

KEY BENEFITS

- Software that maintains the available resource pool (CPUs, GPUs, Storage, IPU, FPGAs)
- Allows for machines to be created from the available resource pool.
- Programs the photonic switch (PXC) to create the desired machine.
- DMTF Redfish APIs
- DFM provides end-to-end orchestration with run-time attach/detach for a system device without interruptions to machine BIOS/System OS
- DFM is connected to Drut Software Platform (DSP) for application integration.
- DFM is priced on the number of photonic switch ports available in the fabric cluster.

The **Drut Fabric Manager (DFM)** is the operational control of the photonic fabric. The DFM maintains the available resource pool (CPUs, GPUs, Memory, Storage, IPU, etc.). It allows for machines to be created from the resource pool and programs the photonic switch (PXC) to create the desired machine. This capability is unique and critical in order to create a dynamic fabric. The DFM discovers the resource end-point data from the Fabric Interface Cards and allows the PXC to be programmed and re-programmed to yield the desired results. The DFM provides end-to-end orchestration with run-time attach/detach for a system device without interruptions to machine BIOS/System OS.

DFM Advantages

Drut Fabric Manager (DFM) is a fleet of microservices that are deployed on a Kubernetes cluster, it is managed through a standard GUI within the Drut Software Platform and exposes Redfish compliant northbound rest APIs. FM can be configured to be installed per rack, a group of racks in a POD or for a whole cluster.

Drut Fabric Manager Services

- Automatic discovery of Fabric elements and composable resources via OOB Network
- Create composed system along with necessary data paths as per the configuration requirements
- Dynamically attach or detach a composable asset to the composed system
- Facilitate operations on the composed system
- Periodic Health check for the composed systems, involved data paths, fabric elements.
- Event and alarm management, audit log of all commands issued in the past 30 days.
- Automatic firmware/software upgrades for Fabric elements
- Access to Fabric Manager API via RBAC (Role Based Access Control)
- Highly configurable, independently scalable, fault tolerant microservices with self-healing features
- Audit trail of composed system operations, composable asset operations along with metrics
- Built on open-source software (Spring Boot, Java, Python, RabbitMQ, PostgreSQL, DockerCE)

Ordering Information

- Product: DFM
- Code: DRT-SW-DFM-STD-RTU
- Description: Fabric Manager RTU