The whole series of the firewalls and Unified Security Gateway from ZyXEL are designed to be able to use various external authentication servers like RADIUS, LDAP or Active Directory servers.

Strong authentication can be used to set up VPN, for SSL and SSL-VPN login and also to be able to enable some specific rules in the firewall.

Adding a new RADIUS server

In the **Configuration** menu, expand the **Object** option, click on **AAA Server** and in the **RADIUS** tab, click on **+ Add** and add your radius server by specifying:

- a name
- a description
- the server address
- the authentication port (1812)
- the timeout (10 seconds is fine)
- a NAS IP Address (127.0.0.1 is fine, it's just considered as an additional attribute)
- keep the "Case-sensitive User Names" activated
- the shared secret key (defined in **multiOTP** when you have added the device)
- a Group Membership Attribute (Filter-Id(11) is the default value)
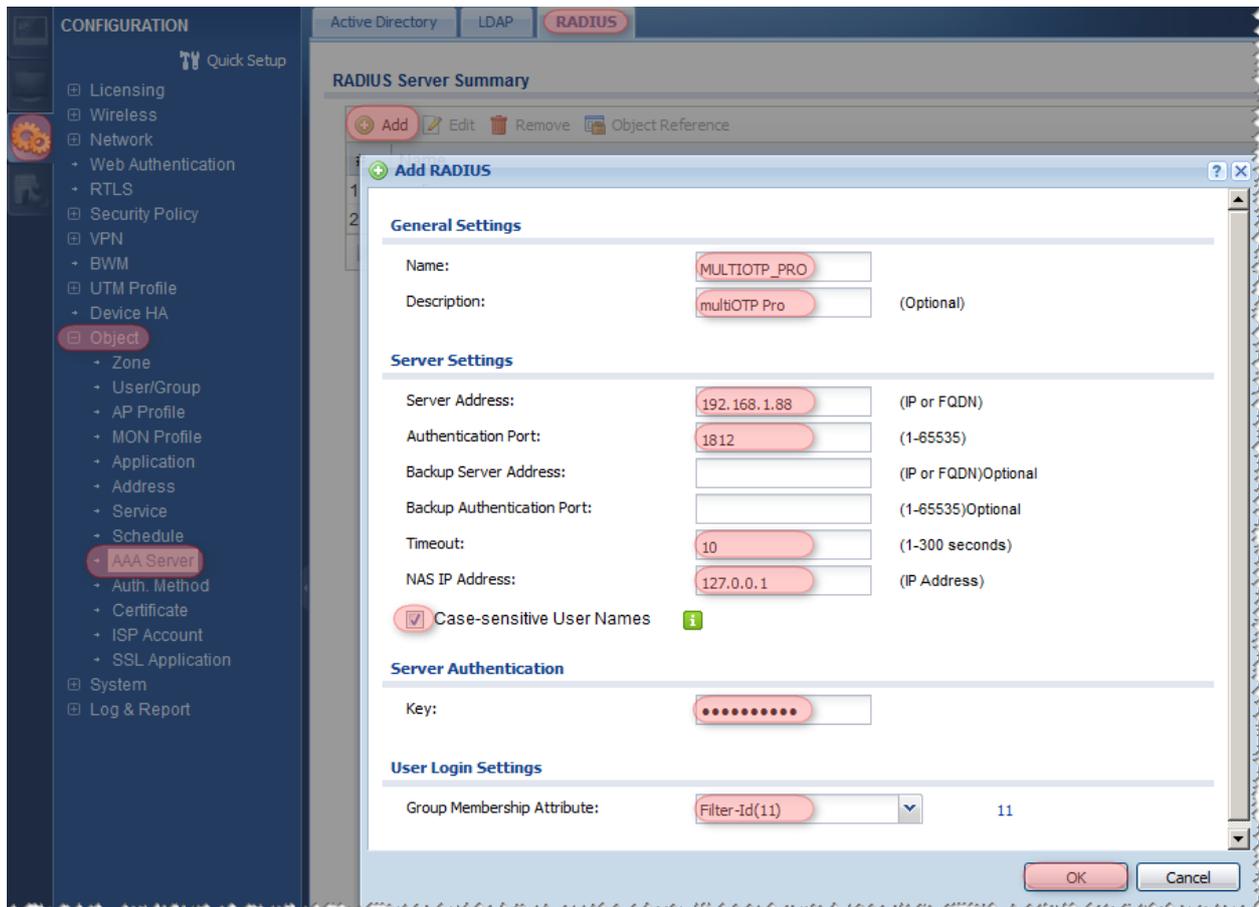
Be sure that your firewall corresponds to one of the device you have added in **multiOTP**, otherwise it will not work.

Creating an authentication method

In the **Configuration** menu, expand the **Object** option, click on **Auth. Method** and click on **+ Add** to add an authentication method.

You can for example define that the username and password must be checked first in the local firewall database, and if not accepted, then they are checked in your defined RADIUS server.
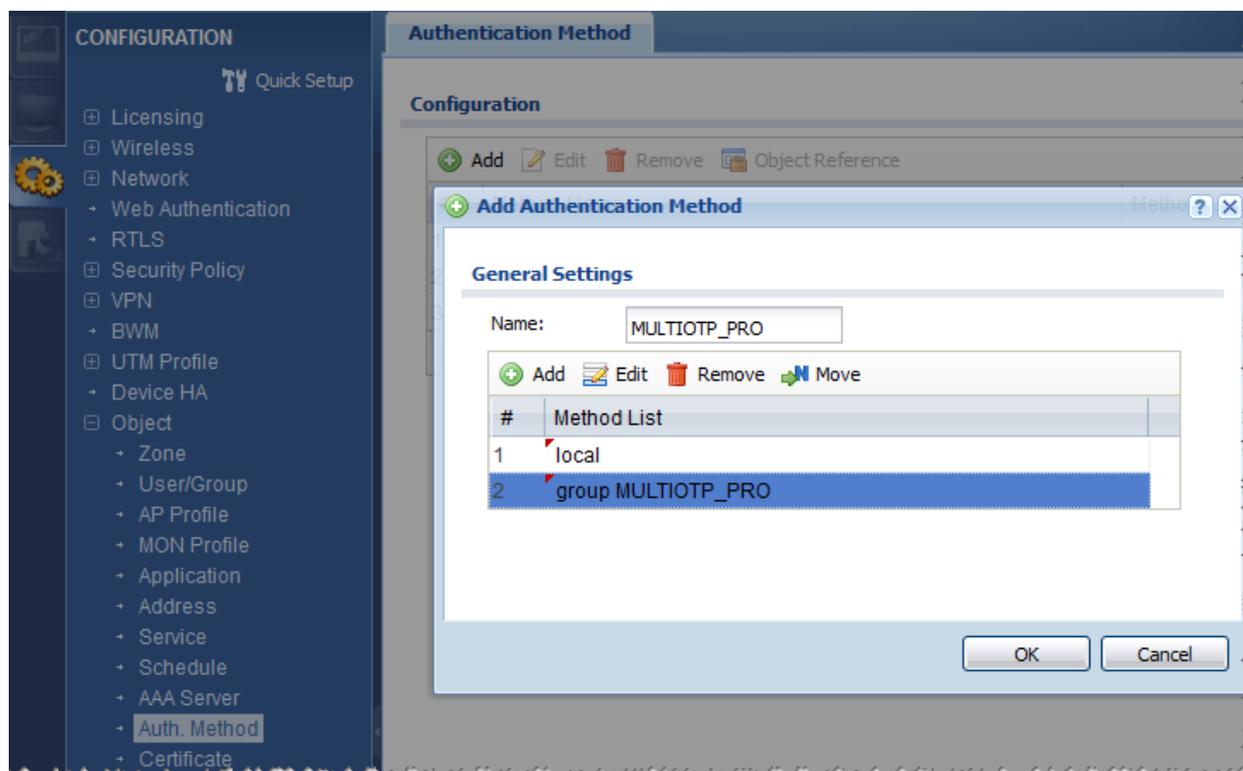
Select the right authentication method for each service

The new defined authentication method can be used for various services like:
- WWW login (and therefore for SSL-VPN login)
- VPN connections
- specific policy control rules

If used for policy control rules, the firewall can check that:
- an external radius user is connected (using the radius-users option)
- a specific radius user is connected (using a specific user defined in the firewall as an ext-user user type)
- a specific radius group of users is connected (using a specific user defined in the firewall as an ext-group-user)

Users are defined in the **Configuration** menu, expand the **Object** option, **User/Group**, **+ Add**.