DISCLAIMER

- Sig-Node community has reached a general consensus, as a best practice, to avoid introducing any new checkpointing support. We reached this understanding after struggling with some hard-to-debug issues in the production environments caused by the checkpointing.
- Any changes to the checkpointed data structure would be considered incompatible and a component should add its own handling if it needs to ensure backward compatibility of reading old-format checkpoint files.

Introduction

This folder contains a framework & primitives, Checkpointing Manager, which is used by several other Kubelet submodules, `dockershim`, `devicemanager`, `pods` and `cpumanager`, to implement checkpointing at each submodule level. As already explained in above `Disclaimer` section, think twice before introducing any further checkpointing in Kubelet. If still checkpointing is required, then this folder provides the common APIs and the framework for implementing checkpointing. Using same APIs across all the submodules will help maintaining consistency at Kubelet level.

Below is the history of checkpointing support in Kubelet.

Package	First checkpointing support merged on	PR link
kubelet/dockershim	Feb 3, 2017	[CRI] Implement Dockershim Checkpoint
devicemanager	Sep 6, 2017	Deviceplugin checkpoint
kubelet/pod	Nov 22, 2017	Initial basic bootstrap-checkpoint support
cpumanager	Oct 27, 2017	Add file backed state to cpu manager