LCOS FX 10.9

Addendum

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LANCOM
SYSTEMS

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1 Addendum to LCOS FX version 10.9

This document describes the changes and enhancements in LCOS FX version 10.9 since the previous version.

2 BGP

The Border Gateway Protocol (BGP) is a dynamic path-vector routing protocol that is used to exchange routing information between autonomous systems (AS).

BGP is typically used for transmitting routing information between different ASs in the Internet (eBGP), or for transmitting information learned from eBGP within an AS (iBGP).

A new **BGP** menu item has been added under **Network** > **Routing**, which allows the user to access the BGP settings.

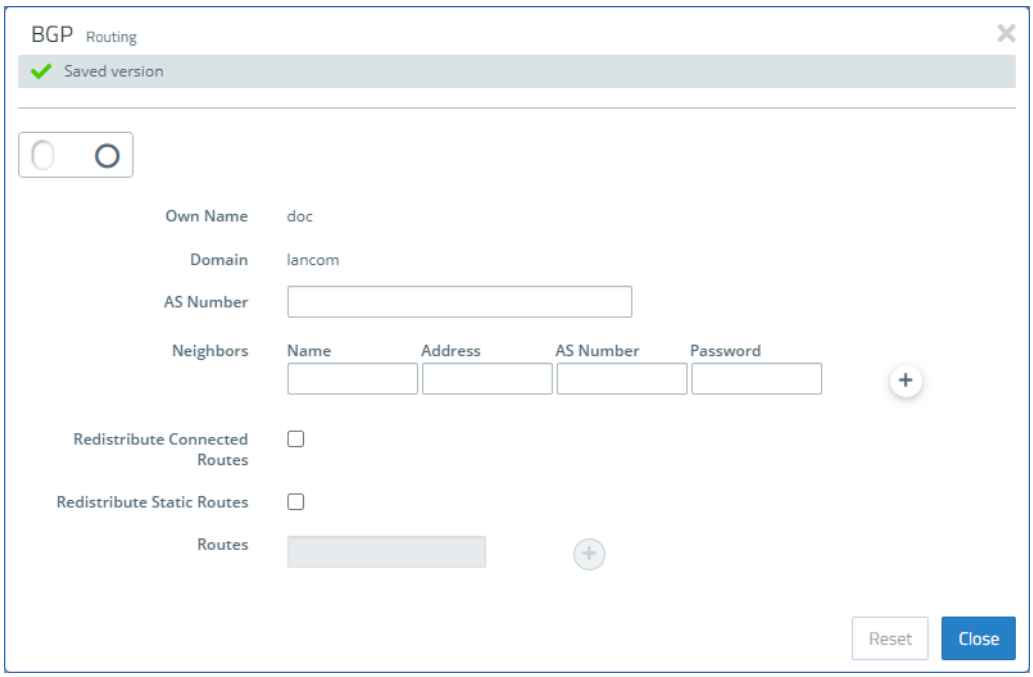

Figure 1: Network > Routing > BGP

2.1 BGP Settings

Under **Network** > **Routing** > **BGP** you can configure the BGP settings of the firewall.

In the **BGP** editing window you can configure the following elements:

Input field	Description
I/0	A slider button indicates whether routing via BGP is currently enabled (**I**) or disabled (**0**). Click on the slider button to change this.
Own Name	The own name is displayed.
Domain	The own domain is displayed.
AS Number	Enter your own AS number here.
Neighbors	› **Name** – Enter the name of the BGP neighbor. › **Address** – Enter the IP address of the BGP neighbor. › **AS Number** – Enter the AS number of the BGP neighbor.

Input field	Description
	› **Password** – Enter the password / shared key for authentication with the BGP neighbor. Click ⊕ on the right to add your entry to the list of BGP neighbors.
Redistribute Connected Routes	Specify here whether the networks configured on the firewall should be distributed to all BGP neighbors.
Redistribute Static Routes	Specify here whether the networks configured below should be distributed to all BGP neighbors.
Routes	Specify here the networks to be announced via BGP. Click ⊕ on the right to add your entry to the list of routes.

If you change any settings, click **Save** to store your changes or **Reset** to discard them. Then click **Close** to quit the editing window.

3 BGP Status

In the **BGP Status** window you can view the BGP status in three tables.

Navigate to **Monitoring & Statistics** > **BGP Status** to open a window displaying these tables.

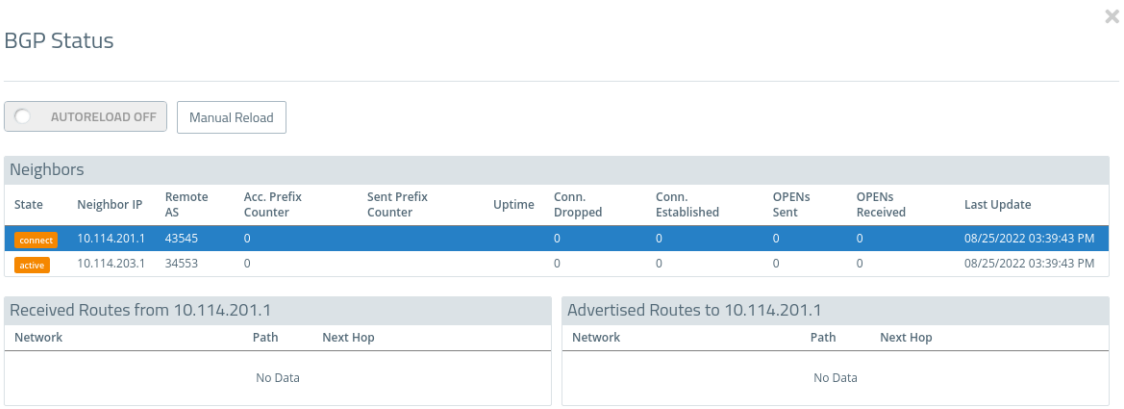

Figure 2: Monitoring & Statistics > BGP Status

The upper "neighbor" table contains information about the neighbors configured on the firewall:

Column	Description
State	Status of the BGP session, can take the following values: › established: BGP can communicate with the peer, status green › connect: BGP waits until the TCP connection can be established, status orange › active: BGP is waiting for a connection attempt from the peer, status orange › opensent: BGP is waiting for an OPEN message from the peer, status orange › openconfirm: BGP is waiting for KEEPALIVE or NOTIFICATION messages, status orange. › idle: In state idle, the router is currently not trying to set up a BGP session. Reasons for this can be that there is no route towards the neighbor, or the neighbor refused an earlier connection attempt, status red
Neighbor IP	Displays the neighbor IP.
Remote AS	Displays the AS of the neighbor.
Accepted Prefix Counter	Displays the number of accepted prefixes.
Sent Prefix Counter	Displays the number of prefixes sent.
Uptime	Displays the runtime of the BGP session.
Connections Dropped	Displays the number of dropped connections.
Connections Established	Displays the number of connections established.
Opens Send	Displays the number of openings sent.
Opens Received	Displays the number of openings received.
Last Update	Displays the timestamp of the last update.

The bottom two tables are displayed when a row in the neighbor table is clicked. The tables show the routes received from or sent to the neighbor.

Table 1: Received Routes

Column	Description
Network	The network of the selected BGP neighbor for received routes.
Path	The neighbor AS of the selected BGP neighbor for received routes.
Next Hop	The next IP address of the selected BGP neighbor for advertised routes.

Table 2: Advertised Routes

Column	Description
Network	The network of the selected BGP neighbor for advertised routes.
Path	The neighbor AS of the selected BGP neighbor for advertised routes.
Next Hop	The next IP address of the selected BGP neighbor for advertised routes.

Click **Reload** to refresh the connections list in the table.

The **Close** button at the bottom of the editor panel allows you to shut the panel.

4 DNS web filter

As of LCOS FX version 10.9, it is possible to operate the **URL / Content Filter** on the basis of DNS. This means that DNS queries passing through the DNS server of the LANCOM R&S®Unified Firewall are classified and filtered according to their categories or configured blacklists and whitelists. For the use of the DNS filter also for HTTPS connections no installation of certificates on the client devices is necessary.

In the desktop connections dialog, a new selection field for **Web Filter Mode** has been added under the **URL / Content Filter** tab.

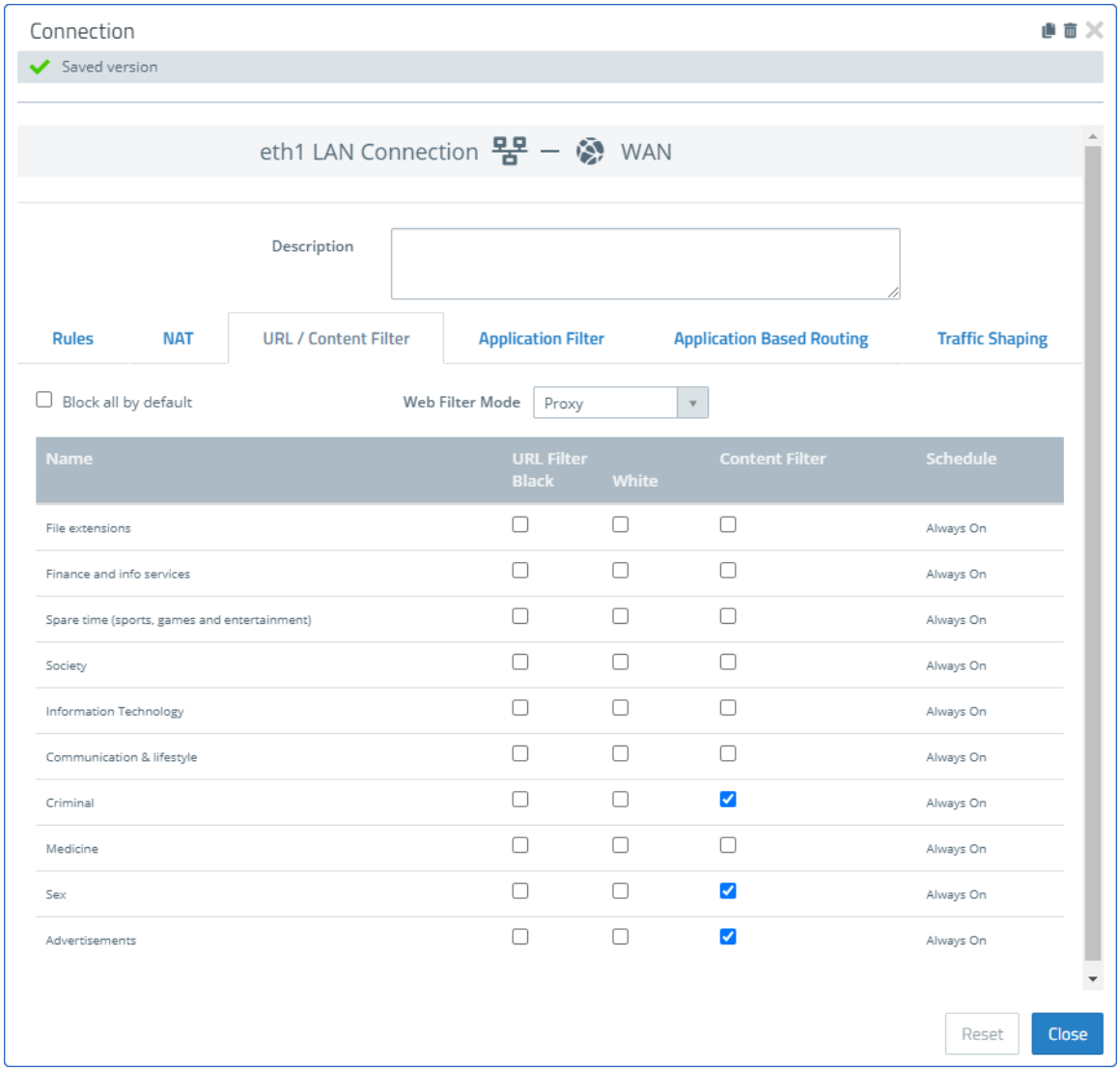

Figure 3: Connection > URL / Content Filter > Web Filter Mode

Input field	Description
Web Filter Mode	You have the choice between the following modes: › **Proxy** – Default mode for the **URL / Content Filter**.

Input field	Description
	› **DNS** – Operate **URL / Content Filter** based on DNS. This means that DNS queries passing through the DNS server of the LANCOM R&S®Unified Firewall are classified and filtered according to their categories or configured blacklists and whitelists. The same profiles are used as for **URL / Content Filter** via the HTTP / HTTPS proxy. For the use of the DNS filter also for HTTPS connections no installation of certificates on the client devices is necessary. However, this also results in the following limitations: › Filtering is done on the domain, not on the URL. › No block page is displayed and it is not possible to use the override mode. › Filtering is performed only when the DNS request passes through the firewall. › **Proxy and DNS** – A combination of the above modes.

5 Send debug data

As of LCOS FX version 10.9 there is the possibility in the help menu to send debug data on request. To do this, you must specify the number of a support ticket with an associated password. The LANCOM R&S®Unified Firewall then generates a file containing all configuration settings and logs. The file is encrypted with the password and stored on a server accessible to support.

The top area shows the last three events where debug data was sent.

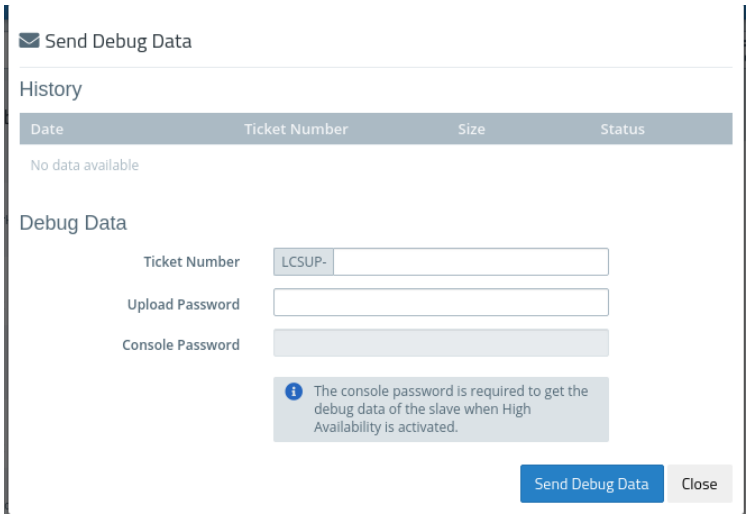

Figure 4: Help > Send Debug Data