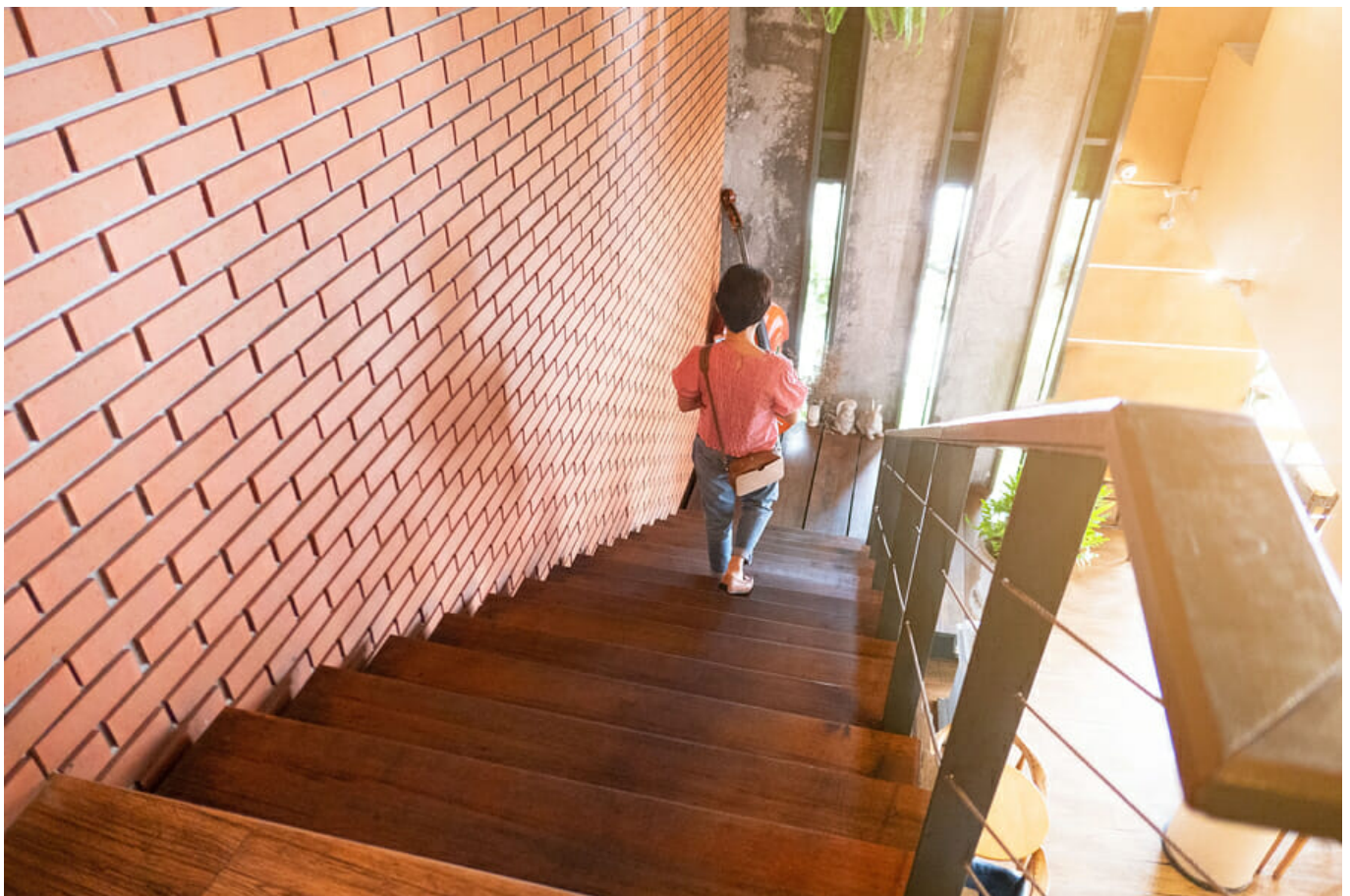


Tiering Virtual Machines with VMware SPBM and FlashArray//C



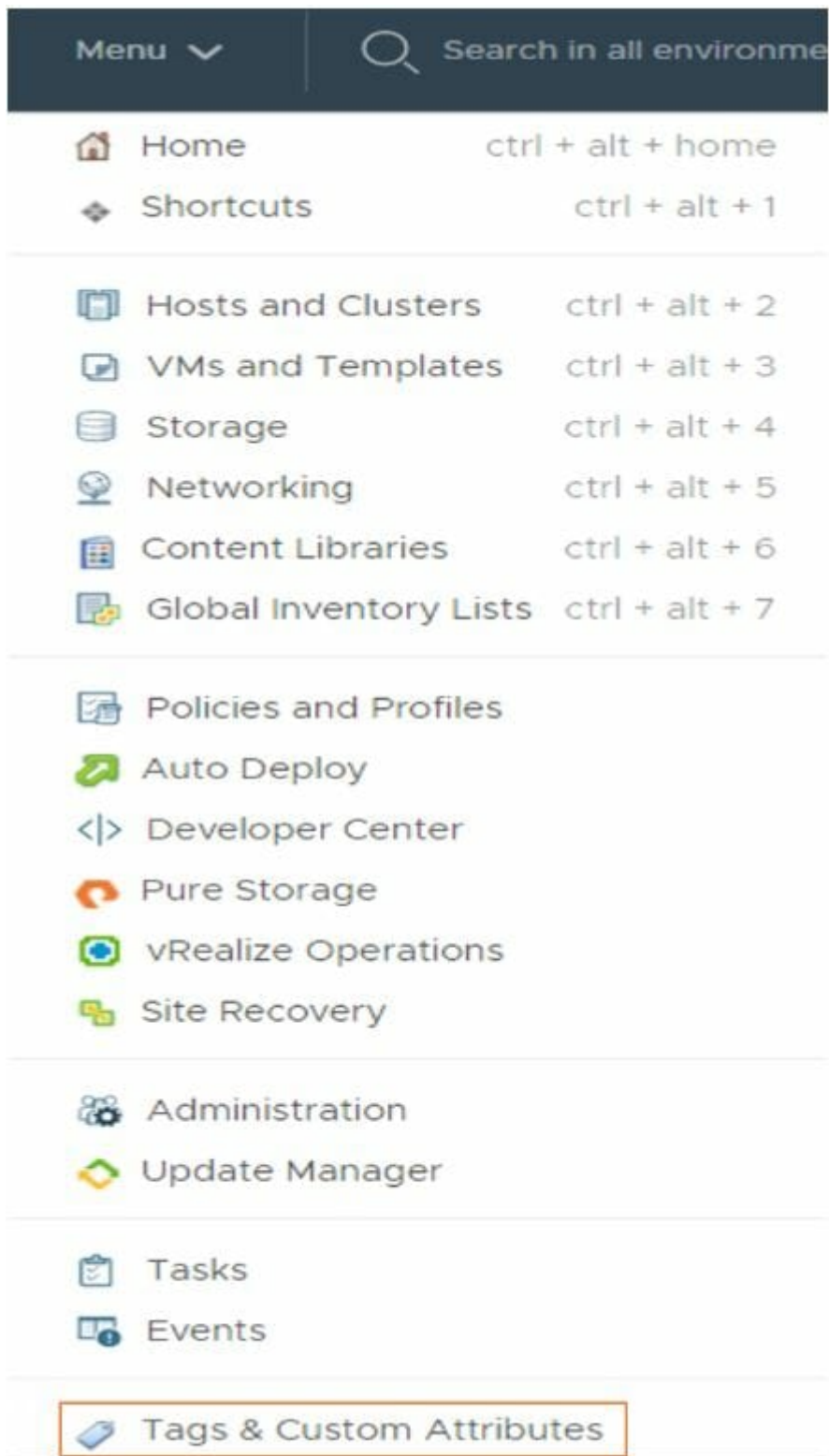
The introduction of the capacity-optimized [FlashArray//C](#) gives VMware customers more flexibility for what to run where within their enterprise. Tier 2 workloads that do not require sub-millisecond latency delivered by the FlashArray//X, or that benefit from a lower cost/GB, capacity-optimized all-flash platform are especially well-suited for Pure Storage's latest product.

The combination of FlashArray//X, FlashArray//C, and Pure's deep VMware integration provides VM admins a consistent experience and solution for storage, management, and automation of all their VM needs.

[VMware Storage Policy Based Management](#) (SPBM) is an intuitive feature that makes placing virtual machines on the appropriate FlashArray easy. It does this by providing a framework to associate your VMFS volumes with categories, tags, and policies. Since these constructs are user-defined, this makes it straight forward to align them to whatever processes already exist within your datacenter today.

A quick example here will illustrate just how easy and adaptable SPBM can be for delineating your Tier 0 and Tier 2 workloads between FlashArray//X (or FlashArray//M) and FlashArray//C. The video provides more detail.

First, categories and tags need to be defined within vCenter and can be found under Tags and Custom Attributes at the bottom of the main vCenter menu.



We add a category first, and then a tag for Tier 2 VMFS datastores.

Add Category



Category Name:

Tier 2

Description:

Tags Per Object:

One tag Many tags

Associable Object Types:

- All objects
- Folder
- Datastore
- Distributed Switch
- Library Item
- vApp
- Cluster
- Datastore Cluster
- Host
- Network
- Virtual Machine
- Datacenter
- Distributed Port Group
- Content Library
- Resource Pool

Add Tag



Name:

Tier 2 VMFS

Description:

Category:

Tier 2



[Create New Category](#)

CANCEL

OK

Using the Pure Storage vSphere HTML5 plug-in, we next create a VMFS datastore on the FlashArray//C.

Create Datastore



1 Type

2 VMFS Version

3 Name and Size

4 Compute Resource

5 FlashArray

6 Protection

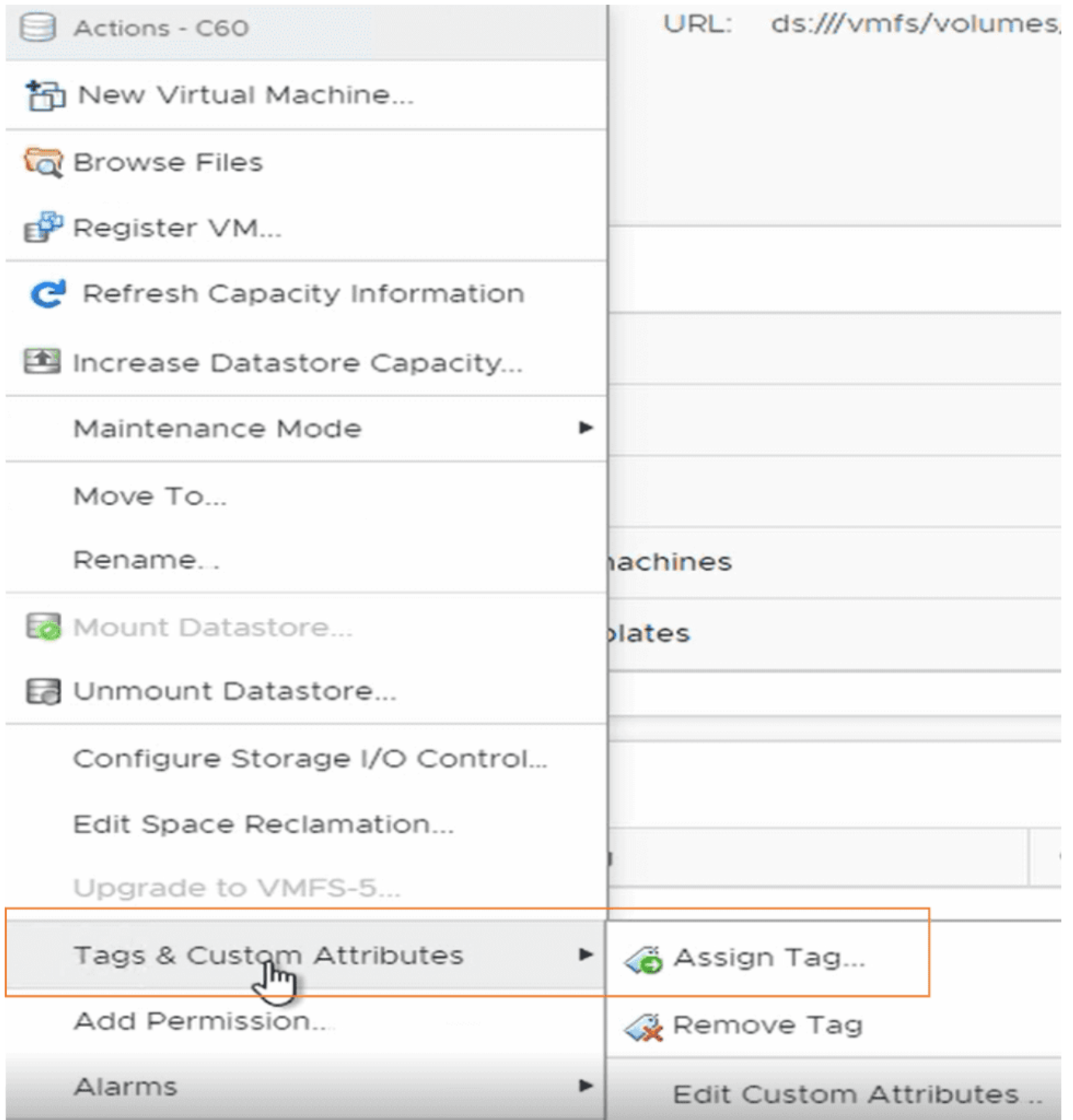
7 Ready to complete

Ready to complete

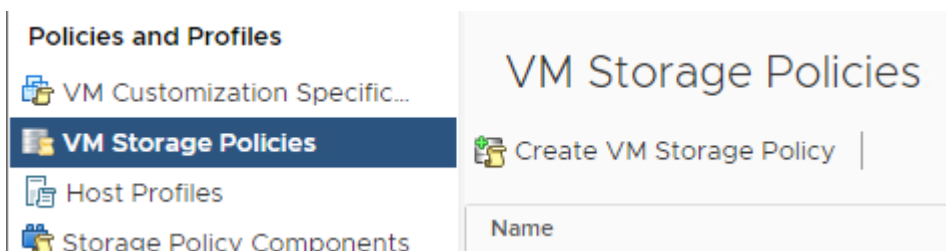
Datastore Name:	C60
Type:	VMFS
VMFS Version:	VMFS 6
Datastore Size:	12 TB
Compute Resource:	Krishna-Tom-Cluster
FlashArray:	C60
Protection:	None

Creating datastore...

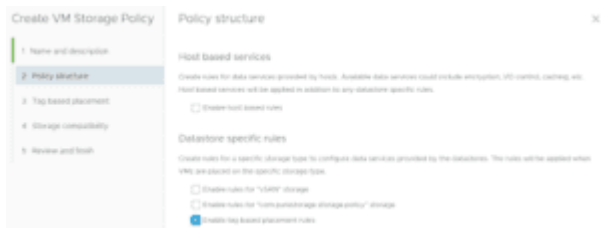
After VMFS datastore creation, we next tag the datastore with the Tier 2 tag.



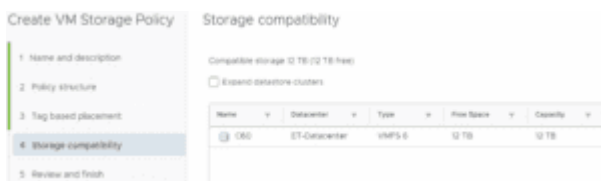
Under the Policies and Profiles menu, create a new VM Storage Policy.



After naming it, select 'Enable Tag based placement rules', browse and add the Tier 2 tag.



Here we can see the VMFS volume we created and tagged from before appears as a compatible datastore.



Now that our SPBM policy is created, the below 'Deploy From Template' wizard shows our compatible VMFS datastore when we select the Tier 2 VMs storage policy.

CentOS7 - Deploy From Template

- ✓ 1 Select a name and folder
- ✓ 2 Select a compute resource
- 3 Select storage**
- 4 Select clone options
- 5 Ready to complete

Select storage

Select the storage for the configuration and disk files

Configure per disk

Select virtual disk format: Same format as source ▼

VM Storage Policy: Tier 2 VMs ▼

	Name	Capacity	Provisioned	Free
▲	Storage Compatibility: Compatible			
	C60	12 TB	1.98 GB	12 TB
▲	Storage Compatibility: Incompatible			
	Cassandra-DataStore	13 TB	9.13 TB	3.87 TB
	datastore1	92.5 GB	10.94 GB	81.56 GB

This example was purposefully basic but hopefully it shows the power and convenience of tagging your datastores in a tiered environment. We can use them for deployment of any new VM, vApp, or VM template just by selecting the appropriate policy when it's time to select storage. Naturally, as more VMFS volumes are created, they too can be tagged, or you can add more policy rules that include things like snapshot, replication, and vVols support. You may not have noticed, but at no point in the above process did we navigate to the Pure Storage GUI. This is thanks to our great partnership with VMware and deep integration points that make FlashArray management painless and intuitive. To see this demo played out step-by-step please check out this video. Further information on all things VMware can be found on the Pure Storage [VMware Platform Guide](#) and [Virtualization](#) solution web pages.