

# Univention Corporate Server - Extended IP and network management documentation

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## 1 Advanced proxy configuration

### 1.1 Cascading of proxies

In some scenarios, cascading of proxy servers may be required. In such a setup, individual proxy servers access logically superordinate proxy servers when web sites are opened, which then fetch the requested data from the internet. This allows creation of a hierarchical structure of proxy servers and, for example, the operation of a central cache in a company's headquarters that the proxy servers at the individual company sites can access.

The superordinate proxy server is referred to as a *parent proxy*. The parent proxy can be specified via the Univention Configuration Registry variables `squid/parent/host` (IP address or hostname) and `squid/parent/port` (port number).

Proxy requests from computers in the proxy server's local network are answered directly and not forwarded to the parent proxy. If additional networks should be excluded from forwarding to the parent proxy, these can be specified via the Univention Configuration Registry Variable `squid/parent/directnetworks`. When doing so, the CIDR notation must be used (e.g. `192.0.2.0/24`); several networks should be separated by blank spaces.

## 1.2 Operation as a transparent proxy

It is possible to configure Squid as a transparent proxy. This can help avoid configuring the proxy server in all application programs. When using a transparent proxy, all unencrypted web queries are automatically rerouted through the proxy server.

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**Note:** This only works for unencrypted web traffic, not for `https`.

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**Note:** LDAP authentication on the proxy server must not be enabled.

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The following configuration steps need to be made:

- The proxy server must be configured as the default gateway on all clients.
- The proxy server must be configured to use IP forwarding.

```
$ echo "net.ipv4.ip_forward = 1" >/etc/sysctl.d/ip_forward.conf
$ sysctl --system
```

- The Univention Configuration Registry Variable `squid/transparentproxy` must be set to `yes` on the proxy server. After that Univention Firewall and Squid need to be restarted:

```
$ systemctl restart univention-firewall squid
```

This enables packet filter rules which redirect all queries for the web ports to the proxy server.

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