

Microsoft®

System Center Operations Manager 2007

Microsoft Surface 1.0 Management Pack Guide

Microsoft Corporation

Published: March, 2009

Send suggestions and comments about this document to surfman@microsoft.com. Please include the management pack guide name with your feedback.

Document Version

This guide is based on the March 2009 version of the Microsoft Surface 1.0 Management Pack, version 1.0.0.0.

Revision History

Release Date	Revisions
March 2009	Beta release of this guide

Copyright

This document supports a preliminary release of a software product that may be changed substantially prior to final commercial release, and is the confidential and proprietary information of Microsoft Corporation ("Microsoft"). It is disclosed pursuant to a non-disclosure agreement between the recipient and Microsoft. This document is provided for informational purposes only, and Microsoft makes no warranties, either express or implied, in this document. Information in this document, including URL and other Internet Web site references, is subject to change without notice. The entire risk of the use or the results from the use of this document remains with the user. Unless otherwise noted, the example companies, organizations, products, domain names, e-mail addresses, logos, people, places, financial and other data, and events depicted herein, are fictitious. No association with any real company, organization, product, domain name, e-mail address, logo, person, places, financial or other data, or events is intended or should be inferred. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2009 Microsoft Corporation. All rights reserved.

Microsoft, Microsoft Surface, Windows, Windows Vista, and XNA are trademarks of the Microsoft group of companies.

All other trademarks are property of their respective owners.

Contents

- Introduction to the Microsoft Surface 1.0 Management Pack for Operations Manager 2007 5
 - Getting the Latest Management Pack and Documentation 6
 - Supported Configurations..... 6
- Getting Started 6
 - Before Importing the Management Pack 6
 - Files to Download 6
 - Importing the Microsoft Surface 1.0 Management Pack 6
 - Creating a New Management Pack for Customizations..... 7
- Configuring the Microsoft Surface 1.0 Management Pack..... 7
- Customizing Rules and Monitors 8
 - Customizing Event Collection Rules 8
 - Customizing Temperature Performance Rules..... 8
- Security Considerations 8
 - Low-Privilege Environments 8
 - Computer Groups 8
- Understanding Management Pack Operations..... 9
 - Objects That the Microsoft Surface 1.0 Management Pack Discovers 9
 - How Health Rolls Up..... 9
 - Viewing Information in the Operations Manager Console 10
 - Key Monitoring Scenarios..... 11
 - Placing Monitored Objects in Maintenance Mode..... 11
- Additional Resources 12
 - Microsoft Surface Community Site 12
 - Microsoft Surface Administration Guide 12
 - Related Information 13
 - Support 13

Introduction to the Microsoft Surface 1.0 Management Pack for Operations Manager 2007

This guide includes a management pack overview, deployment procedures, and monitoring scenarios for the Microsoft Surface™ 1.0 Management Pack for Microsoft® System Center Operations Manager 2007. For specific information about Microsoft System Center Operations Manager 2007, see the [Microsoft System Center Operations Manager](#) Web site.

This management pack includes a set of rules, views, operations, and monitors to help you manage Microsoft Surface 1.0 units. These resources can help you keep your organization's Microsoft Surface environment in a healthy state. The following table summarizes the Microsoft Surface 1.0 Management Pack monitoring functionality that is enabled through Operations Manager 2007 for different Microsoft Surface components.

Microsoft Surface component	Management pack functionality
Microsoft Surface unit	<ul style="list-style-type: none">• Monitors critical processes• Monitors critical services• Automatically recovers stopped services• Monitors the unit's fans
Temperature performance	<ul style="list-style-type: none">• Monitors whether units are approaching the critical shutdown temperature• Collects temperature performance counters• Provides graphs of the temperature performance data
Configuration	<ul style="list-style-type: none">• Alerts you if units are not in user mode• Alerts you if Microsoft Surface services are not configured for automatic startup
Vision System	<ul style="list-style-type: none">• Collects performance data for the Vision System frame rate• Provides graphs of the performance data for the Vision System frame rate

Getting the Latest Management Pack and Documentation

The Microsoft Surface 1.0 Management Pack is located on the [Microsoft Surface Community](#) Web site. You can find the latest version of the management pack and this guide on the Community site.

For more information, see the Support section at the end of this guide.

Supported Configurations

The Microsoft Surface 1.0 Management Pack for Operations Manager 2007 supports monitoring of all Microsoft Surface 1.0 units. This management pack does not support monitoring non-Microsoft Surface hardware units that include the Microsoft Surface SDK or Microsoft Surface SDK, Workstation Edition.

Getting Started

This section describes what to do *before* you import the management pack, what to do *after* you import the management pack, and information about customizations.

Before Importing the Management Pack

Before you import the Microsoft Surface 1.0 Management Pack for Microsoft System Center Operations Manager 2007, note the following limitations of the management pack:

- There is no support for agentless monitoring.

Before you import the Microsoft Surface 1.0 Management Pack for Operations Manager 2007, take the following actions:

- Make sure that all Microsoft Surface units that are managed by Operations Manager use Local System as the Agent Action Account.

Files to Download

To monitor Microsoft Surface 1.0 units, you must first download the Microsoft Surface 1.0 Management Pack for Operations Manager 2007 from the [Microsoft Surface Community](#) Web site. The Microsoft Surface 1.0 Management Pack for Operations Manager 2007 includes the following file:

- Microsoft.Surface.1.0.mp

Importing the Microsoft Surface 1.0 Management Pack

For instructions about how to import a management pack, see [How to Import a Management Pack in Operations Manager 2007](#) on the Microsoft TechNet Web site. After you import the Microsoft Surface 1.0

Management Pack in Operations Manager 2007, create a new management pack that you store overrides and other customizations in.

Creating a New Management Pack for Customizations

Most vendor management packs are sealed so that you cannot change any of the original settings in the management pack file. However, you can create customizations, such as overrides or new monitoring objects, and save them to a different management pack. By default, Operations Manager 2007 saves all customizations to the default management pack. As a best practice, you should instead create a separate management pack for each sealed management pack that you want to customize.

By creating a new management pack to store overrides, you have the following advantages:

- This scenario simplifies the process of exporting customizations that you created in your test and pre-production environments to your production environment. For example, instead of exporting a default management pack that contains customizations from multiple management packs, you can export only the management pack that contains customizations of a single management pack.
- This scenario enables you to delete the original management pack without first deleting the default management pack. A management pack that contains customizations depends on the original management pack. This dependency requires you to delete the management pack with customizations before you can delete the original management pack. If all of your customizations are saved to the default management pack, you must delete the default management pack before you can delete an original management pack.
- You can more easily track and update customizations to individual management packs.

For more information about sealed and unsealed management packs, see [Management Pack Formats](#) on the Microsoft TechNet Web site. For more information about management pack customizations and the default management pack, see [About Management Packs in Operations Manager 2007](#) on the Microsoft TechNet Web site.

Configuring the Microsoft Surface 1.0 Management Pack

The Microsoft Surface 1.0 Management Pack checks registry settings, collects performance counters and events, and runs scripts to monitor processes and services at set intervals. These actions are derived from standard Microsoft System Center Operations Manager 2007 rules and monitors. Microsoft Surface units include everything that you need to run these actions without any additional configuration.

Customizing Rules and Monitors

The Microsoft Surface 1.0 Management Pack for Microsoft System Center Operations Manager 2007 includes 9 performance data collection rules and 13 event data collection rules. Each monitor starts with the word "Monitor". Each rule starts with the word "Collect" to indicate that it is only collecting data. The one alert-generating rule starts with the word "Alert".

By default, all performance and event collection rules are enabled in the Microsoft Surface 1.0 Management Pack. To find these rules, go to the Rules section in the Operations Manager 2007 console, and look for "Microsoft Surface Unit" type rules.

Customizing Event Collection Rules

The Microsoft Surface Management Pack collects all events that are related to Microsoft Surface. These events are valuable for troubleshooting and usage trending. You can disable these rules and create new rules to collect only the events that are most relevant to your business. To change the event collection rules, open the Authoring section of the Operations Manager 2007 console and change the scope to "Microsoft Surface Unit". Search for rules that contain the word "Collect Surface". There are 13 event collection rules, all ending with the word "Events". Override the "enabled" parameter to change a rule.

Customizing Temperature Performance Rules

You might find that the temperature alert threshold is close to your normal operating temperature, and you might want to override these thresholds. To change the threshold, open the Authoring section of the Operations Manager 2007 console and change the scope to "Microsoft Surface Unit". Search for monitors that contain the word "Temperature". There are four temperature monitors. Override the "threshold" parameter to change the threshold.

Security Considerations

This section contains information about security requirements and delegating authority for the Microsoft Surface 1.0 Management Pack for Microsoft System Center Operations Manager 2007.

Low-Privilege Environments

The Microsoft Surface 1.0 Management Pack requires that the Agent Action Account is Local System.

Computer Groups

You can delegate authority to a precise level with user roles. For more information about user roles, see the [About User Roles in Operations Manager 2007](#) topic in Operations Manager 2007 Help.

When you import the management pack, the following computer group is created. You can use this group for scoping and roles authorization.

- Microsoft Surface Unit Group

You can also create your own groups that contain Microsoft Surface units for scoping and roles authorization.

Understanding Management Pack Operations

This section describes the basic features of the Microsoft Surface 1.0 Management Pack.

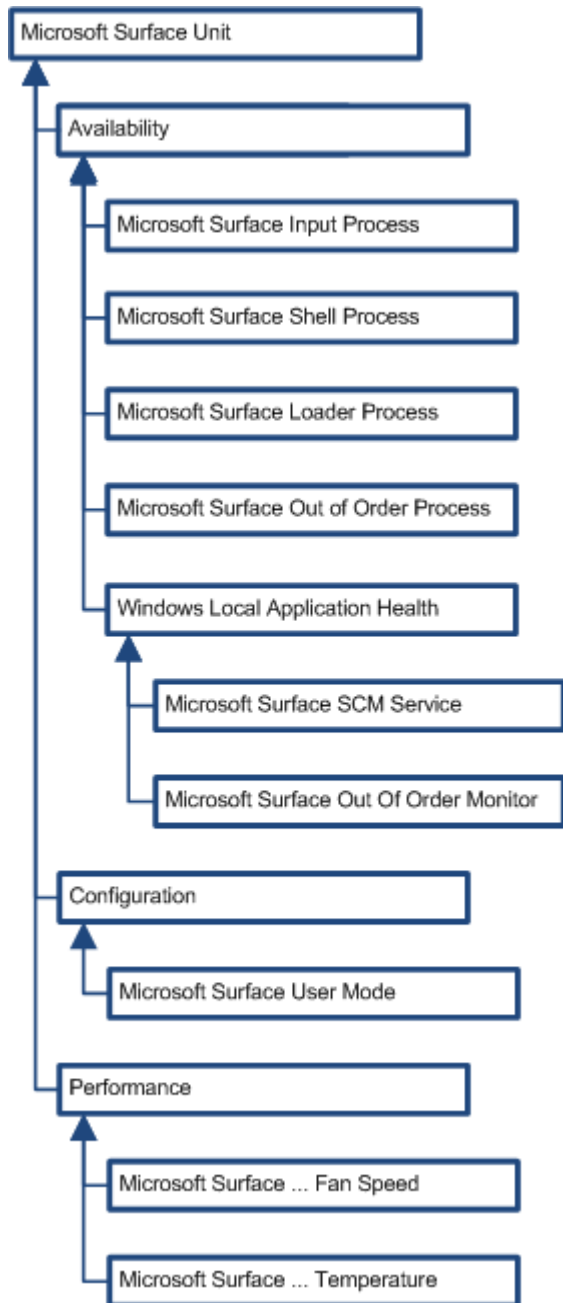
Objects That the Microsoft Surface 1.0 Management Pack Discovers

The Microsoft Surface 1.0 Management Pack automatically discovers the object types in the following list. For more information about discovering objects, see the [Object Discoveries in Operations Manager 2007](#) topic in Microsoft System Center Operations Manager 2007 Help.

- Microsoft Surface Unit
- Microsoft Surface Unit Group—automatically populated with discovered Microsoft Surface units

How Health Rolls Up

The following diagram shows how the health states of components roll up in the Microsoft Surface 1.0 Management Pack. For clarity, the performance monitors are shown only once, with the four fan speed counters represented by "Microsoft Surface ... Fan Speed" and the four temperature counters represented by "Microsoft Surface ... Temperature".



Viewing Information in the Operations Manager Console

In the Operations Manager 2007 console, you can see a high-level view of object types in your Microsoft Surface deployment within 1 hour after you deploy a Microsoft Surface unit.

A view can contain a lengthy list of objects. To find a specific object or group of objects, use the **Scope**, **Search**, and **Find** buttons on the Operations Manager toolbar. For more information, see the [How to Manage Monitoring Data Using Scope, Search, and Find](#) topic in Operations Manager 2007 Help.

The following views are listed directly under the Microsoft Surface 1.0 node in the Monitoring pane of the Operations console in Operations Manager 2007.

View name	Description
Active Alerts	Provides access to alerts that are specific to units in the Microsoft Surface Units Group.
Microsoft Surface Units	Displays a list of units in the Microsoft Surface Units Group and their rolled-up health state.
Recently Resolved Alerts	Shows alerts that were resolved in the last 24 hours. Because some conditions automatically resolve, you might want to look at recently resolved alerts for transient problems.
Temperature Performance	Shows graphs of performance counters for a Microsoft Surface unit's temperature.
Units in Maintenance Mode	Shows a list of units in Maintenance Mode.
Vision System Performance	Shows graphs of performance counters for a Microsoft Surface unit's Vision System frame rate.

Key Monitoring Scenarios

The Microsoft Surface 1.0 Management Pack helps you do more monitoring with fewer people by monitoring the following key scenarios:

- Are Microsoft Surface critical processes running?
- Are Microsoft Surface services running and configured for automatic startup?
- Are Microsoft Surface units running in user mode?
- Are Microsoft Surface units operating within acceptable temperature ranges?
- Are Microsoft Surface unit fans running?

Placing Monitored Objects in Maintenance Mode

When a monitored object, such as a Microsoft Surface unit or distributed application, goes offline for maintenance, Operations Manager 2007 detects that no agent heartbeat is being received and, as a result, might generate numerous alerts and notifications. To prevent alerts and notifications, place the monitored object into maintenance mode. In maintenance mode, Operations Manager 2007 suppresses alerts, notifications, rules, monitors, automatic responses, state changes, and new alerts at the agent.

For more information about how to place a monitored object in maintenance mode, see [How to Put a Monitored Object into Maintenance Mode in Operations Manager 2007](#) on the Microsoft TechNet Web site.

Additional Resources

Microsoft Surface Community Site

The [Microsoft Surface Community](#) site includes the latest information, downloads, and forums for everyone in your company who is working with Microsoft Surface, including resources for developers, designers, IT administrators, and many other roles. The following list is a sample of the types of information that is available on the site:

- Learning the Microsoft Surface Basics: A series of training videos to introduce you to Microsoft Surface.
- Microsoft Surface Administration Guide: How to administer, maintain, deploy, and troubleshoot Microsoft Surface units in your office or venue.
- Calibrating a Microsoft Surface Unit: How and when to run basic and full calibration on a Microsoft Surface unit by using the Calibrate Vision System tool.
- Ambient Light Indicator Tool: How and when to use the Ambient Light Indicator tool to check the lighting around a Microsoft Surface unit.
- Sample Applications: An overview of the Microsoft Surface applications that are available from Microsoft.
- Each Microsoft Surface unit also includes the printed *Microsoft Surface Operation and Maintenance Guide*.

Note: Access to the Microsoft Surface Community site is by invitation only. If you are not registered for the Surface Community Web site, please contact the person in your company who is responsible for requesting Surface Community accounts, or e-mail us directly at partners@surface.com and include your e-mail address, the name of your company, and your title or role (for example, IT administrator).

Microsoft Surface Administration Guide

The Microsoft Surface Administration Guide is available on the Microsoft Surface Community site in the form of Web articles and as a download.

Related Information

In addition to the Microsoft Surface Community Web site, you can find related information on the following Microsoft Web sites:

- [Microsoft Surface](http://www.surface.com) (http://www.surface.com): The latest public news, information, and videos about Microsoft Surface.
- [Microsoft TechNet](http://technet.microsoft.com) (http://technet.microsoft.com): The latest administration documentation to help you administer the Windows Vista® operating system that is included with the Microsoft Surface unit.
- [Microsoft Developer Network](http://msdn.microsoft.com) (http://msdn.microsoft.com): The latest development documentation to help developers learn about Microsoft Windows® Presentation Foundation (WPF) and the Microsoft XNA™ development platform.

Support

You can obtain support for the Microsoft Surface Management Pack through the [Microsoft Surface Community](#) site forums or by contacting Microsoft Surface Support at (866) 425-8880.