

# Architecture

## ODIM

Open Distributed Infrastructure Management, ODIM, is a stack based on DMTF Redfish Services and Model. It puts up Redfish compliant APIs on the northbound side that allows for clients to interact with these Services and data center resources managed by ODIM.

ODIM does basically 3 things:

1. **Abstraction/Translation** – Clients don't see differences in vendors' Redfish implementation or management protocols
2. **Aggregation** – ODIM aggregates all resources across the datacenter. No knowledge of IP addresses or credentials needed
3. **Proxy** – Clients don't need to be on the management network. Enables centralized functions

The way we deal with 1) above is through an abstraction layer (or a plugin layer if you will). This layer absorbs the differences between different vendors' Redfish implementation as well allows for communicating with resources that don't speak Redfish at all. Aggregation happens through the Redfish Aggregation Service and takes away the need for clients to know what resources is in the data center. A client can simply query ODIM and get collections of different resources.

