```
...
int *page = malloc(4096)
*page = 100;
// OS evicts page
printf("val=%d", *page);
...
```

1. The application issues a load to a virtual address. The CPU queries the translation look aside buffer for a mapping.

2. The TLB does not have the mapping and requests the PTE from the page table walker (PTW)

3. The PTW walks the page table and **detects a remote PTE**

4. PTW sends the PTE address to the PFA.

5. PFA assembles a **load command** in memory.

6. PFA signals NIC to send the command and provides the first free page (from the freeQ) as a receive buffer.

7. NIC reads request from memory, sends request to memory blade.

8. NIC gets new page, DMAs page to destination frame.

9. NIC signals PFA done.

10. PFA updates page table.

11. PFA adds **pageID to NewQ**.

12. The application is restarted with the new mapping.