

Proxy auto-configuration for Windows and Linux

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Operation systems generally can digest and look for a `PAC file` ("proxy auto-config"). They look for it using `WPAD` ("web proxy auto-discovery protocol").

Windows 7 and 8 do that. Ubuntu can do that (can be activated within the `Network` settings). For Fedora and Korora it's the same.

The `PAC file` can look like this one which provides "[PAC with network and domain whitelisting](#)".

For `WPAD` to work automatically the file should be served using the the MIME type `application/x-ns-proxy-autoconfig`. Its location should be announced via `DHCP` and `DNS`.

The `DNS` should announce either an `A record` ("host record") or an `CNAME` for the domain name `wpad` which should resolve to the IP of the machine that serves the `PAC file`. All in all it should be possible to access it over port `80` using `http://wpad.[local_domain]/proxy.pac`.

Using `DHCP` the file can be made available using any address and port. On a Linux machine the responsible configuration file `/etc/dhcp/dhcpd.conf` could look like this:

```
option local-proxy-config code 252 = text;
...
subnet 192.168.0.0 netmask 255.255.255.0 {
    range 192.168.0.100 192.168.0.200;
    ...
    option local-proxy-config
    "http://www.example.org/proxy.pac";
}
```

References

- [Web Proxy Autodiscovery Protocol \(wikipedia.org\)](https://en.wikipedia.org/wiki/Web_Proxy_Autodiscovery_Protocol)
- [Configuring Web proxy clients... \(technet.microsoft.com\)](https://technet.microsoft.com/en-us/library/cc756686.aspx)