

OpenVPN for eduVPN

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OpenVPN-nl

- Uses /dev/random and not /dev/urandom?
- Minimal system uptime first;
- PRNG fiddling (entropy size);
- **tls-cipher:**
 - TLS-DHE-RSA-WITH-AES-256-GCM-SHA384
 - TLS-DHE-RSA-WITH-AES-256-CBC-SHA256
 - TLS-DHE-RSA-WITH-AES-256-CBC-SHA
- **cipher:** AES-256-CBC
- **auth:** SHA256
- **prng:** SHA256

eduVPN 1.0 (OpenVPN 2.4)

- OpenVPN \geq 2.3 clients;
- **tls-cipher:**
 - TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384 (OpenSSL 1.0.1+, or PolarSSL 1.3+)
- **auth:** SHA256
- **cipher:** AES-256-CBC
 - OpenVPN 2.4 clients will use AES-256-GCM (via NCP)
- Other:
 - **tls-auth**
 - **tls-version-min:** 1.2
 - **dh:** none (enforces ECDHE)

eduVPN 2.0 (OpenVPN 2.4)

- OpenVPN \geq 2.4 clients;
- Use EC for CA as well?
 - Probably not...
- **tls-cipher:**
 - TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384 (OpenSSL 1.0.1+, or PolarSSL 1.3+)
 - TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384 (?)
- **cipher:** AES-256-GCM only (disable NCP?)
- **auth:** SHA256 (SHA384?)
- Other:
 - **tls-crypt** (instead of **tls-auth**, breaks existing client configurations, and does not yet work on OpenVPN Connect (iOS/Android), NetworkManager)