



# Dynamic MSI-X and IMS opens



# Dynamic MSI-X

- Enable allocation of MSI-X after probe phase (no longer one shot)
- New API: `int pci_add_msix_irq_vector (struct pci_dev *dev)`
- Should be called only after `pci_alloc_irq_vectors()` or variants
- Patches: [https://github.com/intel/idxd-driver/tree/intel\\_dynamic\\_msix](https://github.com/intel/idxd-driver/tree/intel_dynamic_msix)



# IMS opens

1. Support multiple formats for interrupt messages
2. IMS PASID programming