

项目进展

- 集成测试验证可以正确运行wasm文件
- 实现功能： stop wasm instance、remove wasm instance

验证可以正确运行wasm文件

- 执行命令: wasi_example_main.wasm test
- 目前stdout保留在日志文件中，而不是直接输出到console

```
containerConfig := ContainerConfigWithWasmModule(  
    name: "container1",  
    wasmModule,  
    WithTestLabels(),  
    WithTestAnnotations(),  
    WithLogPath( path: "container1.log"),  
    WithCommand( cmd: "wasi_example_main.wasm", args...: "test"),  
)  
  
cn, err := runtimeService.CreateContainer(sb, containerConfig, sbConfig)  
require.NoError(t, err)  
  
defer func() {  
    t.Logf( format: "Remove the wasm instance")  
    assert.NoError(t, runtimeService.RemoveContainer(cn))  
}()  
  
t.Logf( format: "Start the wasm instance in the pod")  
require.NoError(t, runtimeService.StartContainer(cn))
```

```
2023-04-16T14:44:36.338017404+08:00 stdout F Random number: -459250344  
2023-04-16T14:44:36.338074713+08:00 stdout F Random bytes: [63, 85, 252, 56, 170, 66, 231, 24, 181, 219, 127, 64, 121, 29, 115, 171, 247, 219, 104, 74, 240, 252, 115, 172, 3  
, 2, 32, 45, 131, 61, 4, 64, 192, 135, 73, 0, 172, 67, 74, 158, 42, 214, 241, 172, 247, 146, 44, 249, 122, 192, 112, 176, 128, 234, 162, 63, 98, 95, 151, 73, 180, 182, 235,  
28, 3, 139, 94, 233, 161, 129, 56, 91, 223, 55, 163, 191, 133, 91, 14, 235, 235, 93, 148, 120, 66, 111, 30, 244, 203, 227, 97, 166, 53, 233, 235, 0, 145, 21, 240, 9, 91, 97,  
57, 143, 239, 99, 223, 162, 43, 5, 110, 239, 159, 44, 4, 160, 126, 44, 30, 64, 106, 138, 155, 68, 191, 224, 160, 3]  
2023-04-16T14:44:36.338135204+08:00 stdout F Printed from wasi: This is from a main function  
2023-04-16T14:44:36.338181596+08:00 stdout F This is from a main function  
2023-04-16T14:44:36.338194187+08:00 stdout F The env vars are as follows.  
2023-04-16T14:44:36.338262595+08:00 stdout F PATH: /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin  
2023-04-16T14:44:36.338306166+08:00 stdout F HOSTNAME: VM-0-17-ubuntu  
2023-04-16T14:44:36.338318139+08:00 stdout F The args are as follows.  
2023-04-16T14:44:36.338439031+08:00 stdout F wasi_example_main.wasm  
2023-04-16T14:44:36.338474416+08:00 stdout F test  
2023-04-16T14:44:36.338890969+08:00 stdout F File content is This is in a file  
~
```

粗糙的benchmark

- 过程：拉取module -> 启动instance -> 关闭instance -> 删除instance
- 问题：如果一启动完成，就stop，stdout可能来不及输出到日志文件中
- 目前在代码中用wasmtime shim运行包含wasm文件的oci镜像报错：

- `ERRO[2023-04-18T13:36:16.803652448+08:00] copy shim log` `error="read /proc/self/fd/35: file already closed"`

```
E0418 13:36:16.807680 379216 remote_runtime.go:270] StartContainer "b6efd07c1b0c34a1792ff73c6492cdc086180f1d083a6211b1052b014bb716c3" from runtime service failed:
rpc error: code = Unknown desc = failed to start containerd task "b6efd07c1b0c34a1792ff73c6492cdc086180f1d083a6211b1052b014bb716c3": Others("error setting up module: could not load module from file: failed to read input file"): unknown
--- FAIL: BenchmarkContainerInCri
    cri_container_test.go:50: Create a pod config and run sandbox container
    common.go:119: Pull test image "leviyanx/wasi-demo-app:v2.0"
    cri_container_test.go:57: Create a container config and run container in a pod
    cri_container_test.go:71:
        Error Trace:   cri_container_test.go:71
        Error:          Received unexpected error:
                        rpc error: code = Unknown desc = failed to start containerd task "b6efd07c1b0c34a1792ff73c6492cdc086180f1d083a6211b1052b014bb716c3"
: Others("error setting up module: could not load module from file: failed to read input file"): unknown
        Test:          BenchmarkContainerInCri
    cri_container_test.go:68: Remove the container
```

- FAIL