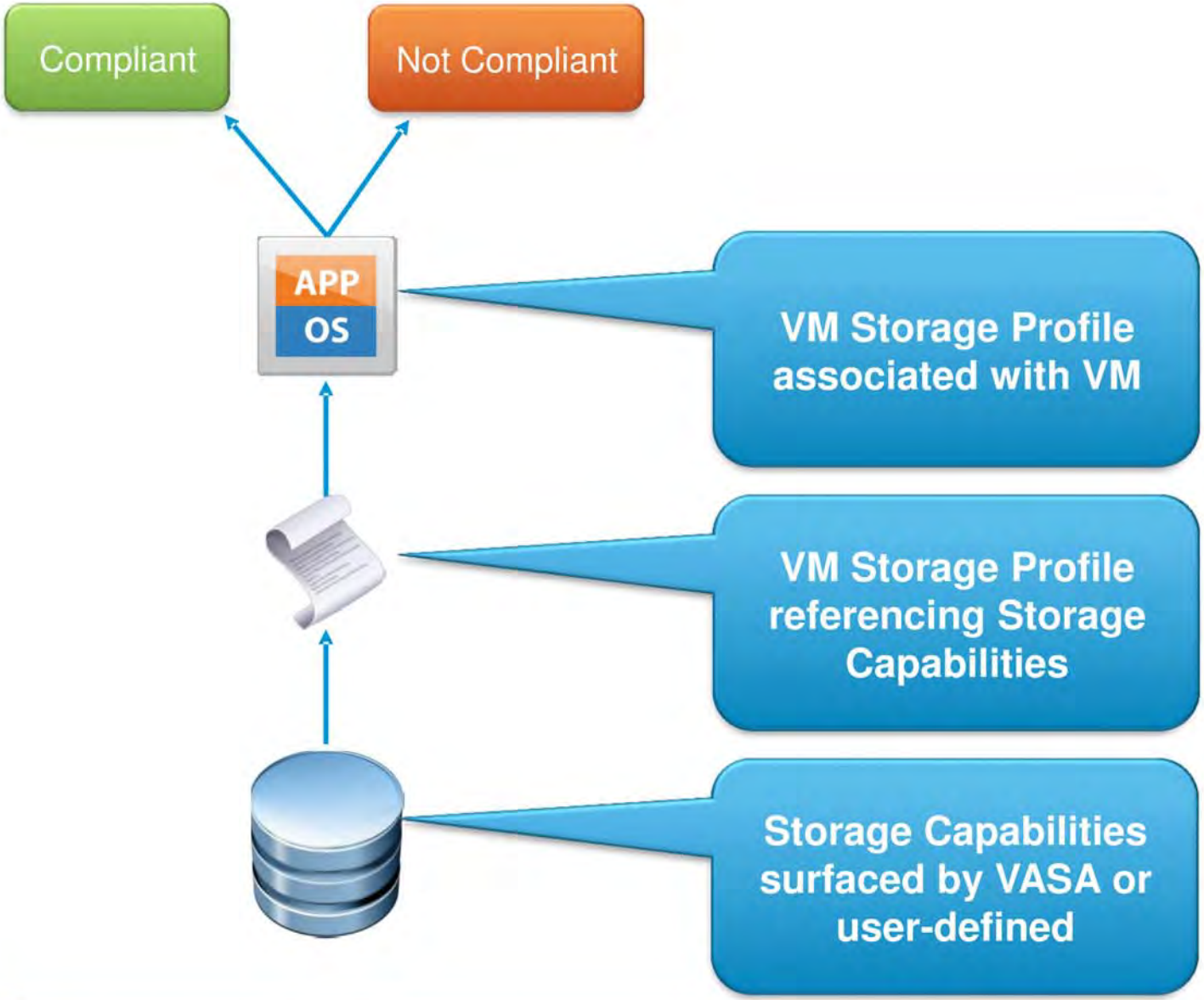
vSphere 5 What's New - Profile-Driven Storage

Why Profile-Driven Storage?

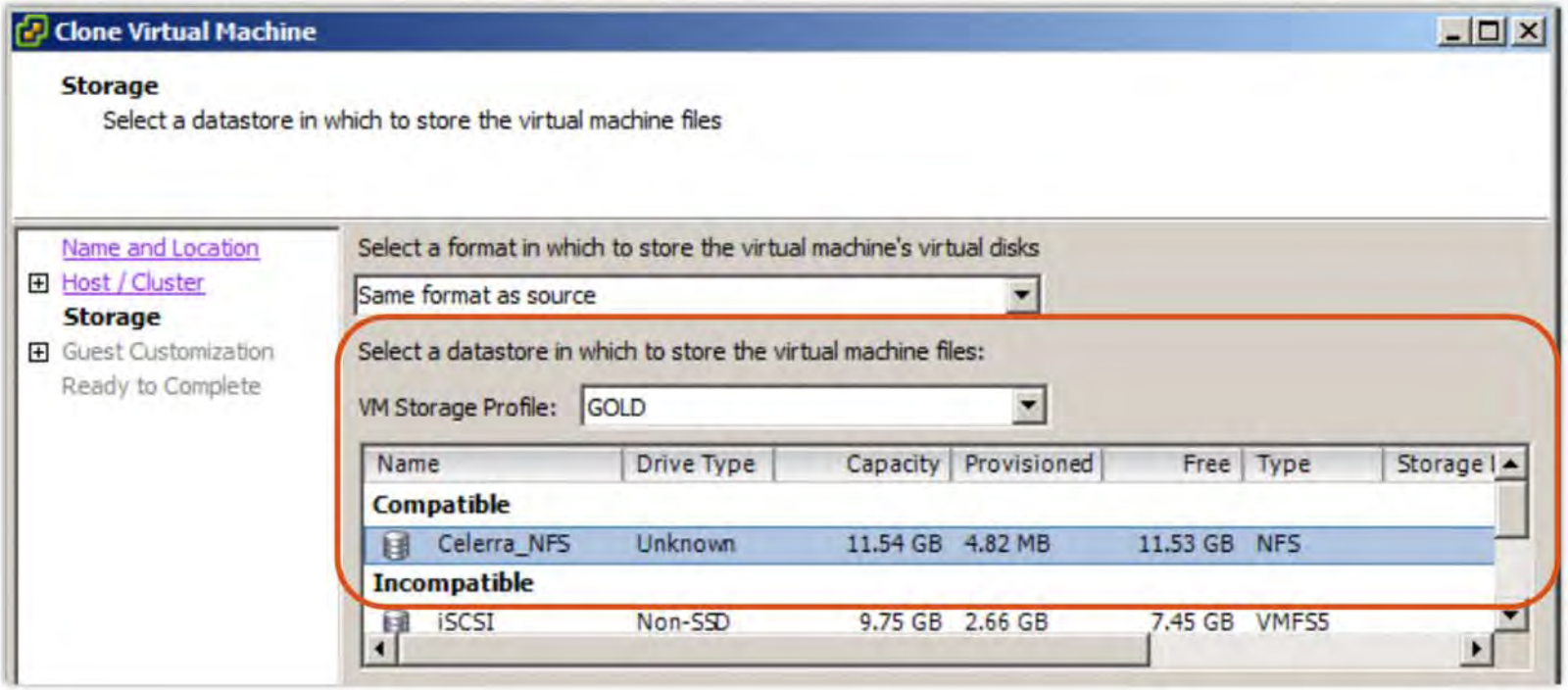
Save OPEX by reducing repetitive planning and effort!

- **Minimize per-VM (or per VM request) "thinking" or planning for storage placement.**
  - Admin needs to identify VM storage requirements and match to physical storage properties.
- **Increase probability of "correct" storage placement and use (minimize need for troubleshooting, minimize time for troubleshooting).**
  - Admin needs more insight into storage characteristics.
  - Admin needs ability to custom-tag available storage.
  - Admin needs easy means to identify incorrect VM storage placement (e.g. on incorrect datastore).

Storage Capabilities & Profile-Driven Storage

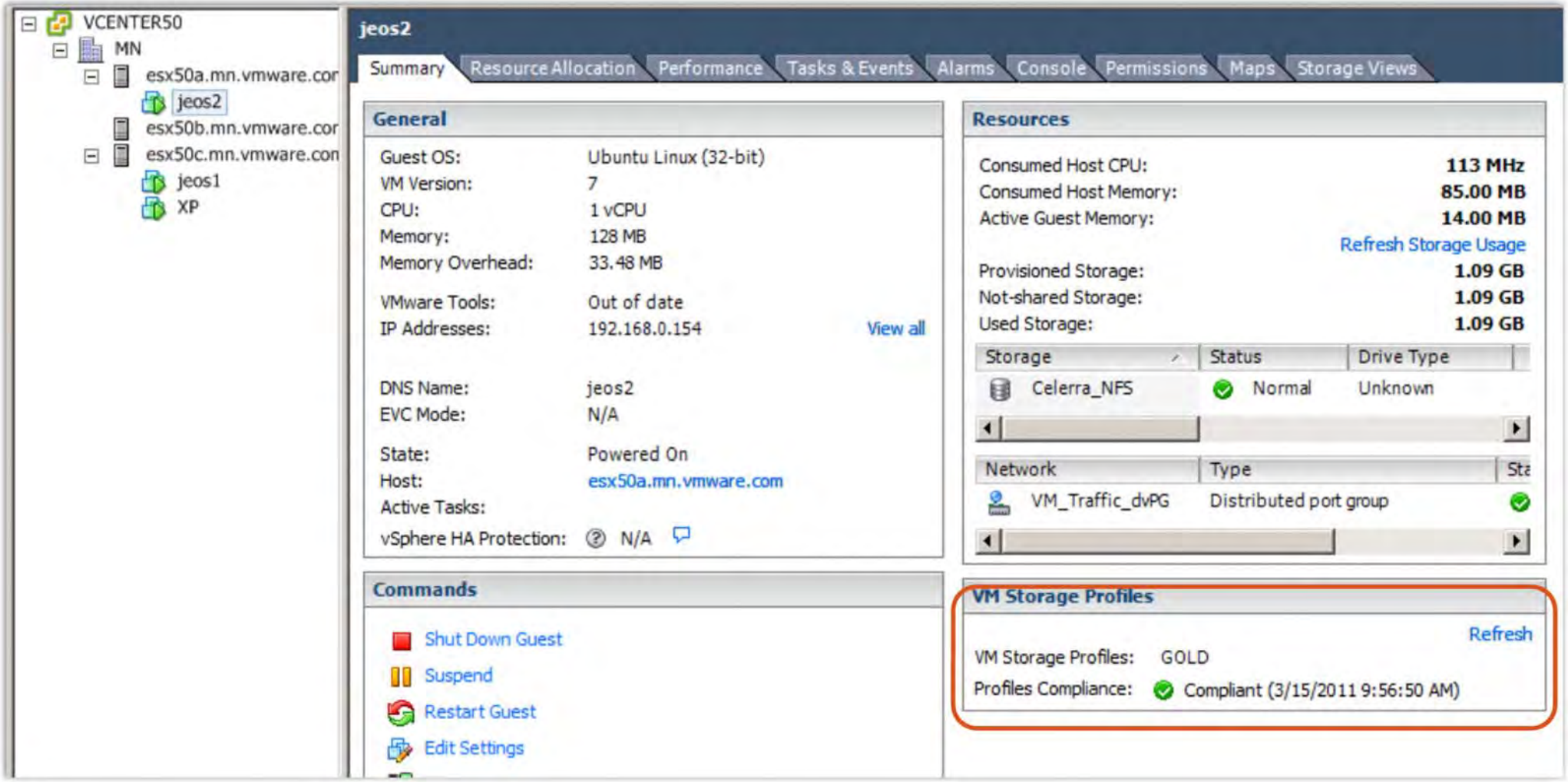


Selecting a Profile During Provisioning



- By selecting a VM Storage Profile, datastores are now split into Compatible & Incompatible.
- The Celerra_NFS datastore is the only datastore which meets the GOLD Profile requirements – i.e. it is the only datastore that has our user-defined storage capability associated with it.

Profile-Driven Storage Compliance



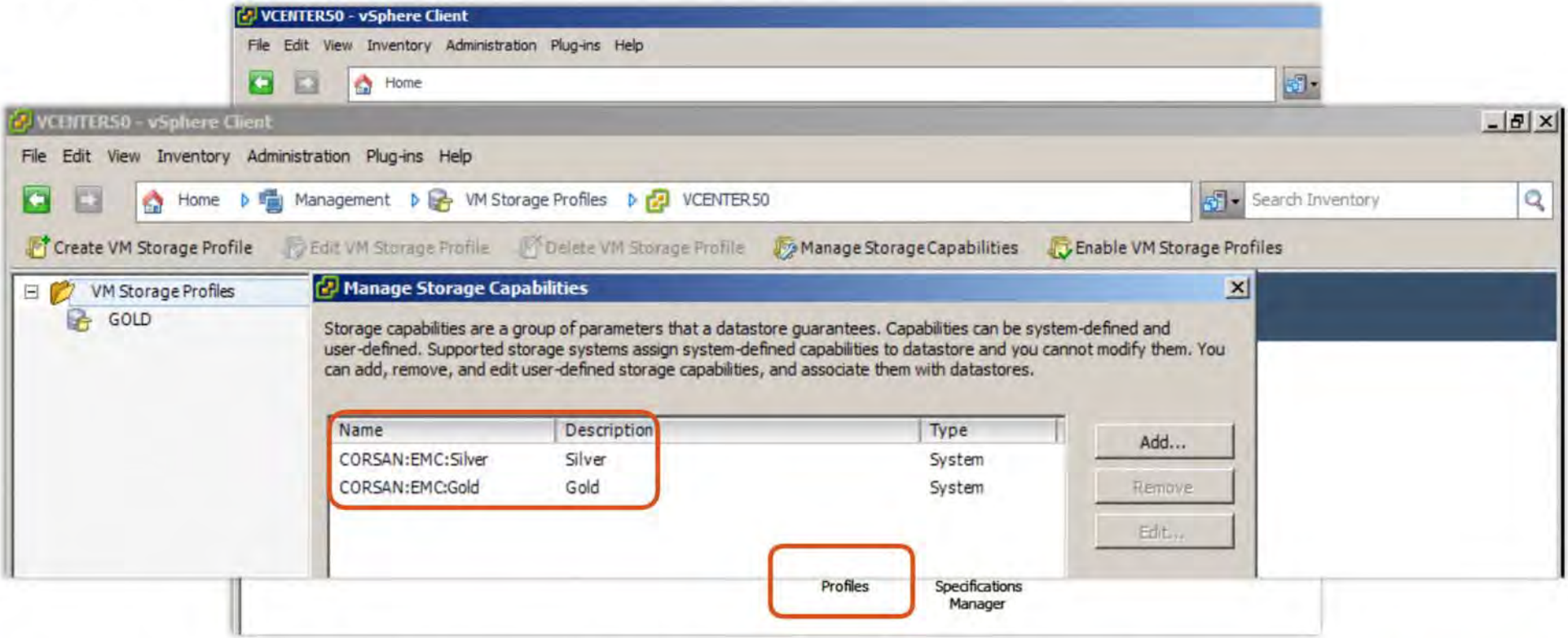
- Profile Compliance is visible from the Virtual Machine Summary tab.

vSphere Storage APIs for Storage Awareness

- Storage Awareness is an Extension of the vSphere Storage APIs, vCenter-based extensions.
- It allows storage arrays to integrate with vCenter for management functionality via server-side plug-ins or Vendor Providers.
- This in turn allows a vCenter administrator to be aware of the topology, capabilities, and state of the physical storage devices available to the cluster.
- VASA enables several features.
  - For example it delivers System-defined (array-defined) Capabilities that can greatly enhance **Profile-Driven Storage**.
  - Another example is that it provides array internal information that helps several **Storage DRS** use cases to work optimally with various arrays.

Storage Capabilities

- Once the Vendor Provider has been successfully added to vCenter, the profiles should also display the storage capabilities provided to it by the Vendor Provider.



- The above example contains a 'mock-up' of some possible Storage Capabilities as displayed in the profiles. These are retrieved from the Vendor Provider.

Save OPEX by Reducing Repetitive Planning and Effort!