



Windows Vista™

## **Windows Vista Beta 2 Windows System Resource Manager Step by Step Guide**

---

Microsoft Corporation

Published: December, 2005

Author: Todd Phillips

Editor: Arwyn Carroll

### **Abstract**

Windows System Resource Manager provides resource management and enables the allocation of resources, including processor and memory resources, among multiple applications based on business priorities.

**Microsoft**

*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. 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, and events depicted herein are fictitious, and no association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event 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 Corporation.*

*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.*

*© 2005 Microsoft Corporation. All rights reserved.*

*Active Directory, Microsoft, MS-DOS, Visual Basic, Visual Studio, Windows, Windows NT, Active Directory, and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.*

*This product contains graphics filter software; this software is based, in part, on the work of the Independent JPEG Group*

*All other trademarks are property of their respective owners.*

# Contents

---

Windows Vista Beta 2 Windows System Resource Manager Step by Step Guide .....	5
Requirements for Using Windows System Resource Manager .....	5
Windows System Resource Manager Scenarios .....	5
Step 1: Work with process-matching criteria .....	5
Step 1: Create a process-matching criterion using path matching .....	6
Step 2: Create a process-matching criterion using user or group matching .....	7
Step 3: Modify a process-matching criterion .....	8
Step 4: Delete a process-matching criterion .....	9
Step 5: View resource-allocation policy dependencies .....	9
Step 2: Work with resource-allocation policies .....	10
Step 1: Create a CPU allocation .....	10
Step 2: Create a memory allocation .....	11
Step 3: Modify a resource-allocation policy .....	12
Step 4: Delete a resource-allocation policy .....	12
Step 5: Set a resource-allocation policy to managing or profiling .....	13
Step 6: Change the precedence of a resource allocation .....	13
Step 7: View matched processes .....	14
Step 8: View calendar dependencies .....	14
Step 9: Create a suballocation .....	15
Step 10: View a suballocation tree .....	16
Step 11: Set the management rule .....	17
Step 12: Set the processor affinity of a resource allocation .....	17
Step 3: Work with the calendar .....	18
Step 1: Enable or disable calendar control .....	19
Step 2: Create a one-time event .....	19
Step 3: Create a recurring event .....	20
Step 4: Modify a calendar event .....	22
Step 5: Delete a calendar event .....	22
Step 6: View a calendar event .....	23
Step 7: Create a schedule .....	23
Step 8: Modify a schedule .....	24
Step 9: Delete a schedule .....	25
Step 4: Work with accounting .....	25
Step 1: Enable or disable accounting .....	26
Step 2: Change accounting settings .....	26

Step 3: Archive accounting information.....	26
Step 4: Customize accounting data .....	27
Step 1: Set the scope.....	27
Step 2: Group accounting data .....	28
Step 3: Filter accounting data before grouping.....	29
Step 4: Filter accounting data after grouping.....	30
Step 5: Add or remove accounting fields .....	30
Step 6: Sort accounting data .....	31
Step 5: Administer Windows System Resource Manager.....	32
Step 1: Connect to another computer managed by Windows System Resource Manager.....	32
Step 2: Start management or stop management .....	33
Step 3: Install the Windows System Resource Manager client for remote administration.....	34
Step 4: Import or export process-matching criteria, resource-allocation policies, calendar events, and schedules .....	35
Step 5: Add or remove a process from the user-defined exclusion list.....	35
Step 6: View Windows System Resource Manager status .....	36
Step 7: Configure notification options .....	37
Step 8: To reset or restore the Windows System Resource Manager configuration and data .....	38
Sending Feedback and Logging Bugs.....	39
Additional Resources.....	39

# Windows Vista Beta 2 Windows System Resource Manager Step by Step Guide

---

With Windows System Resource Manager, administrators can control how CPU and memory resources are allocated to applications, services, and processes. Managing resources in this way improves system performance and reduces the chance that applications, services, or processes will interfere with the rest of the system. It also creates a more consistent and predictable experience for users of applications and services running on the computer.

You can use Windows System Resource Manager to manage multiple applications on a single computer or users on a computer on which Terminal Services are installed.

## Requirements for Using Windows System Resource Manager

Windows System Resource Manager is a Windows Server™ Code Name "Longhorn" component. Windows System Resource Manager will run on any computer that supports Windows Server "Longhorn".

## Windows System Resource Manager Scenarios

[Step 1: Work with process-matching criteria](#)

[Step 2: Work with resource-allocation policies](#)

[Step 3: Work with the calendar](#)

[Step 4: Work with accounting](#)

[Step 5: Administer Windows System Resource Manager](#)

## Step 1: Work with process-matching criteria

[Step 1: Create a process-matching criterion using path matching](#)

[Step 2: Create a process-matching criterion using user or group matching](#)

[Step 3: Modify a process-matching criterion](#)

[Step 4: Delete a process-matching criterion](#)

[Step 5: View resource-allocation policy dependencies](#)

## Step 1: Create a process-matching criterion using path matching

### ▶ Create a process-matching criterion using path matching

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Process Matching Criteria**, and then click **New Process Matching Criteria**.
3. In **Criteria Name**, type a descriptive name for the new process-matching criterion, and then click **Add**.
4. On the **Files or Command Lines** tab, to specify the processes, services, or applications to be managed, do one of the following:
  - To specify the process manually, type the file name or command-line path in **Included files or command lines**.
  - Or, to choose the process from a list, select **Registered Service, Running Process**, or **Application**, and then click **Select**.
  - If you selected either Registered Service or Running Process, click the process you want to match, and then click OK.
  - If you selected **Application**, type the path to the location of the application executable file, or click **Browse** to find the application executable file, and then double-click the application executable file.
5. To specify the processes, services, or applications to exclude from management, select **Excluded files or command lines**, and then do one of the following:
  - To specify the process manually, in **Excluded files or command lines**, click and then type the file name or command-line path.
  - To choose from a list, select **Registered Service, Running Process**, or **Application**, and then click **Select**.
  - If you selected **Registered Service** or **Running Process**, click the process you want to match, and then click **OK**.
  - If you selected **Application**, type the path to the location of the application

executable file, or click **Browse** to find the application executable file, and then double-click the application executable file.

6. Repeat this procedure as necessary to include any additional processes, and then click **OK**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using Run as to perform this procedure.

 **Note**

User or group matching does not support using wildcards or regular expressions.

 **Note**

A process-matching criterion name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

## Step 2: Create a process-matching criterion using user or group matching

### Create a process-matching criterion using user or group matching

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Process Matching Criteria**, and then click **New Process Matching Criteria**.
3. In **Criteria Name**, type a descriptive name for the new process-matching criterion, and then click **Add**.
4. Click the **Users or Groups** tab and then do one of the following:
  - To match processes based on user or group membership, in **Included users and groups**, click **Add**.
  - To exclude users or groups from matching, select **Excluded users and groups**, and then click **Add**.
5. In **Select Users or Groups**, type the user or group name, and then click **OK**. Repeat this procedure as necessary to include all of the appropriate user or

group names.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using Run as to perform this procedure.

 **Note**

User or group matching does not support using wildcards or regular expressions.

 **Note**

A process-matching criterion name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

### Step 3: Modify a process-matching criterion

 **Modify a process-matching criterion**

1. Open Windows System Resource Manager.
2. In the console tree, click **Process Matching Criteria**.
3. In the details pane, right-click the process-matching criterion you want to modify, and then click **Properties**.
4. On the **Rules** tab, do one of the following and click **OK**:
  - To add a new match criterion, click **Add**.
  - To modify the existing match criterion, click **Edit**.
  - To remove an existing match criterion, click **Remove**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 4: Delete a process-matching criterion

### ▶ Delete a process-matching criterion

1. Open Windows System Resource Manager.
2. In the console tree, click **Process Matching Criteria**.
3. In the details pane, right-click a process-matching criterion, and then click **Delete**.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using Run as to perform this procedure.

#### **Note**

To delete a process-matching criterion that is a member of a resource-allocation policy, you must first remove the process-matching criterion from the resource-allocation policy.

## Step 5: View resource-allocation policy dependencies

### ▶ View resource-allocation policy dependencies

1. Open Windows System Resource Manager.
2. In the console tree, click **Process Matching Criteria**.
3. In the details pane, right-click a process-matching criterion, click **Properties**, and then click **Dependencies**.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 2: Work with resource-allocation policies

[Step 1: Create a CPU allocation](#)

[Step 2: Create a memory allocation](#)

[Step 3: Modify a resource-allocation policy](#)

[Step 4: Delete a resource-allocation policy](#)

[Step 5: Set a resource-allocation policy to managing or profiling](#)

[Step 6: Change the precedence of a resource allocation](#)

[Step 7: View matched processes](#)

[Step 8: View calendar dependencies](#)

[Step 9: Create a suballocation](#)

[Step 10: View a suballocation tree](#)

[Step 11: set the management rule](#)

[Step 12: Set the processor affinity of a resource allocation](#)

### Step 1: Create a CPU allocation

#### Create a CPU allocation

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Resource Allocation Policies**, and then click **New Resource Allocation Policy**.
3. In **Policy Name**, type a descriptive name for the new resource-allocation policy, and then click **Add**.
4. On the **General** tab, in Process matching criteria, select a process-matching criterion.
5. In Percentage of processor allocated for this resource, type or select the value for the percentage of total CPU bandwidth to be allocated and then click **OK**.

#### Note

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a

security best practice, consider using Run as to perform this procedure.

 **Note**

User or group matching does not support using wildcards or regular expressions.

 **Note**

A process-matching criterion name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

## Step 2: Create a memory allocation

### Create a memory allocation

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Resource Allocation Policies**, and then click **New Resource Allocation Policy**.
3. In **Policy Name**, type a descriptive name for the new resource-allocation policy, and then click **Add**.
4. Click the **Memory** tab.
5. Select the Use maximum committed memory for each process check box.
6. In **Maximum committed memory limit per process (in MB)**, type a value in megabytes.
7. In **If memory is surpassed**, select either **Stop the application** or **Log an event**.
8. Select the **Use maximum working set limit for each process** check box.
9. In **Maximum working set limit per process (in MB)**, type a value in megabytes.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using Run as to perform this procedure.

 **Note**

User or group matching does not support using wildcards or regular expressions.

 **Note**

A process-matching criterion name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

## Step 3: Modify a resource-allocation policy

 **Modify a resource-allocation policy**

1. Open Windows System Resource Manager.
2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click the resource-allocation policy you want to modify and then click **Properties**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

Only one resource-allocation policy can be in effect and set to either managing or profiling at a given time.

## Step 4: Delete a resource-allocation policy

 **Delete a resource-allocation policy**

1. Open Windows System Resource Manager.
2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click a resource-allocation policy and then click **Delete**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a

security best practice, consider using **Run as** to perform this procedure.

 **Note**

You cannot delete a resource-allocation policy if it is active as either the managing policy or the profiling policy. To do so, you must first set the resource-allocation policy so that it is neither managing nor profiling.

## Step 5: Set a resource-allocation policy to managing or profiling

### Set a resource-allocation policy to managing or profiling

1. Open Windows System Resource Manager.
2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click the resource-allocation policy you want to set, and then click either **Set as Managing Policy** or **Set as Profiling Policy**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

Only one resource-allocation policy can be in effect and set to either managing or profiling at a given time.

## Step 6: Change the precedence of a resource allocation

### Change the precedence of a resource allocation

1. Open Windows System Resource Manager.
2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click a resource-allocation policy, and then click **Properties**.
4. In **Allocate** these resources, click the resource allocation, and then click either the up arrow, to raise the precedence of the resource allocation, or the down

arrow, to lower the precedence of the resource allocation. You can change the precedence only if there are one or more resource allocations in the resource-allocation policy.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

When you select a resource-allocation policy in the console tree, a numerical value associated with precedence of the allocation appears in the details pane in the **Precedence** column; lower values correspond to higher precedence.

## Step 7: View matched processes

 **View matched processes**

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Resource Allocation Policies**.
3. In the console tree, click a resource-allocation policy, right-click the same resource-allocation policy, click **View**, and then click **Process Matching**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 8: View calendar dependencies

 **View calendar dependencies**

1. Open Windows System Resource Manager.

2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click a resource-allocation policy, and then click **Properties**.
4. Click the **Dependencies** tab and then do one of the following:
  - To view calendar-event dependencies, select **View calendar events**.
  - To view schedule dependencies, select **View schedules**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 9: Create a suballocation

### Create a suballocation

1. Open Windows System Resource Manager.
2. In the console tree, click Resource Allocation Policies.
3. In the details pane, right-click a resource-allocation policy, and then click Properties.
4. On the Resources tab, in Allocate these resources, click the resource allocation where you want to create a suballocation and then click Edit.
5. Click the Advanced tab, click Sub-allocate resources, and then click Add.
6. On the General tab, in Process matching criteria, select a process-matching criterion.
7. In Percentage of processor allocated for this resource, type or select the value for the percentage of the total CPU bandwidth to allocate to the selected process-matching criterion, and then click OK.
8. To create a deeper suballocation hierarchy, repeat steps 4-8, as necessary.

 **Important**

You can create a suballocation only if the management rule for the resource allocation is set to Standard.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using Run as to perform this procedure.

 **Note**

User or group matching does not support using wildcards or regular expressions.

 **Note**

A process-matching criterion name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

## Step 10: View a suballocation tree

 **View a suballocation tree**

1. Open Windows System Resource Manager.
2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click the resource-allocation policy that contains the suballocation you want to view, click **Properties**, and then, on the **Resources** tab, click **View Tree**.

 **Important**

The View Tree button appears only if a suballocation has been created in the resource allocation.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 11: Set the management rule

### ▶ Set the management rule

1. Open Windows System Resource Manager.
2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click a resource-allocation policy, and then click **Properties**.
4. On the **Resources** tab, click **Edit**.
5. Click the **Advanced** tab, select from the following management rules, and click **OK**:
  - **Standard** - Windows System Resource Manager will not attempt to control how the CPU allocation is divided among matched processes.
  - **Equal Per Process** - The CPU allocation is divided on an equal shares basis among all matched processes.
  - **Equal Per User** - The CPU allocation is divided on an equal shares basis among all users. Processes created by the user are able to use as much of the user's total CPU allocation as necessary.

### Note

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 12: Set the processor affinity of a resource allocation

### ▶ Set the processor affinity of a resource allocation

1. Open Windows System Resource Manager.
2. In the console tree, click **Resource Allocation Policies**.
3. In the details pane, right-click a resource-allocation policy, and then click **Properties**.
4. In **Allocate these resources**, click a resource allocation, click **Edit**, and then click the **Advanced** tab.

5. Click **Use specified processors**, and then in the space provided, type the numbers of the processors you want to include, expressed as numbers separated by commas (for example, 1,3,5) or in a range (for example, 1-5), or type the word All to use all available processors.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

The processor set is represented as a range from 0 - (n - 1), where n is equal to the total number of processors on the computer.

 **Note**

User or group matching does not support using wildcards or regular expressions.

 **Note**

A process-matching criterion name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

## Step 3: Work with the calendar

[Step 1: Enable or disable calendar control](#)

[Step 2: Create a one-time event](#)

[Step 3: Create a recurring event](#)

[Step 4: Modify a calendar event](#)

[Step 5: Delete a calendar event](#)

[Step 6: View a calendar event](#)

[Step 7: Create a schedule](#)

[Step 8: Modify a schedule](#)

[Step 9: Delete a schedule](#)

## Step 1: Enable or disable calendar control

### ▶ Enable or disable calendar control

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Calendar**, and then click either **Enable** or **Disable**, depending on the current state of calendar control.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

#### **Note**

By default, calendar control is enabled.

#### **Note**

If you enable calendar control, the calendar default resource-allocation policy is automatically set to managing unless another resource-allocation policy is scheduled for the current time.

## Step 2: Create a one-time event

### ▶ Create a one-time event

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Calendar**, right-click **Calendar Events**, and then click **New One Time Event**.
3. In **Event Name**, type a name for the event.
4. Select either **Policy Name** or **Schedule Name**, and then choose a resource-allocation policy or schedule with which to associate the one-time event. (You must create a schedule first to be able to select Schedule Name).
5. In the **Start time and date** box, click a date and time. (If you associated the one-time event with a schedule, the time option is not available.)
6. In the **End time and date** box, click a date and time and then click OK. (If you associated the one-time event with a schedule, the time option is not available).

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

When you create or modify calendar events or schedules, any time values you specify will be considered in the local time of the server. All time values displayed in the Windows System Resource Manager interface or saved to an XML file will also be in the local time of the server.

 **Note**

A one-time event name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

### Step 3: Create a recurring event

 **Create a recurring event**

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Calendar**, right-click **Calendar Events**, and then click **New Recurring Event**.
3. In **Event Name**, type a name for the event.
4. Click either **Policy Name** or **Schedule Name**, and then do one of the following:
  - If you clicked **Policy Name**, select a resource-allocation policy with which to associate the recurring event.
  - Or, if you clicked **Schedule Name**, select a schedule with which to associate the recurring event.
5. If you clicked **Policy Name**, in **Start and end time** do the following:
  - In **Start**, select a time for the policy to begin.
  - In **End**, select a time for the policy to end.
  - In **Duration**, select a value for the length of time that the policy will be in

effect.

6. In **Recurrence Pattern**, do one of the following:
  - Click **Daily**, and in **Recur every**, specify, in days, how frequently the event should recur.
  - Or, click **Weekly**, and in **Recur every**, specify, in weeks, how frequently the event should recur. Then, in the check boxes provided, select one or more days.
  - Or, click **Monthly**, and then do one of the following:
    - Click **Day**, and in the spaces provided, type a numeric value for the day of the month on which the calendar event should run and a numeric value for the monthly frequency with which the event should recur.
    - Or, click **The**, and in the drop-down boxes, select **first**, **second**, **third**, **fourth**, or **last**, and then select the day on which the calendar event should run. In the space provided, type the monthly frequency with which the event should recur.
  - Click **Yearly**, and then do one of the following:
    - Click **Every**, in the drop-down box, select a month, and then type a numeric value for the day on which calendar event should run.
    - Or, click **The**, and in the drop-down boxes, select **first**, **second**, **third**, **fourth**, or **last**, select the day, and then select the month on which the calendar event should run.
7. In **Recurrence Range**, in the **Start** box, select a date for the policy to take effect.
8. Select **No end date**, or select **End on** and an ending date, and then click **OK**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

When you create or modify calendar events or schedules, any time values you specify will be considered in the local time of the server. All time values displayed in the Windows System Resource Manager interface or saved to an XML file will also be in the local time of the

server.

 **Note**

A one-time event name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

## Step 4: Modify a calendar event

### **Modify a calendar event**

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Calendar**, and then click **Calendar Events**.
3. In the details pane, right-click the calendar event you want to modify, and then click **Edit**.
4. Edit the event details that you want to change and click **OK**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

When you create or modify calendar events or schedules, any time values you specify will be considered in the local time of the server. All time values displayed in the Windows System Resource Manager interface or saved to an XML file will also be in the local time of the server.

## Step 5: Delete a calendar event

### **Delete a calendar event**

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Calendar**, and then click **Calendar Events**.
3. In the details pane, right-click a calendar event, and then click **Delete**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 6: View a calendar event


 **View a calendar event**

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Calendar**, and then click **Calendar Events**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 7: Create a schedule

 **Create a schedule**

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Calendar**, right-click **Schedules**, and then click **New Schedule**.
3. In **Schedule Name**, type a name for the schedule.
4. On the calendar display, double-click a time in the column to add a schedule item.
5. In **Policy name**, select a resource-allocation policy.
6. In **Start Time**, select a time for the resource-allocation policy to take effect.
7. In **End Time**, select a time for the resource-allocation policy to end.
8. Repeat the procedure to add additional resource-allocation policies to the

schedule as necessary, and then click **OK**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

You cannot assign more than one resource-allocation policy to the same time period in a schedule.

 **Note**

When you create or modify calendar events or schedules, the time values you specify will be expressed in the local time of the server. All time values displayed in the Windows System Resource Manager interface or saved to an XML file will also be expressed in the local time of the server.

 **Note**

A schedule name cannot start with a hyphen (-) and cannot contain any of the following characters: , \ / \* ; ? : " | - < or >.

## Step 8: Modify a schedule

### **Modify a schedule**

1. Open Windows System Resource Manager.
2. In the console tree double-click **Calendar**, and then click **Schedules**.
3. In the details pane, right-click the schedule you want to modify, and then do one of the following:
  - If you want to add one new schedule entry, click **Add Schedule Entry**.
  - Or, if you want to add multiple schedule entries or change the calendar time scale, click **Edit**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the

appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

You cannot assign more than one resource-allocation policy to the same time period in a schedule.

 **Note**

When you create or modify calendar events or schedules, the time values you specify will be expressed in the local time of the server. All time values displayed in the Windows System Resource Manager interface or saved to an XML file will also be expressed in the local time of the server.

## Step 9: Delete a schedule

### Delete a schedule

1. Open Windows System Resource Manager.
2. In the console tree, double-click **Calendar**, and then click **Schedules**.
3. In the details pane, right-click a schedule, and then click **Delete**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 4: Work with accounting

[Step 1: Enable or disable accounting](#)

[Step 2: Change accounting settings](#)

[Step 3: Archive accounting information](#)

[Step 4: Customize accounting data](#)

## Step 1: Enable or disable accounting

### ▶ Enable or disable accounting

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Accounting**, and then click either **Enable** or **Disable**, depending on whether accounting is currently disabled or enabled.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 2: Change accounting settings

### ▶ Change accounting settings

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Windows System Resource Manager**, click **Properties**, and then click **Accounting**.
3. Select **Enable logging of job accounting information** to turn accounting on.
4. In **Specify how often to log the accounting information**, type a value in minutes.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 3: Archive accounting information

### ▶ Archive accounting information

1. Open Windows System Resource Manager.

2. In the console tree, right-click **Accounting**, and then click **Archive Information**.
3. In the **Start Date** box, select a start date for the data to be archived.
4. In the **End Date** box, select an end date for the data to be archived.
5. In **Archive file**, type a file name and path for the archived data. Or, to find the directory where you want to save the archived file, click **Browse**.
6. In **File format**, either leave the default value **Comma Delimited Text** or click the drop-down arrow and select a file format.
7. To delete from the accounting database all data that is to be archived, select **Delete archived entries from the database**, and then click **OK**.

 **Important**

Deleting archived items from the accounting database does not reduce the disk usage of the accounting database.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 4: Customize accounting data

[Step 1: Set the scope](#)

[Step 2: Group accounting data](#)

[Step 3: Filter accounting data before grouping](#)

[Step 4: Filter accounting data after grouping](#)

[Step 5: Add or remove accounting fields](#)

[Step 6: Sort accounting data](#)

### Step 1: Set the scope

 **Set the scope**

1. Open Windows System Resource Manager.

2. In the console tree, right-click **Accounting**, click **Filter View**, and then click **Scope Filter**.
3. Select **Start Date** and select a beginning date for the accounting data.
4. Select **End Date**, select an ending date for the accounting data, and then click **OK**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

In **Configure Accounting View Filter**, you can use **Save View** to save the accounting view filter configuration for later use, **Load View** to load a previously saved configuration, or **Reset View** to reset the configuration to the default. You can also perform these operations from the command-line.

## Step 2: Group accounting data

### Group accounting data

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Accounting**, click **Filter View**, and then click **Group Items**.
3. In the **Group items by** box, select the group in which you want the accounting data to be aggregated.
4. Repeat this procedure for the remaining menus, as necessary, and then click **OK**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

In **Configure Accounting View Filter**, you can use **Save View** to save the accounting view filter configuration for later use, **Load View** to load a previously saved configuration, or **Reset View** to reset the configuration to the default. You can also perform these operations from the command-line.

### Step 3: Filter accounting data before grouping

 **Filter accounting data before grouping**

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Accounting**, click **Filter View**, and then click **Filter Before Grouping**.
3. In **Define criteria**, in the **Column name** box, select the accounting column you want to filter.
4. In the **Condition** box, select the matching condition.
5. In the **Value** box, type the value you want to match.
6. In the **And/Or** box, select the logical value.
7. To add the criteria you have specified, click **Add to list**.
8. After creating one or more filters, click **OK** to filter the accounting data.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

In **Configure Accounting View Filter**, you can use **Save View** to save the accounting view filter configuration for later use, **Load View** to load a previously saved configuration, or **Reset View** to reset the configuration to the default. You can also perform these operations from the command-line.

## Step 4: Filter accounting data after grouping

### ▶ Filter accounting data after grouping

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Accounting**, click **Filter View**, and then click **Filter After Grouping**.
3. In **Define criteria**, in the **Column name** box, select the accounting column you want to filter.
4. In **Condition**, select the matching condition.
5. In **Value**, type the value you want to match.
6. In **And/Or**, select the logical value.
7. To add the criteria you have specified, click **Add to list**.
8. After creating one or more filters, click **OK** to filter the accounting data.

#### **Important**

The option to filter accounting data after grouping is available only if you have already grouped the data.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

#### **Note**

In **Configure Accounting View Filter**, you can use **Save View** to save the accounting view filter configuration for later use, **Load View** to load a previously saved configuration, or **Reset View** to reset the configuration to the default. You can also perform these operations from the command-line.

## Step 5: Add or remove accounting fields

### ▶ Add or remove accounting fields

1. Open Windows System Resource Manager.

2. In the console tree, right-click **Accounting**, click **Filter View**, and then click **Specify Columns**.
3. Do one of the following and then click **OK**:
  - To remove an accounting column, first make sure that the **Select all possible columns** check box is cleared. Then, click any of the columns listed in **Displayed columns** and click **Remove**.
  - To add an accounting column, first make sure that the **Select all possible columns** check box is cleared. Then, click any of the columns listed in **Available columns** and click **Add**.
  - To display all possible columns, select the **Select all possible columns** check box.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

In **Configure Accounting View Filter**, you can use **Save View** to save the accounting view filter configuration for later use, **Load View** to load a previously saved configuration, or **Reset View** to reset the configuration to the default. You can also perform these operations from the command-line.

## Step 6: Sort accounting data

### Sort accounting data

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Accounting**, click **Filter View**, and then click **Sort Items**.
3. In **Sort items by**, select a group by which to sort the accounting data.
4. Select either **Ascending** or **Descending**.
5. Repeat steps 3 and 4, as necessary, and click **OK**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

In **Configure Accounting View Filter**, you can use **Save View** to save the accounting view filter configuration for later use, **Load View** to load a previously saved configuration, or **Reset View** to reset the configuration to the default. You can also perform these operations from the command-line.

## Step 5: Administer Windows System Resource Manager

[Step 1: Connect to another computer managed by Windows System Resource Manager](#)

[Step 2: Start management or stop management](#)

[Step 3: Install the Windows System Resource Manager client for remote administration](#)

[Step 4: Import or export process-matching criteria, resource-allocation policies, calendar events, and schedules](#)

[Step 5: Add or remove a process from the user-defined exclusion list](#)

[Step 6: View Windows System Resource Manager status](#)

[Step 7: Configure notification options](#)

[Step 8: To reset or restore the Windows System Resource Manager configuration and data](#)

### Step 1: Connect to another computer managed by Windows System Resource Manager

 **Connect to another computer managed by Windows System Resource Manager**

1. Open Windows System Resource Manager.

2. In the console tree, right-click **Windows System Resource Manager**, and then click **Connect to another computer**.
3. In **Select Another computer**, type the name of the computer managed by Windows System Resource Manager, and then click **Connect**. You can also find another computer on the network by clicking **Browse**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

To perform this procedure on a remote computer, you must be a member of the Administrators group on the remote computer, or you must have been delegated the appropriate authority.

## Step 2: Start management or stop management

### Start management or stop management

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Windows System Resource Manager**, and then click either **Start managing** or **Stop managing**, depending on the current managing state.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

When management is stopped, running processes will not be managed, and accounting records will not be generated. Administrative tasks can still be performed and notifications will still be generated, however. Any changes made while management is stopped will not take effect until

management is restarted.

### Step 3: Install the Windows System Resource Manager client for remote administration

#### ▶ Install the Windows System Resource Manager client for remote administration

1. On the Windows System Resource Manager CD-ROM, go to the \Setup\x86\ directory, and then double-click **setup.exe**.
2. Proceed through the wizard until you reach the Completing the Windows System Resource Manager Setup Wizard page on which you can do the following:
3. To open the Windows System Resource Manager snap-in, click **Start WSRM client** snap-in after this wizard is closed.
4. To close the wizard, click **Finish**.

#### ◆ Important

You can install the Windows System Resource Manager client only on 32-bit editions of Windows XP Professional, Windows Server 2003 family operating systems, and Windows 2000 with Service Pack 3. The 64-bit editions of these operating systems are not supported.

#### ◆ Important

To administer Windows System Resource Manager remotely, Distributed Component Object Model (DCOM) must be enabled on the computer managed by Windows System Resource Manager.

#### 📌 Note

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 4: Import or export process-matching criteria, resource-allocation policies, calendar events, and schedules

### ▶ Import or export process-matching criteria, resource-allocation policies, calendar events, and schedules

1. Open Windows System Resource Manager.
2. Right-click **Windows System Resource Manager**.
3. Click either **Import WSRM information** or **Export WSRM information**.
4. Do one of the following and then click **OK**:
  - To import, in the **Location** box, type the path to the appropriate XML files. Or, click **Browse** and go to the directory where the files are located.
  - To export, in the **Location** box, type the path to the directory where you want to save the process-matching criteria, resource-allocation policies, calendar events, and schedules. Or, click **Browse** and go to the directory where you want to save the files.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

#### **Note**

Directory paths specified for import and export operations are treated as though they correspond to the computer on which the client components are installed.

## Step 5: Add or remove a process from the user-defined exclusion list

### ▶ Add or remove a process from the user-defined exclusion list

1. Open Windows System Resource Manager.
2. In the console tree, right-click Windows System Resource Manager, and then

click Properties.

3. Click the Exclusion List tab and then select User Defined.
4. Do one of the following and then click OK:
  - To add a process to the exclusion list, click Add, and then browse to the directory where the program executable is located.
  - To remove a process from the exclusion list, select the process you want to remove, and then click Remove.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

To add a process matched by the current managing resource-allocation policy to the user-defined exclusion list, you must first either change the managing resource-allocation policy to one that does not match the process, or stop Windows System Resource Manager management.

 **Note**

If you want to add a process and include its arguments, you must use the command-line procedure, as illustrated in the following example: `wsrcm /Set:UserExclusionList /INS /ProcList:"%WINDIR%\System32\Svchost -k imagesvr"`.

 **Note**

When you use the command line to either add a process to or remove a process from the user-defined exclusion list, be sure to specify the complete path to the executable file of that process. This will prevent unintentionally matching a different process.

## Step 6: View Windows System Resource Manager status

### View Windows System Resource Manager status

1. Open Windows System Resource Manager.

2. To view the current status of Windows System Resource Manager (the calendar, the service mode, and the current resource-allocation policy, as well as the status of notification and accounting), in the console tree, click **Windows System Resource Manager**.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

 **Note**

You can change any of these settings by clicking the corresponding icon, or through the Windows System Resource Manager Properties page. To access the Properties page, in the console tree, right-click **Windows System Resource Manager**, and then click **Properties**.

## Step 7: Configure notification options

### Configure notification options

1. Open Windows System Resource Manager.
2. In the console tree, right-click **Windows System Resource Manager**, click **Properties**, and then click **Notification**.
3. Select **Enable e-mail notification**.
4. In **Notify these e-mail aliases**, type your e-mail address, including domain name (for example, someone@example.com).
5. In **Use this SMTP server**, type the NetBIOS name or the fully qualified domain name (FQDN) of the Simple Mail Transfer Protocol (SMTP) server.
6. In **Select the event log messages**, select one or more events. To view the list of events, click **Error**, **Warning**, or **Information**, and then click **OK**. If you select Error, Warning, or Information, all of the individual events in that category are included.

 **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the

appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

## Step 8: To reset or restore the Windows System Resource Manager configuration and data

### ▶ To reset or restore the Windows System Resource Manager configuration and data

1. Open Windows System Resource Manager.
2. Right-click **Windows System Resource Manager**.
3. Click **Reset WSRM Information**, and then do one of the following:
  - Click **From Automatic Backup**, and then, when prompted, click **Yes**.
  - Or, click **To Default Settings**, and then, when prompted, click **Yes**.

#### **Note**

To perform this procedure, you must be a member of the Administrators group on the local computer, or you must have been delegated the appropriate authority. If the computer is joined to a domain, members of the Domain Admins group might be able to perform this procedure. As a security best practice, consider using **Run as** to perform this procedure.

#### **Note**

Reset from automatic backup replaces all process-matching criteria, resource-allocation policies, calendar events, and schedules with the versions that were saved during the last automatic backup.

#### **Note**

Reset to default settings sets Windows System Resource Manager to the post-installation state. The current management state is not changed, however. Any process-matching criteria, resource-allocation policies, calendar events, or schedules you created that are in addition to those provided by default will be lost.

## Sending Feedback and Logging Bugs

Your feedback is very important to help us improve this feature in future releases of Windows Server "Longhorn". Please provide feedback regarding your experience using Windows System Resource Manager, problems that you encounter, and whether this document was helpful. We are also interested in feature requests and general feedback about Windows System Resource Manager.

To provide feedback on this Step-by-Step Guide, follow the instructions on the [Microsoft Web site](http://go.microsoft.com/fwlink/?linkid=55105) (<http://go.microsoft.com/fwlink/?linkid=55105>). Please note that in the comment area on the Web site, you will need to provide the name of this Step-by-Step Guide.

## Additional Resources

The following resources provide additional information about Windows System Resource Manager:

- If you need product support for Windows Server "Longhorn" you can join a beta newsgroup for Windows Server "Longhorn". To access newsgroups for Windows System Resource Manager, follow the instructions that are provided on the [Microsoft Connect Web site](http://go.microsoft.com/fwlink/?LinkId=50067) (<http://go.microsoft.com/fwlink/?LinkId=50067>). Members of the Windows System Resource Manager team will monitor the beta newsgroup for Windows Server "Longhorn", so post your questions and issues there.
- For more information about Windows System Resource Manager, see the [Microsoft Web site](http://go.microsoft.com/fwlink/?LinkId=14264) (<http://go.microsoft.com/fwlink/?LinkId=14264>).

If you are a beta tester and part of the special Technology Adoption Program (TAP) beta program, you can also contact your appointed Microsoft development team member for assistance.