

bt-WebFilter Administrator's Guide: Quotas



bt-WebFilter Administrator's Guide: Quotas

Contents

Quota Feature Description	3
Quota Property Options	4
Adding a new a Quota	5
Applying Quotas in WebFilter	5
Apply a Quota to a Custom Access Policy:	5
Apply a Quota to an Individual User:	
Apply a Quota to an Individual IP Address:	
Apply a Quota to an Entire IP Range:	
Apply a Quota For Unauthenticated Users:	
Applying Multiple Quotas	29
Viewing and Resetting Current Quota Usage	29
Example Scenarios	30
Apply Quotas Based on Departments	30
Create Bandwidth Quotas:	32
Create Custom Access Policies:	33
Apply Quotas to Custom Access Policies:	35
Apply a Quota to Specific Categories or URLs for an Individual IP Address	
Apply a Quota for the Lunch Hour:	37
Create a Custom Schedule:	37
Apply the Quota to Users:	39
Apply a Bandwidth Quota for Company Work Hours:	40
Create a Custom Schedule:	40
Apply the Quota to Users:	42

Quota Feature Description

bt-WebFilter allows you to create quotas for your environment to help limit the amount of time spent browsing the internet or overall bandwidth utilization on a single website, category, or group of categories. A quota is assigned per category or site/mask, and can be applied to a number of different objects, which are listed below:

- Custom Access Policies
- Individual Users
- Individual IP Addresses
- IP Ranges
- Unauthenticated Users

NOTE: A quota applied to an individual IP address (Personal Quota) will be applied to all web access. To implement quotas based on categories or sites/masks for individual IP addresses, the steps included in 'Apply a Quota to an **Entire IP Range:**' should be used. The IP Range can be configured with a single IP address (i.e. 192.168.1.25 – 192.168.1.25). Additionally, an example scenario with this requirement is included in the 'Apply a Quota to **Specific Categories or URLs for an Individual IP Address**' section.

Quota Property Options

The Quota properties window has the following options:

- Name of the Quota
- Period Of Validity Specifies how often the quota should reset its usage data.
 - Daily
 - Weekly
 - Monthly
- Severity
 - Strict Specifies that when the quota limit is reached, access will be denied for the objects governed by the quota
 - Lite Specifies that when the quota limit is reached, access will be not be denied however logs will be generated for the objects governed by the quota.
- Bandwidth Limit (KB)
- Time Limit (min) This value is calculated by how long it takes for the resource to be delivered. It does not specify how much 'Viewing Time' the user is accumulating.

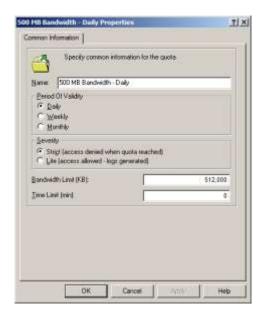


Figure 1 - Quota Property Page

Adding a new a Quota

To create a quota:

- 1. Open the WebFilter Management Console:
- 2. Right-click on 'Quotas', then select 'New' | 'Quota...'
- 3. Name the quota as desired
- 4. Select the period of validity
- 5. Select the 'Severity'
- 6. Enter the 'Bandwidth Limit' for the quota if desired
- 7. Enter the 'Time Limit' for the quota if desired

NOTE: Both Bandwidth and Time Limit values can be applied to a single quota, allowing the quota to enforce both factors.

8. Click 'Apply' then 'OK' to save the new quota

Applying Quotas in WebFilter

Apply a Quota to a Custom Access Policy:

- 1. In the bt-WebFilter Management Console window, click on the 'Custom Access Policies' container object.
- 2. Right-click the Custom Access Policy, then select 'Properties'



Figure 2 - Accessing Quota Properties

3. Select the 'Quotas' tab and then click the 'Add...' button at the bottom of the window



Figure 3 – Quotas tab of Custom Access Policy

4. If applying the quota to a Category or group of Categories, select the 'Category' option. If applying the quota to a URL or mask, select the 'URL' option.



Figure 4 – Quota Access Object Properties Window

5. Select the 'Details' tab. If a 'Category' Access Object Type was selected in the previous step, select the appropriate Categories that the Quota will apply to. If the URL Access Object Type was selected in the previous step, enter the appropriate URL(s) or mask(s).

NOTE: to apply a single quota for all Internet access, before clicking the Details tab, check the URL radio button, then enter a single asterisk (*) in the Details.

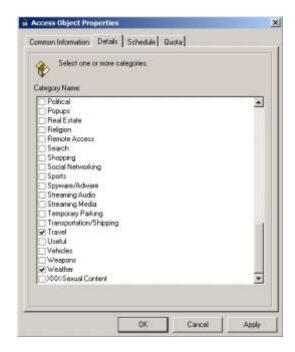


Figure 5 – Quota Access Object Applied Categories

- 6. Select the 'Schedule' tab.
- 7. Use the Drop-Down to select the schedule that will be used to apply the Quota.

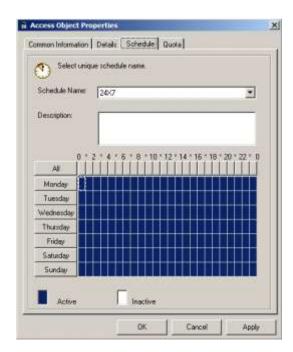


Figure 6 - Quota Access Object Schedule

- 8. Select the 'Quota' tab
- 9. Use the drop-down list labeled 'Quota' to select the correct Quota to be used



Figure 6 - Quota Access Object Quota Selection

10. In the section labeled 'Quota Applying method', select the option to apply the Quota to each user of the group, or to apply the quota to the group as a whole.

NOTE: If using the 'Single Quota for whole NT group' option, all users of the group will be affected by the browsing habits of each other user in the group. As an example: If User A, B, and C are in a group which has this quota application type enforced, User A can utilize all of the quota bandwidth before user B and C get a chance to utilize the bandwidth. This would result in an immediate denial of web access for users B and C even though they have not met the quota limit individually.

11. Click 'Apply', then 'OK' to save the changes and be redirect back to the 'Quotas' tab of the Custom Access Policy

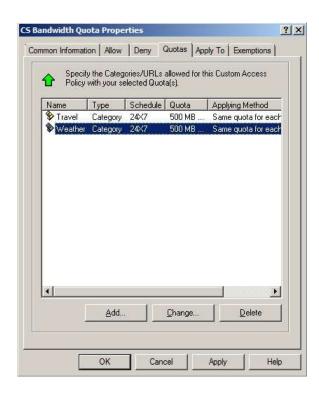


Figure 7 - Custom Access Policy Quotas Applied

12. Click 'Apply' to save the quota settings to the Custom Access Policy

The newly-applied quota will now be applied to all objects selected in the 'Apply To' tab of the Custom Access Policy.

Apply a Quota to an Individual User:

1. Navigate to the properties page of the appropriate registered domain. This can be done by expanding 'Access Rules', then right-clicking the domain and selecting 'Properties'.

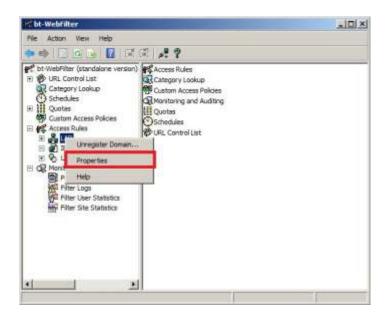


Figure 8 - Registered Domain Properties

2. Navigate to the 'Individual Rights' tab, then either add or edit the appropriate user object by clicking the 'Add...' or 'Edit...' buttons.



Figure 9 – Registered Domain Individual Rights Tab

a. If adding a user, click the 'Add...' button, enter the user name and click 'Check Names'. Once the correct user has been resolved, click 'OK'. You can then click the newly-added user and click the 'Edit' button.

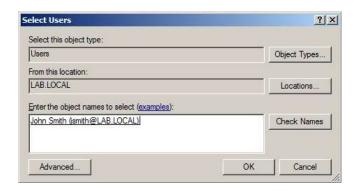


Figure 10 - Select Users Window

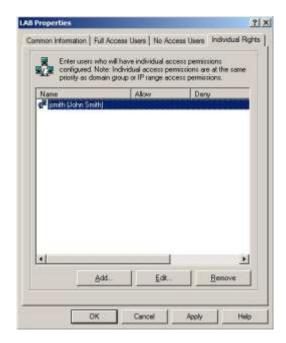


Figure 11 – Registered Domain Individual Rights User List



Figure 12 – Individual Rights User Properties

3. From the Individual Properties page, select the 'Quotas' tab and click the 'Add...' button



Figure 13 – User Quota Access Object Page

4. On the 'Access Object Properties' page 'Common Information' tab, select either the 'Category' or the 'URL' option.

NOTE: to apply a single quota for all Internet access, before clicking the Details tab, check the URL radio button, then enter a single asterisk (*) in the Details.

5. Select the 'Details' tab. If a Category Access Object Type was selected in the previous step, select the appropriate categories that the quota will apply to. If the URL Access Object Type was selected in the previous step, enter the appropriate URL(s) or mask(s).



Figure 14 – Quota Access Object Applied Categories

6. Select the 'Schedule' tab, then select the schedule that will be used to apply the quota

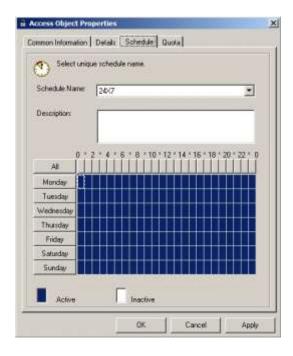


Figure 15 – Quota Access Object Applied Schedule

- 7. Navigate to the 'Quota' tab
- 8. Select the appropriate quota from the drop-down list labeled 'Quota'



Figure 16 - Quota Access Object Applied Quota

9. Click 'Apply', then 'OK' to save the changes and be redirected back to the 'Quotas' tab of the user 'Individual Properties' window

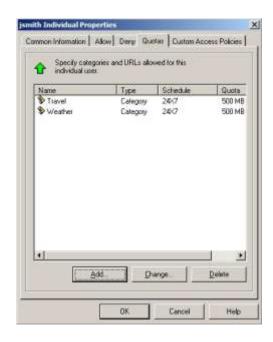


Figure 17 - Individual Rights User Applied Quotas

10. Click 'OK' to save the individual properties configured for the user, then click 'Apply' to save the changes to the domain properties.

The newly-applied quota will now be applied to the specific user.

Apply a Quota to an Individual IP Address:

NOTE: Quotas applied to individual IP's with the below steps will be applied to ALL web access. To configure individual IP address quotas for specific categories or sites/masks, follow the examples in the 'Apply a Quota to an Entire IP Range:' and 'Apply a Quota to Specific Categories or URLs for an Individual IP Address' sections.

1. Navigate to the properties page of 'IP Ranges' by expanding 'Access Rules', then right-clicking 'IP Ranges' and selecting 'Properties'.

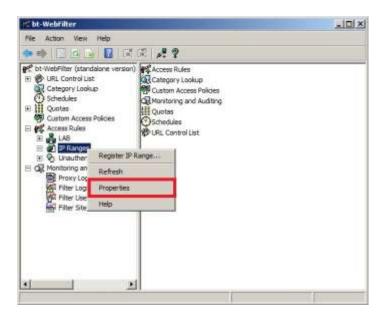


Figure 18 - IP Range Properties



Figure 19 – IP Range Properties Window

2. Navigate to the 'Personal Quotas' tab and click the 'Add...' button

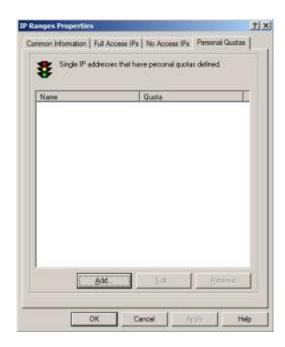


Figure 20 – IP Range Personal Quotas Tab

3. Select the appropriate quota from the drop-down field labeled 'Quota:'



Figure 21 – Add Personal Quota Window

4. Click the 'Add...' button and enter the appropriate IP address, then click 'OK'

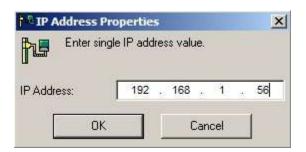


Figure 22 - Add Personal Quota IP Address



Figure 23 – Personal Quota configured

5. Click 'OK', then 'Apply' or 'OK' to save the changes



Figure 24 – IP Range Personal Quota

The Quota will now be applied to the specific IP address for ALL web access.

Apply a Quota to an Entire IP Range:

To complete the following steps you must have already configured an IP Address range under the 'Access Rules' container object. For more information see 'Access Rules' in the WebFilter user manual

1. Navigate to the properties page of the appropriate registered IP range. This can be done by expanding 'Access Rules', expanding 'IP Ranges', then right-clicking the IP range and selecting 'Properties'.

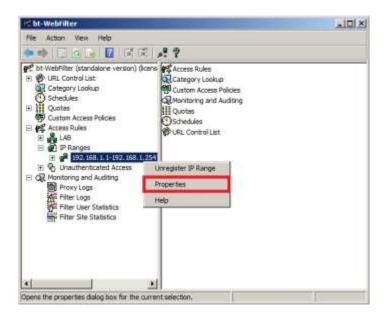


Figure 25 – Registered IP Range Properties

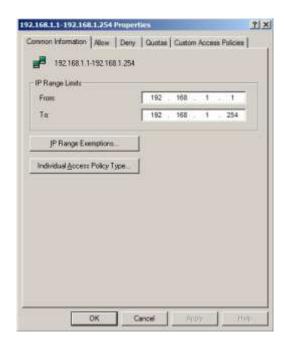


Figure 26 - Registered IP Range Properties Window

2. Navigate to the 'Quotas' tab, then click the 'Add...' button.



Figure 27 - Registered IP Range Quota

3. If applying the quota to a category or group of categories, select the 'Category' option. If applying the quota to a URL or mask, select the 'URL' option.



Figure 28 – Registered IP Range Quota Access Object Properties Window

4. Select the 'Details' tab. If a Category Access Object Type was selected in the previous step, select the appropriate Categories that the Quota will apply to. If the URL Access Object Type was selected in the previous step, enter the appropriate URL(s) or mask(s).

NOTE: to apply a single quota for all Internet access, before clicking the Details tab, check the URL radio button, then enter a single asterisk (*) in the Details.

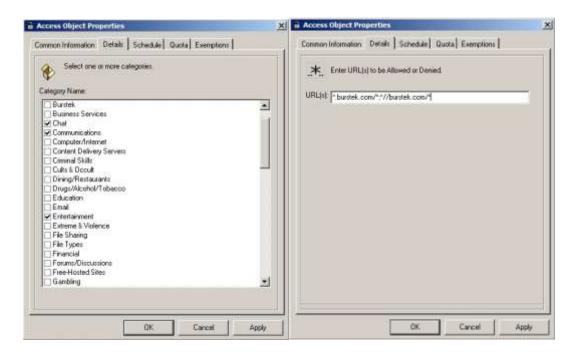


Figure 29 - Quota Access Object Applied Categories or URLs/Masks

5. Navigate to the 'Schedule' tab, then select the schedule that will be used to apply the quota

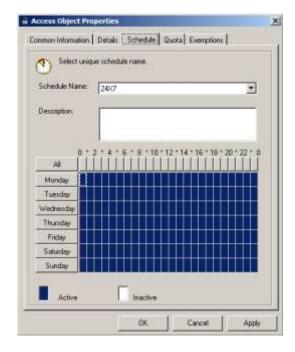


Figure 30 – Quota Access Object Schedule

- 6. Navigate to the 'Quota' tab
- 7. Select the appropriate quota from the drop-down list labeled 'Quota'



Figure 31 – Quota Access Object Applied Quota

- 8. Select 'same quota for each group member' or 'single quota for the group' for the desired Quota Applying Method
- 9. To exempt specific IP addresses from having the quota applied, add the desired IP addresses in the 'Exemptions' tab of the Access Object Properties window



Figure 32 - Registered IP Range Quota Exemption

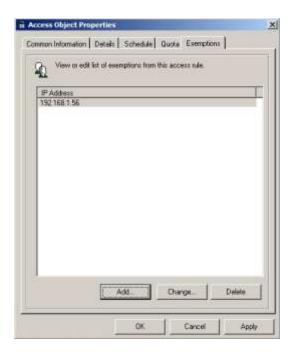


Figure 33 – Registered IP Range Quota Exemption Applied

- 10. Click 'Apply', then 'OK' to save the changes and be redirect back to the 'Quotas' tab of the IP Range Properties window
- 11. Click 'Apply' to save the changes to the IP Range properties, then click 'OK' to exit the IP Range Properties window

The Quota will now be applied to the appropriate IP Range.

Apply a Quota For Unauthenticated Users:

1. Navigate to the properties page of the Unauthenticated Access user set. This can be done by expanding 'Access Rules', then right-clicking 'Unauthenticated Access' and selecting 'Properties'.

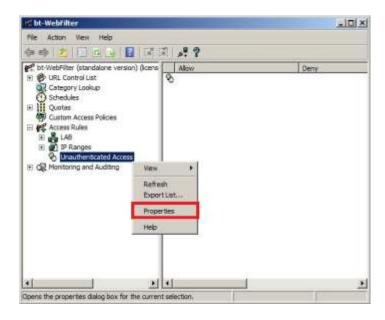


Figure 34 – Unauthenticated Access Properties

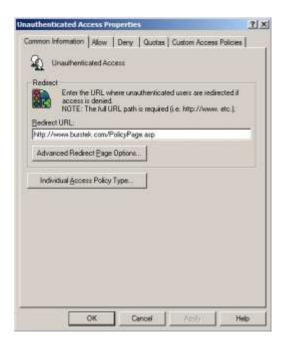


Figure 35 – Unauthenticated Access Properties Window

2. Navigate to the 'Quotas' tab, then click the 'Add...' button.



Figure 36 – Unauthenticated Access Quotas Tab

3. If applying the Quota to a Category or group of Categories, select the 'Category' option. If applying the quota to a URL or mask, select the 'URL' option.

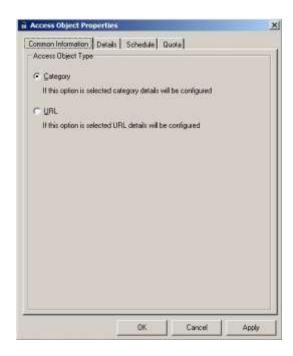


Figure 37 – Unauthenticated Access Quota Access Object Properties

4. Select the 'Details' tab. If a Category Access Object Type was selected in the previous step, select the appropriate categories that the Quota will apply to. If the URL Access Object Type was selected in the previous step, enter the appropriate URL(s) or mask(s).

NOTE: to apply a single quota for all Internet access, before clicking the Details tab, check the URL radio button, then enter a single asterisk (*) in the Details.



Figure 38 – Quota Access Object Applied Categories

5. Navigate to the 'Schedule' tab, then select the schedule that will be used to apply the quota

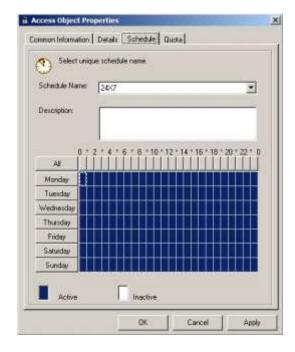


Figure 39 - Quota Access Object Schedule

- 6. Navigate to the 'Quota' tab
- 7. Select the appropriate quota from the drop-down list labeled 'Quota'



Figure 40 – Quota Access Object Applied Quota

8. Click 'Apply', then 'OK' to save the changes and be redirect back to the 'Quotas' tab of the 'Unauthenticated Access Properties' window

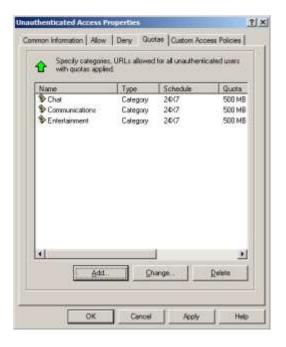


Figure 41 – Unauthenticated Access Applied Quotas

9. Click 'Apply' to save the changes to the Unauthenticated Access Properties, then click 'OK' to close the window.

The Quota will now be applied to all unauthenticated access.

Applying Multiple Quotas

Multiple quotas can be added to the same object and be applied to different categories and/or URLs. For example, if you want to have a 2 GB quota for the 'General News' and 'Social Networking' categories and a 500 MB quota for the 'Travel' and 'Weather' categories, all you would need to do is create the individual quotas and assign them to the Individual Access Policy. For an example, see 'Apply Quotas to Custom Access Policies:'

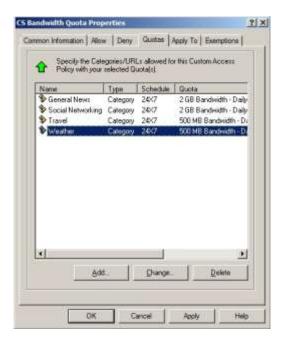


Figure 42 – Multiple Quota applications

Viewing and Resetting Current Quota Usage

To monitor quota utilization per user:

- 1. Expand 'Quotas' in the left-hand navigation menu of the WebFilter management interface
- 2. Click on the desired quota in the left-hand menu. The quota usage information should display in the main window.
- 3. The quota can be reset for specific access objects (users/IPs, etc.) by right-clicking the access object, then clicking 'Reset Quota Usage'.

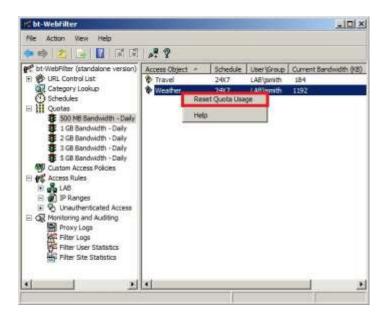


Figure 43 - Reset Quota Usage Option

Example Scenarios

Below, are a few example scenarios to show you how Quotas could be utilized in your environment and the steps required to implement them.

Apply Quotas Based on Departments

A company may want to configure quotas for each department in an organization in order to limit the amount of bandwidth utilized by each department for non-work related internet browsing, while still accommodating for each department's actual browsing requirements.

As an example:

The company's Sales department may require a certain amount of access to Social Networking sites for promoting the Company's internet presence; however, they wouldn't need unlimited access to sites categorized as Humor or Entertainment. The shipping department may have no need for Social Networking, but may find it essential to allow for weather conditions to be streamed from web sites categorized as General News or Weather.

Included below, is an example scenario of a company's requirements to limit bandwidth on a per-department basis.

NOTE: The bandwidth values presented are only examples, and are in no way offered as a recommendation for acceptable bandwidth usage for an organization.

Company A would like to limit bandwidth for the following departments and categories:

Sales

- Entertainment
 - 1 GB (1,048,576 KB)
- General News
 - 2 GB (2,097,152 KB)
- o Humor
 - 1 GB (1,048,576 KB)
- Social Networking
 - 5 GB (5,242,880 KB)
- Sports
 - 500 MB (512,000 KB)
- Travel
 - 500 MB (512,000 KB)
- Weather
 - 1 GB (1,048,576 KB)
- Customer Service
 - o General News
 - 2 GB (2,097,152 KB)
 - Social Networking
 - 2 GB (2,097,152 KB)
 - Streaming Audio
 - 3 GB (3,145,728 KB)
 - Travel
 - 500 MB (512,000 KB)
 - Weather
 - 500 MB (512,000 KB)
- Shipping
 - o General News
 - 1 GB (1,048,576 KB)
 - Streaming Audio
 - 5 GB (5,242,880 KB)
 - Weather
 - 3 GB (3,145,728 KB)

Create Bandwidth Quotas:

First, we should create a bandwidth quota for each required bandwidth limit necessary from the above information. The steps included in the '

Adding a new a Quota' section can be used to create the following quotas:

- 500 MB (512,000 KB)
- 1 GB (1,048,576 KB)
- 2 GB (2,097,152 KB)
- 3 GB (3,145,728 KB)
- 5 GB (5,242,880 KB)

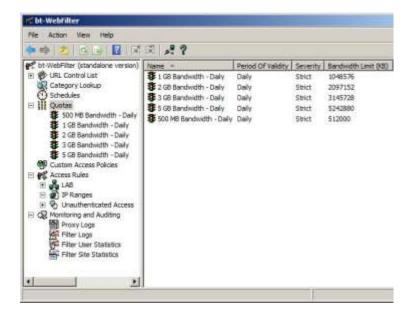


Figure 44 – 500MB, 1GB, 2GB, 3GB, 5GB Bandwidth Quotas

Create Custom Access Policies:

For detailed information on creating Custom Access Policies, see 'Creating a Custom Access Policy' of the WebFilter User Guide.

We will assume that each department can be represented by an Active Directory group. Since each department will have a different set of quotas, it is recommended to create a separate Custom Access Policy for each department:

- 1. CS Bandwidth Quota
- 2. Sales Bandwidth Quota
- 3. Shipping Bandwidth Quota

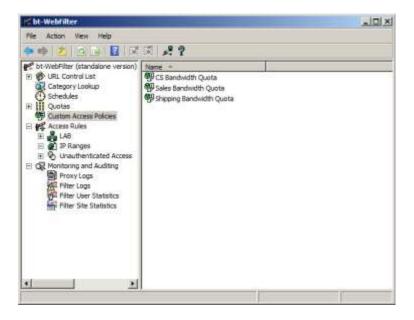


Figure 45 – Custom Access Policies created for each department

Configure Each Custom Access Policy With a Restriction Type:

1. Click the 'Individual Access Policy Type...' button, then select the 'Restriction Policy' option.

NOTE: Although the categories or sites which are associated with a quota will override the permission policy settings, it is important to note that all categories/sites not included in the 'Allow' tab of the Custom Access Policy will be denied with a permission policy.



Figure 46 – Custom Access Policy Individual Access Policy Type

- 2. Click 'OK' to save the changes
- 3. Click 'Apply' or 'OK' to save the changes to the Custom Access Policy

We can now configure the Custom Access Policies to apply the quotas to the specific groups.

NOTE: Quotas can also be applied to existing Custom Access Policies as long as the Custom Access Policy is applied to the necessary groups or users.

Separate quotas must be applied to Custom Access Policies individually. As an example: The Customer Service department will utilize 3 different quotas (500 MB, 2 GB, and 3 GB). We would first configure the 500 MB quota, followed by the 2 GB and 3 GB quotas. No specific order is necessary.

Apply Quotas to Custom Access Policies:

We can now apply the steps included in 'Apply a Quota to a Custom Access Policy:' for each quota to be applied.

For the scenario mentioned above, we should have applied the quota application steps for a total of 10 times:

- 1. Sales 500 MB (Sales Bandwidth Quota Custom Access Policy)
 - Sports
 - Travel
- 2. Sales 1 GB (Sales Bandwidth Quota Custom Access Policy)
 - Entertainment
 - Humor
 - Weather
- 3. Sales 2 GB (Sales Bandwidth Quota Custom Access Policy)
 - General News
- 4. Sales 5 GB (Sales Bandwidth Quota Custom Access Policy)
 - Social Networking
- 5. Customer Service 500 MB (CS Bandwidth Quota Custom Access Policy)
 - Travel
 - Weather
- 6. Customer Service 2 GB (CS Bandwidth Quota Custom Access Policy)
 - General News
 - Social Networking
- 7. Customer Service 3 GB (CS Bandwidth Quota Custom Access Policy)
 - Streaming Audio
- 8. Shipping 1 GB (Shipping Bandwidth Quota Custom Access Policy)
 - General News
- 9. Shipping 3 GB (Shipping Bandwidth Quota Custom Access Policy)
 - Weather
- 10. Shipping 5 GB (Shipping Bandwidth Quota Custom Access Policy)
 - Streaming Audio

The quotas should now be applied to the specified departments through the Custom Access Policies configured.

Apply a Quota to Specific Categories or URLs for an Individual IP Address

When using the steps outlined in the 'Apply a Quota to an Individual IP Address:' section, the quota will be applied to all web access. In order to apply quotas based on specific categories or URLs for individual IP addresses, an IP range must be created for the individual IP address.

To create an IP Range for an individual IP Address:

1. Right-click 'IP Ranges', under 'Access Rules, then click 'Register IP Range...'

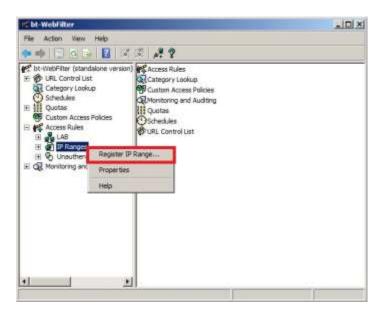


Figure 47 - Register IP Range

2. Enter the individual IP address in both the 'From:' and 'To:' fields, then click 'OK'

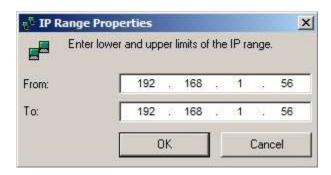


Figure 48 – Single IP Address in Range

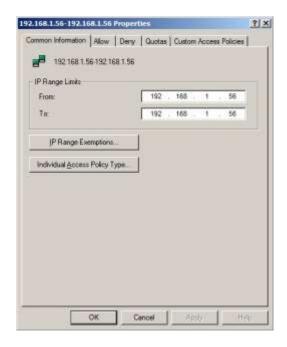


Figure 49 - Registered IP Range Properties Window

Once the IP Range has been registered, the steps to 'Apply a Quota to an Entire IP Range:'can be used to apply the desired quota.

Apply a Quota for the Lunch Hour:

Some companies may require quotas to be enforced during the lunch hour in order to conserve bandwidth for working employees, while allowing employees on their lunch break to utilize the web for non-work functions. In order to apply a quota for a specific time of day, a custom schedule must be used.

Create a Custom Schedule:

To create a custom schedule:

1. Right-click 'Schedules' in the left-hand navigation menu of the bt-WebFilter management console, then click 'New' | 'Schedule...'

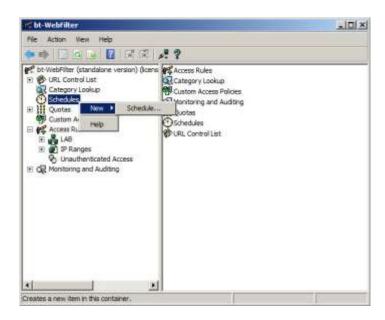


Figure 50 - Create New Schedule

2. Name the schedule as desired, then navigate to the 'Properties' tab in order to configure the active hours of the schedule



Figure 51 – New Schedule Properties Window

3. Select the hour or half-hour increments that will be active during the schedule, then click the 'Active' option. Since we are creating a lunch hour schedule, we will mark the hours of 12-1pm for Monday through Friday as active.

NOTE: You may click and drag through the boxes to select multiple boxes. You can also click the labeled boxes located at the edge of the chart to mark the respective row or column.

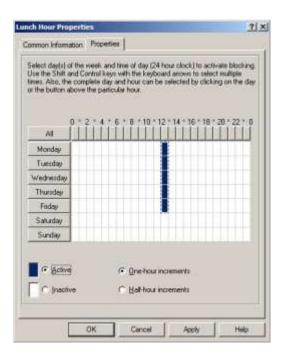


Figure 52 – Setting Active Schedule Period

4. Click 'OK' to save the changes and complete the creation of the Lunch Hour schedule

Apply the Quota to Users:

1. Navigate to the Custom Access Policy that is applied to the desired users, or create a new Custom Access Policy to apply the quota. In this example, we will create a new Custom Access Policy for the quota.



Figure 53 - Custom Access Policy For Schedule Application

2. We can now follow the steps included in Apply a Quota to a Custom Access Policy:, while utilizing the newly-created Lunch Hour schedule in step 7 of the 'Apply a Quota to a Custom Access Policy:' section.
NOTE: The 'Apply To' tab of the Custom Access Policy must be configured with the necessary user group(s) in order to apply the quota as desired. In this example, we would add the 'Domain Users' group in order to apply the filter to all authenticated domain users.

Apply a Bandwidth Quota for Company Work Hours:

It may be desired to apply a bandwidth quota for a specific category or number of categories during work hours. Companies may want to enforce this type of quota in order to allow employees to certain categories like streaming audio during work hours, while at the same time ensuring that too much bandwidth is not utilized for web traffic to the categories. In order to apply a quota for a specific time of day, a custom schedule must be used.

Create a Custom Schedule:

To create a custom schedule:

1. Right-click 'Schedules' in the left-hand navigation menu of the bt-WebFilter management console, then click 'New' | 'Schedule...'

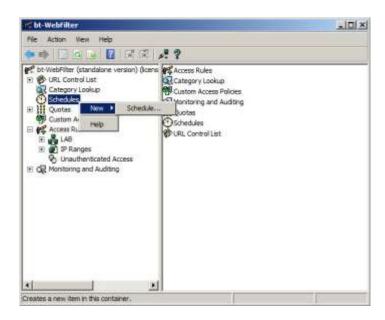


Figure 54 - Create New Schedule

2. Name the schedule as desired, then navigate to the 'Properties' tab in order to configure the active hours of the schedule



Figure 55 – New Schedule Properties Window

3. Select the hour or half-hour increments that will be active during the schedule, then click the 'Active' option. Since we are creating a Work hour schedule, we will mark the hours of 9-12, and 13-17 for Monday through Friday as active.

NOTE: You may click and drag through the boxes to select multiple boxes. You can also click the labeled boxes located at the edge of the chart to mark the respective row or column.

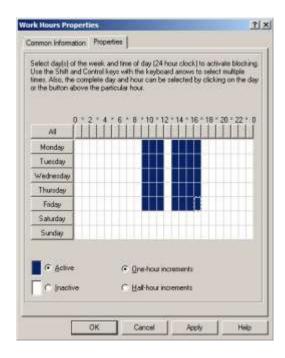


Figure 56 – Setting Active Schedule Period

4. Click 'OK' to save the changes and complete the creation of the Lunch Hour schedule

Apply the Quota to Users:

1. Navigate to the Custom Access Policy that is applied to the desired users, or create a new Custom Access Policy to apply the quota. In this example, we will create a new Custom Access Policy for the quota.



Figure 57 – Custom Access Policy to apply Quota with Schedule

2. We can now follow the steps included in the 'Apply a Quota to a Custom Access Policy:' section, while utilizing the newly-created Work Hours schedule in step 7.

NOTE: The 'Apply To' tab of the Custom Access Policy must be configured with the necessary user group(s) in order to apply the quota as desired. In this example, we would add the 'Domain Users' group in order to apply the filter to all authenticated domain users.