

EZ Cloud New vDC Tasks

February 3, 2016

Hank Preston, hapresto@cisco.com

What and Why?

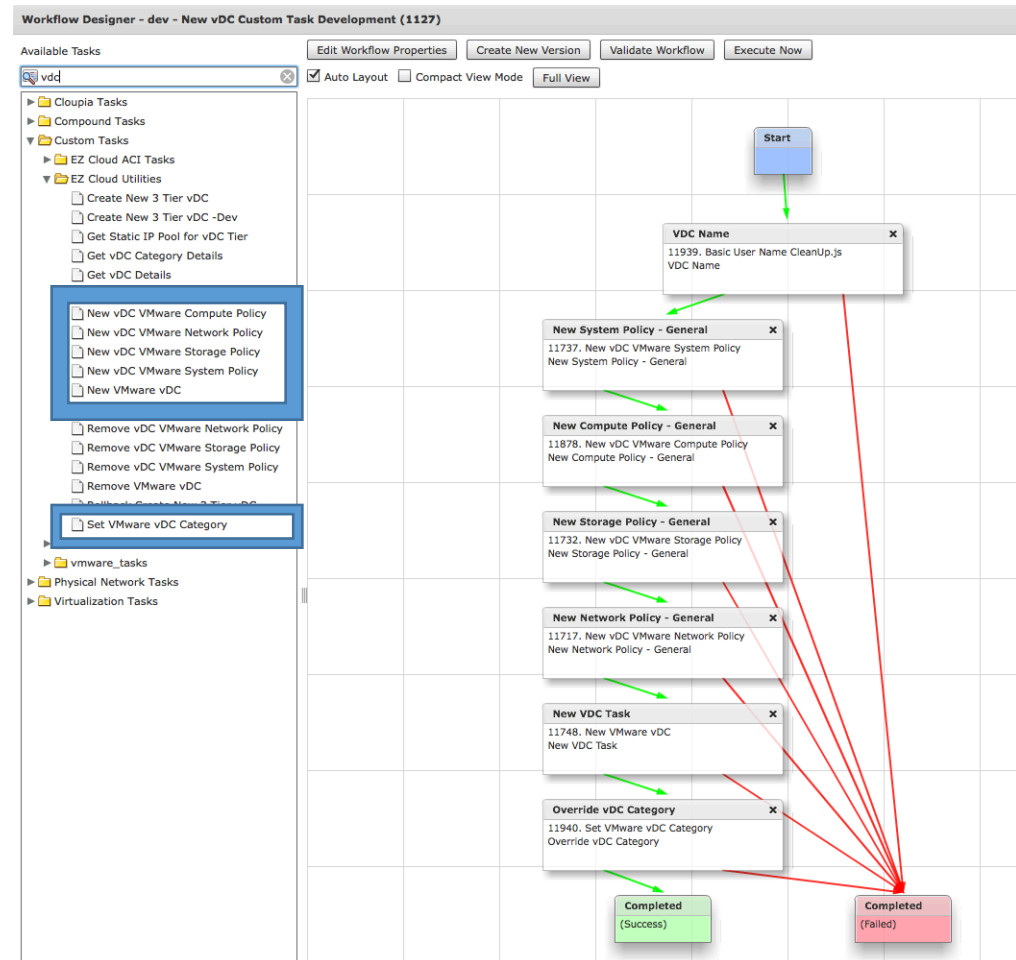
- Set of Custom Tasks for UCSD to
 - Create System, Compute, Storage, and Network VMware vDC Policies
 - Create New VMware vDC
 - Set Override Policies for a vDC Category
- Full Rollback enabled on policies and vDC
- Enable Dynamic Creation of new vDCs and all their policies
- Great to couple with ACI Automation to link ANP -> vDC

Pre-Reqs and Be Aware

- The new System, Compute, and Storage Policies require a Template Policy for some settings
 - eg Rules used in Storage and Compute Policies
- Current Compute Policy Supports Clusters Only
- Current Storage Policy Supports Data Stores Only

Walkthrough Example Workflow

- New Tasks to create New and Remove vDC Policies and vDC
- New Task to Set vDC Category Policies



Walkthrough Example Workflow Inputs

- Inputs for vDC Name
- Key Infrastructure Resources
 - VMware Cloud
 - Cluster
 - Datastore
 - Port-Group
 - Etc
- Admin Inputs for Policy Templates

The screenshot shows the 'Edit Workflow' interface with the 'Edit User Inputs' tab selected. The 'Workflow User Inputs' table lists various inputs with columns for Input Label, Inj, Mandato, Type, and Admin Input Value. A blue box highlights the 'Admin Input Value' column for the last three rows: 'General Cloud System Policy', 'General Cloud Compute', and 'General Cloud Storage'. The table also includes a search bar and a 'Total 12 Items' indicator at the bottom.

Input Label	Inj	Mandato	Type	Admin Input Value
New vDC Name		Yes	gen_text_input	
User Group		Yes	userGroup	
VMware Cloud Name		Yes	vmwareCloudNamesList	
VMware Cluster		Yes	clusterList	
VMware Resource Pool		Yes	vmwareResourcePoolIdentit	
VMware Data Store		Yes	dataStoreName	
VMware Port-Group		Yes	vmwareVmPortGroupIdentit	
Static IP Pool Policy		Yes	VMWareIPPoolPolicy	
System Policy Template Name		Yes	gen_text_input	General Cloud System Policy
Compute Policy Template Name		Yes	gen_text_input	General Cloud Compute
Storage Policy Template Name		Yes	gen_text_input	General Cloud Storage
Category to Override		Yes	vdcCategory	

Walkthrough Example New Policy Task

- OUTPUTS for Use Later
 - Policy Name
 - Policy ID

Edit Task (New vDC VMware System Policy)

Task Information

User Input Mapping

Task Inputs

User Output Mapping

Workflow Task Basic Information

Task Name: New System Policy - General

Task Category: EZ Cloud Utilities

Task Type: New vDC VMware System Policy

Comment: New System Policy - General

Retry Execution
If supported the task will retry as specified

Task Details

Selected task will generate following outputs:

OUTPUT_SYSTEM_POLICY_NAME : System Policy Name

OUTPUT_SYSTEM_POLICY_ID : System Policy ID

OUTPUT_SYSTEM_POLICY_PROVIDER : System Policy Provider

Next Close

Walkthrough Example New Policy Task

- Map in the template policy

Edit Task (New vDC VMware System Policy)

Task Information ✓
User Input Mapping
Task Inputs
User Output Mapping

User Input Mappings to Task Input Attributes
Select which of the following attributes you would like to use values from workflow input fields or provide the values in the next step.

Manage Workflow User Inputs

If 'Map to User Input' is checked, inputs are prompted during workflow execution unless specified by admin in the workflow definition.

System Policy Template Name (Mandatory)
Type: Generic Text Input
 Map to User Input
User Input: System Policy Template Name

Type: Generic Text Input
 Map to User Input
User Input: VDC Name.formatedInput

System Policy Description
Type: Generic Text Input
 Map to User Input

VM Name Template (Mandatory)
Type: Generic Text Input
 Map to User Input

Back Next Close

Walkthrough Example New Policy Task

- Administratively Define Policy Settings

Edit Task (New vDC VMware System Policy)

Provide the values for the task inputs which are not mapped to workflow inputs.

Revalidate

Task Information ✓
User Input Mapping ✓
Task Inputs
User Output Mapping

System Policy Description: Created with SR\${SR_ID}

VM Name Template: vm-u\${SR_ID} *
To include a parameter, escape the \$ like "vm-\\\${SR_ID}"
 Allow End User VMName or Prefix
 Power On After Deployment

Hostname Template: \\\${VMNAME} *
Set to "\\\${VMNAME}" to match the VM Name

DNS Domain: intranet.local *

DNS Suffix: *** Not currently used, Suffix List copied from template

DNS Servers: *** Not currently used, Server List copied from template

VM Image Type: Windows and Linux *

Windows Domain To Join: intranet

Windows Join Domain Username: administrator

Windows Join Domain Password: *****

Windows Product ID:

Next Close

Walkthrough Example New vDC Task

- Map in all the new vDC Policies Created in previous tasks

Edit Task (New VMware vDC)

Task Information ✓

User Input Mapping

Task Inputs

User Output Mapping

User Input Mappings to Task Input Attributes

System Policy Name (Mandatory)
Type: Generic Text Input
 Map to User Input
User Input: New System Policy - General.OUTPUT_SYSTEM_POLICY_NAME

Compute Policy Name (Mandatory)
Type: Generic Text Input
 Map to User Input
User Input: New Compute Policy - General.OUTPUT_COMPUTE_POLICY_NAME

Storage Policy Name (Mandatory)
Type: Generic Text Input
 Map to User Input
User Input: New Storage Policy - General.OUTPUT_STORAGE_POLICY_NAME

Network Policy Name (Mandatory)
Type: Generic Text Input
 Map to User Input
User Input: New Network Policy - General.OUTPUT_NETWORK_POLICY_NAME

End User Self Service Policy ID

Walkthrough Example Set Category Task

- Identify the Category you are changing
- Map in appropriate Policies

Edit Task (Set VMware vDC Category)

Task Information User Input Mapping Task Inputs User Output Mapping

User Input Mappings to Task Input Attributes
Select which of the following attributes you would like to use values from workflow input fields or provide the values in the next step.

VDC ID (Mandatory)
Type: vDC Selector
 Map to User Input
User Input: New VDC Task.OUTPUT_VDC_ID

VDC Application Category (Mandatory)
Type: vDC Category
 Map to User Input
User Input: Cateogry to Override

System Policy Name
Type: Generic Text Input
 Map to User Input
User Input: New System Policy - General.OUTPUT_SYSTEM_POLICY_NAME

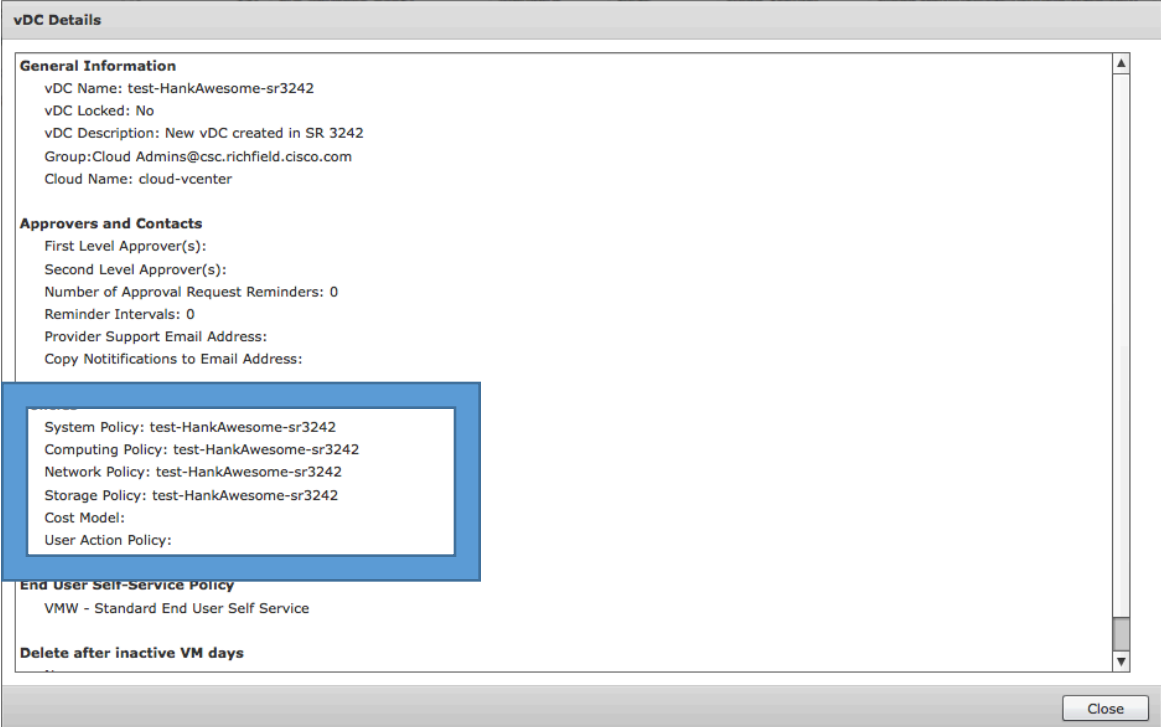
Compute Policy Name
Type: Generic Text Input
 Map to User Input
User Input: New Compute Policy - General.OUTPUT_COMPUTE_POLICY_NAME

Storage Policy Name

Back Next Close

Walkthrough Example New vDC Details

- See the new policies that were created and assigned



The screenshot displays the 'vDC Details' window with the following sections:

- General Information**
 - vDC Name: test-HankAwesome-sr3242
 - vDC Locked: No
 - vDC Description: New vDC created in SR 3242
 - Group: Cloud Admins@csc.richfield.cisco.com
 - Cloud Name: cloud-vcenter
- Approvers and Contacts**
 - First Level Approver(s):
 - Second Level Approver(s):
 - Number of Approval Request Reminders: 0
 - Reminder Intervals: 0
 - Provider Support Email Address:
 - Copy Notifications to Email Address:
- Policies** (highlighted with a blue box)
 - System Policy: test-HankAwesome-sr3242
 - Computing Policy: test-HankAwesome-sr3242
 - Network Policy: test-HankAwesome-sr3242
 - Storage Policy: test-HankAwesome-sr3242
 - Cost Model:
 - User Action Policy:
- End User Self-Service Policy**
 - VMW - Standard End User Self Service
- Delete after inactive VM days**

A 'Close' button is located at the bottom right of the window.

Walkthrough Example New vDC Categories

- The over ridden category with policies assigned

Virtual Data Centers for All User Groups > vDC (test-HankAwesome-sr3242) Back

Refresh Favorite Report Metadata

Manage Categories

vDC Category	Name	Code	Description	Deployment Policy	Computing Policy	Network Policy	Storage Policy
216/0	Discovered VM	DISC	Discovered VMs. All VMs provision				
216/1	Generic VM	GEN	Any generic virtual machine				
216/2	Web Server	web	Any generic virtual machine				
216/3	Application Server	app	Application server				
216/4	Database	data	Database engines or application				
216/5	App - CPU Intensiv	APPC	CPU intensive applications				
216/6	App - Memory Inte	APPM	Memory intensive applications				
216/7	App - Disk Intensiv	APPD	Disk IO intensive applications				
216/8	App - Network Inte	APPN	Network IO intensive applications	test-HankAwesome-sr3242	test-HankAwesome-sr3	test-HankAwesome-sr3242	test-HankAwesome-sr3242
216/10	Other App 2	OTH2	Place holder for applications or VM				
216/11	Other App 3	ECS3	Place holder for applications or VM				