

CHAPTER 18

Examples

1 This chapter contains various code examples that PMIx users may find helpful.

2 18.1 Playing Around

3 Example block of C code

```
1 int main() {  
2     printf("Hello World!\n");  
3     return 0;  
4 }
```

4 The inline code `printf("Hello World");` prints “Hello World”.

5 Example of a selection of a file:

```
1 /* Fence to hold all processes in this namespace */  
2 pmix_proc_t wildproc;  
3 PMIX_PROC_CONSTRUCT(&wildproc);  
4 (void)strncpy(wildproc.namespace, myproc.namespace, PMIX_MAX_NSLEN);  
5 wildproc.rank = PMIX_RANK_WILDCARD;  
6  
7 rc = PMIx_Fence(&wildproc, 1, NULL, 0);  
8 if (PMIX_SUCCESS != rc) {  
9     fprintf(stderr,  
10         "Client ns %s rank %d: PMIx_Fence failed: %s\n",  
11         myproc.namespace, myproc.rank, PMIx_Error_string(rc));  
12     goto done;  
13 }
```

6

7 Example with highlighting:

```

1  /* Fence to hold all processes in this namespace */
2  pmix_proc_t wildproc;
3  PMIX_PROC_CONSTRUCT(&wildproc);
4  (void)strncpy(wildproc.namespace, myproc.namespace, PMIX_MAX_NSLEN);
5  wildproc.rank = PMIX_RANK_WILDCARD;
6
7  rc = PMIx_Fence(&wildproc, 1, NULL, 0);
8  if (PMIX_SUCCESS != rc) {
9      fprintf(stderr,
10         "Client ns %s rank %d: PMIx_Fence failed: %s\n",
11         myproc.namespace, myproc.rank, PMIx_Error_string(rc));
12     goto done;
13 }

```

1
2 Putting a couple of examples together

3 18.2 Synchronizing Fence

4 This example shows how to call a synchronizing **PMIx_Fence** operation across the entire
5 namespace. To signify the entire namespace we are using the **PMIX_RANK_WILDCARD** constant.

```

1  /* Fence to hold all processes in this namespace */
2  pmix_proc_t wildproc;
3  PMIX_PROC_CONSTRUCT(&wildproc);
4  (void)strncpy(wildproc.namespace, myproc.namespace, PMIX_MAX_NSLEN);
5  wildproc.rank = PMIX_RANK_WILDCARD;
6
7  rc = PMIx_Fence(&wildproc, 1, NULL, 0);
8  if (PMIX_SUCCESS != rc) {
9      fprintf(stderr,
10         "Client ns %s rank %d: PMIx_Fence failed: %s\n",
11         myproc.namespace, myproc.rank, PMIx_Error_string(rc));
12     goto done;
13 }

```

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