HEALTH CHAIN MANAGEMENT

Aug 11th, 2016

Stephen O'Mahony Apple Inc. Jun Liu Seagate Technology

High Level Problem

- There is a need to allow for automated management of large populations of storage devices.
- Progress in this area is being impeded by the lack of standards. In the industry, there are two key areas:
 - Drive Health Status
 - Storage Supply Chain Data
- OCP is a good forum to drive these standards within the Industry
- □ This is a problem within the Industry.

This presentation is not a contribution to Open Compute Project

High Level Solution

- Build a forum that allows the industry to drive a solution
- Two Working groups to understand the sensitivity within the Industry
- Aim to release a joint proposal with more details

High Level Details of Solution

The focus is to standardize the building blocks to allow different enterprises to build their own unique solutions.

- Standardize supply chain data
- Standardize API for drive health data
- Link supply chain and datacenter information in a common structure

Possible Solution Referenced in Descriptive Term

- Standardize supply chain data
- □ Standardize API for drive health data
- □ Link supply chain and datacenter information in a common structure.
- Move away from a supply chain towards a health management chain.
- The focus is to standardize the building blocks to allow different enterprises to build their own unique solution

Industry Forum

- Complementary with existing Industry forums (T10)
- OCP has emerged as a good forum for technology consumers
- Work within OCP structure to present a paper and require follow on structures

Invite key players in the industry to form two working groups

Execution

- The committees will be under the umbrella of two working groups in OCP
- Examine the feasibility and desire to for a common data supply chain
- Examine a common API for drive health management

Supply Chain Working Group Charter

- The scope of the initial working group is to understand the needs and consensus within the industry to drive to a common data format in the transmission of supplier data between storage vendors and the datacenter.
- For example, the DC will ask storage vendors for serial number information and warranty information for a PO - this data is sent in varying formats. This is burdensome for the DC and suppliers. Since everyone is on a different "standard". This forces manual steps into the vendor process that leads to errors in the data. To compound the problem, the data is most often sent in excel.
- The working group will report back within 120 days if there is consensus and needs to drive a common standard. They will make a recommendation if there is a need to the structure of the committee to address the issue.
- □ The working group will be formed under the umbrella of OCP storage.

API Working Group Charter

- The scope of the initial working group is to understand the needs and consensus within the industry to drive to a common API for managing drive health.
- The API should be complementary to long-term objectives of committees such as SNIA and T10.
- The working group will report back within 120 days if there is consensus and needs to drive a common standard. They will make a recommendation if there is a need to the structure of a committee to address the issue.
- □ The working group will be formed under the umbrella of OCP storage.

Thank You!

stephen omahony@apple.com

jun.a.liu@seagte.com