

Proven Practice - Resource Pool Capacity Management with Metron Athene

Introduction

Whilst Athene allows you to monitor and report a wide range of performance metrics from VMware and Physical platforms, [Athene version 8.2.4](#) does not directly collect the metrics relating to [Resource Pools](#) unlike later versions of the software. However using the powerful grouping functionality within Athene you can obtain lists of your virtual machines and group them together into Resource Pools. You can then use this data to produce aggregated performance reports detailing Resource Pool usage and incorporate them into the Athene capacity web portal, APR.

Intended Audience

This proven practice is suitable for any organization use Resource Pools, but is particularly useful for large enterprise organizations with many resource pools to manage.

Targeted at Capacity Management and Service Management professionals, this will also be of interest to VCPs.

Outline

1. Scenario Explained
2. Group Creation
3. Monitoring CPU Utilization
4. Creating the Bulletin

Author

Metron is a privately owned limited company which was founded in 1986. Metron-Athene Inc is a wholly owned subsidiary of Metron technology Ltd. The company is Europe's foremost Capacity Planning and Systems Performance Management specialist. Metron's flagship product, Athene, provides fully integrated ITIL-compliant capacity management, automatic performance analysis and reporting for UNIX, Linux, Windows and Mainframe Servers .

[Find out more about Metron](#)

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Resources

- You can find this document on the internet at <http://viops.vmware.com/home/docs/DOC-1146>

Disclaimer

You use this proven practice at your discretion. VMware and the author do not guarantee any results from the use of this proven practice. This proven practice is provided on an as-is basis and is for demonstration purposes only.

Resource Pool Capacity Management with Metron Athene

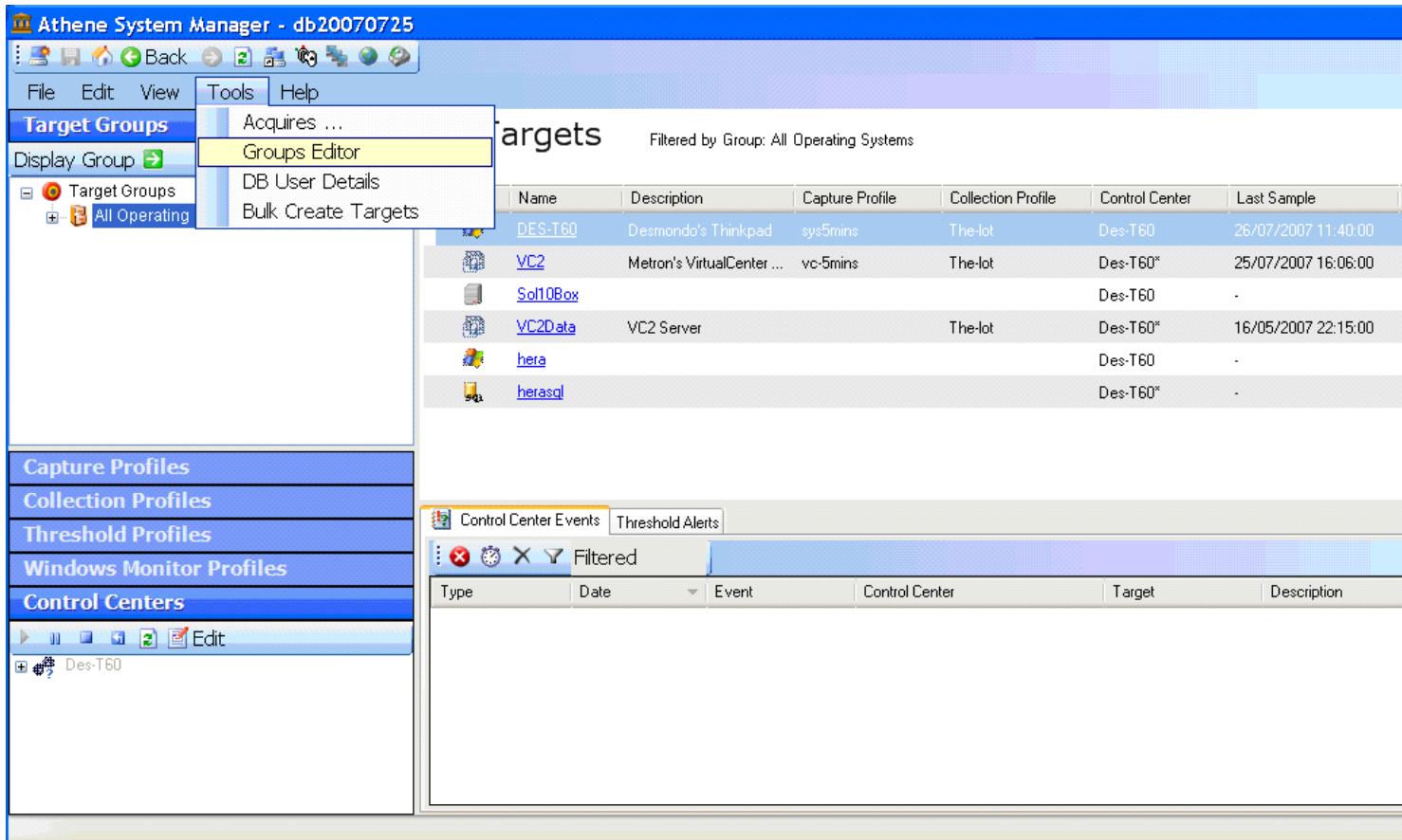
1. Scenario Explained

The following table summarises the configuration that we will use for this demonstration.

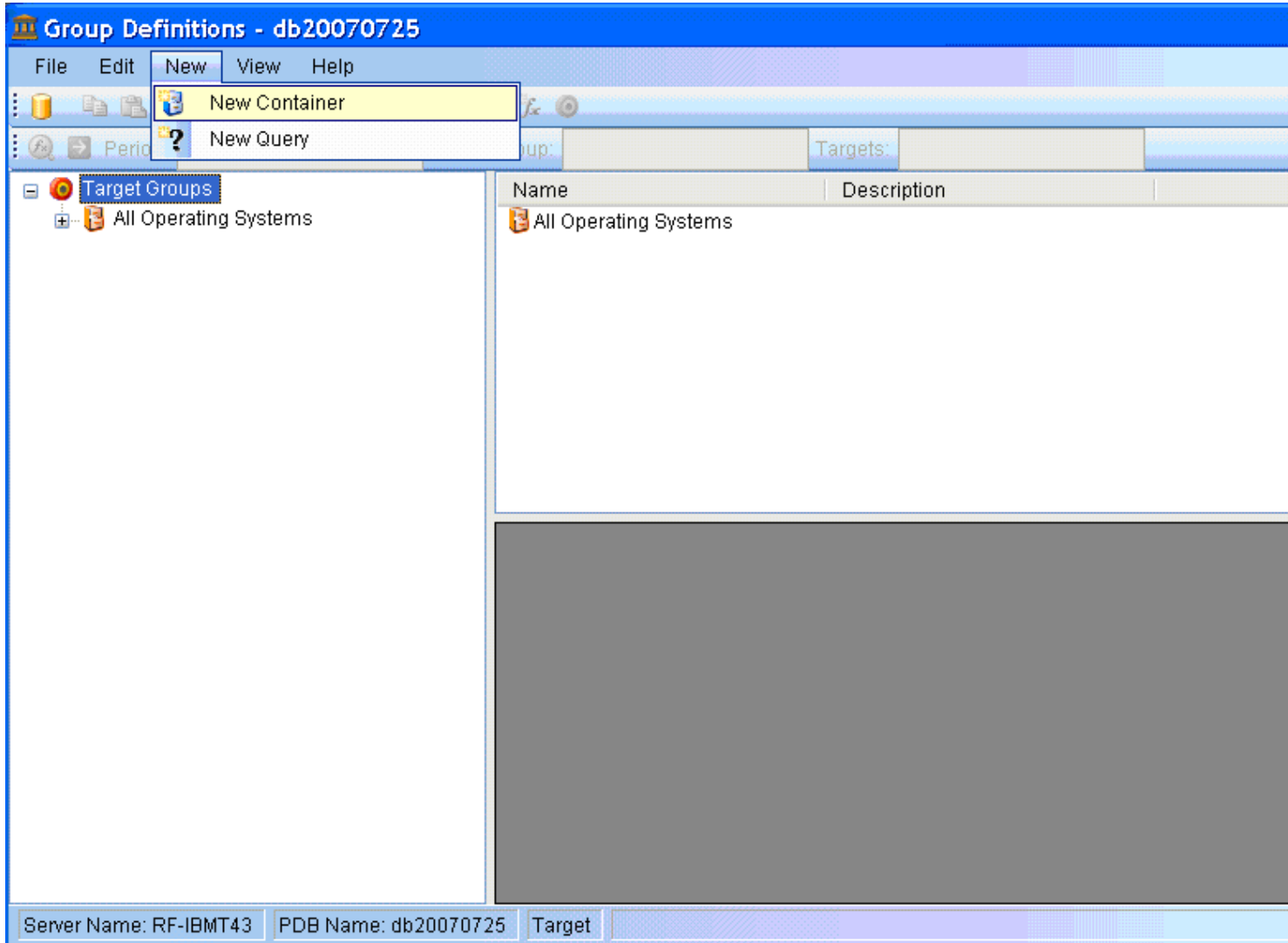
Resource Pools	Virtual Machines
ResPool1	VM1GBVAP087
	VM1GBVAP095
	VM1GBVAP096
	VM1GBVAP097
ResPool2	VM1GBVAP214
	VM1GBVAP215
	VM1GBVAP218
	VM1GBVAP219

2. Group Creation

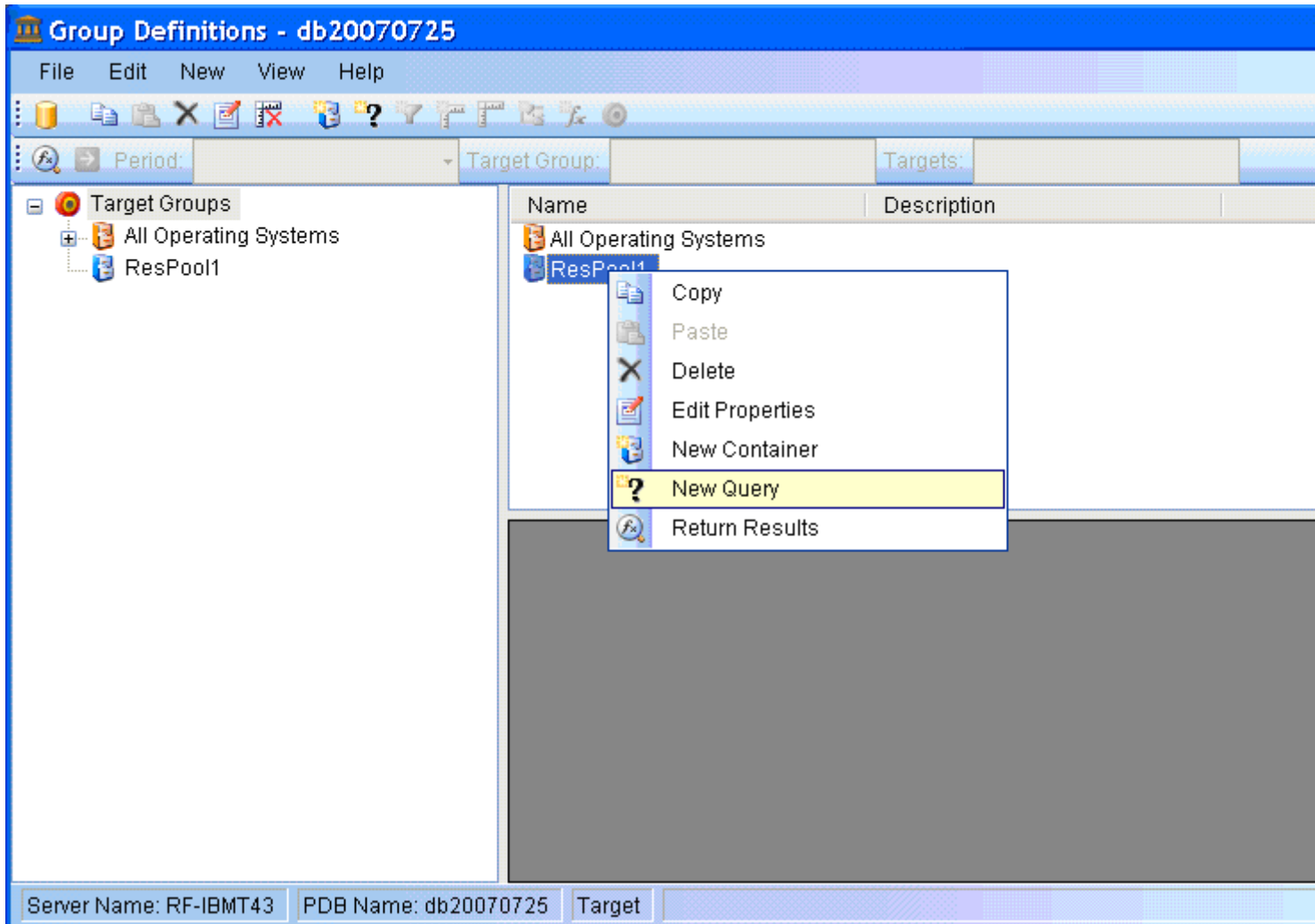
In order to group your virtual machines accordingly the first step is to create the necessary static groups. The "Group Definitions" application is available from within System Manager.



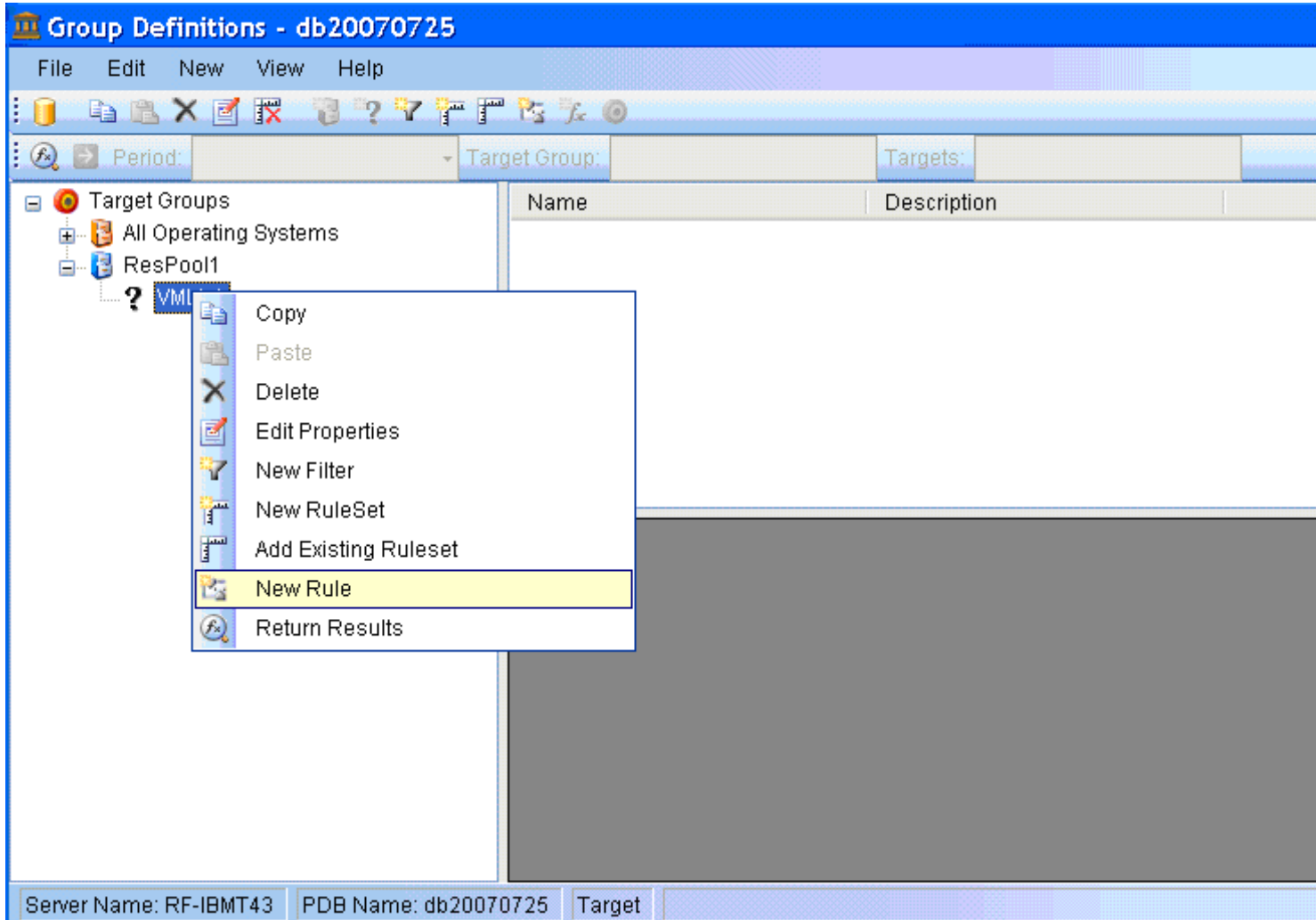
From within the Group Definition application you need to create a Container for each of your Resource Pools.



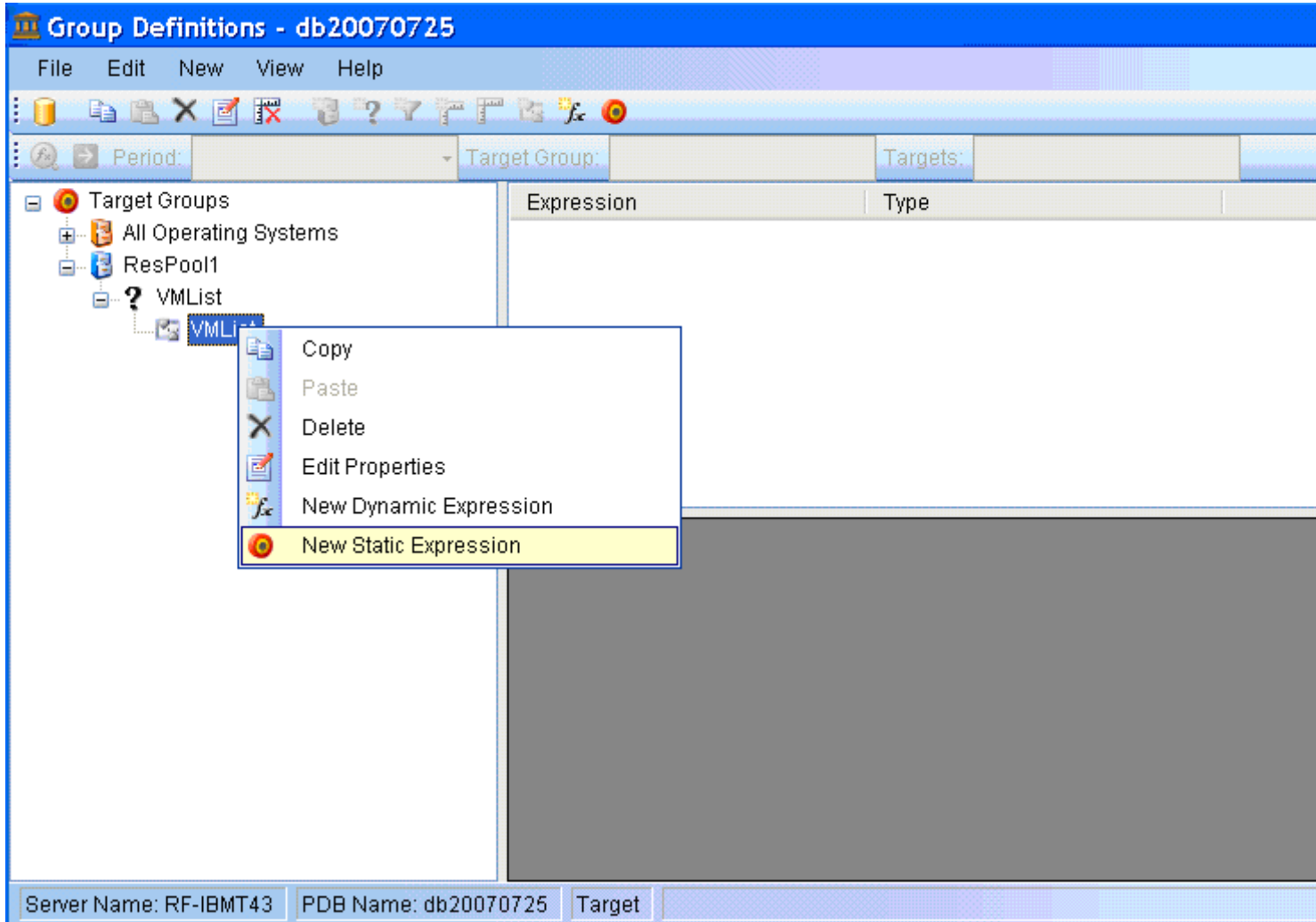
Now we have created an appropriately named Container (i.e. ResPool1) we will need to create a query within that Container. This is done by right clicking on the Container and choosing "New Query".



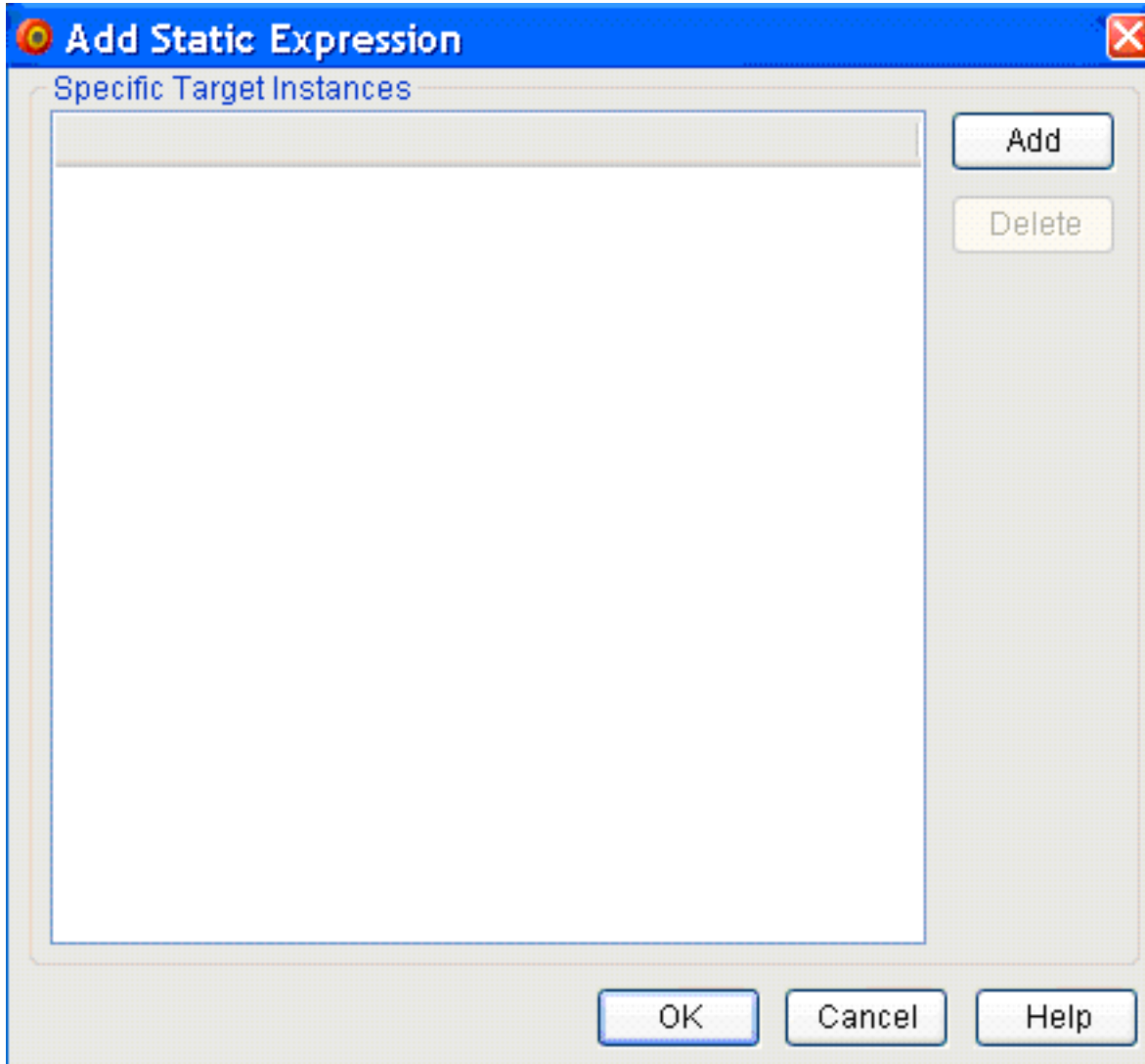
We can then provide a name for the query; in this example I have called it "VMList". We now have to attach a rule to the newly created query. In this example we will use the same name for the rule i.e. "VMList".

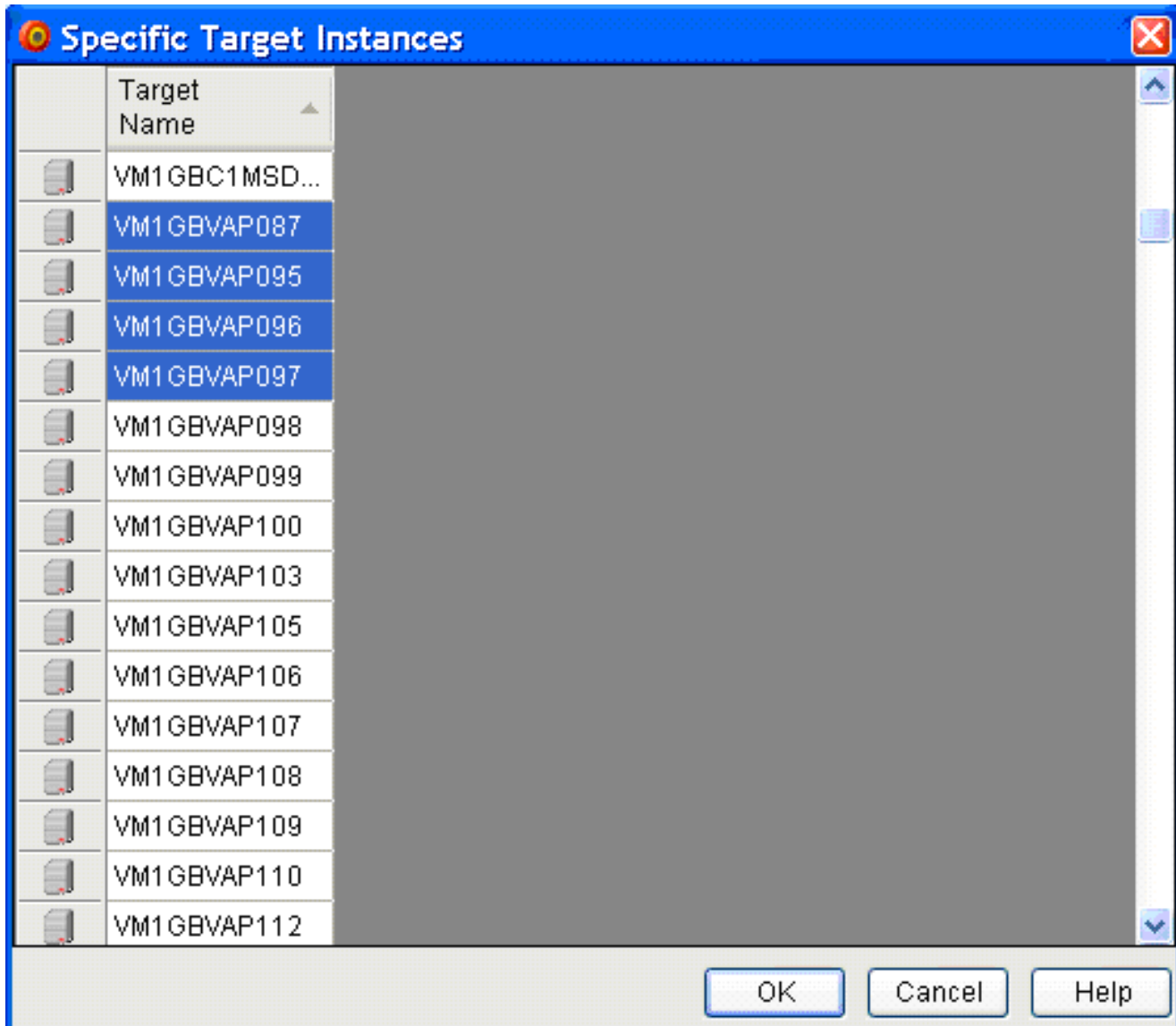


Finally we need to attach a "static expression" to the new rule structure.



Once selected, you will be presented with a screen that allows you to add targets; subsequently clicking on "Add" brings up another screen to enable your target selection.





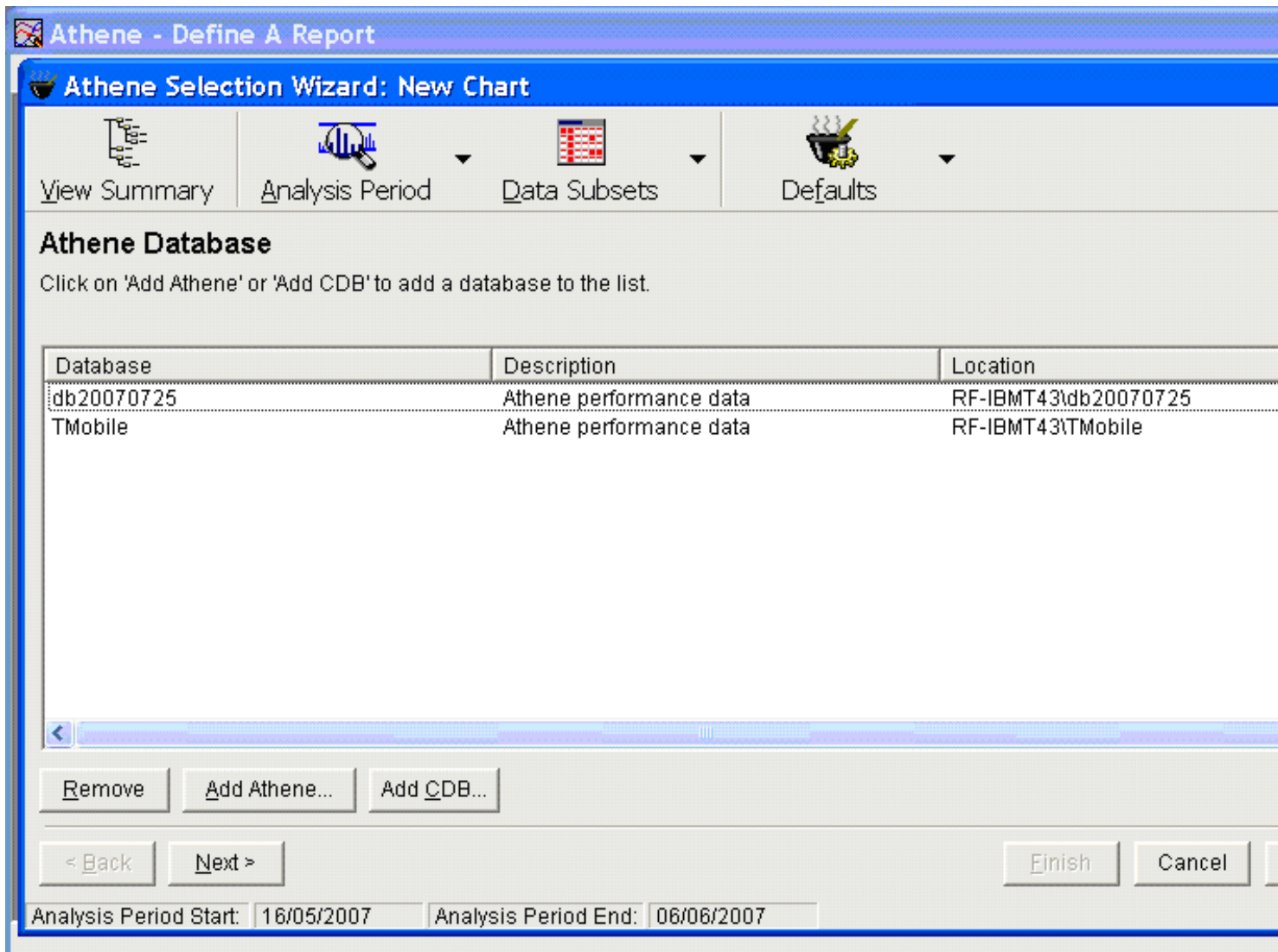
Once you have selected the required targets click "OK" and then "OK" again and you have successfully defined a group containing the VMs associated with "ResPool1". If we run through the steps again but choosing the remaining VMs specified, we can create the appropriate group for "ResPool2".

Now we have created the necessary groups we will use them to automate the production of reports detailing the CPU usage at the Resource Pool level.

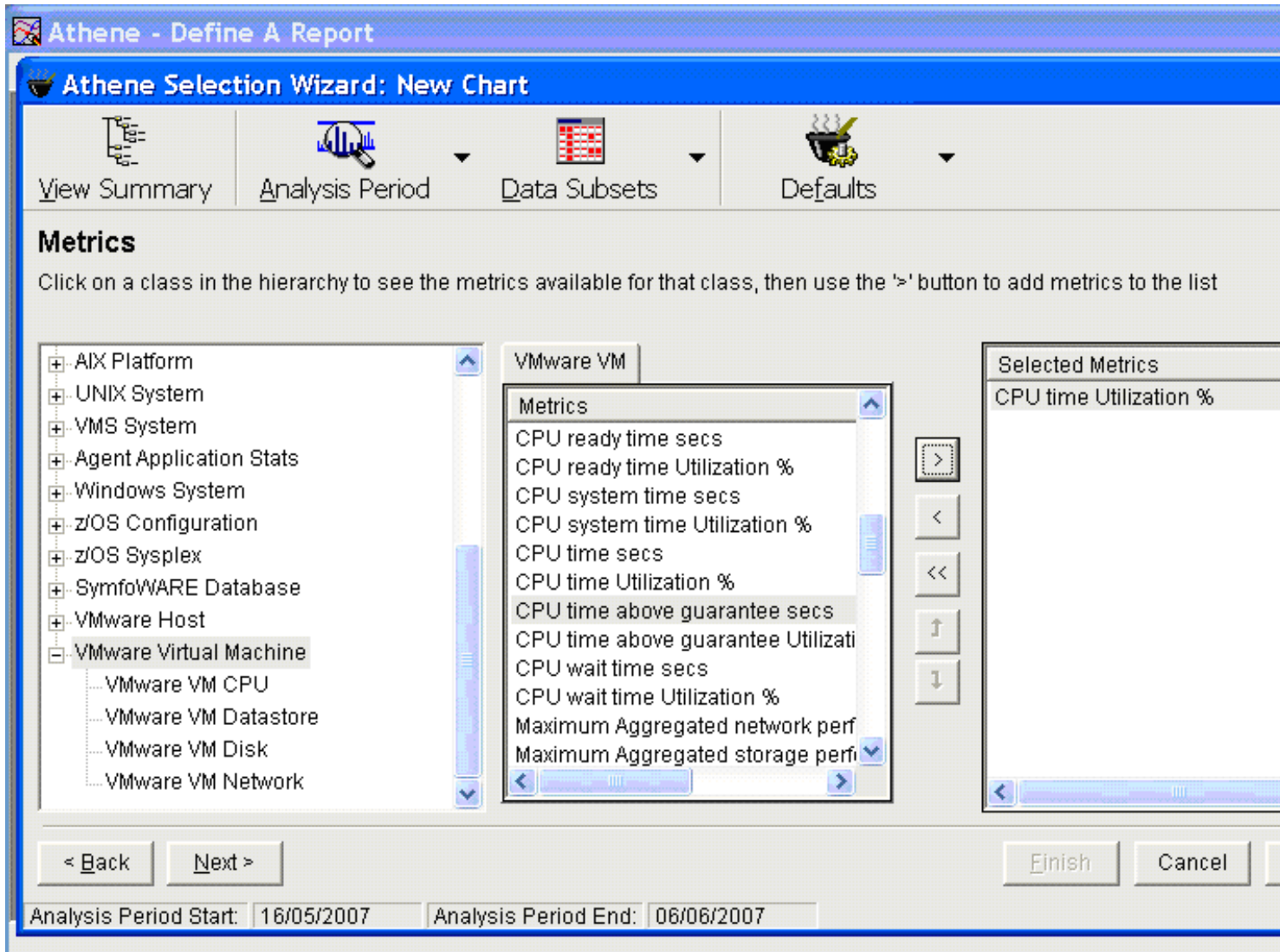
3. Monitoring CPU Utilization

In this example we will run through the creation of a simple VM CPU Time Utilization chart.

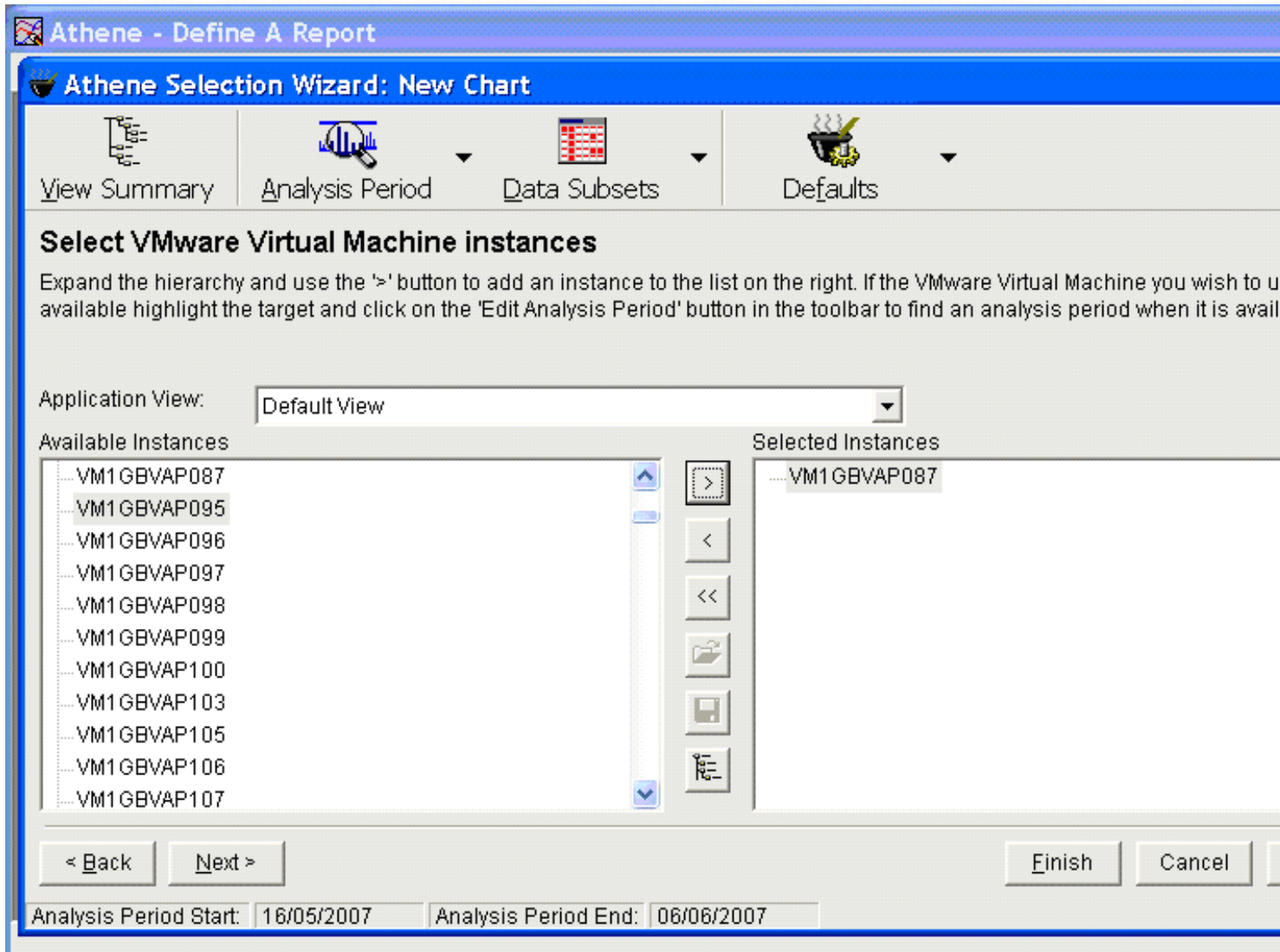
If you open the Define a Report application and choose to create a new chart; you can then choose the appropriate PDB.



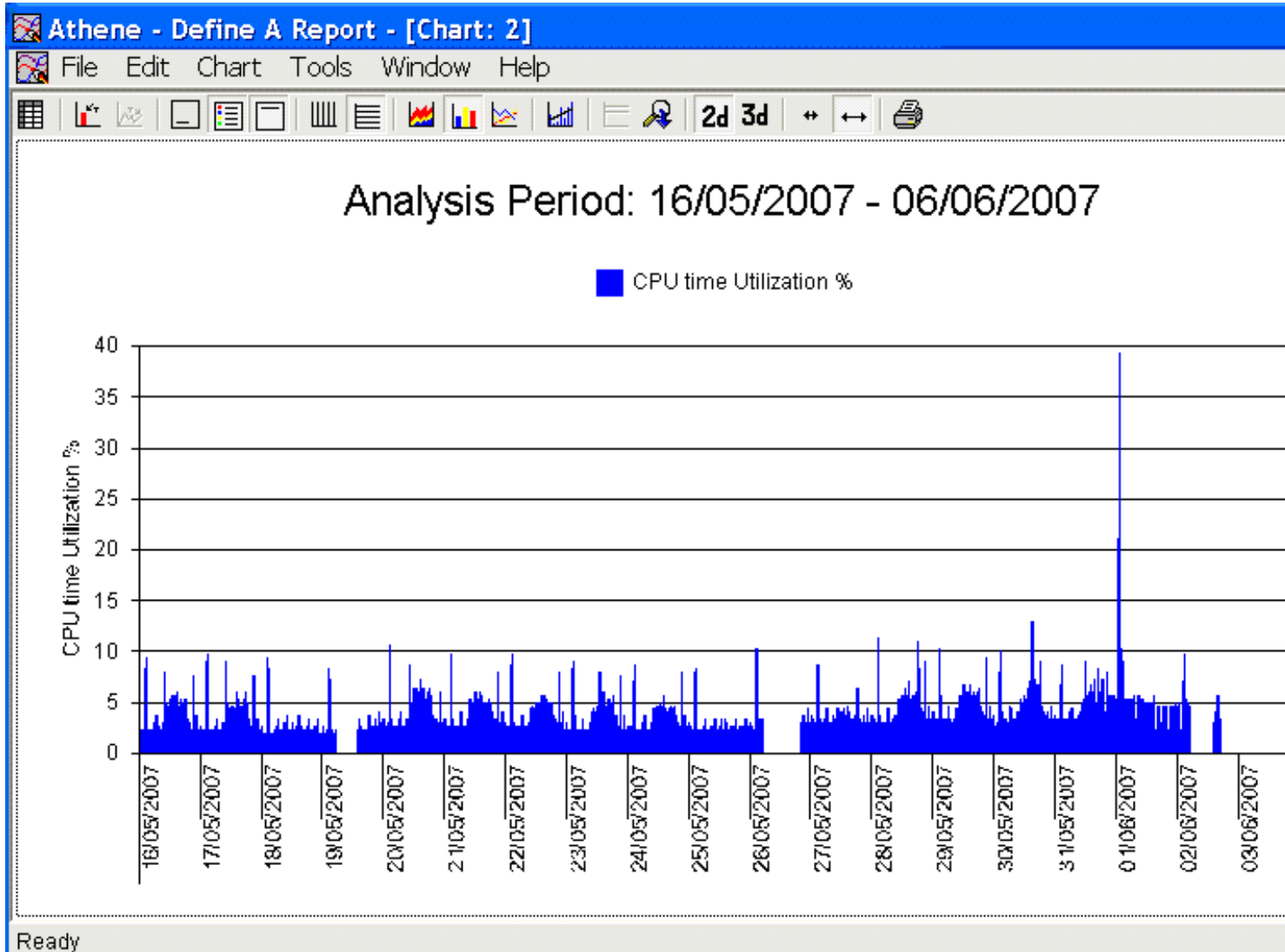
Once selected we will select VMware Virtual Machine and the CPU time Utilization metric and then click on "Next".



We will now choose an available instance and choose "Finish".



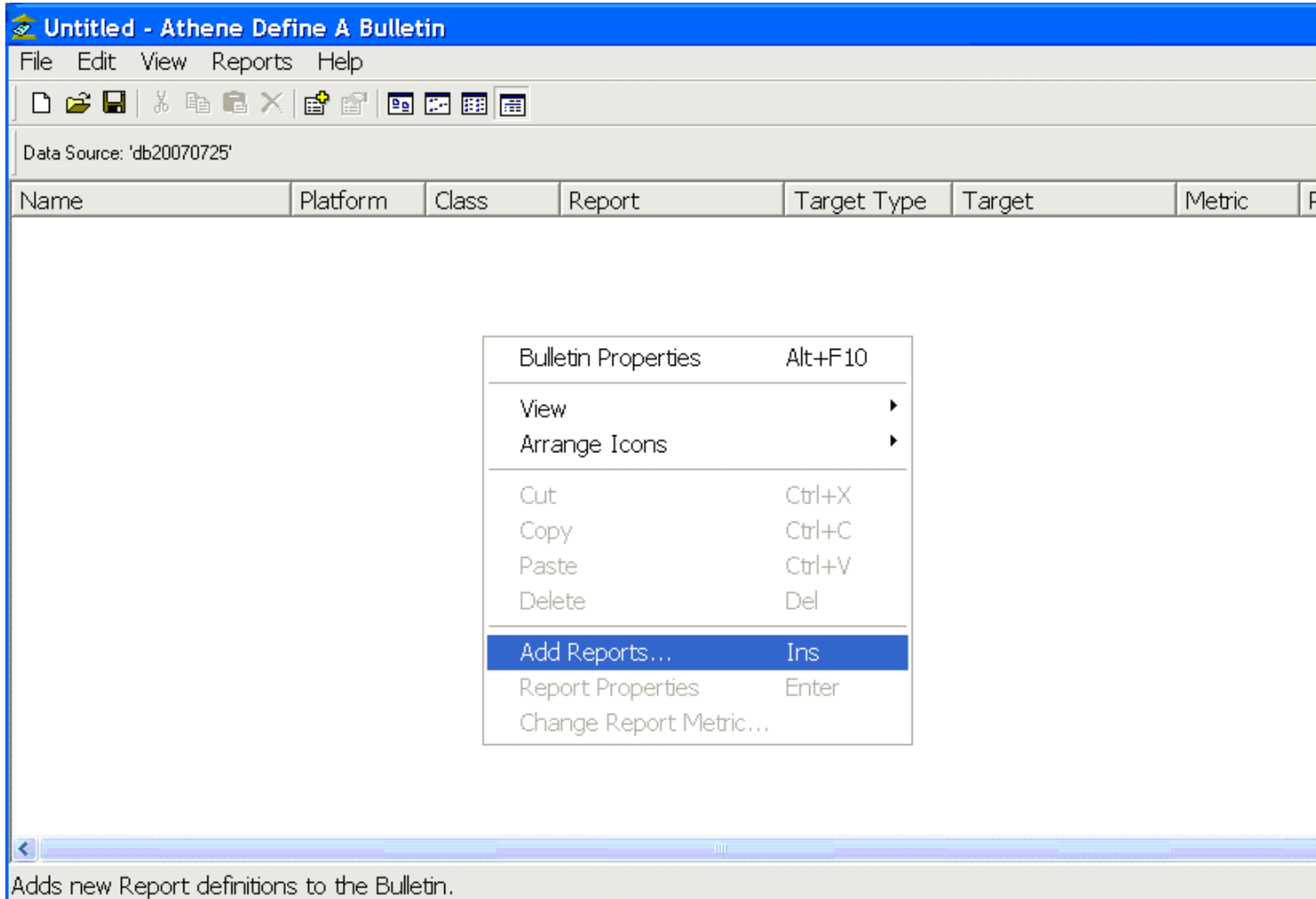
If you now edit the resulting graph to match those contained in your current APR and save it to the usual path i.e. *C:\Documents and Settings\All Users\Documents\Athene\Automatic Reports\Updateable Charts*.



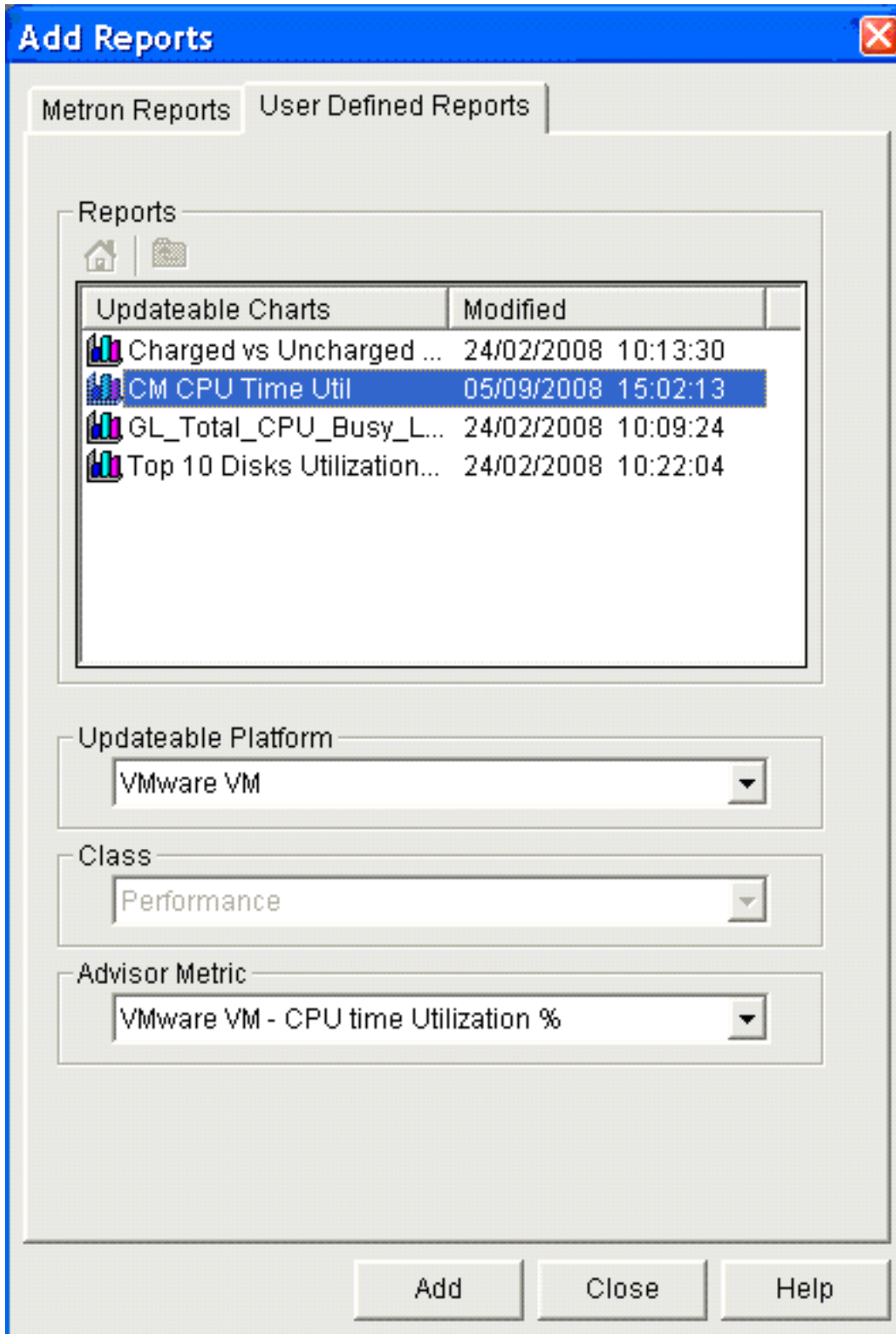
3. Creating of the Bulletin

Now we have created the appropriate Resource Pool groups and a report template we need to either produce a new bulletin or add it to an existing one. In this example we will produce a new one.

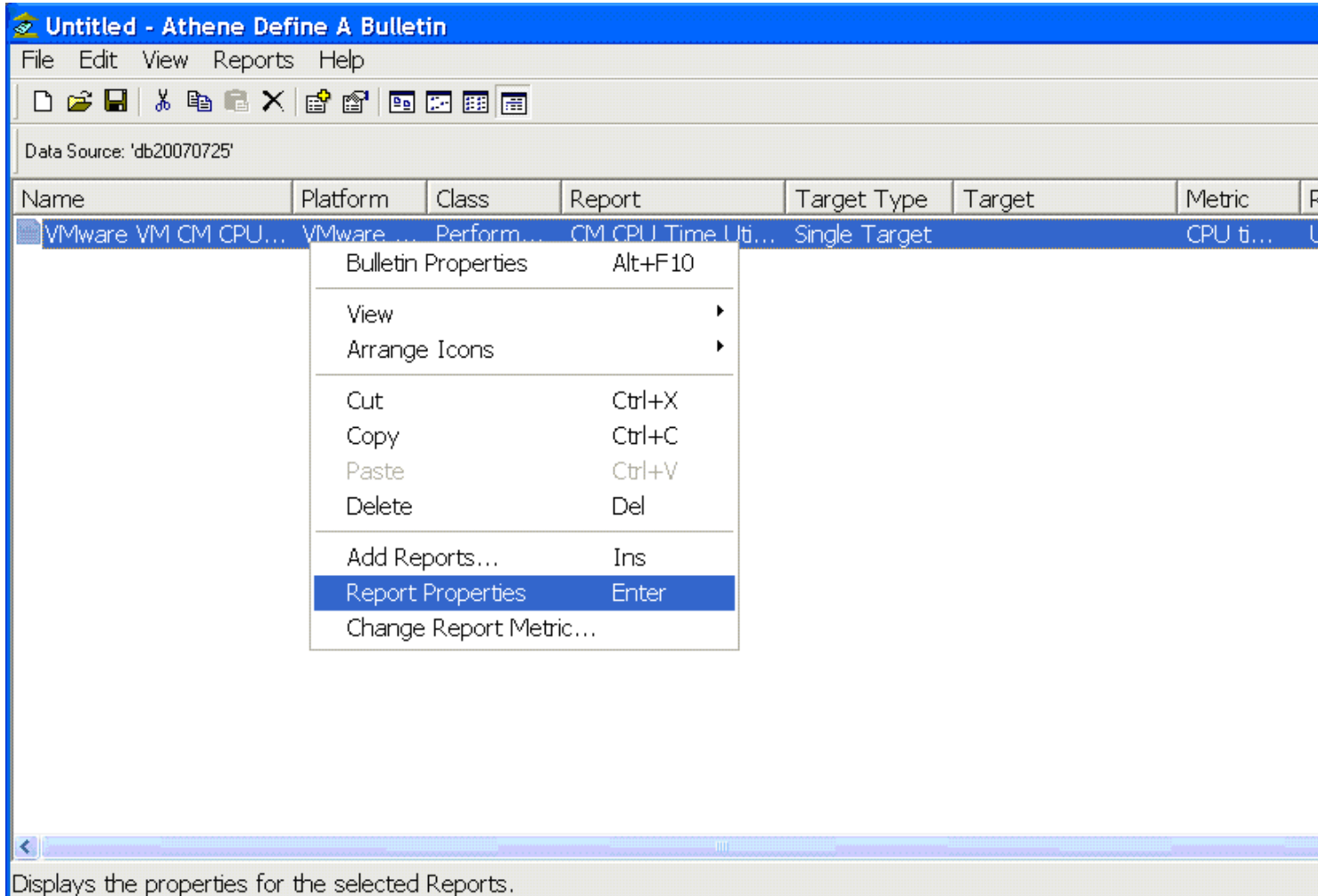
If you open the "Athene Define a Bulletin" application and right click in the white panel you will be able to add a report.



If you now click on the "User Defined Reports" tab you will be able to choose the newly created VM CPU Time Utilization chart.



Once chosen you can click on Add and it will take you back to the previous screen. You can then right click on the report and choose "Report Properties".



From the properties screen you can now choose the target type and group. In our case it is a "Target Group" rather than a "Single Target".

Report Properties

General | Analysis | Settings | Actions

VMware VM CM CPU Time Util Performance Report

Name and Content

VMware VM CM CPU Time Util Performance

Target Type and Name

Single Target

Single Target

Target Group

Report Column

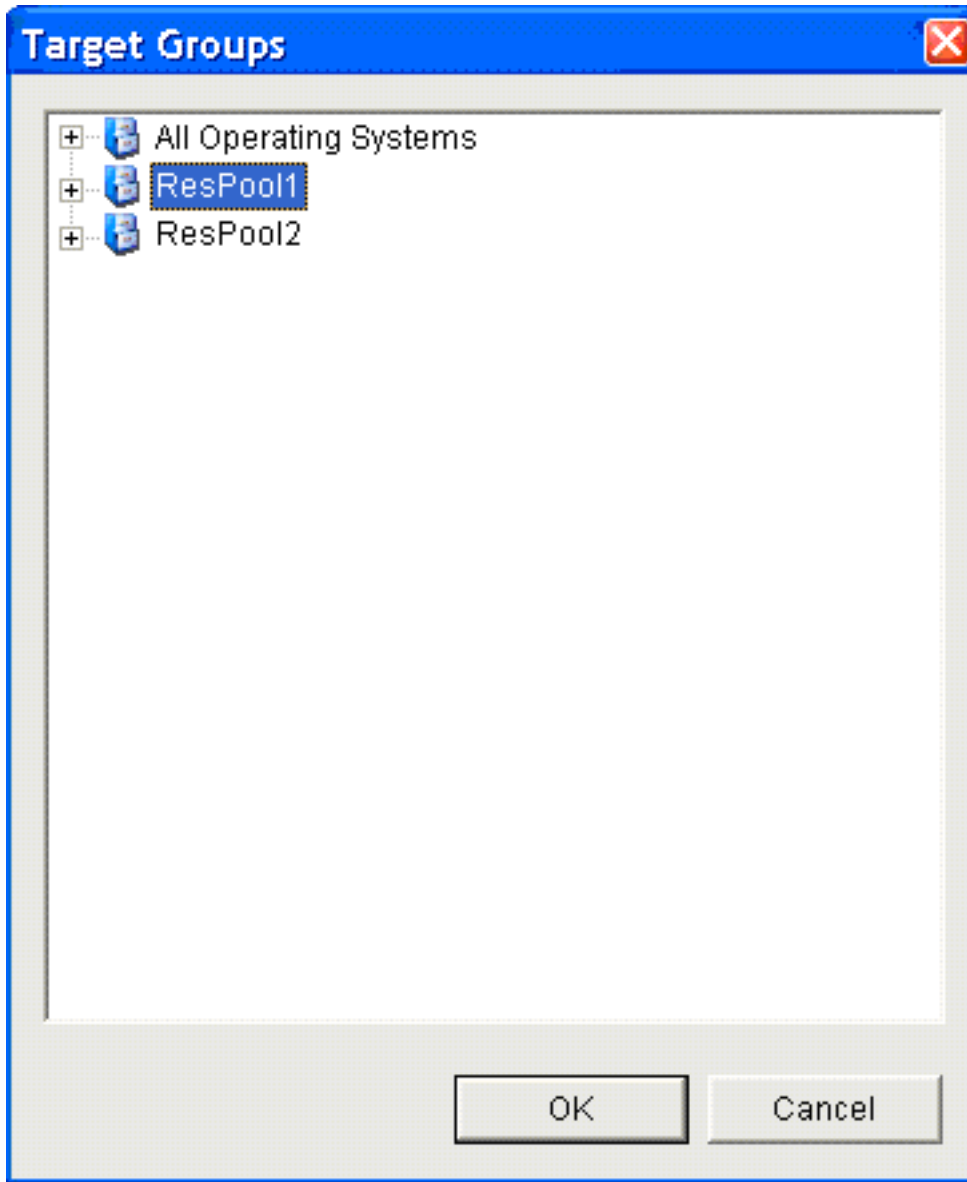
User Defined

APR Status

Include status of report in APR tree.

OK Cancel Apply Help

We can then choose one of the newly created Resource Pool groups. If you click on "OK" you will be returned to the previous screen and the VM's attached to this group will be displayed.



Report Properties

General | Analysis | Settings | Actions

VMware VM CM CPU Time Util Performance Report

Name and Content

VMware VM CM CPU Time Util Performance

Target Type and Name

Target Group

ResPool1

- VM1GBVAP087
- VM1GBVAP095
- VM1GBVAP096
- VM1GBVAP097

Report Column

User Defined

APR Status

Include status of report in APR tree.

OK Cancel Apply Help

If you click on "OK" and you can then save the bulletin. The process should be repeated to include any additional Resource Pool groups.

Once the appropriate additions have been made to your APR structure and the bulletin added to a schedule you will be able to automatically generate performance reports.

With the addition of further groups and by producing further report templates showing different metrics you will be able to report on any of the Resource Pool groups/metrics you require.