.nodemanager.runtime.linux.docker-mode for the global whitelist? I guess yarn.nodemanager.runtime.linux.sandbox-mode can also be renamed before beta1, if needed.

- Miklos Szegedi added a comment 03/Aug/17 23:52
 - + gphillips, in case he would like to comment.
- Greg Phillips added a comment 04/Aug/17 13:06

Whitelisting runtimes seems to be the best option. I would likely modify the way sandbox-mode is selected to rely on the runtime whitelist and the container environment instead of using yarn.nodemanager.runtime.linux.sandbox-mode. This would remove the redundant knob issue.

Miklos Szegedi added a comment - 07/Aug/17 21:54

Thank you for the patch, shanekumpf@gmail.com. Would you mind adding two assertFalses verifying that Docker and Sandboxk are not allowed in . testIsRuntimeAllowedDefault?

I am wondering whether it would be a good idea to specify the user as well not just enabling a runtime in general. I could imagine that an admin allows Docker runtime only for specific users first...

➤ ○ Hadoop QA added a comment - 07/Aug/17 22:57

x -1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 17s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			trunk Compile Tests
0	mvndep	0m 9s	Maven dependency ordering for branch
+1	mvninstall	14m 43s	trunk passed
+1	compile	9m 31s	trunk passed
+1	checkstyle	1m 1s	trunk passed
+1	mvnsite	1m 28s	trunk passed
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
-1	findbugs	0m 54s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in trunk has 5 extant Findbugs warnings.
+1	javadoc	1m 8s	trunk passed
			Patch Compile Tests
0	mvndep	0m 10s	Maven dependency ordering for patch
+1	mvninstall	1m 33s	the patch passed
+1	compile	5m 51s	the patch passed
+1	javac	5m 51s	the patch passed
-0	checkstyle	1m 4s	hadoop-yarn-project/hadoop-yarn: The patch generated 2 new + 215 unchanged - 0 fixed = 217 total (was 215)
+1	mvnsite	1m 28s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1	findbugs	2m 18s	the patch passed
-1	javadoc	0m 23s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager generated 1 new + 105 unchanged - 0 fixed = 106 total (was 105)
			Other Tests
-1	unit	0m 33s	hadoop-yarn-api in the patch failed.

+1	unit	13m 26s	hadoop-yarn-server-nodemanager in the patch passed.
+1	unit	0m 14s	hadoop-yarn-site in the patch passed.
+1	asflicense	0m 26s	The patch does not generate ASF License warnings.
		66m 29s	

Reason	Tests
Failed junit tests	had oop. yarn. conf. Test Yarn Configuration Fields

Subsystem	Report/Notes
Docker	lmage:yetus/hadoop:14b5c93
JIRA Issue	YARN-6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12880714/YARN-6930.001.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle
uname	Linux 50390be84761 3.13.0-119-generic #166-Ubuntu SMP Wed May 3 12:18:55 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / adb84f3
Default Java	1.8.0_131
findbugs	v3.1.0-RC1
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/16753/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
checkstyle	https://builds.apache.org/job/PreCommit-YARN-Build/16753/artifact/patchprocess/diff-checkstyle-hadoop-yarn-project_hadoop-yarn.txt
javadoc	https://builds.apache.org/job/PreCommit-YARN-Build/16753/artifact/patchprocess/diff-javadoc-javadoc-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager.txt
unit	https://builds.apache.org/job/PreCommit-YARN-Build/16753/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-api.txt
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/16753/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server/nodemanager hadoop-yarn-project/hadoop-yarn/hadoop-yarn/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/16753/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

Shane Kumpf added a comment - 08/Aug/17 12:56

Thanks for the comments, miklos.szegedi@cloudera.com. I will get those assertions added.

I am wondering whether it would be a good idea to specify the user as well not just enabling a runtime in general. I could imagine that an admin allows Docker runtime only for specific users first...

I think there could be value in an ACL model for container runtimes, however, there are additional issues regarding user squashing that need to be addressed before the feature is very useful. Let's address that in a different issue if that works for you?

I'll also note that there are differences in implementation between the Java Sandbox and Docker runtimes, so I have not changed the behavior of the existing runtime selection with this patch. One of the considerations when developing the docker runtime was the ability to control the runtime per container as opposed to per application/cluster; i.e. AM's run as regular process based containers, while map and reduce task containers run using the docker runtime. The java sandbox based runtime takes a different approach and is enabled through configuration. This may be appropriate for the java sandbox runtime, but I don't want to change the way the docker runtime selection works today, which is why I decided not to introduce the docker-mode config and instead check the allowed runtimes after selection.

Miklos Szegedi added a comment - 08/Aug/17 17:08

Thank you shanekumpf@gmail.com. Yes, let's address the user issue in a different jira. Would you like to open it?

```
public void testIsRuntimeAllowedNotDocker() throws Exception {
95
            conf.set(LINUX_CONTAINER_RUNTIME_ALLOWED_RUNTIMES,
96
                "DefaultLinuxContainerRuntime, JavaSandboxLinuxContainerRuntime");
97
98
            DelegatingLinuxContainerRuntime delegatingLinuxContainerRuntime =
99
                new DelegatingLinuxContainerRuntime();
100
            delegatingLinuxContainerRuntime.initialize(conf);
101
            assertFalse(delegatingLinuxContainerRuntime.isRuntimeAllowed(
102
                dockerLinuxContainerRuntime));
103
```

This is nice, however I meant changing testIsRuntimeAllowedDefault to test that the default does not allow any of the other runtimes. This is what exactly checks what this jira is about.

Also, could you add the new config into yarn-default.xml?

Eric Badger added a comment - 08/Aug/17 18:22

Hey shanekumpf@gmail.com, thanks for the patch! I have a few comments

If we're only allowing certain runtimes to be executed, then shouldn't we not even init them in DelegatingLinuxContainerRuntime.java:initialize()?

I think DEFAULT_LINUX_CONTAINER_RUNTIME_ALLOWED_RUNTIMES and allowedRuntimes should be arrays of Strings. That way we can test equality against the array elements instead of whether a long string contains a substring.

Should we set runtime = null if the runtime isn't allowed, just in case someone catches the ContainerExecutionException somewhere up the line?

➤ ○ Hadoop QA added a comment - 10/Aug/17 19:43



Vote	Subsystem	Runtime	Comment
0	reexec	0m 15s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			trunk Compile Tests
0	mvndep	0m 43s	Maven dependency ordering for branch
+1	mvninstall	13m 40s	trunk passed
+1	compile	9m 4s	trunk passed
+1	checkstyle	0m 49s	trunk passed
+1	mvnsite	2m 4s	trunk passed
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
-1	findbugs	0m 49s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in trunk has 1 extant Findbugs warnings.
+1	javadoc	1m 32s	trunk passed
			Patch Compile Tests
0	mvndep	0m 9s	Maven dependency ordering for patch
+1	mvninstall	1m 23s	the patch passed
+1	compile	5m 35s	the patch passed
+1	javac	5m 35s	the patch passed
-0	checkstyle	0m 54s	hadoop-yarn-project/hadoop-yarn: The patch generated 1 new + 214 unchanged - 0 fixed = 215 total (was 214)
+1	mvnsite	2m 2s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	xml	0m 2s	The patch has no ill-formed XML file.
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1	findbugs	3m 19s	the patch passed
+1	javadoc	0m 25s	hadoop-yarn-api in the patch passed.
+1	javadoc	0m 42s	hadoop-yarn-common in the patch passed.
+1	javadoc	0m 23s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager generated 0 new + 104 unchanged - 1 fixed = 104 total (was 105)

+1	javadoc	0m 17s	hadoop-yarn-site in the patch passed.
			Other Tests
+1	unit	0m 33s	hadoop-yarn-api in the patch passed.
+1	unit	2m 42s	hadoop-yarn-common in the patch passed.
-1	unit	13m 59s	hadoop-yarn-server-nodemanager in the patch failed.
+1	unit	0m 12s	hadoop-yarn-site in the patch passed.
+1	asflicense	0m 22s	The patch does not generate ASF License warnings.
		72m 35s	

Subsystem	Report/Notes		
Docker	Image:yetus/hadoop:14b5c93		
JIRA Issue	YARN 6930		
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12881289/YARN-6930.002.patch		
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle xml		
uname	Linux fe3e2f63f22a 4.4.0-43-generic #63-Ubuntu SMP Wed Oct 12 13:48:03 UTC 2016 x86_64 x86_64 x86_64 GNU/Linux		
Build tool	maven		
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh		
git revision	trunk / 312e57b		
Default Java	1.8.0_131		
findbugs	v3.1.0-RC1		
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/16830/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html		
checkstyle	https://builds.apache.org/job/PreCommit-YARN-Build/16830/artifact/patchprocess/diff-checkstyle-hadoop-yarn-project_hadoop-yarn.txt		
unit	https://builds.apache.org/job/PreCommit-YARN-Build/16830/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager.txt		
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/16830/testReport/		
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn		
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/16830/console		
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org		

➤ ○ Hadoop QA added a comment - 12/Aug/17 13:00



Vote	Subsystem	Runtime	Comment
0	reexec	0m 24s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			trunk Compile Tests
0	mvndep	0m 11s	Maven dependency ordering for branch
+1	mvninstall	16m 5s	trunk passed
+1	compile	9m 20s	trunk passed
+1	checkstyle	1m 0s	trunk passed
+1	mvnsite	2m 12s	trunk passed
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site

-1	findbugs	0m 53s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in trunk has 1 extant Findbugs warnings.
+1	javadoc	1m 47s	trunk passed
			Patch Compile Tests
0	mvndep	0m 10s	Maven dependency ordering for patch
+1	mvninstall	1m 35s	the patch passed
+1	compile	6m 8s	the patch passed
+1	javac	6m 8s	the patch passed
+1	checkstyle	1m 4s	the patch passed
+1	mvnsite	2m 25s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	xml	0m 2s	The patch has no ill-formed XML file.
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1	findbugs	4m 42s	the patch passed
+1	javadoc	0m 27s	hadoop-yarn-api in the patch passed.
+1	javadoc	0m 53s	hadoop-yarn-common in the patch passed.
+1	javadoc	0m 30s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager generated 0 new + 104 unchanged - 1 fixed = 104 total (was 105)
+1	javadoc	0m 18s	hadoop-yarn-site in the patch passed.
			Other Tests
+1	unit	0m 40s	hadoop-yarn-api in the patch passed.
+1	unit	2m 54s	hadoop-yarn-common in the patch passed.
-1	unit	14m 1s	hadoop-yarn-server-nodemanager in the patch failed.
+1	unit	0m 17s	hadoop-yarn-site in the patch passed.
+1	asflicense	0m 31s	The patch does not generate ASF License warnings.
		79m 24s	

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:14b5c93
JIRA Issue	YARN-6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12881608/YARN-6930.003.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle xml
uname	Linux 8f2862adf020 3.13.0-119-generic #166-Ubuntu SMP Wed May 3 12:18:55 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 8b242f0
Default Java	1.8.0_144
findbugs	v3.1.0-RC1
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/16873/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
unit	https://builds.apache.org/job/PreCommit-YARN-Build/16873/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager.txt
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/16873/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/16873/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

Shane Kumpf added a comment - 12/Aug/17 13:09

Thanks miklos.szegedi@cloudera.com and ebadger for the feedback. I have attached a new patch that addresses your comments and the issues reported by the precommit job.

Should we set runtime = null if the runtime isn't allowed, just in case someone catches the ContainerExecutionException somewhere up the line?

I don't believe this is necessary given the scope of runtime, so I've left this change out. Let me know if I'm missing something here.

I'm still looking into the c-e test failure, but it may be unrelated.

Shane Kumpf added a comment - 15/Aug/17 14:00

The unit test failure does not appear to be related to this patch. It is failing on trunk today. I've opened YARN 7014 to investigate. I believe the latest patch has addressed the comments. /cc jianhe

Eric Badger added a comment - 16/Aug/17 16:00

The findbugs isn't related to this JIRA, butl think it's something that we should fix. We can just make CGROUPS ROOT DIRECTORY another NM config.

DelegatingLinuxContainerRuntime.java

```
@@ -31,8 +32,13 @@
import org.apache.hadoop.yarn.server.nodemanager.containermanager.runtime.ContainerRuntime;
import org.apache.hadoop.yarn.server.nodemanager.containermanager.runtime.ContainerRuntimeContext;

+import java.util.Arrays;
+import java.util.List;
import java.util.Map;

+import static org.apache.hadoop.yarn.conf.YarnConfiguration.DEFAULT_LINUX_CONTAINER_RUNTIME_ALLOWED_RUNTIMES;
+import static org.apache.hadoop.yarn.conf.YarnConfiguration.LINUX_CONTAINER_RUNTIME_ALLOWED_RUNTIMES;
+
```

Not sure of the convention here. Is it ok to import static variables one by one or should we just import YarnConfiguration and reference the variables specifically?

```
@@ -50.25 +56.35 @@
  \verb"private DefaultLinuxContainerRuntime" defaultLinuxContainerRuntime";
  private DockerLinuxContainerRuntime dockerLinuxContainerRuntime;
  private JavaSandboxLinuxContainerRuntime javaSandboxLinuxContainerRuntime;
 private List<String> allowedRuntimes;
  @Override
  public void initialize(Configuration conf)
      throws ContainerExecutionException {
    allowedRuntimes = Arrays.asList(
         conf.getTrimmedStrings(LINUX_CONTAINER_RUNTIME_ALLOWED_RUNTIMES,
        DEFAULT_LINUX_CONTAINER_RUNTIME_ALLOWED_RUNTIMES));
    PrivilegedOperationExecutor privilegedOperationExecutor =
        PrivilegedOperationExecutor.getInstance(conf);
     defaultLinuxContainerRuntime = new DefaultLinuxContainerRuntime(
        privilegedOperationExecutor);
     defaultLinuxContainerRuntime.initialize(conf);
    if (isRuntimeAllowed(defaultLinuxContainerRuntime)) {
      defaultLinuxContainerRuntime.initialize(conf);
     dockerLinuxContainerRuntime = new DockerLinuxContainerRuntime(
        privilegedOperationExecutor);
     dockerLinuxContainerRuntime.initialize(conf);
```

It would save us a little bit of time and memory isRuntimeAllowed took the class name directly. That way we could check to see if the runtime is allowed before we allocate it. I also wonder whether it would be better/cleaner to iterate through allowedRuntimes and allocate the new objects by class name via reflection instead of hard-coding all of them. There's probably a reason why this is a terrible idea, but it's a thought.

▼ ○ Eric Badger added a comment - 16/Aug/17 19:38

File YARN 7025 for the findbugs issue

Shane Kumpf added a comment - 17/Aug/17 12:15

Thanks for the review, ebadger.

The findbugs isn't related to this JIRA, but I think it's something that we should fix.

See YARN-6515. YARN-6968 has been created to track fixing the issue, but I expect we'll remove the reference all together once whitelisted mounts are available.

Is it ok to import static variables one by one or should we just import YarnConfiguration and reference the variables specifically?

Given line length limits and how long some of the config options have become, IMO, it improves readability, but I'll let others comment if there is a strong opinion.

I also wonder whether it would be better/cleaner to iterate through allowedRuntimes and allocate the new objects by class name via reflection instead of hard-coding all of them

I've always tried to reserve reflection for cases where I don't know a class and its functionality at compile time. In this case we do. Again, if there is a strong opinion that the trade off is worth it, I can pursue a patch that leverages reflection.

Jason Darrell Lowe added a comment - 17/Aug/17 16:38

Sorry to jump in a bit late here. I agree that going the reflection route is a bit dubious at this point for a couple of reasons. This isn't a supported plugin interface yet, meaning we don't expect users to provide their own runtime classes which would require reflection to load. Also the runtime interface would need at least a method to determine whether that runtime wants to support a particular container. Currently

DelegatingLinuxContainerRuntime#pickContainerRuntime has very specific knowledge of all the various runtimes and is doing that logic. It would need to be changed to an ordered list where the first runtime to say it wants to support a container gets it. So I think we're OK keeping it hardcoded for now given it's not really a general interface yet. Even if we want to migrate to a full plugin interface later that requires fully-qualified class names in the property list, we can always continue to recognize the legacy values for backwards compatibility.

On a related note, how does a user know what values are valid for yarn.nodemanager.runtime.linux.allowed-runtimes? If we are going the hardcoded route then arguably we should list the ones we know about here so users know what they can do. Also from a performance standpoint, if we're going hardcoded then it would be more efficient to use enums for the various supported runtimes and use an EnumSet to track allowed runtimes. Then we aren't doing a linear search with string compares for each runtime on each container operation but rather a simple bitmask check. Not a must-fix thing, just pointing out the possibility.

We could also explicitly decouple the config values from the source, using simpler values like "default,docker,javasandbox" rather than the class name. The latter has the drawback that if anyone decides to refactor the class name they just inadvertently broke all existing user configs that referred to it. If we keep an explicit mapping of values to classnames (like the enum) then this can't happen.

Shane Kumpf added a comment - 21/Aug/17 15:27

Thanks for the feedback, jlowe! I'm not opposed to moving this to enums and simpler names if that is the preferred direction.

If we are going the hardcoded route then arguably we should list the ones we know about here so users know what they can do.

When you say "list the ones we know about here", can you elaborate on what you mean? List them in the documentation?

✓ O Jason Darrell Lowe added a comment - 21/Aug/17 16:19

I'm not hung up on whether we go full-blown enums, but I do think we should not do "semi-reflection" with the base class names. IMHO we should either do a full plugin interface with reflection or not use reflection at all. Maybe others feel differently.

When you say "list the ones we know about here", can you elaborate on what you mean?

Sorry, I meant in the property description for yarn.nodemanager.runtime.linux.allowed-runtimes in yarn-default, which last I checked was used to automatically generate the property documentation in the Hadoop docs. If a user stumbles across this property, the description is not going to be sufficient to know what valid values are allowed.

Shane Kumpf added a comment - 28/Aug/17 18:19

Thanks for the feedback jlowe and ebadger. I have uploaded a new patch to address the comments. Runtime types are now represented as an enum, docs have been updated with allowed values, and the runtimes will no longer be instantiated or initialized if the runtime is not allowed.

➤ O Hadoop QA added a comment - 28/Aug/17 19:39



Vote	Subsystem	Runtime	Comment
0	reexec	0m 20s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			trunk Compile Tests
0	mvndep	0m 11s	Maven dependency ordering for branch
+1	mvninstall	15m 44s	trunk passed
+1	compile	10m 11s	trunk passed
+1	checkstyle	1m 3s	trunk passed

5 PM		[IA	KN-6930] Admins should be able to explicitly enable specific LinuxContainerRuntime in the NodeManager - ASF JIKA
+1	mvnsite	2m 16s	trunk passed
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
-1	findbugs	0m 53s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in trunk has 1 extant Findbugs warnings.
+1	javadoc	1m 55s	trunk passed
			Patch Compile Tests
0	mvndep	0m 11s	Maven dependency ordering for patch
+1	mvninstall	1m 36s	the patch passed
+1	compile	6m 14s	the patch passed
+1	javac	6m 14s	the patch passed
-0	checkstyle	1m 2s	hadoop-yarn-project/hadoop-yarn: The patch generated 1 new + 214 unchanged - 1 fixed = 215 total (was 215)
+1	mvnsite	2m 13s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	xml	0m 1s	The patch has no ill-formed XML file.
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1	findbugs	3m 57s	the patch passed
+1	javadoc	0m 28s	hadoop-yarn-api in the patch passed.
+1	javadoc	0m 44s	hadoop-yarn-common in the patch passed.
+1	javadoc	0m 24s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager generated 0 new + 104 unchanged - 1 fixed = 104 total (was 105)
+1	javadoc	0m 15s	hadoop-yarn-site in the patch passed.
			Other Tests
+1	unit	0m 36s	hadoop-yarn-api in the patch passed.
+1	unit	2m 42s	hadoop-yarn-common in the patch passed.
-1	unit	13m 53s	hadoop-yarn-server-nodemanager in the patch failed.
+1	unit	0m 14s	hadoop-yarn-site in the patch passed.
+1	asflicense	0m 26s	The patch does not generate ASF License warnings.
		78m 24s	

Reason	Tests
Failed junit tests	hadoop.yarn.server.nodemanager.containermanager.TestContainerManager

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:14b5c93
JIRA Issue	YARN 6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12884091/YARN-6930.004.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle xml
uname	Linux 113027a99b13 3.13.0-119-generic #166-Ubuntu SMP Wed May 3 12:18:55 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / d5bc958
Default Java	1.8.0_144
findbugs	v3.1.0-RC1
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/17154/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
checkstyle	https://builds.apache.org/job/PreCommit-YARN-Build/17154/artifact/patchprocess/diff-checkstyle-hadoop-yarn-project_hadoop-yarn.txt
unit	https://builds.apache.org/job/PreCommit-YARN-Build/17154/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager.txt
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17154/testReport/

modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17154/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

Shane Kumpf added a comment - 28/Aug/17 19:52

I'll upload a new patch to address the checkstyle issue. The test that failed passes locally and doesn't appear to be related to this patch.

▼ ○ Hadoop QA added a comment - 29/Aug/17 14:47

-1 overall

Vote	Subsystem	Runtime	Comment	
0	reexec	0m 18s	Docker mode activated.	
			Prechecks	
+1	@author	0m 0s	he patch does not contain any @author tags.	
+1	test4tests	0m 0s	he patch appears to include 1 new or modified test files.	
			trunk Compile Tests	
0	mvndep	0m 46s	Maven dependency ordering for branch	
+1	mvninstall	16m 42s	trunk passed	
+1	compile	9m 31s	trunk passed	
+1	checkstyle	0m 58s	trunk passed	
+1	mvnsite	2m 7s	trunk passed	
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site	
-1	findbugs	0m 49s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in trunk has 1 extant Findbugs warnings.	
+1	javadoc	1m 47s	trunk passed	
			Patch Compile Tests	
0	mvndep	0m 11s	Maven dependency ordering for patch	
+1	mvninstall	1m 29s	e patch passed	
+1	compile	5m 38s	the patch passed	
+1	javac	5m 38s	ne patch passed	
+1	checkstyle	0m 58s	adoop-yarn-project/hadoop-yarn: The patch generated 0 new + 214 unchanged - 1 fixed = 214 total (was 215)	
+1	mvnsite	2m 4s	the patch passed	
+1	whitespace	0m 0s	The patch has no whitespace issues.	
+1	xml	0m 2s	The patch has no ill-formed XML file.	
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site	
+1	findbugs	3m 29s	the patch passed	
+1	javadoc	0m 23s	hadoop-yarn-api in the patch passed.	
+1	javadoc	0m 42s	hadoop-yarn-common in the patch passed.	
+1	javadoc	0m 23s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager generated 0 new + 104 unchanged - 1 fixed = 104 total (was 105)	
+1	javadoc	0m 16s	hadoop-yarn-site in the patch passed.	
			Other Tests	
+1	unit	0m 32s	hadoop-yarn-api in the patch passed.	
+1	unit	2m 28s	hadoop-yarn-common in the patch passed.	
+1	unit	13m 33s	hadoop-yarn-server-nodemanager in the patch passed.	
+1	unit	0m 16s	hadoop-yarn-site in the patch passed.	
+1	asflicense	0m 27s	The patch does not generate ASF License warnings.	
		76m 27s		

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:14b5c93
JIRA Issue	YARN-6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12884245/YARN-6930.005.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle xml
uname	Linux 67e2572c4009 3.13.0-116-generic #163-Ubuntu SMP Fri Mar 31 14:13:22 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 33afa94
Default Java	1.8.0_144
findbugs	v3.1.0-RC1
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/17179/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17179/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17179/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

▼ ○ Eric Badger added a comment - 29/Aug/17 15:47 - edited

We need to update this with the new enums.

Also, do we need a new file for the enum? Can we use LinuxContainerRuntimeConstants.java instead?

■ Jason Darrell Lowe added a comment - 29/Aug/17 16:25

Thanks for updating the patch!

In addition to Eric's comment, it would be nice if we identified which word in the config value wasn't recognized in this error handling. The code should be catching inside the for loop so it knows which value was bad and can report it.

Otherwise patch looks good overall.

Shane Kumpf added a comment - 30/Aug/17 14:06

Thanks for the additional reviews. I've attached a new patch to address the comments.

➤ ○ Hadoop QA added a comment - 30/Aug/17 15:27



Vote	Subsystem	Runtime	Comment	
0	reexec	0m 19s	Docker mode activated.	
			Prechecks	
+1	@author	0m 0s	e patch does not contain any @author tags.	
+1	test4tests	0m 0s	he patch appears to include 1 new or modified test files.	
			trunk Compile Tests	
0	mvndep	0m 42s	Maven dependency ordering for branch	
+1	mvninstall	14m 0s	trunk passed	
+1	compile	9m 26s	trunk passed	
+1	checkstyle	1m 1s	trunk passed	
+1	mvnsite	2m 18s	trunk passed	
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site	
-1	findbugs	0m 53s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in trunk has 1 extant Findbugs warnings.	
+1	javadoc	1m 48s	trunk passed	
			Patch Compile Tests	
0	mvndep	0m 11s	Maven dependency ordering for patch	
+1	mvninstall	1m 30s	e patch passed	
+1	compile	5m 53s	the patch passed	
+1	javac	5m 53s	e patch passed	
+1	checkstyle	0m 58s	adoop-yarn-project/hadoop-yarn: The patch generated 0 new + 215 unchanged - 1 fixed = 215 total (was 216)	
+1	mvnsite	2m 9s	ne patch passed	
+1	whitespace	0m 0s	he patch has no whitespace issues.	
+1	xml	0m 1s	he patch has no ill-formed XML file.	
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site	
+1	findbugs	3m 46s	the patch passed	
+1	javadoc	0m 25s	hadoop-yarn-api in the patch passed.	
+1	javadoc	0m 44s	hadoop-yarn-common in the patch passed.	
+1	javadoc	0m 28s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager generated 0 new + 104 unchanged - 1 fixed = 104 total (was 105)	
+1	javadoc	0m 15s	hadoop-yarn-site in the patch passed.	
			Other Tests	
+1	unit	0m 35s	hadoop-yarn-api in the patch passed.	
+1	unit	2m 33s	hadoop-yarn-common in the patch passed.	
+1	unit	13m 36s	hadoop-yarn-server-nodemanager in the patch passed.	
+1	unit	0m 15s	hadoop-yarn-site in the patch passed.	
+1	asflicense	0m 27s	The patch does not generate ASF License warnings.	
		75m 3s		

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:14b5c93
JIRA Issue	YARN-6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12884476/YARN-6930.006.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle xml
uname	Linux cfe947ce94f8 3.13.0-119-generic #166-Ubuntu SMP Wed May 3 12:18:55 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	trunk / 200b113

Default Java	1.8.0_144
findbugs	v3.1.0-RC1
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/17206/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17206/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17206/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

- ▼ Eric Badger added a comment 30/Aug/17 18:23
 - +1 (non-binding) from me on the latest patch
- Jason Darrell Lowe added a comment 30/Aug/17 19:50

Thanks for updating the patch! +1 lgtm as well. shanekumpf@gmail.com would you mind providing a patch for branch-2 as well?

Shane Kumpf added a comment - 07/Sep/17 12:54

Sorry for the delay. I'm attaching a patch for branch-2. Note that the java sandbox runtime (\frac{YARN-5280}{}) does not exist in branch-2. Without \frac{YARN-5280}{}, there is no call to prepareContainer in ContainerLaunch, so how the application fails differs. However, the application is properly failed when the runtime is not allowed, which is the goal here.

➤ O Hadoop QA added a comment - 07/Sep/17 14:38

-1 overall

Vote	Subsystem	Runtime	Comment
0	reexec	0m 39s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			branch-2 Compile Tests
0	mvndep	0m 30s	Maven dependency ordering for branch
+1	mvninstall	7m 9s	branch-2 passed
+1	compile	2m 0s	branch-2 passed with JDK v1.8.0_144
+1	compile	2m 21s	branch-2 passed with JDK v1.7.0_151
+1	checkstyle	0m 43s	branch-2 passed
+1	mvnsite	1m 49s	branch-2 passed
0	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1	findbugs	3m 27s	branch-2 passed
+1	javadoc	1m 14s	branch-2 passed with JDK v1.8.0_144
+1	javadoc	1m 25s	branch-2 passed with JDK v1.7.0_151
			Patch Compile Tests
0	mvndep	0m 11s	Maven dependency ordering for patch
+1	mvninstall	1m 32s	the patch passed
+1	compile	1m 59s	the patch passed with JDK v1.8.0_144
+1	javac	1m 59s	the patch passed
+1	compile	2m 20s	the patch passed with JDK v1.7.0_151
+1	javac	2m 20s	the patch passed
-0	checkstyle	0m 41s	hadoop-yarn-project/hadoop-yarn: The patch generated 1 new + 239 unchanged - 0 fixed = 240 total (was 239)
+1	mvnsite	1m 47s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.

		L.	
+1	xml	0m 0s	The patch has no ill-formed XML file.
)	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1	findbugs	4m 57s	the patch passed
+1	javadoc	0m 22s	hadoop-yarn-api in the patch passed with JDK v1.8.0_144.
+1	javadoc	0m 38s	hadoop-yarn-common in the patch passed with JDK v1.8.0_144.
+1	javadoc	0m 21s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-jdk1.8.0_144 with JDK v1.8.0_144 generated 0 new + 201 unchanged - 1 fixed = 201 total (was 202)
+1	javadoc	0m 10s	hadoop-yarn-site in the patch passed with JDK v1.8.0_144.
+1	javadoc	1m 42s	the patch passed with JDK v1.7.0_151
			Other Tests
+1	unit	0m 33s	hadoop-yarn-api in the patch passed with JDK v1.7.0_151.
+1	unit	2m 53s	hadoop-yarn-common in the patch passed with JDK v1.7.0_151.
-1	unit	28m 40s	hadoop-yarn-server-nodemanager in the patch failed with JDK v1.7.0_151.
+1	unit	0m 14s	hadoop-yarn-site in the patch passed with JDK v1.7.0_151.
+1	asflicense	0m 26s	The patch does not generate ASF License warnings.
		97m 12s	

Reason	Tests
JDK v1.8.0_144 Failed junit tests	hadoop. yarn. server. node manager. container manager. scheduler. Test Container Scheduler Queuing
	hadoop.yarn.server.nodemanager.webapp.TestNMWebServer
JDK v1.7.0_151 Failed junit tests	hadoop.yarn.server.nodemanager.TestNodeStatusUpdaterForLabels
	hadoop.yarn.server.nodemanager.webapp.TestNMWebServer
JDK v1.7.0_151 Timed out junit tests	org.apache.hadoop.yarn.server.nodemanager.TestNodeStatusUpdater

Subsystem	Report/Notes				
Docker	Image:yetus/hadoop:5e40efe				
JIRA Issue	YARN 6930				
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12885811/YARN-6930.branch-2.001.patch				
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle xml				
uname	Linux 0bc436afe1a1 3.13.0-116-generic #163-Ubuntu SMP Fri Mar 31 14:13:22 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux				
Build tool	maven				
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh				
git revision	branch-2 / 8cce192				
Default Java	1.7.0_151				
Multi-JDK versions	/usr/lib/jvm/java-8-oracle:1.8.0_144 /usr/lib/jvm/java-7-openjdk-amd64:1.7.0_151				
findbugs	v3.0.0				
checkstyle	https://builds.apache.org/job/PreCommit-YARN-Build/17327/artifact/patchprocess/diff-checkstyle-hadoop-yarn-project_hadoop-yarn.txt				
unit	https://builds.apache.org/job/PreCommit-YARN-Build/17327/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-jdk1.7.0_151.txt				
JDK v1.7.0_151 Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17327/testReport/				
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn				
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17327/console				
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org				

[➤] O Shane Kumpf added a comment - 07/Sep/17 14:58

Attached a patch to address the checkstyle issue. The test failures appear unrelated.

► O7/Sep/17 16:18



0 r			
	reexec	0m 31s	Docker mode activated.
			Prechecks
+1 (@author	0m 0s	The patch does not contain any @author tags.
+1 t	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			branch-2 Compile Tests
0 r	mvndep	0m 12s	Maven dependency ordering for branch
+1 r	mvninstall	8m 0s	branch-2 passed
+1 (compile	2m 3s	branch-2 passed with JDK v1.8.0_144
+1 (compile	2m 17s	branch-2 passed with JDK v1.7.0_151
+1 (checkstyle	0m 42s	branch-2 passed
+1 r	mvnsite	1m 49s	branch-2 passed
0 f	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1 f	findbugs	3m 21s	branch-2 passed
+1 j	javadoc	1m 15s	branch-2 passed with JDK v1.8.0_144
+1 j	javadoc	1m 26s	branch-2 passed with JDK v1.7.0_151
			Patch Compile Tests
0 r	mvndep	0m 11s	Maven dependency ordering for patch
+1 r	mvninstall	1m 28s	the patch passed
+1 (compile	1m 53s	the patch passed with JDK v1.8.0_144
+1 j	javac	1m 53s	the patch passed
+1 (compile	2m 17s	the patch passed with JDK v1.7.0_151
+1 j	javac	2m 17s	the patch passed
+1 (checkstyle	0m 41s	the patch passed
+1 r	mvnsite	1m 44s	the patch passed
+1 \	whitespace	0m 0s	The patch has no whitespace issues.
+1 >	xml	0m 1s	The patch has no ill-formed XML file.
0 f	findbugs	0m 0s	Skipped patched modules with no Java source: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site
+1 f	findbugs	3m 53s	the patch passed
+1 j	javadoc	0m 16s	hadoop-yarn-api in the patch passed with JDK v1.8.0_144.
+1 j	javadoc	0m 26s	hadoop-yarn-common in the patch passed with JDK v1.8.0_144.
+1 j	javadoc	0m 16s	hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-jdk1.8.0_144 with JDK v1.8.0_144 generated 0 new + 201 unchanged - 1 fixed = 201 total (was 202)
+1 j	javadoc	0m 9s	hadoop-yarn-site in the patch passed with JDK v1.8.0_144.
+1 j	javadoc	1m 19s	the patch passed with JDK v1.7.0_151
			Other Tests
+1 ι	unit	0m 27s	hadoop-yarn-api in the patch passed with JDK v1.7.0_151.
+1 ι	unit	2m 26s	hadoop-yarn-common in the patch passed with JDK v1.7.0_151.
-1 ι	unit	13m 49s	hadoop-yarn-server-nodemanager in the patch failed with JDK v1.7.0_151.
+1 ι	unit	0m 9s	hadoop-yarn-site in the patch passed with JDK v1.7.0_151.
+1 a	asflicense	0m 21s	The patch does not generate ASF License warnings.
		77m 21s	

Reason	Tests
JDK v1.8.0_144 Failed junit tests	hadoop.yarn.server.nodemanager.webapp.TestNMWebServer

JDK v1.7.0_151 Failed junit tests hadoop.yarn.server.nodemanager.webapp.TestNMWebServer

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:5e40efe
JIRA Issue	YARN-6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12885825/YARN-6930.branch-2.002.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit findbugs checkstyle xml
uname	Linux 4e2d746e28bd 3.13.0-116-generic #163-Ubuntu SMP Fri Mar 31 14:13:22 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	branch-2 / 8cce192
Default Java	1.7.0_151
Multi-JDK versions	/usr/lib/jvm/java-8-oracle:1.8.0_144 /usr/lib/jvm/java-7-openjdk-amd64:1.7.0_151
findbugs	v3.0.0
unit	https://builds.apache.org/job/PreCommit-YARN-Build/17331/artifact/patchprocess/patch-unit-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-jdk1.7.0_151.txt
JDK v1.7.0_151 Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17331/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17331/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

This message was automatically generated.

Jason Darrell Lowe added a comment - 07/Sep/17 21:11

+1 for the branch-2 patch as well. The TestNMWebServer failure is unrelated as the same failure occurs without the patch applied. I'll file a followup JIRA to address that test failure in branch-2 if one doesn't already exist.

Committing this.

Jason Darrell Lowe added a comment - 07/Sep/17 21:35

Thanks to shanekumpf@gmail.com for the contribution and to miklos.szegedi@cloudera.com and ebadger for additional review! I committed this to trunk, branch-3.0, and branch-2.

▼ ○ Hudson added a comment - 07/Sep/17 22:07

SUCCESS: Integrated in Jenkins build Hadoop-trunk-Commit #12812 (See https://builds.apache.org/job/Hadoop-trunk-Commit/12812/) YARN-6930. Admins should be able to explicitly enable specific (jlowe: rev b0b535d9d5727cd84fd6368c6d1b38363616504e)

- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-servernodemanager/src/main/java/org/apache/hadoop/yarn/server/nodemanager/containermanager/monitor/ContainersMonitorImpl.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-servernodemanager/src/main/java/org/apache/hadoop/yarn/server/nodemanager/containermanager/linux/runtime/DelegatingLinuxContainerRuntime.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-servernodemanager/src/main/java/org/apache/hadoop/yarn/server/nodemanager/LinuxContainerExecutor.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-site/src/site/markdown/DockerContainers.md
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common/src/main/resources/yarn-default.xml
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager/src/main/java/org/apache/hadoop/yarn/server/nodemanager/containermanager/linux/runtime/LinuxContainerRuntimeConstants.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-servernodemanager/src/main/java/org/apache/hadoop/yarn/server/nodemanager/ContainerExecutor.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-servernodemanager/src/main/java/org/apache/hadoop/yarn/server/nodemanager/containermanager/runtime/ContainerRuntime.java
- (edit) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api/src/main/java/org/apache/hadoop/yarn/conf/YarnConfiguration.java
- (add) hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-servernodemanager/src/test/java/org/apache/hadoop/yarn/server/nodemanager/containermanager/linux/runtime/TestDelegatingLinuxContainerRuntime.java
- Shane Kumpf added a comment 08/Sep/17 16:04

Thanks jlowe! Also, thanks to ebadger and miklos.szegedi@cloudera.com for the reviews!

➤ O Shane Kumpf added a comment - 09/Oct/17 13:01

This is needed in 2.8.2 as well. Reopened and attached a patch for 2.8.2.

➤ ○ Hadoop QA added a comment - 09/Oct/17 14:01



Vote	Subsystem	Runtime	Comment
0	reexec	0m 24s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			branch-2.8.2 Compile Tests
0	mvndep	0m 20s	Maven dependency ordering for branch
+1	mvninstall	7m 16s	branch-2.8.2 passed
+1	compile	2m 35s	branch-2.8.2 passed
+1	checkstyle	0m 36s	branch-2.8.2 passed
+1	mvnsite	1m 34s	branch-2.8.2 passed
-1	findbugs	0m 57s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in branch-2.8.2 has 1 extant Findbugs warnings.
+1	javadoc	1m 16s	branch-2.8.2 passed
			Patch Compile Tests
0	mvndep	0m 12s	Maven dependency ordering for patch
+1	mvninstall	1m 29s	the patch passed
+1	compile	2m 35s	the patch passed
+1	javac	2m 35s	the patch passed
+1	checkstyle	0m 36s	the patch passed
+1	mvnsite	1m 36s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	xml	0m 1s	The patch has no ill-formed XML file.
+1	findbugs	4m 26s	the patch passed
+1	javadoc	1m 16s	the patch passed
			Other Tests
+1	unit	0m 30s	hadoop-yarn-api in the patch passed.
+1	unit	2m 40s	hadoop-yarn-common in the patch passed.
+1	unit	9m 45s	hadoop-yarn-server-nodemanager in the patch passed.
+1	asflicense	0m 20s	The patch does not generate ASF License warnings.
		50m 31s	

Subsystem	Report/Notes
Docker	lmage:yetus/hadoop:d0a0f24
JIRA Issue	YARN-6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12891051/YARN-6930.branch-2.8.2.001.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle xml
uname	Linux b2cd08fe04dd 3.13.0-129-generic #178-Ubuntu SMP Fri Aug 11 12:48:20 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	branch-2.8.2 / 76e053a

Default Java	1.7.0_151
findbugs	v3.0.0
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/17824/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17824/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server-nodemanager U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17824/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

✓ O Jason Darrell Lowe added a comment - 09/Oct/17 14:51

Thanks for the patch!

In the future, please do not set the Fix Version/s field to indicate where a patch should be targeted. That field should only be updated by the committer when the changes are committed. The Target Version/s field is for specifying where changes should/need to go, and the Fix Version/s field tracks where changes have been committed. Otherwise we can't tell from the JIRA whether this has or has not been fixed in those versions.

The 2.8.2 patch looks OK to me, but in order for this to go into branch-2.8.2 it first needs to go into branch-2.8. However the 2.8.2 patch does not apply to branch-2.8. Could you please supply a patch for branch-2.8 as well?

Shane Kumpf added a comment - 09/Oct/17 14:54

The findbugs warning is unrelated to this patch. **YARN-7034* addressed the warning for trunk and branch-2, but it appears this was missed in the branch-2.8 patch. I'll open a new JIRA to address this in branch-2.8 and branch-2.8.2.

Shane Kumpf added a comment - 09/Oct/17 15:06

Thanks for the review, jlowe and sorry for the mistake. I'll get a patch up for branch-2.8 as well.

▼ ○ Hadoop QA added a comment - 10/Oct/17 16:14



Vote	Subsystem	Runtime	Comment
0	reexec	0m 37s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 2 new or modified test files.
			branch-2.8 Compile Tests
0	mvndep	0m 21s	Maven dependency ordering for branch
+1	mvninstall	9m 1s	branch-2.8 passed
+1	compile	2m 25s	branch-2.8 passed
+1	checkstyle	0m 35s	branch-2.8 passed
+1	mvnsite	1m 33s	branch-2.8 passed
-1	findbugs	0m 56s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in branch-2.8 has 1 extant Findbugs warnings.
+1	javadoc	1m 12s	branch-2.8 passed
			Patch Compile Tests
0	mvndep	0m 10s	Maven dependency ordering for patch
+1	mvninstall	1m 15s	the patch passed
+1	compile	2m 11s	the patch passed
+1	javac	2m 11s	the patch passed
+1	checkstyle	0m 34s	the patch passed
+1	mvnsite	1m 26s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	xml	0m 1s	The patch has no ill-formed XML file.

+1	findbugs	3m 46s	the patch passed
+1	javadoc	1m 7s	the patch passed
			Other Tests
+1	unit	0m 26s	hadoop-yarn-api in the patch passed.
+1	unit	2m 27s	hadoop-yarn-common in the patch passed.
+1	unit	9m 51s	hadoop-yarn-server-nodemanager in the patch passed.
+1	asflicense	0m 21s	The patch does not generate ASF License warnings.
		50m 8s	

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:c2d96dd
JIRA Issue	YARN 6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12891283/YARN-6930.branch-2.8.001.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle xml
uname	Linux 83291e37f2cc 3.13.0-116-generic #163-Ubuntu SMP Fri Mar 31 14:13:22 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	branch-2.8 / b41a702
Default Java	1.7.0_151
findbugs	v3.0.0
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/17843/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17843/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server-nodemanager U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17843/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

■ O Jason Darrell Lowe added a comment - 10/Oct/17 16:46 - edited

Thanks for the 2.8 patch!

For consistency with the trunk/branch-2 code updateEnvForWhitelistVars should not throw ContainerExecutionException. See DelegatingLinuxContainerRuntime#updateEnvForWhitelistVars in branch-2 for reference. Once that exception declaration is removed then the TestContainerLaunch changes should also drop out of the patch.

Shane Kumpf added a comment - 10/Oct/17 22:52

Thanks for the review jlowe, makes sense. Attaching a new patch with those changes.

➤ ○ Hadoop QA added a comment - 11/Oct/17 00:03



Vote	Subsystem	Runtime	Comment
0	reexec	16m 4s	Docker mode activated.
			Prechecks
+1	@author	0m 0s	The patch does not contain any @author tags.
+1	test4tests	0m 0s	The patch appears to include 1 new or modified test files.
			branch-2.8 Compile Tests
0	mvndep	0m 20s	Maven dependency ordering for branch
+1	mvninstall	6m 36s	branch-2.8 passed

+1	compile	2m 8s	branch-2.8 passed
+1	checkstyle	0m 32s	branch-2.8 passed
+1	mvnsite	1m 20s	branch-2.8 passed
-1	findbugs	0m 47s	hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-nodemanager in branch-2.8 has 1 extant Findbugs warnings.
+1	javadoc	1m 0s	branch-2.8 passed
			Patch Compile Tests
0	mvndep	0m 11s	Maven dependency ordering for patch
+1	mvninstall	1m 11s	the patch passed
+1	compile	2m 4s	the patch passed
+1	javac	2m 4s	the patch passed
+1	checkstyle	0m 28s	the patch passed
+1	mvnsite	1m 20s	the patch passed
+1	whitespace	0m 0s	The patch has no whitespace issues.
+1	xml	0m 0s	The patch has no ill-formed XML file.
+1	findbugs	3m 39s	the patch passed
+1	javadoc	1m 2s	the patch passed
			Other Tests
+1	unit	0m 24s	hadoop-yarn-api in the patch passed.
+1	unit	2m 28s	hadoop-yarn-common in the patch passed.
+1	unit	10m 14s	hadoop-yarn-server-nodemanager in the patch passed.
+1	asflicense	0m 19s	The patch does not generate ASF License warnings.
		61m 45s	

Subsystem	Report/Notes
Docker	Image:yetus/hadoop:c2d96dd
JIRA Issue	YARN-6930
JIRA Patch URL	https://issues.apache.org/jira/secure/attachment/12891373/YARN-6930.branch-2.8.002.patch
Optional Tests	asflicense compile javac javadoc mvninstall mvnsite unit shadedclient findbugs checkstyle xml
uname	Linux fc55b1bfdc23 4.4.0-43-generic #63-Ubuntu SMP Wed Oct 12 13:48:03 UTC 2016 x86_64 x86_64 x86_64 GNU/Linux
Build tool	maven
Personality	/testptch/hadoop/patchprocess/precommit/personality/provided.sh
git revision	branch-2.8 / 108c239
Default Java	1.7.0_151
findbugs	v3.0.0
findbugs	https://builds.apache.org/job/PreCommit-YARN-Build/17850/artifact/patchprocess/branch-findbugs-hadoop-yarn-project_hadoop-yarn_hadoop-yarn-server_hadoop-yarn-server-nodemanager-warnings.html
Test Results	https://builds.apache.org/job/PreCommit-YARN-Build/17850/testReport/
modules	C: hadoop-yarn-project/hadoop-yarn/hadoop-yarn-api hadoop-yarn-project/hadoop-yarn/hadoop-yarn-common hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server-nodemanager U: hadoop-yarn-project/hadoop-yarn
Console output	https://builds.apache.org/job/PreCommit-YARN-Build/17850/console
Powered by	Apache Yetus 0.6.0-SNAPSHOT http://yetus.apache.org

➤ O Jason Darrell Lowe added a comment - 11/Oct/17 14:51

Thanks for updating the patch!

+1 for the branch-2.8 patch. Committing this.

✓ O Jason Darrell Lowe added a comment - 11/Oct/17 15:05

Thanks, shanekumpf@gmail.com! I committed this to branch-2.8 and branch-2.8.2 as well.

Shane Kumpf added a comment - 11/Oct/17 15:16

Thanks for the reviews and commits, jlowe!

✓ ○ Varun Vasudev added a comment - 30/Oct/17 15:22

jlowe/shanekumpf@gmail.com - should this be marked as an incompatible change? Existing Docker configs will have to change to run with 2.9.0.

✓ O Junping Du added a comment - 30/Oct/17 16:40

Hi vvasudev, thanks for comments. It sounds like 2.8.2 and 2.9 have the same configuration from my quick check. Given 2.8.2 is the first stable release of 2.8, it doesn't sounds incompatible to 2.9 release. Do I miss something here?

✓ ○ Varun Vasudev added a comment - 30/Oct/17 16:46 - edited

junping_du, this change turns off the Docker runtime by default. It has to be explicitly turned on in 2.9. In 2.8 it was turned on by default . Given that the Docker work is alpha, it may not be necessary, but I just wanted to make sure.

✓ ○ Junping Du added a comment - 30/Oct/17 20:00

It has to be explicitly turned on in 2.9. In 2.8 it was turned on by default.

If so, I agree that we should mark this fix in 2.9 as incompatible in case users upgrade from 2.8 to 2.9 with assumption that docker runtime is on by default.

People

Assignee:

Shane Kumpf

Reporter:

Vinod Kumar Vavilapalli

Votes:

O Vote for this issue

Watchers:

12 Start watching this issue

Dates

Created:

02/Aug/17 19:35

Updated:

25/Oct/19 20:25

Resolved:

11/Oct/17 15:05