

APPENDIX B

Reference URLs

This appendix includes a number of reference URLs associated with System Center Operations Manager 2007 (OpsMgr). A list of URLs was previously included in Appendix E, “Reference URLs,” in the predecessor to this book, *System Center Operations Manager 2007 Unleashed*, and is updated here to include references pertinent to OpsMgr 2007 R2 (Release 2). Links are also available “live” with the online content available for with this book. URLs do change—although the authors have made every effort to verify the references in this appendix as working links, there is no guarantee that they will remain current.

General Resources

A number of websites provide excellent resources for OpsMgr, as follows:

- ▶ Ian Blyth wrote an article on OpsMgr 2007 architecture at <http://ianblythmanagement.wordpress.com/2006/08/01/scom-2007-architecture/>. This includes some compare/contrast with MOM 2005, if you are familiar with that platform.
 - ▶ Also architecture-related is an article by Brian Wren at <http://blogs.technet.com/ati/archive/2007/05/14/targeting-rules-and-monitors.aspx>. The article talks about how to target rules and monitors, and the difference between groups in MOM 2005 and OpsMgr 2007. This is also discussed at length in Chapter 9, “Unleashing Operations Manager 2007.”
- You may also want to check Jonobie Ford's article at <http://blogs.technet.com/momteam/archive/2007/10/31/targeting-series-part-1-differences-between-2005-and-2007.aspx>.
- ▶ The ReSearch This! management pack troubleshooting tool is hosted by System Center Central. You can download the management pack at

IN THIS APPENDIX

- ▶ General Resources
- ▶ Microsoft's OpsMgr Resources
- ▶ Blogs
- ▶ OpsMgr Shell
- ▶ PowerShell Information
- ▶ Cross Platform
- ▶ Connectors
- ▶ The System Center Family
- ▶ Public Forums

<http://www.systemcentercentral.com/PackCatalog/PackCatalogDetails/tabid/145/IndexID/21716/Default.aspx>.

- ▶ A list of the top KB articles published for Operations Manager 2007 is available at <http://kbalertz.com/Technology.aspx?tec=533>.

If you're not already receiving email notifications of new articles in the Microsoft Knowledge Base from kbAlertz, you can sign up for them at <http://kbalertz.com/>. You just need to create an account and select the technologies you want to be alerted about.

- ▶ Here are some articles on Audit Collection Services (ACS) in OpsMgr 2007:

For a white paper on auditing using ACS and optimizing that experience with Secure Vantage, see

<http://www.securevantage.com/docs/Secure%20Vantage%20WhitePaper%20Enterprise%20Auditing%20with%20ACS.pdf>.

Read Microsoft's ACS white paper at

http://download.microsoft.com/download/E/E/7/EE797D69-02B2-420D-B0F2-196906CCE063/Whitepaper-Audit_Collection_with_System_Center_Operations_Manager_2007_final.pdf.

Secure Vantage offers an ACS resource kit as a free community download, available at <http://www.securevantage.com/Products/ACSResourceKit.aspx>.

Maarten Goet (OpsMgr MVP) provides an overview of ACS-related information at <http://opsmgr2007.wikidot.com/system:audit-collection-services>.

Maarten also has a series of ACS Deep Dive articles at System Center Central:

- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/13052/Default.aspx>
- ▶ <http://systemcentercentral.com/BlogDetails/tabid/143/indexid/13112/Default.aspx>
- ▶ <http://www.systemcentercentral.com/tabid/143/indexid/53717/Default.aspx>

You can find an ACS disk and database planning calculator at

<http://www.systemcentercentral.com/Downloads/DownloadsDetails/tabid/144/IndexID/7425/Default.aspx>.

ACS Windows 2008 and Vista audit reports are listed at

<http://blogs.technet.com/momteam/archive/2009/05/08/acs-reports-for-windows-2008-and-windows-2008-r2.aspx>.

<http://securevantage.spaces.live.com/Blog/cns!905E136EE69247B4!454.entry> provides information about routine ACS health checks.

Eric Fitzgerald (an original Microsoft ACS Program Manager) documents and demystifies ACS Event Transformation at

<http://blogs.msdn.com/ericfitz/archive/2008/02/27/acs-event-transformation-demystified.aspx>.

For information on configuring ACS to use certificate-based authentication, a good place to start is Clive Eastwood's article at

<http://blogs.technet.com/cliveeastwood/archive/2007/05/11/how-to-configure-audit-collection-system-acs-to-use-certificate-based-authentication.aspx>.

Although Service Pack (SP) 1 lets you enable the ACS forwarder on a management server or the RMS (root management server), Jeff Skelton of Rede Consulting documents doing it in the base version of OpsMgr 2007 at <http://helpmemanager.blogspot.com/>.

Find a summary of ACS support for CrossPlat systems at <http://blogs.technet.com/momteam/archive/2009/05/11/solution-summary-acs-support-for-unix-and-linux-systems.aspx>.

Maarten Goet presents a preview of R2 and Cross Platform ACS at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/13046/Default.aspx>.

Three downloadable components are required for Cross Platform Audit Collection Services:

- ▶ **R2 CrossPlat updated management packs**—
<http://www.microsoft.com/downloads/details.aspx?displaylang=en&familyID=b15fef5c-e331-4006-8913-be376bb0e0c1>
- ▶ **CrossPlat ACS management packs**—
<http://www.microsoft.com/downloads/details.aspx?displaylang=en&familyID=24081923-a92f-449f-a182-48ad81ccaf14>
- ▶ **CrossPlat ACS installer**—
<http://www.microsoft.com/downloads/details.aspx?displaylang=en&familyID=68590cff-453f-4822-b9e4-140824c76486>

- ▶ Here are some resources regarding the Gateway Server Component:

http://www.techlog.org/archive/2007/02/14/operations_manager_2007_gateway is an article by Maarten Goet on the gateway server approval process.

Pete Zerger (OpsMgr MVP) and Ian Jirka of Microsoft copresented at MMS 2008 on using the Gateway Server role. This included key use scenarios and troubleshooting; you can download their presentation at <http://www.systemcentercentral.com/Downloads/DownloadsDetails/tabid/144/IndexID/6224/Default.aspx> (sign into System Center Central to download).

Mutual authentication takes one of two forms in Operations Manager—Kerberos or certificate authentication. <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/32926/Default.aspx> is Pete's master list of mutual authentication-related errors for OpsMgr 2007 (also applicable to System Center Essentials).

Pete also has a three-part series on PKI and gateway scenarios here, as follows:

- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/indexid/19101/Default.aspx>
- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/19102/Default.aspx>
- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/31342/Default.aspx>

Rory McCaw, OpsMgr MVP and technical editor of this book, documents R2 changes to gateway server configuration with Windows Server 2008 at

<http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/20563/Default.aspx>. Brian Daniel writes more about this at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/19171/Default.aspx>.

- ▶ An RTM bug—If you install additional management servers after installing OpsMgr reporting, the new management servers will not be able to write to the data warehouse until you create profiles. Documentation is at <http://blogs.technet.com/momteam/archive/2007/08/29/if-you-install-opsmgr-2007-reporting-and-then-install-secondary-ms-then-it-will-not-be-able-to-write-dw-data-as-profiles-are-not-created.aspx>, and the bug is fixed in SP 1.
- ▶ Walter Chomak of Microsoft has done some research on OpsMgr 2007 I/O considerations. Read about his results at <http://wchomak.spaces.live.com/blog/cns!F56EFE25599555EC!610.entry>.
- ▶ Satya Vel of the OpsMgr team has an article on network bandwidth utilization for OpsMgr roles at <http://blogs.technet.com/momteam/archive/2007/10/22/network-bandwidth-utilization-for-the-various-opsmgr-2007-roles.aspx>. A related chart by Jeff Skelton comparing bandwidth between OpsMgr 2007 and MOM 2005 is at <http://helpmemanager.googlepages.com/MOMvsSCOMUsageovertime.JPG>.
- ▶ Gartner Group has Operations Manager 2007 firmly in the Challenger's quadrant. See their December 2007 and 2009 reports <http://mediaproducts.gartner.com/reprints/microsoft/vol10/article2and3/article2and3.html> and https://h10078.www1.hp.com/bto/download/Gartner_Magic_Quadrant_IT_Event_Corr_Analysis.pdf, respectively.
- ▶ Ready to dig into MP authoring? Check out Chapter 8, “Management Pack Authoring,” and you also should read Pete Zerger’s article at <http://www.systemcentercentral.com/Details/tabid/147/IndexID/24878/Default.aspx>:

The Operations Manager R2 MP Module Reference is at <http://technet.microsoft.com/en-us/library/dd391800.aspx>.

Check out the Management Pack University at http://74.52.12.162/~microsoft/conference_agenda.php?cid=19.

Download the OpsMgr 2007 MP Authoring Guide from http://download.microsoft.com/download/7/4/d/74deff5e-449f-4a6b-91dd-fbcb117869a2/OM2007_AuthGuide.doc.

You will also find a great website on management pack authoring, maintained by Steve Wilson of Microsoft, at <http://www.authormps.com/dnn/>.

Here's a four-part series on creating a two-state PowerShell script monitor using the authoring console by Stefan Koell (code4ward.net). The series comes with a sample MP you can use to check your work and see the intended end result at

<http://www.systemcentercentral.com/tabid/144/IndexId/50087/Default.aspx>:

- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/44971/Default.aspx>

- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/46908/Default.aspx>
- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/48469/Default.aspx>
- ▶ <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/50085/Default.aspx>

Here's a posting on how to create a PowerShell task for OpsMgr using the Authoring console by Andreas Zuckerhut, at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/41687/Default.aspx>.

Creating a PowerShell Script discovery including on-demand discovery task with the Authoring console, also by Andreas Zuckerhut, is at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexId/50020/Default.aspx>.

- ▶ Tools for MP authors include the following:
 - ▶ **System Center Operations Manager 2007 R2 Authoring Resource Kit**—
<http://www.microsoft.com/downloads/details.aspx?FamilyID=9104af8b-ff87-45a1-81cd-b73e6f6b51f0&displaylang=en>.
 - ▶ **Log Smith for Operations Manager 2007**—By Stefan Koell. A great tool for identifying event parameters when authoring event rules. For the feature list, go to <http://www.code4ward.net/main/LogSmith/Features.aspx>; download it at <http://www.code4ward.net/main/LogSmith/Download.aspx>.
 - ▶ **OpsMgr Community Toolkit**—A complete list of community-authored tools for OpsMgr 2007 is at <http://systemcentercentral.com/tools>.
- ▶ Looking for community-authored management packs? For a complete list, see <http://www.systemcentercentral.com/mps>. Here are some recently released community-authored MPs of note:
 - ▶ **PowerShell 2-State-Monitor Sample**—Sample MP leveraging the R2 OpsMgr PowerShell modules by Stefan Koell at <http://www.systemcentercentral.com/tabid/144/IndexId/50087/Default.aspx>.
 - ▶ **PKI Certificate Verification MP**—By Raphael Burri at <http://www.systemcentercentral.com/PackCatalog/PackCatalogDetails/tabid/145/IndexID/24860/Default.aspx>.
 - ▶ **Service Pack 1 Edition of the Cisco Management Pack, v1.0.2.6**—By Kris Bash at <http://operatingquadrant.com/2009/09/26/scom-sp1-edition-of-the-cisco-management-pack-v1-0-2-6/>.
- ▶ The OpsMgr Reporting Authoring Guide is available at <http://technet.microsoft.com/en-us/opsmgr/bb498235.aspx>.

- ▶ Brian Wren of Microsoft talks about programmatically creating groups at <http://blogs.technet.com/brianwren/archive/2008/11/18/programmatically-creating-groups.aspx>.
- ▶ Want to know how to combine a System.Snmprobe and System.Performance.DeltaValueCondition module to calculate SNMP counter delta values? See Kris Bash's post at <http://operatingquadrant.com/2009/10/14/scom-combining-a-system-snmprobe-and-system-performance-deltavaluecondition-modules-to-calculate-snmprobe-counter-delta-values/>.
- ▶ Looking for training? This is not an exhaustive list, but here are several places that offer courses on OpsMgr 2007:

InFront Consulting Group's training is at <http://www.infrontconsulting.com/training.php>.

Secure Vantage offers free online training on ACS; see <http://www.securevantage.com/ACSTraining.aspx> for information on the Masters Class series.

<http://learning.microsoft.com/Manager/Catalog.aspx?clang=en-US&dtype=Table&Sort=Relevancy&page=1&search=operations%20manager> will get you a listing of Microsoft-developed training.

Training videos are available at <http://technet.microsoft.com/en-us/opsmgr/bb498237.aspx>. To download these videos (webcasts), go to <http://www.microsoft.com/downloads/details.aspx?FamilyID=1276a840-671f-4452-98c7-5599c0d3ff9c&DisplayLang=en>.

You may also want to invest a couple of hours viewing the TechNet Support Webcast by Brian Wren, Troubleshooting Microsoft Operations Manager Top Issues, found online at <http://support.microsoft.com/kb/828936>.

Other training videos and demos are available at <http://www.microsoft.com/events/series/technetmms.aspx?tab=webcasts&id=42365>.

Microsoft now provides the System Center Ramp Up Series at <http://systemcenter.vlabcenter.com/>. This includes the material on architecting a cross platform solution and managing your Unix/Linux systems.

JCA Academy (Telindus) also has material, described at http://www.jcaacademy.be/_media/pdf_cursus/_en/MOC138%20-%20Opsmgr%202007%20training.pdf and taught by Rory McCaw. The main web page is <http://www.jcaacademy.be/>.

<http://www.cbtplanet.com/microsoft-it/microsoft-system-center-operations-manager-training-video.htm> is a collection of OpsMgr training videos on CD.

There is also <https://www.learnitstuff.com/pc-16-7-operations-manager-2007-and-mom-2005.aspx>.
- ▶ Satya Vel and one of his coworkers adapted the MOM 2005 Resource Kit MOMNetCheck utility for command-line use in OpsMgr 2007. You can use the tool to remotely check installation prerequisites. Information and a download are available at <http://blogs.technet.com/momteam/archive/2007/11/20/remote-agent-prerequisite-checker-tool-for-opsmgr-2007.aspx>.

- ▶ Do you want to move the OpsMgr databases to another server? The authors researched the requirements and documented the steps in Chapter 12, “Backup and Recovery,” of *System Center Operations Manager 2007 Unleashed*. Blog articles discussing this are also available at <http://ops-mgr.spaces.live.com/blog/cns!3D3B8489FCAA9B51!177.entry> and <http://ops-mgr.spaces.live.com/blog/cns!3D3B8489FCAA9B51!225.entry> for information on moving the Operational database; and <http://ops-mgr.spaces.live.com/Blog/cns!3D3B8489FCAA9B51!235.entry> for the steps to move the OpsMgr data warehouse.
- ▶ Microsoft discusses virtualizing SQL Server 2008 at <http://www.microsoft.com/sqlserver/2008/en/us/virtualization.aspx>. An article on using SQL Server 2005 in a virtual environment is available at <http://download.microsoft.com/download/a/c/d/acd8e043-d69b-4f09-bc9e-4168b65aaa71/SQLVirtualization.doc>.
- ▶ Michael Pearson has an excellent article discussing SRS Recovery Planning, available online from the SQL Server Central community at <http://www.sqlservercentral.com/columnists/mpearson/recoveryplanningforsqlreportingservices.asp>. You must register with SQLServerCentral to view the full article.
- ▶ For information on the types of SQL maintenance to perform on your OpsMgr databases, check Kevin Holman's posting at <http://blogs.technet.com/kevinholman/archive/2008/04/12/what-sql-maintenance-should-i-perform-on-my-opsmgr-databases.aspx>.
- ▶ For steps on setting up a SQL Server cluster, read Microsoft's article at <http://msdn.microsoft.com/en-us/library/ms179530.aspx>.
- ▶ Trying to set up a virtual server cluster? See <http://blogs.technet.com/pfeireland/archive/2008/05/16/how-to-create-a-windows-server-2008-cluster-within-hyper-v-using-simulated-iscsi-storage.aspx> to create a virtual cluster on Windows 2008/Hyper-V.
- ▶ Coauthor Cameron Fuller wrote a (humorous) piece on the Clustering MP at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexId/51752/Default.aspx>, emphasizing major steps to remember when working with clustered resources in OpsMgr.
- ▶ For a discussion of agent discovery hanging after enabling the SQL Broker Service, see Steve Rachui's posting at <http://blogs.msdn.com/steverac/archive/2009/08/30/opsmgr-agent-discovery-hanging-after-enabling-broker-service.aspx>. Steve is a contributor to this book.
- ▶ What's new in the OpsMgr R2 Software Development Kit (SDK)? Check the article at <http://msdn.microsoft.com/en-us/library/bb437542.aspx>. A diagram showing an architecture overview is available at <http://msdn.microsoft.com/en-us/library/bb437500.aspx>.
- ▶ Have an interesting experience when trying to delete an agentless system? This happens if you first install agentless and then install as a managed agent without first deleting the agentless configuration. This information is discussed in Chapter 9, “Installing and Configuring Agents,” of *System Center Operations Manager 2007 Unleashed*, with full details available at http://ops-mgr.spaces.live.com/default.aspx?_c01_BlogPart=blogentry&_c=BlogPart&_angle=cns!3D3B8489FCAA9B51!163.

- ▶ For information on debugging the infamous alert, the “Script or Executable Failed to Run,” see <http://cameronfuller.spaces.live.com/blog/cns!A231E4EB0417CB76!1006.entry>.
- ▶ Steve Rachui has a two-part series on understanding monitors, as follows:
 - <http://blogs.msdn.com/steverac/archive/2009/08/30/understanding-monitors-in-opsmgr-2007-part-i-unit-monitors.aspx>
 - <http://blogs.msdn.com/steverac/archive/2009/09/06/understanding-monitors-in-opsmgr-2007-part-ii-aggregate-monitors.aspx>
- ▶ The System Center Virtual Machine Manager (VMM) 2007 scripting guide is available for download at <http://go.microsoft.com/fwlink/?LinkId=104290>. “How-to” videos for managing VMM with PowerShell are at <http://go.microsoft.com/fwlink/?LinkId=98846>.
- ▶ Download Boris Yanushpolsky's Override Explorer from http://blogs.msdn.com/boris_yanushpolsky/attachment/4301837.ashx.
- ▶ Several people have done some work on helping you put computers into maintenance mode in batch.

This includes Clive Eastwood's command-line tool, documented at <http://blogs.technet.com/cliveeastwood/archive/2007/09/18/agentmm-a-command-line-tool-to-place-opsmgr-agents-into-maintenance-mode.aspx>.

Andrzej Lipka enhances Clive's approach using the PsExec Tool. See <http://blogs.technet.com/alipka/archive/2007/12/20/opsmgr-2007-putting-computers-in-maintenance-mode-remotely.aspx>. PsExec is available at <http://technet.microsoft.com/en-us/sysinternals/bb897553.aspx>.

See a discussion on running PowerShell from a batch file for maintenance mode at <http://social.technet.microsoft.com/Forums/en/operationsmanageregeneral/thread/33d0ee92-2c1d-4f2d-a656-834877de565d>.

- ▶ Want to mass-create computer groups? Use XML to do this easily. See <http://cameronfuller.spaces.live.com/blog/cns!A231E4EB0417CB76!1982.entry>.
- ▶ If you can't get your reports to send email subscriptions, check out <http://blogs.msdn.com/ketaanhs/archive/2005/09/05/461055.aspx> on how to configure the PermittedHosts entry in the RSReportServer.config file.
- ▶ You can download a tool that enables you to test emails from the command line; this lets you see how the message will look prior to configuring a mail server. The tool is available at https://blogs.pointbridge.com/Blogs/morse_matt/Lists/Posts/Post.aspx?ID=24.
- ▶ If you do a Help -> About in the Operations console, it displays a version (build) number. The MOM team provides a cross-reference of version numbers to "common names" (although only through SP 1 RC) at <http://blogs.technet.com/momteam/archive/2008/01/10/versioning-in-opsmgr.aspx>. For more recent build numbers, see a thread at <http://www.systemcentercentral.com/Forums/ForumPost/tabid/177/IndexID/45009/Default.aspx>.

- ▶ David Wallis wrote an application allowing OpsMgr admins to acknowledge and resolve alerts via email—download it at <http://www.systemcentercentral.com/Downloads/DownloadsDetails/tabid/144/IndexID/44253/Default.aspx>.
- ▶ Use PowerShell to resolve rule-generated alerts older than X days; download the script at <http://www.systemcentercentral.com/Downloads/DownloadsDetails/tabid/144/IndexID/19968/Default.aspx>.
- ▶ <http://www.systemcentercentral.com/Details/tabid/147/IndexID/35783/Default.aspx> discusses using Process Monitor to identify which discovery and monitoring script is using more resources than expected.
- ▶ Need help to configure notifications?

Check out the Microsoft website at <http://technet.microsoft.com/en-us/library/dd440890.aspx>.

Here's a post on configuring IM notifications:

<http://blogs.technet.com/operationsmgr/archive/2009/04/15/configuring-im-notifications-in-system-center-operations-manager-2007.aspx>.

Kevin Holman writes about configuring notifications at

<http://blogs.technet.com/kevinholman/archive/2008/06/26/using-opsmgr-notifications-in-the-real-world-part-1.aspx>.

To see how to configure notifications to include alerts from specific groups and classes, read

<http://blogs.technet.com/kevinholman/archive/2008/02/01/configuring-notifications-to-include-specific-alerts-from-specific-groups-and-classes.aspx>.

Use PowerShell to create individual notification subscriptions for individual rules and monitors. Read how to do so at

<http://blogs.technet.com/kevinholman/archive/2008/10/12/creating-granular-alert-notifications-rule-by-rule-monitor-by-monitor.aspx>.

- ▶ Appendix A, “OpsMgr R2 by Example,” is a compilation of previously posted blog articles on tuning management packs. Find these posts “green” and online at:

<http://tinyurl.com/ActiveDirectoryMP-ByExample>

<http://tinyurl.com/ExchangeMP-ByExample>

<http://tinyurl.com/SQLMP-ByExample>

<http://tinyurl.com/WindowsServerMP-ByExample>

<http://tinyurl.com/OperationsManagerMP-ByExample>

<http://tinyurl.com/DNSMP-ByExample>

<http://tinyurl.com/GroupPolicyMP-ByExample>

<http://tinyurl.com/DHCPMP-ByExample>

<http://tinyurl.com/PrintServerMP-ByExample>

<http://tinyurl.com/SharePointMP-ByExample>

<http://tinyurl.com/ConfigMgrMP-ByExample>

<http://tinyurl.com/TMGMP-ByExample>

- ▶ Wondering how to use a property bag? See <http://blogs.msdn.com/mariussutara/archive/2008/01/24/momscriptapi-createtypedpropertybag-method.aspx> and <http://www.systemcentercentral.com/Downloads/DownloadsDetails/tabid/144/indexID/7803/Default.aspx>.

Microsoft's OpsMgr Resources

The following list includes some general Microsoft resources available for OpsMgr 2007:

- ▶ **Microsoft's Operations Manager website**—
<http://go.microsoft.com/fwlink/?LinkId=86432>.
- ▶ **Microsoft's System Center website**—
<http://www.microsoft.com/systemcenter/>.
- ▶ **System Center Operations Manager 2007 Catalog**—
<http://go.microsoft.com/fwlink/?LinkId=82105> or
<http://pinpoint.microsoft.com/en-US/systemcenter/managementpackcatalog>.
- ▶ Microsoft's System Center Pack Catalog has multiple pages for all things OpsMgr and ConfigMgr. The catalog incorporates the following pages:

All packs for all products—

<https://www.microsoft.com/technet/prodtechnol/scp/catalog.aspx>
(<http://go.microsoft.com/fwlink/?LinkId=71124>).

Operations Manager 2007—

<https://www.microsoft.com/technet/prodtechnol/scp/opsmgr07.aspx>
(<http://go.microsoft.com/fwlink/?LinkId=82105>). With OpsMgr 2007 R2, you can also download management packs from within the Operations console!

Operations Manager 2005—

<https://www.microsoft.com/technet/prodtechnol/scp/opsmgr05.aspx>.

Operations Manager 2000—

<https://www.microsoft.com/technet/prodtechnol/scp/opsmgr00.aspx>.

Configuration Manager 2007 Configuration Packs—

<https://www.microsoft.com/technet/prodtechnol/scp/configmgr07.aspx>.

Virtual Machine Manager 2008 PRO Packs—

<http://technet.microsoft.com/en-us/systemcenter/cc462790.aspx>.

TIP: FINDING THE SYSTEM CENTER PACK CATALOG

In late 2009, the System Center Pack Catalog was moved to the Pinpoint platform. The links listed here should redirect you to Pinpoint, or you can access the System Center Pack Catalog directly at <http://pinpoint.microsoft.com/en-US/systemcenter/managementpackcatalog>.

- ▶ **Operations Manager 2007 management pack guides**—
<http://go.microsoft.com/fwlink/?LinkId=85414>.
- ▶ **Operations Manager 2007 management pack guides for server products**—<http://go.microsoft.com/fwlink/?linkid=83259>.
- ▶ **Microsoft download site for SP 1 documentation for Operations Manager 2007**—
<http://www.microsoft.com/downloads/details.aspx?familyid=d826b836-59e5-4628-939e-2b852ed79859&displaylang=en&tm>.
- ▶ **OpsMgr 2007 R2 documentation**—<http://technet.microsoft.com/en-us/opsmgr/bb498235.aspx>.
- ▶ What's OpsMgr all about, anyway? Microsoft has published "Key Concepts for Operations Manager 2007." You can download the document at <http://www.microsoft.com/downloads/details.aspx?FamilyID=3a633532-1dde-49b6-930f-7df50b69b77b&DisplayLang=en>. This document describes how OpsMgr 2007 implements modeling.
- ▶ **Operations Manager 2007 online help**—<http://technet.microsoft.com/en-us/library/bb381409.aspx>.
- ▶ **Operations Manager 2007 Technical Library**—
<http://technet.microsoft.com/library/bb310604.aspx>.
- ▶ Find a great Microsoft discussion on processor bottlenecks at <http://technet.microsoft.com/en-us/library/aa995907.aspx>.
- ▶ The "Operations Manager 2007 Performance and Scalability" white paper is at <http://www.microsoft.com/DOWNLOADS/details.aspx?FamilyID=a1b7610d-3dbe-4e51-bcb3-446d50dadf14&displaylang=en>.
- ▶ The Operations Manager 2007 Rule and Monitor Targeting Poster is available at http://download.microsoft.com/download/f/a/7/fa73e146-ab8a-4002-9311-bfe69a570d28/BestPractices_Rule_Monitor_REV_110607.pdf.
- ▶ **TechNet Manageability Center**—Links to resources and *TechNet* magazine articles at <http://technet.microsoft.com/en-us/manageability/default.aspx>.
- ▶ **Virtual hands-on labs**—Virtual labs for System Center products including Operations Manager, Essentials, and Configuration Manager at <http://technet.microsoft.com/en-us/bb539977.aspx>.
- ▶ **All about OpsMgr licensing for customers with Software Assurance (SA)**—The volume licensing brief for OpsMgr 2007 is at <http://go.microsoft.com/fwlink/?linkid=87480>.
- ▶ **Operations Manager 2007 R2 SDK**—<http://msdn.microsoft.com/en-us/library/cc268402.aspx>. The pre-SP2 version is at <http://msdn2.microsoft.com/en-us/library/bb437575.aspx>.
- ▶ XML Notepad 2007 is an intuitive tool for browsing and editing XML documents. Read about it at <http://msdn2.microsoft.com/en-us/library/aa905339.aspx>, and download the tool from <http://www.microsoft.com/downloads/details.aspx?familyid=72d6aa49-787d-4118-ba5f-4f30fe913628&displaylang=en>.

- ▶ **System Center Operations Manager 2007 tools and utilities**—This is a link to the catalog and listing of resource kit tools, at <http://go.microsoft.com/fwlink/?LinkId=94593>.
- ▶ Interested in learning more about the Microsoft Operations Framework? Check out version 4.0 of the MOF at <http://go.microsoft.com/fwlink/?LinkId=50015>.
- ▶ Information on the Infrastructure Optimization (IO) model is available at <http://www.microsoft.com/technet/infrastructure>.
- ▶ Details about the Microsoft Solutions Framework (MSF) are located at <http://www.microsoft.com/downloads/details.aspx?familyid=50DBFFFE-3A65-434A-A1DD-29652AB4600F&displaylang=en> and <http://www.microsoft.com/downloads/details.aspx?familyid=a71ac896-1d28-45a4-880c-8b0cc8265c63&displaylang=en>.
- ▶ To create company knowledge, one of the required pieces of software is the Visual Studio 2005 Tools for Office Second Edition Runtime. This is available at <http://www.microsoft.com/downloads/details.aspx?FamilyID=F5539A90-DC41-4792-8EF8-F4DE62FF1E81&displaylang=en>. (Microsoft Word is also required.)
- ▶ View a TechNet webcast on Microsoft IT's implementation of OpsMgr 2007 at <http://msevents.microsoft.com/CUI/WebCastEventDetails.aspx?culture=en-US&EventID=1032322478&CountryCode=US>.
 Read the related white paper online at <http://technet.microsoft.com/en-us/library/bb735238.aspx>.
 There is also an accompanying PowerPoint presentation, available for download at <http://download.microsoft.com/download/6/8/4/6848d1c4-227c-4831-936b-98c10fec6c55/ImpSysCtrOpsMgr2007updatePPT.ppt>.
- ▶ Download a 180-day evaluation copy of Operations Manager 2007 R2 from <http://www.microsoft.com/technet/prodtechnol/eval/scom/default.msp>. You can also download an evaluation copy and get information about the R2 release at <http://technet.microsoft.com/en-us/opsmgr/dd239186.aspx>.
 Information about bug fixes in R2 is at <http://support.microsoft.com/kb/971410/>.
- ▶ Cumulative Update 1 for R2 is available at the Microsoft Download Center at <http://www.microsoft.com/downloads/details.aspx?FamilyID=05d30779-2ddc-48dc-aa91-a23167ee2cad&displaylang=en>. This contains a number of fixes for the Operations Manager 2007 R2 release. The corresponding Knowledge Base (KB) article is published at <http://support.microsoft.com/kb/974144>.
- ▶ Cumulative Update 2 for R2 CrossPlat is available at <http://www.microsoft.com/downloads/details.aspx?FamilyID=befb326c-67fb-4449-b7f8-3ebb64d61f19&displaylang=en>, along with updates to affected management packs at <http://www.microsoft.com/downloads/details.aspx?FamilyID=b15fef5c-e331-4006-8913-be376bb0e0c1&displaylang=en>. KB article 979790 at <http://support.microsoft.com/kb/979490> explains the changes.

- ▶ <http://technet.microsoft.com/en-us/opsmgr/cc280350.aspx> lets you download the slipstreamed evaluation copy of SP 1 and the SP 1 upgrade bits for existing installations.

Bugs fixed with the SP 1 release are listed in KB article 944443, at <http://support.microsoft.com/default.aspx/kb/944443>.

The update rollout for SP 1 is available at <http://www.microsoft.com/downloads/details.aspx?FamilyID=05d7785d-fe69-48bc-8dfa-72a77c8936bf&displaylang=en>.

- ▶ There are resource kits for the various versions of Operations Manager:
 - ▶ OpsMgr 2007 ResKit is at the System Center Operations Manager TechCenter (<http://go.microsoft.com/fwlink/?LinkId=94593>).
 - ▶ The MOM 2005 Resource Kit is available at <http://go.microsoft.com/fwlink/?LinkId=34629> and <http://technet.microsoft.com/en-us/opsmgr/bb498240.aspx>.

Blogs

There has been an explosion of blogs with information regarding OpsMgr. Where previously you might be directed to websites and papers, now most information seems to appear on the blogs. Here are some blogs the authors have used. Some are more active than others are, and new blogs seem to spring up overnight!

- ▶ A great source of information is System Center Central (<http://www.systemcentercentral.com>); managed by three OpsMgr MVPs—Pete Zerger, Rory McCaw, and Maarten Goet. (Pete contributed the material on management pack authoring for this book, and Rory is our technical editor.)
- ▶ The OpsMgr team has a blog at <http://blogs.technet.com/operationsmgr/>. You can find older postings at <http://blogs.technet.com/smsandmom/>.
- ▶ If you're interested in keeping up with VMM, the VMM team has a blog at <http://blogs.technet.com/scvmm/>.
- ▶ <http://www.contoso.se/blog/> is the Operations Manager blog by Anders Bengtsson, an OpsMgr MVP.
- ▶ See a blog by Stephan Stranger (former MVP and now at Microsoft) at http://blogs.technet.com/stefan_stranger/.
- ▶ <http://blogs.msdn.com/incarnato> is Justin Incarnato's "Mother" blog. Justin is a senior program manager on OpsMgr team.
- ▶ <http://blogs.technet.com/cliveeastwood> is an OpsMgr, SCE, and MOM blog by Clive Eastwood, a Microsoft OpsMgr Supportability Program Manager.
- ▶ Kevin Sullivan's Management blog is at https://blogs.technet.com/kevinsul_blog/. (Kevin is a Technology Specialist at Microsoft focusing on management products.)

- ▶ http://blogs.msdn.com/boris_yanushpolsky is Boris Yanushpolsky's OpsMgr++ blog. Boris is an OpsMgr Program Manager.
- ▶ <http://blogs.msdn.com/mariussutara> contains notes by Marius Sutura on Operations Manager, including troubleshooting, development information, and comments.
- ▶ <http://blogs.technet.com/kevinholman> is Kevin Holman's OpsMgr blog.
- ▶ <http://alipka.wordpress.com/experience/> is a blog by Andrzej Lipka on IT management and operations. Andrzej, formerly at Microsoft, is now at Dell. <http://blogs.technet.com/alipka> contains his earlier postings, which he has thoughtfully posted at his new site.
- ▶ <http://blogs.msdn.com/rslaten> is a blog by Russ Slaten, a Microsoft Escalation Engineer supporting management products.
- ▶ <http://blogs.msdn.com/steverac> is Steve Rachui's manageability blog. Steve is a Support Escalation Engineer at Microsoft, concentrating on OpsMgr and ConfigMgr. Steve contributed the material on targeting in this book, and was the technical reviewer for *System Center Configuration Manager 2007 Unleashed*.
- ▶ <http://blogs.msdn.com/sampatton> is a blog by Steve Patton, an OpsMgr developer.
- ▶ <http://www.systemcentercommunity.com/> is an OpsMgr 2007 forum with questions and answers about OpsMgr. You will need to create a user ID to reply to the posts.
- ▶ <http://blogs.msdn.com/jakuboleksy> is by Jakub Oleksy, previously an OpsMgr developer and now working on Service Manager.
- ▶ <http://blogs.technet.com/mgoedtel/> is a blog by Matt Goedtel, a Microsoft MCS consultant focusing on Operations Manager.
- ▶ <http://discussitnow.spaces.live.com/> is by Blake Mengotto, an OpsMgr MVP and self-described "MOM dude."
- ▶ Secure Vantage has a blog on Windows Live; see <http://securevantage.spaces.live.com>.
- ▶ <http://blogs.msdn.com/eugenebykov/> is a great source of information on authoring OpsMgr reports by Eugene Bykov, an OpsMgr developer responsible for the reporting user interface.
- ▶ <http://www.technotesblog.com/> is Dustin Hannifin's Tech Notes blog, which has a section dedicated to OpsMgr 2007.
- ▶ <http://www.scom2k7.com/>, by Timothy McFadden, is titled "Everything System Center Operations Manager 2007."
- ▶ <http://www.techlog.org/> is all about everything Microsoft, by Maarten Goet (OpsMgr MVP), Kenneth van Surksum, Steven van Loef, and Sander Klaassen in the Netherlands.
- ▶ <http://advisec.wordpress.com/> is by Bjorn Axell, an OpsMgr MVP and senior consultant focusing on Microsoft infrastructure products.
- ▶ www.systemcenterguide.com is a System Center blog by Duncan McAlynn.

- ▶ Gordon McKenna's blog is available at http://wmug.co.uk/blogs/gordons_blog/default.aspx. Gordon is an OpsMgr MVP, has worked with the software since its Mission Critical Software days, and is extremely knowledgeable on the product.
- ▶ <http://thoughtsonopsmgr.blogspot.com> is maintained by Marnix Wolf, an OpsMgr MVP.
- ▶ Check out <http://myitforum.com/cs2/blogs/smosh/default.aspx>, a blog by OpsMgr MVP Scott Moss.
- ▶ <http://blogs.technet.com/momteam/default.aspx> is a blog by the OpsMgr team.
- ▶ Walter Chomak's blog on OpsMgr design and capacity planning is at <http://blogs.technet.com/wchomak/>. Walter is a Senior Consultant with Microsoft MCS and a great technical resource.
- ▶ Ian Blyth, previously a Lead Technical Specialist in Microsoft UK, blogs at <http://ianblythmanagement.wordpress.com/> on System Center Technologies.

Here are our own blogs:

- ▶ Our Operations Manager and MOM blog is located at <http://opsmgr.spaces.live.com>. New articles are also posted to <http://www.systemcentercentral.com/opsmgr>.
- ▶ <http://cameronfuller.spaces.live.com> is where Cameron discusses his technical theories, ramblings, and rants. Cameron currently cross-publishes to System Center Central at <http://www.systemcentercentral.com/CameronFuller> and to his employer blog at <http://blogs.catapultsystems.com/cfuller>.
- ▶ <http://www.networkworld.com/community/meyler> is a blog by Kerrie, with more general discussion topics, but concentrating on OpsMgr and Microsoft management.
- ▶ And finally, the OpsMgr/MOM blog by Andy Dominey (<http://myitforum.com/cs2/blogs/adominey/>).

OpsMgr Shell

An extension to PowerShell, the Operations Shell (known as the Command Shell prior to the OpsMgr 2007 R2 release) enables you to do most everything you would ever want to for OpsMgr in a batch or scripted mode. Here are some useful links:

- ▶ <http://blogs.msdn.com/scshell/> is about getting started with the OpsMgr Shell. Robert Sprague, a PowerShell guru on the OpsMgr team, maintains this site.
- ▶ For the video recording of Marco Shaw's presentation on Operations Manager 2007 and PowerShell/Command Shell for the System Center Virtual User Group's inaugural meeting, go to <http://marcoshaw.blogspot.com/2008/06/operations-manager-2007-and-powershell.html>.
- ▶ <http://www.systemcentercentral.com/WIKI/WIKIDetails/tabid/146/IndexID/20507/Default.aspx> is an alphabetical reference of OpsMgr 2007 cmdlets, including syntax and sample scripts.

- ▶ An online article on PowerShell in OpsMgr that appeared in Microsoft's TechNet Magazine is at <http://technet.microsoft.com/en-ca/magazine/2008.08.scom.aspx>.
- ▶ SystemCenterCentral.com provides a tutorial on using PowerShell scripts in custom console tasks at <http://www.systemcentercentral.com/Downloads/DownloadsDetails/tabid/144/IndexID/7880/Default.aspx> (login and hit the Download button for the pdf file).
- ▶ To see how to create a PowerShell task for OpsMgr using the R2 Authoring console, check out the tutorial at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/41687/Default.aspx>, contributed by Stefan Koell.
- ▶ To create an OpsMgr group in PowerShell, Marco Shaw provides a script at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/14790/Default.aspx>. Also, see <http://www.systemcentercentral.com/Details/tabid/147/IndexID/32917/Default.aspx>.
- ▶ Microsoft TechNet social forum covering Operations Manager extensions, such as the SDK and PowerShell integration, is located at <http://social.technet.microsoft.com/Forums/en-US/operationsmanagerextensibility/threads>.
- ▶ Andreas Zuckerhut has several postings, as follows:
 - ▶ A generic performance data connector using .csv files at <http://systemcentercentral.com/BlogDetails/tabid/143/IndexId/45313/Default.aspx>.
 - ▶ Eventcollection with Floodingprevention at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexID/32955/Default.aspx>.
 - ▶ Discovery Write Action Modules for On-Demand Discovery Agent Tasks, at <http://www.systemcentercentral.com/BlogDetails/tabid/143/IndexId/50850/Default.aspx>.

PowerShell Information

You can find information on PowerShell itself at the following sites:

- ▶ The official PowerShell site is at <http://www.microsoft.com/powershell>.
- ▶ <http://social.technet.microsoft.com/Forums/en-US/operationsmanagerextensibility/thread/a3d09372-1a93-418a-a93c-9bc9ddd075b9>—Unofficial PowerShell FAQ by Marco Shaw, who contributed material on PowerShell and the Command Shell to this book. Marco updates this FAQ on an as-needed (“irregular”) basis.
- ▶ The Microsoft TechNet social forum covering general PowerShell discussions is at <http://social.technet.microsoft.com/Forums/en-US/winserverpowershell/threads>.

- ▶ Marco Shaw maintains his own blog at <http://marcoshaw.blogspot.com>. To look only at the OpsMgr-related postings, check out <http://marcoshaw.blogspot.com/search/label/opsmgr>.
- ▶ You may want to check all the PowerShell webcasts by the Scripting Guys at <http://www.microsoft.com/technet/scriptcenter/webcasts/ps.mspc>.
- ▶ Direct from the PowerShell guy himself (Marc van Orsouw, PowerShell MVP), is located at <http://thepowershellguy.com/blogs/posh/default.aspx>.
- ▶ Find a PowerShell cheat sheet at <http://blogs.msdn.com/powershell/archive/2007/01/25/powershell-cheat-sheet-redux-the-pdf-version.aspx>.
- ▶ The Windows PowerShell team has its blog at <http://blogs.msdn.com/powershell/>.
- ▶ Find PowerShell script examples at <http://www.microsoft.com/technet/scriptcenter/hubs/msh.mspc>.
- ▶ PowerShell+ is a free PowerShell editing and debugging environment. You can get a free personal copy at <http://www.powershell.com/downloads/psp1.zip>.
- ▶ Even more about PowerShell and examples of some of the constructs are available in an article by Don Jones at <http://www.microsoft.com/technet/technetmag/issues/2007/01/PowerShell/default.aspx>.

Cross Platform

One of the most visible changes in the R2 version of OpsMgr 2007 is its integrated monitoring of cross platform environments. Here are some references on Cross Platform (also known as CrossPlat or X-Plat).

- ▶ The Cross Platform team recently released a very useful MP authoring guide dedicated to the IT Pro type scenarios around extending their monitoring on Cross Platform systems. The guide and downloadable sample are available at <http://technet.microsoft.com/en-us/opsmgr/bb498235.aspx>.
- ▶ MP Guides for the Cross Platform agents are located at <http://technet.microsoft.com/en-us/library/ee346642.aspx>.
- ▶ <http://technet.microsoft.com/en-us/library/dd789030.aspx> lists the platforms supported by CrossPlat and prerequisites.
- ▶ Find Cross Platform PowerShell scripts to help automate discovery of UNIX/Linux servers, install and upgrade cross platform agents for Operations Manager 2007 R2, sign certificates, and change the management server managing the UNIX/Linux server at <http://blogs.msdn.com/sxplat/archive/2009/12/11/cross-platform-powershell-scripts-released.aspx>.
- ▶ Marnix Wolf maintains a compilation of resources on X-Plat at <http://thoughtsonopsmgr.blogspot.com/2009/07/opsmgr-r2-xplat.html>.

- ▶ <http://blog.xplatxperts.com/xplat-xperts/> is maintained by Rob Doucette and Michael Guthrie, who work on the Bridgeways management packs at Xandros.

Connectors

Connectors are covered in Chapter 2, “Unix/Linux Management: Cross Platform Extensions.” Here are some useful references:

- ▶ The Cross Platform team documents the connectors for OpsMgr 2007 R2 at <http://blogs.msdn.com/scxplat/archive/2009/07/28/announcing-rtm-of-the-system-center-operations-manager-2007-r2-connectors.aspx>.
- ▶ <http://msdn.microsoft.com/en-us/library/bb437511.aspx> can get you started on developing your own connectors.

The System Center Family

Here are some references and articles regarding other components of Microsoft's System Center family:

- ▶ For System Center Essentials deployment planning and installation, see <http://go.microsoft.com/fwlink/?LinkId=94444>.
- ▶ Here are some blogs on System Center Essentials (Essentials) and Remote Operations Manager (ROM):
 - ▶ **Remote Managed Services blog**—<http://blogs.technet.com/dustinj/>.
 - ▶ **The System Center Essentials Team Blog (by the product group)**—<http://blogs.technet.com/systemcenteressentials/>.
 - ▶ **SCE Setup, Policy, and Reporting**—<http://blogs.technet.com/rtammana/>.
- ▶ The System Center Essentials Community TechCenter can be found at <http://technet.microsoft.com/en-us/sce/bb677155.aspx>.
- ▶ One scenario for System Center Essentials is as a means for managing and monitoring assets of small organizations, tied to a centralized Operations Manager server. Read John Joyner's take on Microsoft's direction for management tools in the midsized market at <http://www.eweek.com/article2/0,1895,1905780,00.asp>.
- ▶ Is it System Essentials or is it Operations Manager? It's both—the Remote Operations Manager! Download the Deployment Guide from <http://www.microsoft.com/downloads/details.aspx?FamilyId=4B621EB7-01BB-45F5-9A77-52853F06EEC9%20&displaylang=en>.
- ▶ Microsoft's Service Manager page is at <http://www.microsoft.com/systemcenter/en/us/service-manager.aspx>. Webcasts are available at <http://msevents.microsoft.com/CUI/WebCastEventDetails.aspx?culture=en-US&EventID=1032416974> and

<http://msevents.microsoft.com/CUI/WebCastEventDetails.aspx?culture=en-US&EventID=1032424297&CountryCode=US>.

- ▶ Tim Vanderderkooi writes about his experiences with the Service Manager test releases through December 2008 in the mid-sized business at <http://timvanderkooi.wordpress.com/2008/12/05/service-manager-great-product-but-has-microsoft-missed-the-mid-sized-boat-again/>.

Public Forums

If you need an answer to a question, the first place to check is the Microsoft public forums, which replaced the newsgroups used prior to the R2 release of OpsMgr 2007.

Here's a list of the current OpsMgr forums:

- ▶ **General**—<http://social.technet.microsoft.com/Forums/en-US/operationsmanagergeneral/>.
- ▶ **Deployment**—<http://social.technet.microsoft.com/Forums/en-US/operationsmanagerdeployment/>.
- ▶ **Management Packs**—<http://social.technet.microsoft.com/Forums/en-US/operationsmanagermgmpacks/>.
- ▶ **Reporting**—<http://social.technet.microsoft.com/Forums/en-US/operationsmanagerreporting/>.
- ▶ **Authoring**—<http://social.technet.microsoft.com/Forums/en-US/operationsmanagerauthoring/threads>.
- ▶ **Extensibility (SDK, Connectors, and PowerShell)**—<http://social.technet.microsoft.com/Forums/en-US/operationsmanagerextensibility>

Here are the public forums for CrossPlat and Interoperability:

- ▶ **Cross Platform – General**—<http://social.technet.microsoft.com/Forums/en-US/crossplatformgeneral/>.
- ▶ **Cross Platform – HP-UX**—<http://social.technet.microsoft.com/Forums/en-US/crossplatformhpux/>.
- ▶ **Cross Platform – Solaris**—<http://social.technet.microsoft.com/Forums/en-US/crossplatformsolaris/>.
- ▶ **Cross Platform – Red Hat**—<http://social.technet.microsoft.com/Forums/en-US/crossplatformredhat/>.
- ▶ **Cross Platform – SLES**—<http://social.technet.microsoft.com/Forums/en-US/crossplatformsles/>.
- ▶ **Interoperability – General**—<http://social.technet.microsoft.com/Forums/en-US/interopgeneral/>.
- ▶ **Interoperability – Tivoli Connector**—<http://social.technet.microsoft.com/Forums/en-US/interoptivoli/>.

- ▶ **Interoperability – HP Connector—**
<http://social.technet.microsoft.com/Forums/en-US/interphoperationsmanager/>.
- ▶ **Interoperability – Universal Connector—**
<http://social.technet.microsoft.com/Forums/en-US/interopuniversalconnector/>.
- ▶ **Interoperability – BMC Remedy ARS Connector—**
<http://social.technet.microsoft.com/Forums/en-US/interopremedy/>.