

# **RSA SecurID Ready Implementation Guide**

Last Modified: March 13, 2006

### **Partner Information**

| Product Information |  |
|---------------------|--|
| Partner Name        | Microsoft Corporation  |
| Web Site            | www.microsoft.com  |
| Product Name        | Microsoft Internet Authentication Service (IAS)  |
| Version & Platform  | Windows Server 2003  |
| Product Description | Internet Authentication Service (IAS) in Microsoft® Windows® Server 2003,<br>Standard Edition; Windows Server 2003, Enterprise Edition; and Windows<br>Server 2003, Datacenter Edition is the Microsoft implementation of a<br>Remote Authentication Dial-in User Service (RADIUS) server and proxy. As<br>a RADIUS server, IAS performs centralized connection authentication,<br>authorization, and accounting for many types of network access including<br>wireless, authenticating switch, and remote access dial-up and virtual<br>private network (VPN) connections. As a RADIUS proxy, IAS forwards<br>authentication and accounting messages to other RADIUS servers. |
| Product Category    | RADIUS Servers   |





## **Solution Summary**

| Partner Integration Overview                   |                      |  |
|--|----------------------|--|
| Authentication Methods Supported               | RADIUS               |  |
| List Library Version Used                      | N/A                  |  |
| RSA Authentication Manager Name Locking        | N/A                  |  |
| RSA Authentication Manager Replica Support     | N/A                  |  |
| Secondary RADIUS Server Support                | Yes (unlimited)      |  |
| Location of Node Secret on Agent               | 'None stored'        |  |
| RSA Authentication Agent Host Type             | Communication Server |  |
| RSA SecurID User Specification                 | Designated Users     |  |
| RSA SecurID Protection of Administrative Users | No                   |  |
| RSA Software Token and SD800 Automation        | No                   |  |
| Use of Cached Domain Credentials               | No                   |  |





### **Product Requirements**

| Partner Product Requirements: Microsoft IAS  |         |  |  |  |
|--|---------|--|--|--|
| CPU 733MHz                                   |         |  |  |  |
| Memory                                       | 256MB   |  |  |  |
| Storage                                      | 2GB     |  |  |  |
|  |         |  |  |  |
| Operating System                             |         |  |  |  |
| Platform                                     | Version |  |  |  |
| Standard or Enterprise Edition with Internet |         |  |  |  |

Authentication Service Windows Component installed.

## **Agent Host Configuration**

To facilitate communication between Microsoft Internet Authentication Service (IAS) and the RSA Authentication Manager / RSA SecurID Appliance, an Agent Host record must be added to the RSA Authentication Manager and RSA RADIUS database. The Agent Host record identifies the Microsoft Internet Authentication Service (IAS) server within its database and contains information about communication and encryption.

To create the Agent Host record, you will need the following information.

Hostname

Microsoft Windows 2003

- IP Addresses for all network interfaces
- RADIUS Secret

When adding the Agent Host Record, you should configure Microsoft Internet Authentication Service (IAS) as Communication Server. This setting is used by the RSA Authentication Manager to determine how communication with the Microsoft Internet Authentication Service (IAS) server will occur.

Note: Hostnames within the RSA Authentication Manager / RSA SecurID Appliance must resolve to valid IP addresses on the local network.

Please refer to the appropriate RSA Security documentation for additional information about Creating, Modifying and Managing Agent Host records.



## **Partner Authentication Agent Configuration**

### **Before You Begin**

This section provides instructions for integrating the partners' product with RSA SecurID Authentication. This document is not intended to suggest optimum installations or configurations.

It is assumed that the reader has both working knowledge of all products involved, and the ability to perform the tasks outlined in this section. Administrators should have access to the product documentation for all products in order to install the required components.

All vendor products/components must be installed and working prior to the integration. Perform the necessary tests to confirm that this is true before proceeding.

### Documenting the Solution

#### Adding the Microsoft IAS Server as a RADIUS Client

1. Open RSA Authentication Manager GUI.

| 👆 RSA RADIUS Powered by Steel       | -Belted Radiu         | s (PS037)        | _               | ٦× |
|-------------------------------------|-----------------------|------------------|-----------------|----|
| <u>File Panel W</u> eb <u>H</u> elp |                       |                  |                 |    |
|                                     | siit 🚯 C <u>u</u> t ( | 🖀 Copy 🛛 🕤 Paste | 🚫 Deļete        |    |
| E-RSA RADIUS Server Administration  | Name 🛆                | IP Address       | Make/Model      |    |
|                                     | CISCO2500             | 192.168.40.127   | - Standard Radi |    |
| Profiles                            | PH016.PE.RS           | 10.100.51.16     | - Standard Radi |    |
|                                     | PH017.PE.RS           | 10.100.51.17     | - Standard Radi |    |
| - Statistics                        | PH018.PE.RS           | 10.100.51.18     | - Standard Radi |    |
|                                     | PH031.SECU            | 10.100.51.31     | - Standard Radi |    |
|                                     | PH034.SECU            | 10.100.51.34     | - Standard Radi |    |
|                                     | PH071.PE.RS           | 10.100.51.71     | - Standard Radi |    |
|                                     | PH072.SECU            | 10.100.51.72     | - Standard Radi |    |
|                                     | PH075.SECU            | 10.100.51.75     | - Standard Radi |    |
|                                     | PH080.SECU            | 10.100.51.80     | - Standard Radi |    |
|                                     | PH081.SECU            | 10.100.51.81     | - Standard Radi |    |
|                                     | PH082.SECU            | 10.100.51.82     | - Standard Radi | -  |



2. On the **RADIUS** menu, choose **Manage RADIUS** Server. Right click on **RADIUS** Clients. Select Add.

| Add RADIUS Client            |                            |                   | × |
|------------------------------|----------------------------|-------------------|---|
| <u>N</u> ame:                | VM2132                     | Any RADIUS Client | 0 |
| Description:                 | Microsoft IAS              |                   |   |
| IP Address:                  | 10.100.52.132              |                   |   |
| Shared secret:               | ******                     | Unmask            |   |
| <u>M</u> ake/model:          | - Standard Radius -        | <u>VV</u> eb Info |   |
| Advanced<br>Use different sh | ared secret for Accounting | seconds           |   |
|                              | <u>O</u> K <u>Cancel</u>   |                   |   |

- Name: Enter the IAS Server Host name.
- IP Address: Enter the unique IP address that resolves to the IAS Server Host name.
- Shared secret: A value that will be entered into the IAS server in order to encrypt the communication between the two servers.
- Make/model: Standard RADIUS.

<u>Note</u>: It is important that all hostname and IP addresses resolve to each other. Please reference the RSA Authentication Manager documentation for detailed information on this and other configuration parameters within this screen.

3. Click OK.





#### Activating SecurID authentication via RADIUS

1. From the IAS Server Management Console, expand **Connection Request Policies.** Right Click **Remote RADIUS Server Groups**. Then Launch the **New Remote RADIUS Server Group Wizard**.

| Contraction of Arabier March                | ting <b>C</b> ommiss            |            |
|---|---------------------------------|------------|
| V Internet Authentica                       | tion Service                    |            |
| <u>File A</u> ction <u>V</u> iew <u>H</u> e | elp                             |            |
| ← →   € ■                                   | B   😫                           |            |
| 👳 Internet Authentication                   | n Service (Local)               | Group Name |
| 🗄 📄 RADIUS Clients                          |                                 |            |
| 🗄 📄 Remote Access Log                       | jging                           |            |
| 🗄 💐 Remote Access Pol                       | icies                           |            |
| 🗄 🍈 Connection Reques                       | st Processing                   |            |
| 💐 Connection Re                             | quest Policies                  |            |
| Remote RADIL                                |                                 | -          |
|   | New <u>R</u> emote RADIUS Serve | r Group    |
|   | New                             | ۲.         |
|   | ⊻iew                            | •          |
|   | Refresh                         |            |
|   | Export List                     |            |
|   | Help                            |            |

2. Following the Wizard, click **Next** to begin creating your RSA Authentication Manager server group.





- 3. Select **Custom** to manually configure your RADIUS Servers.
- 4. Enter a group name and then click **Next** to continue.

| New Remote RADIUS Server Group Wizard   | ×      |
|---|--------|
| Group Configuration Method<br>You can set up a typical group or a custom group. | (F     |
| What kind of configuration do you want to use for the servers in this group?    |        |
| <ul> <li>Lypical (one primary server and one backup server)</li> </ul>          |        |
| ● <u>C</u> ustom  |        |
| Group name:   |        |
| RSA RADIUS  |        |
|   |        |
|   |        |
|   |        |
|   |        |
| < <u>B</u> ack <u>N</u> ext >   | Cancel |

5. Click Add to enter your RADIUS Server information.

| New | Remote RADIUS Server Grou | p Wizard       | ×              |
|-----|---------------------------|----------------|----------------|
|     | Add Servers               |                | 43             |
|     | RADIUS Server             | Priority Weig  | ht             |
|     |                           |                | A <u>d</u> d   |
|     |                           |                | <u>B</u> emove |
|     |                           |                | Properties     |
|     |                           |                |                |
|     |                           |                |                |
|     |                           |                |                |
|     |                           |                |                |
|     |                           |                |                |
|     |                           | < <u>B</u> ack | Next > Cancel  |



- 6. Under the Address tab enter the details of your Primary RSA Authentication Manager.
- 7. Using the **Verify** button you are able to confirm that the hostname you have entered is resolvable via DNS or WINS.

| Add RA       | DIUS Server      |                  |            |               | ? ×    |
|--------------|------------------|------------------|------------|---------------|--------|
| Addre        | ss Authenticati  | on/Accounting    | Load Balar | icing         |        |
| Тур          | e the name or IP | address of the R | ADIUS serv | er you want t | o add. |
| <u>S</u> erv | er: ps037        |                  |            |               | ⊻erify |
|              |                  |                  |            |               |        |
|              |                  |                  |            |               |        |
|              |                  |                  |            |               |        |
|              |                  |                  |            |               |        |
|              |                  |                  |            |               |        |
|              |                  |                  |            |               |        |
|              |                  |                  |            |               |        |
|              |                  | OK               |            | Cancel        | Apply  |



8. Select the **Authentication/Accounting** tab and enter the appropriate RADIUS authentication, accounting and shared secret values for communication with your RSA Authentication Manager.

| Add RADI       | US Server                    |                    |                     | ? ×        |
|----------------|------------------------------|--------------------|---------------------|------------|
| Address        | Authentication/Acc           | ounting Load E     | Balancing           |            |
| Authe          | ntication                    |                    |                     |            |
| Authe          | ntication port:              | 1812               |                     |            |
| <u>S</u> hare  | d secret:                    | ******             |                     |            |
| <u>C</u> onfir | m shared secret:             | ******             |                     |            |
| Accou          | Inting                       |                    |                     |            |
| Acc <u>c</u>   | unting port:                 | 1813               |                     |            |
| ا              | s <u>e</u> the same shared s | ecret for authen   | tication and acco   | unting.    |
| s              | hared secret:                | *****              |                     |            |
| C              | onfirm shared secret:        | *****              |                     |            |
| E E            | orward network acce<br>erver | ss server start ar | nd stop notificatio | ns to this |
|                |                              | ОК                 | Cancel              |            |

- 9. Select the **Load Balancing** Tab to enter information related to how this server group should failover or distribute authentication load. These settings will be the same for both Primary and Replica Authentication Managers.
- 10. Enter "1" for Priority,
- 11. Enter "50" for Weight.
- 12. Leave the default settings for all fields under Advanced Settings.



| Add RADIUS Server ? ×   |
|---|
| Address Authentication/Accounting Load Balancing  |
| The priority ranking indicates the status of a server. A primary server has a<br>priority of 1.   |
| Weight is used to calculate how often connection requests are sent to a<br>specific server in a group of servers that have the same priority. |
| Priority: 1 ₩eight: 50  |
| Advanced settings   |
| Number of seconds without response before 3   |
| Maximum number of dropped requests before 5<br>server is identified as unavailable:   |
| Number of seconds between requests when server 30 is identified as unavailable:   |
|   |
|   |
| OK Cancel Apply   |

- 13. Repeat steps 5-12 to define failover RSA Authentication Managers. (Optional)
- 14. Once your RSA Authentication Manager Servers have been entered into the server group. Click **Next** to continue.

| w Remote RADIUS Server G | roup Wizard |                 |   |
|--------------------------|-------------|-----------------|---|
| Add Servers              |             |                 | la de |
| RADIUS Server            | Priority    | Weight          | ]   |
| 🦻 👳 ps035                | 1           | 50              | A <u>d</u> d  |
| 🦻 🥺 ps036                | 1           | 50              |   |
| 🎐 ps037                  | 1           | 50              | <u>H</u> emove  |
|                          |             |                 | Properties  |
|                          |             |                 |   |
|                          |             |                 |   |
|                          |             |                 |   |
|                          |             |                 |   |
|                          |             |                 |   |
|                          |             |                 |   |
|                          |             |                 |   |
|                          |             |                 |   |
|                          |             |                 |   |
|                          | <u> </u>    | ok <u>N</u> ext | :> Cancel   |



15. You have now completed the **RADIUS Server Group Wizard**. At this point you will be asked if you want to launch the New Connection Request Policy Wizard. You can either accept this option or start the process manually by right clicking on the New **Connection Request Policies** icon and selecting **New <u>Connection Request Policy</u>** Wizard option.

| New Remote RADIUS Server Group Wizard |  |  |  |
|---------------------------------------|--|--|--|
| J.                                    | Completing the New Remote<br>RADIUS Server Group Wizard  |  |  |
| EG                                    | You have successfully completed the New Remote RADIUS<br>Server Group Wizard. You created the following group: |  |  |
|                                       | Server group: RSA RADIUS   |  |  |
|                                       | To specify the connection requests to forward to this group,<br>create a connection request policy.            |  |  |
|                                       | Start the New Connection Request Policy Wizard when this wizard closes.  |  |  |
|                                       | To close this wizard, click Finish.  |  |  |
|                                       | < <u>B</u> ack Finish Cancel   |  |  |

16. In the New Connection Request Policy Wizard, Select A typical policy for a common scenario as the Policy Configuration Method and assign an appropriate Policy name.

| New Connection Rec  | uest Policy Wizard   |  |  |
|---|--|--|--|
| <b>Policy Configura</b><br>You can set up   | tion Method<br>o a typical policy or a custom policy.                    |  |  |
| What kind of p  | olicy do you want to set up?<br>policy for a common scenario<br>n policy |  |  |
| Type a name that describes this policy. Policy name: RSA RADIUS Example: Authenticate all requests on this server |  |  |  |
|   | < <u>B</u> ack <u>N</u> ext > Cancel                                     |  |  |



17. On the following screen select <u>Forward connection requests to a remote RADIUS server for authentication</u>.

| New Connection Request Policy Wizard   |  |  |  |
|--|--|--|--|
| Request Authentication<br>Do you want to authenticate connection requests on this server, or do you want to<br>forward them? |  |  |  |
| Where do you want to authenticate connection requests that meet the criteria specified in this policy?                       |  |  |  |
| O Authenticate connection requests on this server  |  |  |  |
| O Users connect to this server through an Internet Service Provider (ISP)  |  |  |  |
| f C Users gial directly into this server or connect through a virtual private network (VPN)                                  |  |  |  |
| Forward connection requests to a remote RADIUS server for authentication   |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| <u>≺B</u> ack <u>N</u> ext≻ Cancel   |  |  |  |

- 18. Depending on the format of your user's login names, populate the **Realm name:** field with the standard element of their username.
- 19. Toggle the checkbox on the screen to remove the Realm Name information from the user name.

| New Connection Re                                   | quest Policy Wizard  | ×    |
|---|--|------|
| <b>Realm Name</b><br>A realm name<br>server to whic | is the portion of the user name that is commonly used to identify the<br>h the request should be forwarded.  | E a  |
| Type the realm                                      | n name of the connection requests that will be forwarded.  |      |
| <u>R</u> ealm name:                                 | @rsasecured.com  |      |
|   | Before authentication, remove the realm name from the user name<br>If the realm name is an identifier added to the existing user name, it<br>must be removed before the connection request can be authenticated. |      |
| Connection re<br>group.                             | quests that have this realm name will be forwarded to the following server   | r    |
| <u>S</u> erver group:                               | RSA RADIUS   New Group   | 1    |
|   |  | -    |
|   | < <u>B</u> ack <u>N</u> ext > Can  | icel |



Note: The Realm Name information must be removed prior to being forwarded to the RSA Authentication Manager. In this example users will log in with their Windows User Principle Name (UPN) e.g. mrennie@rsasecured.com. Within the RSA Authentication Manager database, this user has been defined as just 'mrennie'. It is therefore necessary to have the @rsasecured.com component removed from their submitted name prior to forwarding to the RSA Authentication Manager for RADIUS authentication.

20. Selecting <u>Next></u> should complete the <u>New <u>Connection</u> Request Policy Wizard and associate it with the Remote RADIUS Server group you created previously.</u>



#### **Configuring a Remote RADIUS Client**

The final Microsoft IAS Server configuration task you must carryout to test your configuration is to define a Remote RADIUS Client.

1. From the IAS Server Management Console right click on the **RADIUS Clients** folder and select **New RADIUS Client**.



2. In the resulting screen input the **Friendly name:** of your device and its **Client address**.



- 3. Accept the default Client-Vendor: RADIUS Standard.
- 4. Enter and confirm a Shared secret for communication with the Remote RADIUS Client.
- 5. Select **Finish** completing the RADIUS Client definition.

| Ne | w RADIUS Client  | ×   |
|----|--|-----|
| _  | Additional Information   |     |
|    | If you are using remote access policies based on the client vendor attribute, specify the vendor of the RADIUS client. |     |
|    | <u>C</u> lient-Vendor:   |     |
|    | RADIUS Standard  |     |
|    | Shared secret:   |     |
|    | Confirm shared secret:   |     |
|    | <u>B</u> equest must contain the Message Authenticator attribute   |     |
|    |  |     |
|    |  |     |
| _  |  |     |
|    | < <u>B</u> ack Finish Cano   | cel |



## **Certification Checklist**

| Certification Environment  |                     |                     |  |
|----------------------------|---------------------|---------------------|--|
| Product Name               | Version Information | Operating System    |  |
| RSA Authentication Manager | 6.1                 | Windows Server 2003 |  |
| Microsoft IAS              | 2003                | Windows Server 2003 |  |

Date Tested: March 13, 2006

| Mandatory Functionality              |            |                                    |  |
|--------------------------------------|------------|------------------------------------|--|
| RSA Native Protocol                  |            | RADIUS Protocol                    |  |
| New PIN Mode                         |            |                                    |  |
| Force Authentication After New PIN   | N/A        | Force Authentication After New PIN | $\checkmark$   |
| System Generated PIN                 | N/A        | System Generated PIN               | <ul> <li></li> </ul>   |
| User Defined (4-8 Alphanumeric)      | N/A        | User Defined (4-8 Alphanumeric)    | <ul> <li></li> </ul>   |
| User Defined (5-7 Numeric)           | N/A        | User Defined (5-7 Numeric)         | <ul> <li></li> </ul>   |
| User Selectable                      | N/A        | User Selectable                    | <ul> <li></li> </ul>   |
| Deny 4 and 8 Digit PIN               | N/A        | Deny 4 and 8 Digit PIN             | <ul> <li></li> </ul>   |
| Deny Alphanumeric PIN                | N/A        | Deny Alphanumeric PIN              | <ul> <li></li> </ul>   |
| PASSCODE                             |            |                                    |  |
| 16 Digit PASSCODE                    | N/A        | 16 Digit PASSCODE                  | <ul> <li>Image: A second s</li></ul> |
| 4 Digit Password                     | N/A        | 4 Digit Password                   | <ul> <li>Image: A second s</li></ul> |
| Next Tokencode Mode                  |            |                                    |  |
| Next Tokencode Mode                  | N/A        | Next Tokencode Mode                | <ul> <li>Image: A second s</li></ul> |
| Load Balancing / Reliability Testing |            |                                    |  |
| Failover (3-10 Replicas)             | N/A        | Failover                           | <ul> <li></li> </ul>   |
| Name Locking Enabled                 | N/A        | Name Locking Enabled               |  |
| No RSA Authentication Manager        | N/A        | No RSA Authentication Manager      | $\checkmark$   |
|                                      | Additional | Functionality                      |  |
| RSA Software Token Automation        |            |                                    |  |
| System Generated PIN                 | N/A        | System Generated PIN               | N/A  |
| User Defined (8 Digit Numeric)       | N/A        | User Defined (8 Digit Numeric)     | N/A  |
| User Selectable                      | N/A        | User Selectable                    | N/A  |
| Next Tokencode Mode                  | N/A        | Next Tokencode Mode                | N/A  |
| RSA SD800 Token Automation           |            |                                    |  |
| System Generated PIN                 | N/A        | System Generated PIN               | N/A  |
| User Defined (8 Digit Numeric)       | N/A        | User Defined (8 Digit Numeric)     | N/A  |
| User Selectable                      | N/A        | User Selectable                    | N/A  |
| Next Tokencode Mode                  | N/A        | Next Tokencode Mode                | N/A  |
| Domain Credential Functionality      | ı          |                                    |  |
| Determine Cached Credential State    | N/A        | Determine Cached Credential State  |  |
| Set Domain Credential                | N/A        | Set Domain Credential              |  |
| Retrieve Domain Credential           | N/A        | Retrieve Domain Credential         |  |

MPR

 $\checkmark$  = Pass  $\times$  = Fail N/A = Non-Available Function

