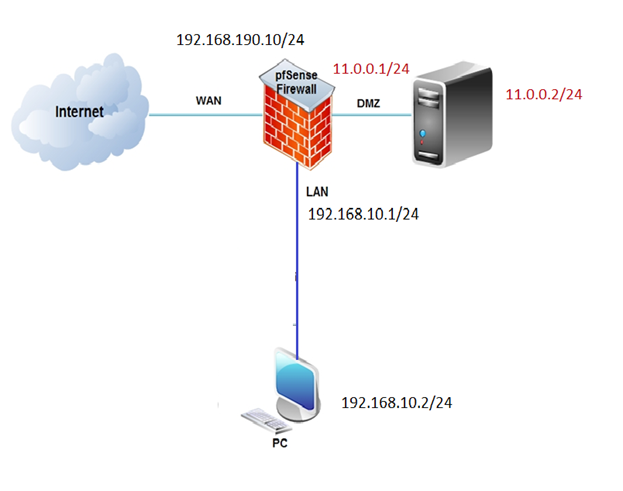
**THIẾT LẬP FIREWALL TOPOLOGY CHO MẠNG DOANH NGHIỆP**

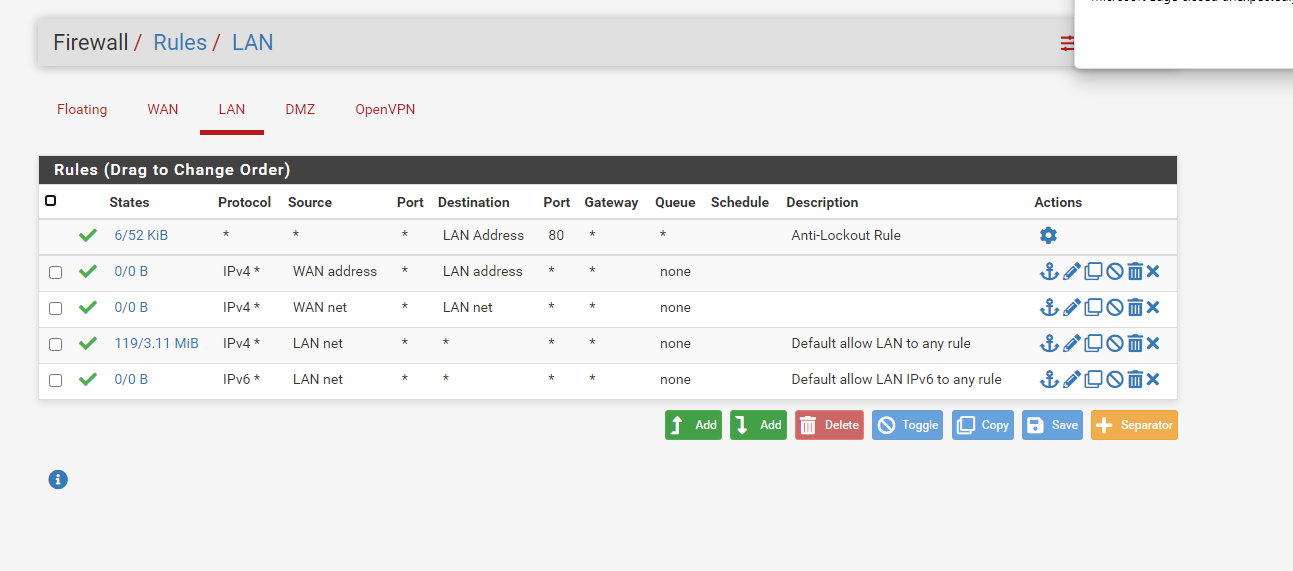
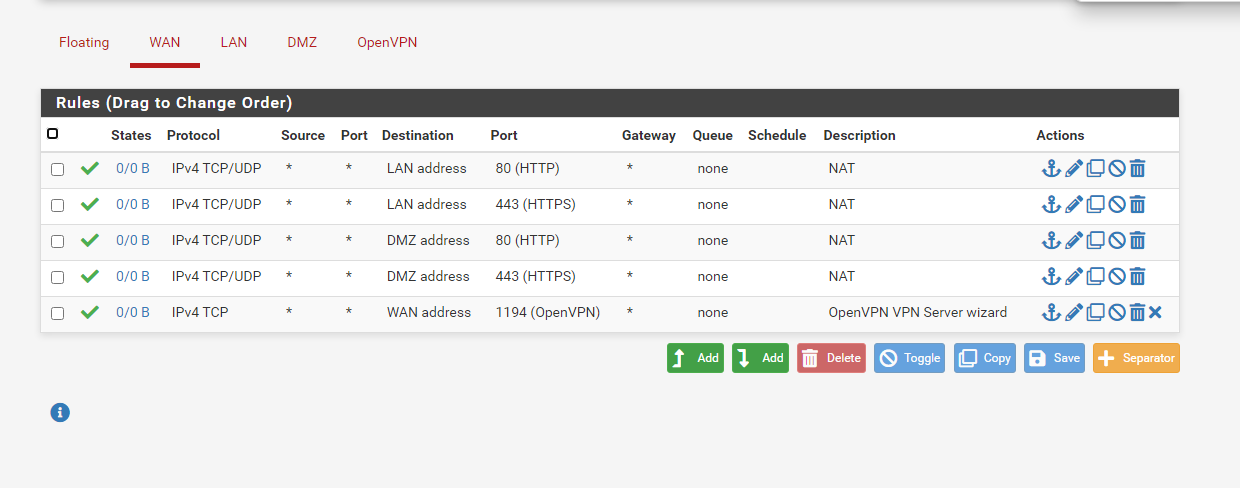
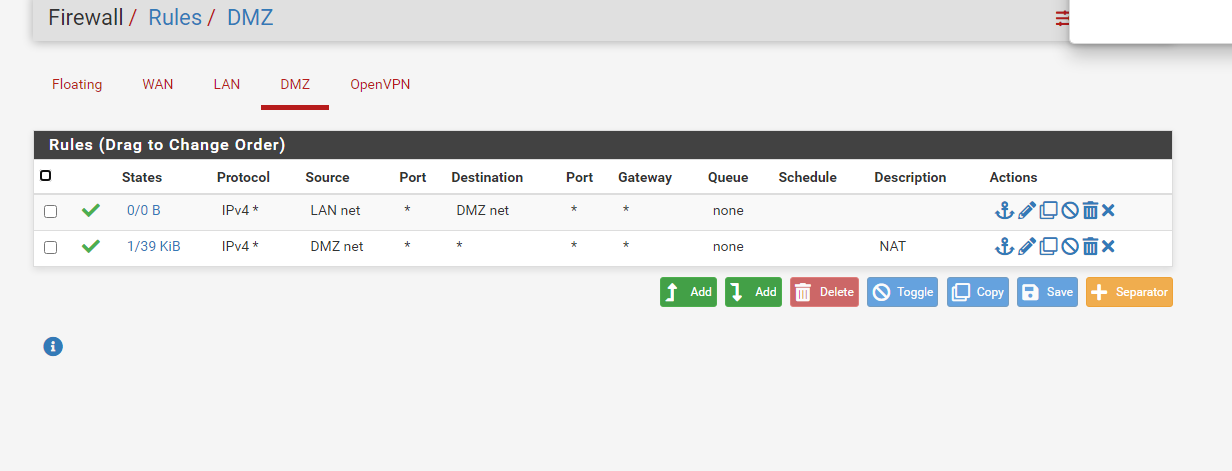
* Xây dựng mô hình mạng đơn giản sử dụng Winserver, pfsense,...
* Thiết lặp các hệ thống trong mạng AD, Domain, Web server, DHCP server,...
* Thiết lặp và cài đặt rule cho pfsense Nat, Allow, Block traffic, OpenVPN,...

**Mô hình mạng**

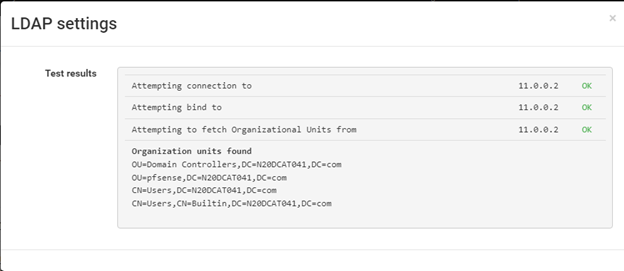
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**Một số tính năng của mô hình**

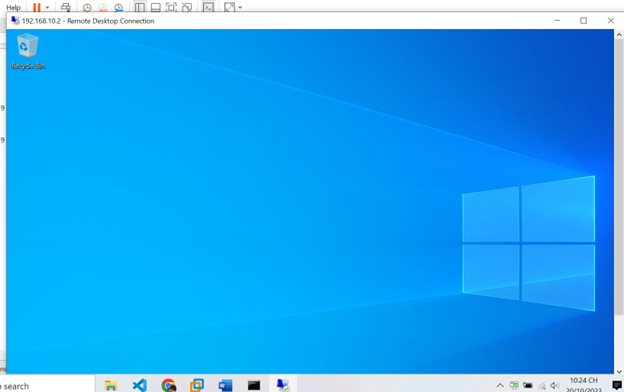
**Các rule của pfsense**

[](https://private-user-images.githubusercontent.com/125547239/326659093-dc452934-d6cd-434f-805f-68b242c56566.jpg?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3MTQ0NzA1ODMsIm5iZiI6MTcxNDQ3MDI4MywicGF0aCI6Ii8xMjU1NDcyMzkvMzI2NjU5MDkzLWRjNDUyOTM0LWQ2Y2QtNDM0Zi04MDVmLTY4YjI0MmM1NjU2Ni5qcGc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjQwNDMwJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI0MDQzMFQwOTQ0NDNaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT03ZDQyMWQxY2VkYzA1MWJhNzZlZWMyYTBjZmQxMDVjMzMwNTY0OGE4YzIzYTk5YTU4YjY4ZGFiNWQxNGFkMmVmJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCZhY3Rvcl9pZD0wJmtleV9pZD0wJnJlcG9faWQ9MCJ9.hSAX9a60kmwO4CooD-dWg_TCUrhJ8Xtrm4webA0rRhM) [](https://private-user-images.githubusercontent.com/125547239/326659102-e7b60d23-0617-4d05-80a5-064c9575a21f.jpg?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3MTQ0NzA1ODMsIm5iZiI6MTcxNDQ3MDI4MywicGF0aCI6Ii8xMjU1NDcyMzkvMzI2NjU5MTAyLWU3YjYwZDIzLTA2MTctNGQwNS04MGE1LTA2NGM5NTc1YTIxZi5qcGc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjQwNDMwJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI0MDQzMFQwOTQ0NDNaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT04NTE5MWE4NDVlMTM5YzMwNTM1OWQyYmNkMGEzNjA0YjU5YmE1MDIyNzMzM2Q5MDhlNDQ2MThiMmE5OTJjN2RjJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCZhY3Rvcl9pZD0wJmtleV9pZD0wJnJlcG9faWQ9MCJ9.esVsyRHzBZ7QoyULKlLpo8JA1m0Dc7YIj6kFIZ1rUh8) [](https://private-user-images.githubusercontent.com/125547239/326659098-fa62f7ef-5215-44df-b054-0d8ab98a1d5c.jpg?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3MTQ0NzA1ODMsIm5iZiI6MTcxNDQ3MDI4MywicGF0aCI6Ii8xMjU1NDcyMzkvMzI2NjU5MDk4LWZhNjJmN2VmLTUyMTUtNDRkZi1iMDU0LTBkOGFiOThhMWQ1Yy5qcGc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjQwNDMwJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI0MDQzMFQwOTQ0NDNaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT04ZWMyMTQ0MjFkODM1ODIyMjM0MzlhZTNlMWQzNzBkNGQzNTRmMDRhNTNkNTQwZDEzMzY0OGZkZjA4NzU5YzVkJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCZhY3Rvcl9pZD0wJmtleV9pZD0wJnJlcG9faWQ9MCJ9.p06wQ_eM1-NpSs6EdLZrKSd4p9iWwDxkbgLCNzp4Suc)

**Liên kết tài khoản AD của windows server với pfsense bằng LDAP**

[](https://private-user-images.githubusercontent.com/125547239/326658585-151ec508-41cc-41b2-bce7-41aa963f6e3d.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3MTQ0NzA1ODMsIm5iZiI6MTcxNDQ3MDI4MywicGF0aCI6Ii8xMjU1NDcyMzkvMzI2NjU4NTg1LTE1MWVjNTA4LTQxY2MtNDFiMi1iY2U3LTQxYWE5NjNmNmUzZC5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjQwNDMwJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI0MDQzMFQwOTQ0NDNaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1iMjFmOWQxOTllOWNjY2I2MTE4MmUzMTIyYWJiMGI1OGQwODNmMzk2ZWU3ZGQyMzc4N2RkZTRiNzkzNDg2OTliJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCZhY3Rvcl9pZD0wJmtleV9pZD0wJnJlcG9faWQ9MCJ9.GAMxBD-eiba7F3PAZsfoeHdK3Ps2y2yruq7mVTatdk4)

**Remote Desktop từ mạng bên ngoài thông qua OpenVPN**

[](https://private-user-images.githubusercontent.com/125547239/326658281-13219ddd-a6e2-47cc-b8f8-9bcfdd2830f2.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3MTQ0NzA1ODMsIm5iZiI6MTcxNDQ3MDI4MywicGF0aCI6Ii8xMjU1NDcyMzkvMzI2NjU4MjgxLTEzMjE5ZGRkLWE2ZTItNDdjYy1iOGY4LTliY2ZkZDI4MzBmMi5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjQwNDMwJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI0MDQzMFQwOTQ0NDNaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1iNzM4NzYzMjZkMTZiODUyYjM3MDk0YTBjZmNhNDZjNjllYTViMzZlZTM4MjliODIxNzdjMmZjMDhhMzM4OGQ2JlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCZhY3Rvcl9pZD0wJmtleV9pZD0wJnJlcG9faWQ9MCJ9.J3c68I7LBtaskMKM1mVj1JpNkyNSiMj7C65_LfxVXD8)