

Runtime Infrastructure - Support #6340

move JNI and native dependencies into the jar

05/10/2022 12:21 PM - Greg Shah

Status:	New	Start date:	
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		case_num:	
billable:	No	version:	
vendor_id:	GCD		
Description			
Related issues:			
Related to Runtime Infrastructure - Support #4549: reduce/eliminate installat...			New

History

#1 - 05/10/2022 12:33 PM - Greg Shah

This article describes a technique to load our own native libraries (and other native dependencies) from our own jar file:

<https://stackoverflow.com/questions/2937406/how-to-bundle-a-native-library-and-a-jni-library-inside-a-jar>

The idea is to bundle multiple versions of the native binaries into the jar, extract them to a temp dir at runtime and then load them from there. This is a clever way to make it easier to deploy. There can also be a fall-back to use the current approach if there is any failure in the extraction or loading.

In addition to our own libp2j.so/p2j.dll we might want to also bundle libffi so that we can eliminate that dependency from the install requirements.

In combination with [#4550](#), [#5167](#) and [#5568](#), we could eliminate all of the local install requirements. A critical requirement for the runtime system will be that a writable temp directory is available (with a certain amount of space available). That is OK.

#2 - 05/10/2022 12:38 PM - Greg Shah

- Related to Support #4549: reduce/eliminate installation dependencies added