

How do I restrict an administrator's scope to specific applications using NetScaler MAS?

NetScaler Management and Analytics System allows administrators to manage multiple NetScaler instances and applications from one single console. It has summarized dashboards at instance level as well as feature level which allows administrators to get a complete view of their applications and the infrastructure using which they manage these application.

In most enterprises, the network administrators and application administrators have defined roles wherein they need to manage only a subset of the NetScaler instances or a subset of the applications. This requires the manageability solution to support role based access (RBA mechanism) settings using which a super administrator can restricted the scope of other administrators to a narrow subset that suits their job requirements and complies with the security access settings of the firm.

MAS supports many RBA scenarios. Let us take a look at one of the use cases:

- Assume that some administrators have been assigned the task of application monitoring wherein they are required to enable/disable services. These administrators are not required to get access to any of the other modules which relate to use cases around infrastructure management, analytics, etc.
MAS can support such RBA scenarios by restricting administrator view to application module only. Furthermore MAS can also restrict access to only a specific set of Applications

Configuration Steps from MAS GUI:

1. Navigate to System -> User Authentication -> Group and create a group/ select the group to which you wish to apply the RBA settings. Ensure that all the administrators whose access you wish to restrict are a part of this group and then click on 'Next' button.

The screenshot shows the 'Modify System Group' configuration page in the NetScaler MAS GUI. The page has a breadcrumb trail: System > User Authentication > Group. There are two tabs: 'Users and Instances' (active) and 'Select Applications'. The configuration fields are as follows:

- Group Name:** AppMon_Group
- Permission*:** admin
- Configure Session Timeout
- Users:**
 - Available (5):** sap_user, nsroot, lync_user, subtenant, tenant1
 - Configured (2):** operator1, operator2
- All Instances

At the bottom, there are 'Cancel' and 'Next' buttons.

2. Here check the 'allow access to Application Monitoring only' box. This will restrict access to Application module only.

The screenshot shows the 'Modify System Group' interface. At the top, there are two tabs: 'Users and Instances' (active) and 'Select Applications'. Below the tabs, there is a checkbox labeled 'Allow access to Application Monitoring only' which is checked. Below this checkbox, there is a text prompt: 'Select the applications that will be part the group'. Underneath, there is another checkbox labeled 'All Applications' which is also checked. At the bottom of the interface, there are three buttons: 'Cancel', 'Back', and 'Finish'.

3. Furthermore, you can also restrict access to a specific subset of applications/virtual servers. Uncheck the 'All Applications' box and click on 'Add virtual servers' to selectively pick the virtual servers to which you want to grant access. After this, click 'Finish'.

The screenshot shows the 'Modify System Group' interface. The 'Allow access to Application Monitoring only' checkbox is checked. The 'All Applications' checkbox is unchecked. Below this, there is a 'Delete' button and a dropdown menu labeled 'Add Virtual Servers'. Below the dropdown menu, there is a table with the following columns: 'Virtual Server Name', 'Virtual Server IP Address', 'Application Type', and 'Instances'. The table contains four rows of data:

Virtual Server Name	Virtual Server IP Address	Application Type	Instances
SAP_NY	10.102.216.178	ib	10.102.216.177
SAP_BLR	10.102.216.180	ib	10.102.216.177
SAP_JPN	10.102.216.187	ib	10.102.216.177
SAP_HK	10.102.216.79	ib	10.102.216.27

At the bottom of the interface, there are three buttons: 'Cancel', 'Back', and 'Finish'.

Once these configuration settings are complete, the administrators belonging to this group will have restricted access after login. Their view will be limited to Application module only and narrowed down to a limited set of applications as defined in RBA settings. Below screenshots show the view of super administrator as compared to the view of the administrator.

Screenshot: Super-administrator's view

CITRIX NetScaler Management and Analytics System | Sep 19 2016 23:09:50 IST | nsroot

Applications | Infrastructure | Analytics | Orchestration | System | Downloads

Dashboard

Applications	Services	Virtual Servers	Certificates	Data Centers	Tenants	NetScaler	Gateway	SDX	SD-WAN
4	30	30	15	3	1	6 Partitions: 3	0	1	0

Virtual Servers | **Applications**

Search: + New Application

Lync

Load Balancing Virtual Servers: 4

OWA

Load Balancing Virtual Servers: 3

SAP

Load Balancing Virtual Servers: 4

owa1

Load Balancing Virtual Servers: 3

Lync

State: Type: HTTP Port: 80

Dashboard | Resources

Total Transactions	Health	Services	NetScaler IP Address
0	100 %	1 of 1	10.102.216.177

Transactions | Connections | Throughput

1

Screenshot: Administrator's view (as per defined RBA settings)

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Applications

Dashboard

Applications	Services	Virtual Servers	Certificates	Data Centers	Tenants	NetScaler	Gateway	SDX	SD-WAN
1	3	6	15	3	1	6 Partitions: 3	0	1	0

Virtual Servers | **Applications**

Search: + New Application

SAP

Load Balancing Virtual Servers: 4

SAP

SAP_BLR	State: <input checked="" type="checkbox"/>	Type: HTTP	Port: 80
SAP_HK	State: <input checked="" type="checkbox"/>	Type: HTTP	Port: 80
SAP_JPN	State: <input checked="" type="checkbox"/>	Type: HTTP	Port: 80
SAP_NY	State: <input checked="" type="checkbox"/>	Type: HTTP	Port: 80

Dashboard | Resources

Total Transactions	Health	Services	NetScaler IP Address
0	0 %	2 of 2	10.102.216.177

CITRIX NetScaler Management and Analytics System Sep 19 2016 23:41:02 IST operator1

Applications

Dashboard / Load Balancing / Virtual Servers

Virtual Servers

Search

<input type="checkbox"/>	Instance Name	Name	Protocol	State	Effective State	Health	IP Address	Port	Partition
<input type="checkbox"/>	NetScaler_VPX_1 (10.102.216.177)	SAP_BLR	HTTP	Down	DOWN		0	10.102.216.180	80
<input type="checkbox"/>	NetScaler_VPX_1 (10.102.216.177)	SAP_NY	HTTP	Down	DOWN		0	10.102.216.178	80
<input type="checkbox"/>	NetScaler_VPX_1 (10.102.216.177)	SAP_JPN	HTTP	Down	DOWN		0	10.102.216.187	80
<input type="checkbox"/>	10.102.216.27	SAP_HK	HTTP	Up	UP		100	10.102.216.79	80

To explore the RBA options hands-on, you may download the NetScaler MAS for free at <https://www.citrix.com/downloads/netscaler-mas.html>