Setting Up and Allocating Bandwidth for Executives in ISA Server

Sometimes it is desirous to provide Internet usage to some special persons like company executives with higher priority than the others. In this lab practice we will define some configuration settings in Microsoft ISA server with a bandwidth priority for the executive computers.

To do so, we have to configure these three settings in the Microsoft ISA server.

- Define a client address set for the executive computers.
- Define a bandwidth priority setting for the executives.
- Define a bandwidth rule based on the previous client address set and bandwidth priority setting.

Defining a Client Address Set:

- 1. Click Start, point to Programs, point to Microsoft ISA Server, and then click ISA Management.
- 2. In the console tree, click to expand the **Servers and Arrays** node.

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Tree	Array Descrip
Internet Security and Acceleration Server 白ー蜀 Servers and Arrays	DERVER
🗄 🚽 SERVER	
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3. Click to expand the node for the server that you want to configure.

ISA Management	
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Tree	Name
Internet Security and Acceleration Server Servers and Arrays Servers Computer Comput	Monitoring Computer Access Policy Publishing Bandwidth Rules Policy Elements Cache Configuration Monitoring Configuration Extensions Network Configuration Client Configuration

4. Click on the **Policy Elements** node to expand it.



5. Right click on the Client Address Sets to define a new set for executive computer.



6. Define a name and description for the new client address set.

Client Set	<u>?×</u>
Name:	Executive Computers
Description (optional):	IP address range of executive computers.
Select the addresses of con address set.	nputers that belong to this client
Members:	
From	
Add	Edit Remove
OK	Cancel

7. Click **Add** button to define the IP range of executive computers.

Add/Edit IP Addresses		<u>? ×</u>
Client set IP addresses:		
From:	192 . 168 . 0	. 30
To:	192 . 168 . 0	. 40
	OK]	Cancel

8. Click **Ok** to close this **Add/Edit IP Addresses** window and then again click **Ok** to close the **Client Set** window.

Client Set	<u>?</u> ×
Name:	Executive Computers
Description (optional):	IP address range of executive computers.
Select the addresses of co address set.	mputers that belong to this client
Members:	
From	То
192.168.0.30	192.168.0.40
Add	Edit Remove
[OK	Cancel

The client Address set for executives has been created.

Creating a New Bandwidth Priority:

Bandwidth priorities define the priority level that is applied to connections that pass through a server that is running ISA Server. Network connections that do not have an assigned bandwidth priority have lower priority than connections that have assigned priorities. Network connections that have lower priorities have a lower chance of passing through the server than connections that have higher priorities.

To create a new bandwidth priority for the executives, follow these steps.

- 1. Click to expand the **Policy Elements** node.
- 2. Right-click Bandwidth Priorities, click New, and then click Bandwidth Priority.

ISA Management		
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Tree	Name	Description
Internet Security and Acceleration Serve Servers and Arrays SERVER Monitoring Computer Access Policy Publishing Bandwidth Rules Policy Elements Conceleration Serve	Default bandwidth priority	
Destination S New	Bandwidth Priority	
Client Addres	•	-
Content Grou Refresh		
		Þ
No logging		

- 3. In the **Name** and **Description** box, type a proper name and description (optional) for the bandwidth priority.
- 4. In the **Outbound bandwidth** box, type a number between 1 and 200 (a priority of 1 is the lowest priority, 200 is the highest).
- 5. In the **Inbound bandwidth** box, type a number between 1 and 200.

Note: We have defined 150 in the inbound as well as outbound bandwidth box. This number is greater than the default Bandwidth Priority (100).

New Bandwidth Priority		? ×
Name:	Executive Priority	
Description (optional):	Priority setting for executive comp	uters.
Outbound bandwidth (1-2	200):	150
Inbound bandwidth (1-20	0):	150
	()	Cancel

6. Click **OK** to close the window.

A new bandwidth priority has been created for the executive computers.

Creating a Bandwidth Rule For Executives:

Bandwidth rules are used to prioritize the requests that pass through the server that is running ISA Server. When you install ISA Server, the server is automatically configured with the default bandwidth rule. The default rule assures that communication that does not have an assigned bandwidth rule is allocated the minimum bandwidth assured by the Windows 2000 default scheduling. The default bandwidth rule is always last in order and cannot be modified or deleted. This task describes how to create a new bandwidth rule.

To create an new bandwidth rule:



1. Right-click **Bandwidth Rules**, click **New**, and then click **Rule**.

2. In the **Bandwidth Rule Name** box, type a proper name of the new bandwidth rule, and then click **Next**.



- 3. In the **Protocols** dialog box, click one of the following options under **Apply this rule to**, and then click **Next**:
 - o All IP traffic
 - Selected protocols
 - All IP traffic except selected

New Bandwidth Rule Wizard			×
Protocols Select the protocols to which this rule applie:	S.		
Apply this rule to: All IP traffic All IP traffic Selected protocols All IP traffic except selected			
	< Back	Next >	Cancel

Note: We have selected all IP traffic.

- 4. In the **Schedule** dialog box, click one of the following options next to the **Use this schedule** box, and then click **Next**:
 - Always
 - Weekends
 - $\circ \quad \text{Work hours} \quad$

New Bandwidth Rule Wizard					×I
Schedule Select a schedule for applyir	ng this rule.				
Use this schedule: Description:	Always <mark>Always</mark> Weekends Work bours		•		
		< Back	Next >	Cancel]

Note: We have selected Always.

- In the Client Type dialog box, click one of the following options under Apply the rule to requests from, and then click Next:
 Any request

 - Specific computers
 Specific users and groups

New Bandwidth Rule Wizard		×
Client Type You can specify client type by user name, group name, o	r IP address.	
Apply the rule to requests from:		
C Any request		
 Specific computers (client address sets) 		
C Specific users and groups		
< Back	Next > Ca	ancel

Note: In this practice, we will select specific computers option and then we will select the previous configured client address set (Executive Computers).

New Bandwidth Rule Wizard			×
Client Sets Specify the client sets to which this rule applie	es.		
Client Sets			J
Add Remove			
[< Back	Next> (Cancel

6. Click **Add** Button to select the previous configured Client address set (Executive Computers).

Add Client Sets		? ×
Defined sets:		Include these sets:
Client Sets	Add >	Client Sets
	< Remove	Executive Computers
	New	
J		
		OK Cancel

7. Click **OK** to close this window.

Note: You can also define a new Client address set here by clicking on the New button.

8. Client Address Set has been added in the New Bandwidth rule. Click **Next** to continue.

New Bandwidth Rule Wizard	×
Client Sets Specify the client sets to which this rule applies.	
Client Sets	
Add Remove	
(Back Nevt)	Cancel
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9. In the **Destination Sets** dialog box, click the desired destination option under **Apply this rule to**, and then click **Next**.

	<u> </u>
Destination Sets Select the destinations to which this rule applies.	
Apply this rule to: All destinations All destinations	
All internal destinations All external destinations Specified destination set All destinations except selected set	
- Rack	Neut \ Cancel

Note: We have selected the All destinations option.

10. In the **Content Group** dialog box, click either **All content groups** or **Selected content groups** under **Apply this rule to**, and then click **Next**.

New Bandwidth Rule Wizard			×
Content Groups Content groups include different file types and MIME types.			
Apply this rule to: All content groups Selected content groups:			
 Application Application Data Files Audio Compressed Files Documents HTML Documents Show only selected content groups 	•	Select Al	
< Back	Next >	Car	ncel

If you click **Selected content groups**, you must also enter the content groups to which you want the rule to apply.

11. In the **Bandwidth Priority** dialog box, click either **Use default scheduling priority** or **Custom**, and then click **Next**.

New Bandwidth Rule Wizard	×
Bandwidth Priority Select the bandwidth priority for	this rule
Use this bandwidth priority:	
O Use default scheduling prioril	by
Custom:	
Name: De	efault bandwidth priority
Description Ex (optional):	ecutive Priority
Outbound bandwidth (1-200)	: 100
Inbound bandwidth (1-200):	100
	< Back Next > Cancel

Note: We will click the Custom option and then select the previously configured **Executive Priority**.

New Bandwidth Rule Wizard	×
Bandwidth Priority Select the bandwidth priority for this rule	
Use this bandwidth priority:	
Use default scheduling priority	
 Custom: 	
Name: Executive Priority	
Description Priority setting for executive computers.	
Outbound bandwidth (1-200): 150	
Inbound bandwidth (1-200): 150	
< Back Next > (Cancel

New Bandwidth Rule Wizard	X
~	Completing the New Bandwidth Rule Wizard
	You have successfully completed the New Bandwidth Rule Wizard. You created a bandwidth rule with the following configuration:
	Applies to the following protocols: All IP traffic
	Schedule: Always
	Applies to requests from: Specific computers (client address sets)
	Specified computers (client address sets): Executive Computers
	To close this wizard, click Finish.
	< Back Finish Cancel

12. Review your Bandwidth rule wizard options and then Click **Finish** to create this new **Executives Bandwidth Rule**.

You have successfully defined a new Bandwidth Rule for executives who have a higher priority than the other users.

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