Steps to compute vROps usage bundled into the vCloud Service Provider Bundle - Premier Plus Edition bundle with UM 3.3.3.

Here are the original steps to report vROps. Below these you will find my interpretation along with instructions and screenshots:

1) Run the Monthly Usage Report.

2) Read from the report the vCloud Service Provider Bundle - Premier Edition value. *This is value A*.

3) Compute the total usage for vRealize Operation Manager as a bundle.

3.a) For each vROps instance query vROps for VMs under its management yielding a list of VMs.

3.b) Determine the "Premier Plus Bundle Value" based on the aggregate average monthly usage of the VMs in the list generated in step 3.a).

This can be performed by computing the average billed RAM from vCenter Server on a per VM basis. *This is value B*.

4) Update the report as follows:

4.a) Update: vCloud Service Provider Bundle - Premier Edition = A-B

4.b) Add: vCloud Service Provider Bundle - Premier Plus Edition = B

Run the Monthly Usage Report in 3.3.3. Read from the report the Avg Capped Billed vRAM (GB) from the vCloud Service Provider Bundle – Premier Edition. This is **Value A**. You will see in the below screenshot (in my small lab) this is **5GB vRAM**.

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While we are in Usage Meter. We must look at the total number of VMs Average billed RAM from vCenter on a per VM basis. To do this, we take the total number of VMs shown under vCenter Server (Virtual Machines by Product Server) and divide it by the amount of vRAM – in this example it is showing 12 VMs with 5 GB. This equates to .42GB vRAM per VM. 12 VMs * .42 = 5GB

The next step is to get a list of VMs from vROPs – if this list is 7 .. then take 7 * .42 = **2.94GB** (*Value B*). So we basically have a total of 5GB vRAM for Premier and 2.94GB vRAM for vROPs.

We will always have a lower number of VMs in vROPs than we will in vCenter – this is because we do not count certain management VMs in vROPs.

To summarize. We know how much total vRAM we used from vCenter, we now need to know how many vROPs VMs that came from. In Usage Meter – the vCenter column will show the total number of VMs deployed that month – even if it was deployed for 5 minutes. We need vROPs to show the same thing.

This is how we get the total number of VMs from vROPs:

The first step we need to take is to keep 30 days worth of deleted objects data. The reason for this is as I stated above. If we have a VM that was created then deleted (as is the case in a cloud environment) we need to know this. The default vROPs keeps deleted objects data is 15

days, we are going to change this to 30 days. This will ensure when we run a report it will capture VMs that were created and deleted – we will still have these built into the aggregate.

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From the vROPs home page click **Administration**.

Then select Global Settings

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Then click the edit Global Settings button at the top right of your screen

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In the Deleted Objects field – change the value from 360 hours to 720 hours and click OK:

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The next step is to create a View – or import a view. This view will give us a list of the VM names, and the count for each VM. The reason we are getting a listing of VMs is so the SP can remove VMs not meant to be in the list. So while we can do a VM count – there are some VMs not under vROPs management they do not pay for. We understand in large environments this can be cumbersome.

To create a new "View":

From the vROPs Home Page:

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Then click on **Environment** to get to the Environment Overview Page:



Then click vSphere Hosts and Clusters from the list. Then on the next screen click the expansion arrow under vSphere World and select the vCenter Server we are running this report for. Note – this must be run for each vCenter under vROPs control.

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Then click the Details Tab:

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Then click the Green Plus Sign (visible in the screenshot above) to create a new View. In the Name field – enter a unique name for this View:

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		 ③ Get More Information ⑤ See Video 	
2. Presentation 3. Subjects	Click to select how to visualize data.		
4. Data			
5. Visibility			

Then click the Presentation tab at the bottom of the View window (note you can change the number of items that will show up per page, the default is 50)

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Select the Subjects tab and in the open field, type Virtual Machine – a list will auto populate and select Virtual Machine from the list.

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Click the Data tab, then click the Folder looking button (as shown in the screenshot) to switch the view:

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Then in the search box type the word "Name" followed by the enter key. Expand the Configuration menu and Double Click the object "Name" – or drag this into the Data window to the right. You will see the "Configuration | Name" object in the Data window once it has successfully been added.



Change the "Show Data for the last" value to 30 days.



In the Data Window. Click the Summary Tab and click the green plus sign. Click save.

OPTIONAL STEP, you can test your "View" by clicking the Select Preview Source at the top of the window and selecting vSphere World and you will see your data at the top of the window. This will show you a listing of the VMs in the environment.



Once you have saved the View. You can run it by clicking on it from the Details Tab of the Environment | vSphere Hosts and Clusters | vCenter screen. You will see a VM count at the bottom right of the screen, however the SP must count the number of VMs under vROPs management report on these using our formula. Important – these steps only give a VM listing so the SP can come up with a final VM count for reporting. This View can be run at any time.

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The next steps are to follow the formula to come up with the final number. (See formula on page 1)

Steps to compute vROps usage standalone with UM 3.3.3.

- 1) For each vROps instance
- 1.a) query vROps for the number of VMs under its management yielding a list of VMs. (See above how to create a list of VMs running vROps)
- 1.b) add a line item to the monthly usage report as follows:

vRealize Operations Manager <IP address of instance> <Version> <VM count from 1.a>