System Center Forum.org

Community Solutions for the Microsoft System Center Suite

Tuning the Consoles in Operations Manager 2007

A few console tweaks to optimize your console experience

Pete Zerger, MCSE(Messaging), MCTS(SQL 2005), MVP-MOM
Neale Brown, MCSA(Messaging)
http://www.systemcenterforum.org

July 2007
Version 1.0

Overview

- Introduction
- Operations Console Tweaks
- Web Console Tweaks
- Leveraging "My Workspace"

Introduction

Rarely does any product come with settings tuned to the precise defaults to fit a given environment, and the Operations Manager consoles are no exceptions. The user interfaces in Operations Manager 2007 represent significant improvements over those in MOM 2005, but through some minor changes, you can customize the console to suit your preferences. In this article, we're going to briefly share a couple of the lesser-known console UI shortcuts and tweaks available in Operations Manager 2007 (from MS and our lab testing) you may not be aware of that can be employed to optimize your experience with the Operations Manager consoles.

DISCLAIMER: We don't want to rain on anyone's parade, but let me begin by saying as always 'use the following information with caution'. Test settings in a lab environment prior to production rollout. Also note that in the case of Operations Console modifications, we would recommend making these on a workstation running a console instance. Never modify settings on your management server unnecessarily.

And with the serious talk out of the way, let's get down to business!

Operations Console Tuning

Off the top of my head, the Operations Console has a couple of object selection limits that I find moderately frustrating. Fortunately, these limitations can be addressed through direct registry edit. Because these two changes are made in the HKEY_CURRENT_USER Hive of the Windows Registry, they must be made on a *per-user basis*.

Task execution against multiple targets

The first of these limitations is the 10 object selection limit for Tasks. What if I want to run a task against 20 objects….or 50 objects? This can be adjusted through the following registry key:

Path: HKCU \Software\Microsoft\Microsoft Operations Manager\3.0\Console\
Keyword: TaskSelectedObjectsLimit (DWORD)
Values:

- -1 (xFFFFFF) : unlimited number of objects allowed to be selected
- 0 : tasks are not going to be populated for selected items in the view
- N > 0 : maximum number of simultaneously selected objects for which tasks are going to be generated.

Maintenance Mode execution against multiple targets

By default, Ops Mgr 2007 Console can only put to 50 objects into maintenance at any one time. If you have increased the previous tweak beyond 50, then this feature can be a potential bottleneck, so use with caution, increasing in small increments, gauging performance along the way. To adjust the amount of objects that can be selected in the UI and simultaneously put into maintenance, just modify the following key:

Path: HKCU\Software\Microsoft\Microsoft Operations Manager\3.0\Console\ConsoleUserSettings\
Keyword: MaxItemsForMaintenanceMode (DWORD)

Console refresh rate

By default, the Operations Console refreshes its cache after 1 minute of inactivity. The refresh occurs only if there has been no user activity in the given console instance for the duration of the refresh period. Default value is one minute, with a maximum of 10. Raising this value on workstations running the console is another way to reduce calls to the operations database. This can be adjusted through the following registry key:

Path: HKCU\Software\Microsoft\Microsoft OperationsManager\3.0\Console\CacheParameters\
Keyword: PollingInterval (DWORD)

NOTE: The CacheParameters key did not exist by default in our environment. Both CacheParameters and PollingInterval had to be created from scratch, but we did see the value being read once present.

Web Console Tuning

The Ops Mgr web console is essentially a .NET application. Several aspects of the web console display can be controlled from within the web.config file, which is a file used to store application settings. These settings can be used to change the amount of data displayed in the console, optimizing performance of the web console to suit your requirements.

Because these changes are made in the web.config file, they affect <u>ALL USERS</u>. So remember, when you modify a Web Console setting that increases the amount of data returned, you have to multiply the impact by the number of concurrent users (extra data x concurrent web console connections). In large environments, this means the impact could be exponential.

On the upside, if you make adjustments that reduce the amount and frequency of database calls, you can actually improve overall Web Console performance in your environment to a certain degree. Because the need to use the Web Console is often due to an operator being out of the office or away from there desk, any adjustments should be made with performance and convenience in mind.

The web.config file for the Ops Mgr Web Console can be found in the following directory by default:

%programfiles%\System Center Operations Manager 2007\Web Console

The configuration settings we'll be found within the <configuration> and <configuration/> tags

<configuration>
 <appSettings>

Let's run through some of the common settings we can use to control our Web Console experience.

NOTE: Some of these values described below are also available in the web.config files for the Mobile Web Console and Alerts RSS feed. You'll find these in the \mobile and \rss subdirectories of the Web Console content directory.

Max Age of Alerts Displayed
This setting controls how many days alerts will be displayed in the web console. The default value is 7.

Look for this key in web.config: <add key="AlertsDaysBefore" value="7" />

Limit Max Data Rows Returned
This setting controls how many alerts will be displayed in the Web Console. The default value is 200. Setting this value to 0 results in all rows being displayed, but may have a negative impact on time it takes console to render. This will override the maximum alert age setting above. If you have an **AlertsDaysBeforeAlertsDays** setting of 7 that includes 1,000 alerts, but a **LimitMaxViewRows** of 200, only the last 200 alerts will be displayed.

Look for this key in web.config: <add key="LimitMaxViewRows" value="200" />

Console Refresh Rate

This setting controls the refresh rate of the Web Console. The default is 5 minutes. Bear in mind the threshold will trigger an auto-refresh only if there has been no activity in the console for the duration of this interval. Setting this value to 0 disables auto-refresh.

Look for this key in web.config: <add key="ViewAutoRefresh" value="5" />

Next, we'll talk a bit about what you can do with the UI to streamline your work.

Leveraging "My Workspace"

My Workspace is an area that allows operators to save favorite views and frequently used searches to a special workspace called "My Workspace". This is the perfect place to save the views and searches that give you targeted snapshots of critical application health and recent alerts to minimize the time spent browsing the Navigation pane for a specific View. Another great feature of this is that preferences saved in the Operations Console UI are displayed in the My Workspace space in the Web Console automatically!
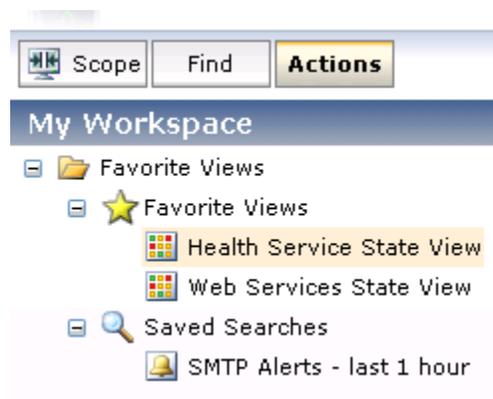

Figure 1 - My Workspace in the Web Console

Favorite Views

 Views can be added by simply right clicking any view in the Monitoring workspace and selecting 'Add to My Workspace' from the pop-up menu.

Saved Searches

Through the Advanced Search option in the Operations Console (on the Search dropdown), you can search based on object type, target name and numerous other criteria. You can then save this to you're my Favorites space by clicking the 'Save parameters to My Favorites' at the bottom of the Advanced Search dialog.

What about my Favorite Tasks?

You may have noticed there is no area in My Workspace to bookmark your favorite tasks. However, when selecting a task in the Action pane you can right click and select 'Add to favorites' from the pop-up menu. This adds the task to 'Favorite Tasks' list near the top of the Action pane.

Conclusion

We hope you find the information we've shared here helpful in optimizing your day-to-day experience with the Operations Manager consoles. Have a console tip of your own? Submit your Operations Manager tips via our website at http://www.systemcenterforum.org/contact