nevisProxy – Secure Web Access

Teaser

nevisProxy is an entry gateway with an integrated web application firewall (WAF). nevisProxy controls user access. Its goal is to protect sensitive data, applications, services, and systems against internal and external threats, without compromising on user-friendliness.

Benefits

nevisProxy combines user identification & authentication, session handling, connection establishment as well as web application firewall functionality. There is no need to combine different products with different characteristics to cover all aspects of secure web access; nevisProxy offers an **all-in-one secure web access solution**. This makes the product **easy to implement, to operate and to use**.

Sign on just once; be protected from end-to-end

All web traffic to and from your applications has to pass the nevisProxy server. This **facilitates end-to-end security**. Also, the users of your system access your applications via one single point, allowing them to have **to authenticate only once (single sign-on)**.

Customizable setup

Additionally, nevisProxy supports a wide range of authentication methods and firewall features, giving you the opportunity to **set up your secure web access according to your needs**. nevisProxy offers a **highly modular architecture**, enabling you to create exactly those functions you need. It is *you* who decides which features to implement, how and when, in order to achieve the highest possible security and protection for your web application infrastructure.

What is it about?

nevisProxy is the core element of NEVIS' secure web access. nevisProxy is a reverse proxy server that is placed in front of a company's web application servers. It intercepts all internet requests on their way from the client to the server. The goal is to protect your company's business applications against external threats, without compromising on user-friendliness.

nevisProxy has five main tasks. When a user sends a request to access an online application protected by NEVIS, nevisProxy

- establishes a secure connection between the client device, the proxy server and the back end,
- organizes the user identification and authentication,
- takes care of the session handling,
- filters the request content for abnormal, not-allowed or malicious elements,

and (if everything is fine),

- transfers the request to the correct business application server in the back end.

See Figure 1 for a graphical representation.

Switzerland ▪ AdNovum Informatik AG ▪ Roentgenstrasse 22 ▪ 8005 Zurich ▪ Switzerland ▪ +41 44 272 6111 ▪ info@nevis-security.ch ▪ www.nevis-security.ch
Singapore ▪ AdNovum Singapore Pte. Ltd. ▪ 3 Shenton Way ▪ #23-03 Shenton House ▪ Singapore 068805 ▪ +65 6536 0668 ▪ info@adnovum.sg ▪ www.nevis-security.sg
Germany ▪ NEVIS Security GmbH ▪ Maximilianstraße 35 A ▪ 80539 Munich ▪ Germany ▪ +49 89 2421 8180 2 ▪ info@nevis-security.de ▪ www.nevis-security.de

Main features

- Support of SSO (single sign-on)
- Connection establishment and protocol handling
- Protocol validation
- Identification and authentication in cooperation with nevisAuth
- Initialization of multi-step authentication
- Propagation of user identities incl. additional information (roles) on secure tokens (SAML, JWT, NEVIS SecToken, HTTP Header, etc.)
- Role-based authorization
- Session handling and management
- Cookie storage
- Protection against denial-of-service attacks, injection attacks and cross-site request forgery
- Content inspection and validation (HTML, XML, JSON, etc.)
- Input validation (blacklists, whitelists, ModSecurity web application firewall engine)
- URL signing and encryption

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Singapore ▪ AdNovum Singapore Pte. Ltd. ▪ 3 Shenton Way ▪ #23-03 Shenton House ▪ Singapore 068805 ▪ +65 6536 0668 ▪ info@adnovum.sg ▪ www.nevis-security.sg
Germany ▪ NEVIS Security GmbH ▪ Maximilianstraße 35 A ▪ 80539 Munich ▪ Germany ▪ +49 89 2421 8180 2 ▪ info@nevis-security.de ▪ www.nevis-security.de