

## REX Dispatcher Function

**rex\_dispatcher\_func:**

```
// save the callee-saved registers
pushq ...
// save stack and frame pointer
movq %rsp, PER_CPU_VAR(rex_old_sp) ...
// switch stack
movq PER_CPU_VAR(rex_stack), %rsp ...
// invoke REX user program
call *%rdx
```

**rex\_exit:**

```
// restore old stack and frame pointer
movq PER_CPU_VAR(rex_old_sp), %rsp

// restore the callee-saved registers
popq ...
```

## REX User Program

**rex\_prog1:**

```
...
ret
```

**Panic**

## In-kernel landingpad

**rex\_landingpad:**

```
// report error
// set default return value
...
jmp rex_exit
```

