Soliton®

NetAttest EPS

Out of the Box Network Security

NetAttest EPS is a powerful, all-in-one port-based network access control solution, enabling a Zero Trust Network strategy. It guides organisations to set up certificate-based user- and device authentication. Everything needed is available in a single package, including the necessary Public Key Infrastructure, a RADIUS server and a one-time password server.
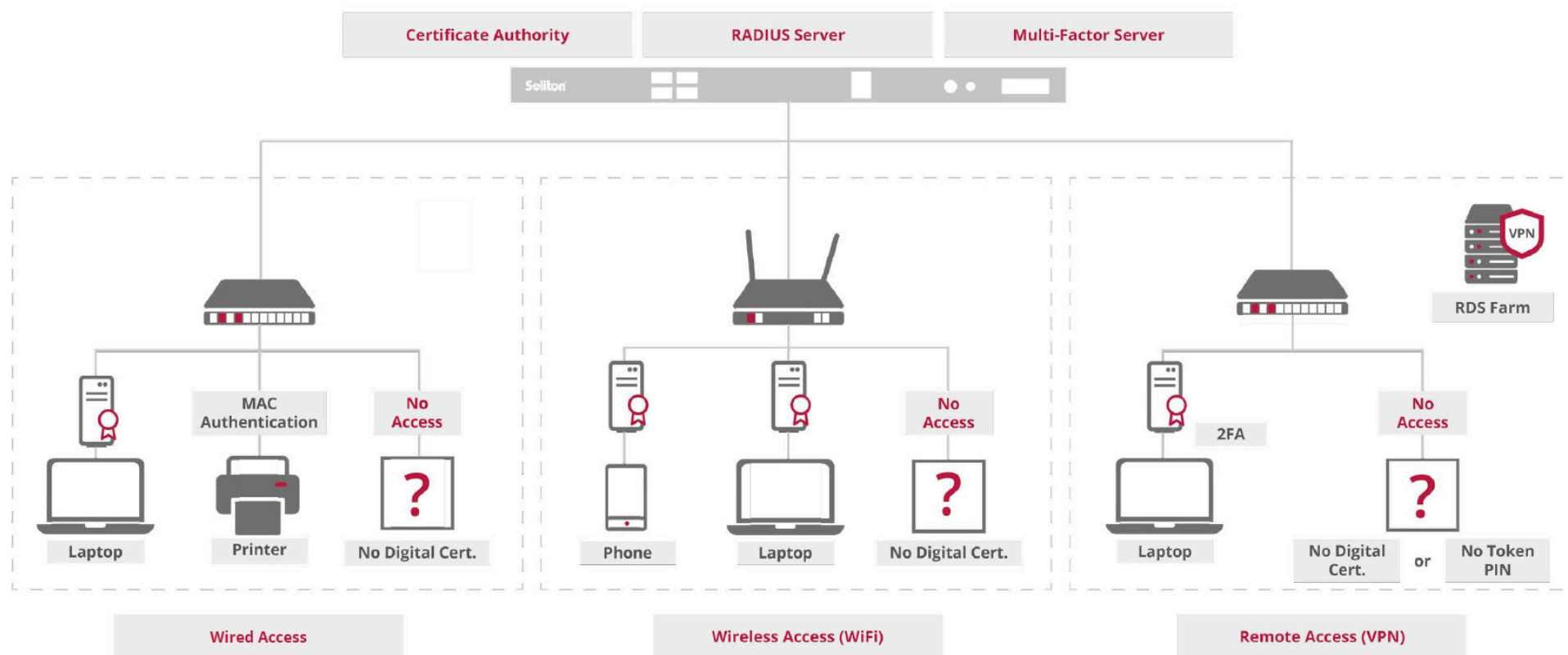
NetAttest EPS makes it easy for IT managers to toughen network security and create multiple network segments (VLANs) while users experience seamless access. At the same time, NetAttest EPS provides WiFi security at WPA Enterprise level. Plus, it contains a Mac address database for systems that are not able to provide certificates. NetAttest EPS supports certificate distribution to unmanage

d systems, including private and third-party devices from partners and contractors. The multiplatform* certificate management app (Soliton KeyManager) makes it easy for end-users to install certificates on their systems, eliminating the need for Mobile Device Management (MDM) to provide secured certificate distribution.

In detail, NetAttest EPS has everything you need for full network access control right out of the box. It's vendor agnostic and easily integrates with most third-party products, reducing the overall costs.

- Authentication, Authorisation, and Accounting for user resource requests
- EAP authentication including MAC address, one-time passwords, and certificate-based authentication
- Dedicated or subordinate certificate authority to integrate with existing Public Key Infrastructures
- Guest access for time-limited access to provide encrypted (free) WiFi
- Uncapped scalability, with all functionality

All-in-one Port-based Network Access Control Solution

Certificate Authority | **RADIUS Server** | **Multi-Factor Server**

Soliton

Wired Access
- MAC Authentication
- No Access
- Laptop
- Printer
- ? No Digital Cert.

Wireless Access (WiFi)
- No Access
- Phone
- Laptop
- ? No Digital Cert.

Remote Access (VPN)
- VPN
- RDS Farm
- 2FA
- No Access
- Laptop
- ? No Digital Cert. or No Token PIN

IEEE802.1X The Gold Standard of Network Authentication

Devices attempting to connect to a restricted LAN, WLAN or VPN require an authentication mechanism. IEEE 802.1X, an IEEE Standard for Port-Based Network Access Control (PNAC), provides protected authentication for secure network access. Soliton developed an all-in-one NAC solution based on certificate-based EAP-TLS with the combination of fool-proof certificate management.

NetAttest:

- No vendor lock-in
- Agentless approach
- Eliminates the use of Pre-Shared Keys
- Reduces risk for credential theft
- Prevents over-the-air credential theft and Man in the Middle attacks
- Forces users to go through an enrolment/onboarding process, ensuring their devices are configured correctly

Wizard-Guided Installation/ Management

Soliton's approach is always to take out complexity and enable easy control and management for IT. The wizard-guided feature of NetAttest EPS allows a quick, intuitive dashboard making it straightforward to install and maintain.

- Questionnaire on each possible configuration
- Context-based manuals provided in the portal
- Outstanding tasks based on questionnaire visible
- Task driven menu builder for optimised operation dashboard

Key Features

Full Back-Up And Redundancy

- Full back-up completes in less than 20 seconds
- Full restores take just 100 seconds
- Full configuration (including CA configuration) automatically shared daily between redundant installations
- Creates redundant installations of RADIUS servers to provide a contingency for Certificate Authority (CA) issues.

Easy to Make Redundant Installations

In case of a redundant configuration, the RADIUS server on both units are active. The full configuration, including the CA configuration, is automatically shared daily. In case the primary CA crashes, the backup CA will take over.

Scales with all functionalities

Up to 100,000 devices

User & Guest Access

Granular control for both users and guests for time-limited and secure access to encrypted (free) WiFi . When authenticated, the guest user is automatically directed to the right network resources.

NetAttest EPS also provides an internal user database for storing temporary employees or contractors.

All-in-one NAC

NetAttest EPS embeds features to optimise administering of security functions;

- Conducts user requests to access company's resources and provides Authentication, Authorization, & Accounting services.

- The built-in RADIUS server provides multiple EAP authentication methods, including MAC address, One-Time Passwords (OTP), certificate-based authentication, etc.

- Acts as a dedicated Certificate Authority (CA) issuing and managing certificates. It can also act as a subordinate CA which integrates into an existing Public Key Infrastructure.

Fast Deployment

Initial set up takes less than 5 minutes, full NAC is up and running in 30 minutes (depending on infrastructure).

100% vendor agnostic

By using industry-standard authentication technologies, NetAttest EPS avoids vendor lock-in issues.

Policy Control

Agentless providing role and device-based secure network access control for any device, employees, contractors and guests across any multi-vendor wired, wireless and VPN infrastructure.

Certificate Authority

Key features include:

- **Web-portal:** a self-service portal for end-users to request and download their own user- and device certificates. Approval can be automated or after approval by the administrator.

- **Online Certificate Status Protocol (OCSP) Responder:** The CA offers OCSP for easy checking of revocation of certificates.

- **Support of Simple Certificate Enrolment Protocol (SCEP):** the embedded SCEP-server makes issuing digital certificates simple and scalable for other IT systems, such as MDM systems and third-party devices, that require a certificate for authentication.

- **Customizable Certificate Signing Request (CSR) templates:** The CSR templates include any data of extended key usage or key generation, including certificate validity period and renewal period.

- **Special-purpose certificates:** The CA allows the administrator to generate special purpose certificates such as Windows SmartCard, Code Signing and Domain Controller certificates.

Mac Address Database

With the MAC address feature, network administrators have a dedicated database available that allows the authentication of MAC addresses of non-802.1X supplicants. The database can store up to 200,000 MAC addresses.

Other features include:

- The MAC address feature automatically detects the non-IEEE 802.1X supplicants in the network and adds them to the safelist.

- The dedicated interface for registering new MAC addresses allows the administrator to add new devices to the network quickly.

Any Device – Same Deployment Process

Use the NetAttest EPS unified deployment process to distribute and install digital certificates on any device.

The multiplatform* certificate management app (Soliton KeyManager) means the deployment process is always the same - regardless of device or operating systems.

Features include:

- **Proxy-server:** handles SCEP requests and adds additional security by protecting the internal Certificate Authority (NetAttest EPS) by URL rewriting and forwarding an SSL/TLS encrypted SCEP request to the internal Certificate Authority (NetAttest EPS.)

- **OTA protocol:** Embeds the Apple Over-The-Air (OTA) protocol supporting certificates on Apple devices.

Mobile Device Management Capabilities

For additional security, NetAttest EPS offers Mobile Device Management (MDM) features. It allows users to create a profile, including several MDM functions such as automatic locking after a predefined time and password prerequisites. Other functions include remote device lock and wipe and the possibility to obtain device information.

Soliton KeyManager App

Soliton KeyManager app makes it easy for network administrators to use short-life certificates for enhanced security. The application means users can self-service on any device, automatically requesting and installing user-anddevice certificates in just 3 steps. Soliton KeyManager app also sends users a warning when certificates are due to expire. Users can click the link to renew the certificate.

Other key benefits include:

- Soliton KeyManager adds security to the Simple Certificate Enrolment Protocol (SCEP) by including a unique secret per request and e.g. APID, IMEI, or UDID during the SCEP process.

- Soliton KeyManager can generate both a public and a private key. It stores the private key on the device in a format that cannot be exported, while the public key is forwarded to NetAttest EPS for authentication purposes.
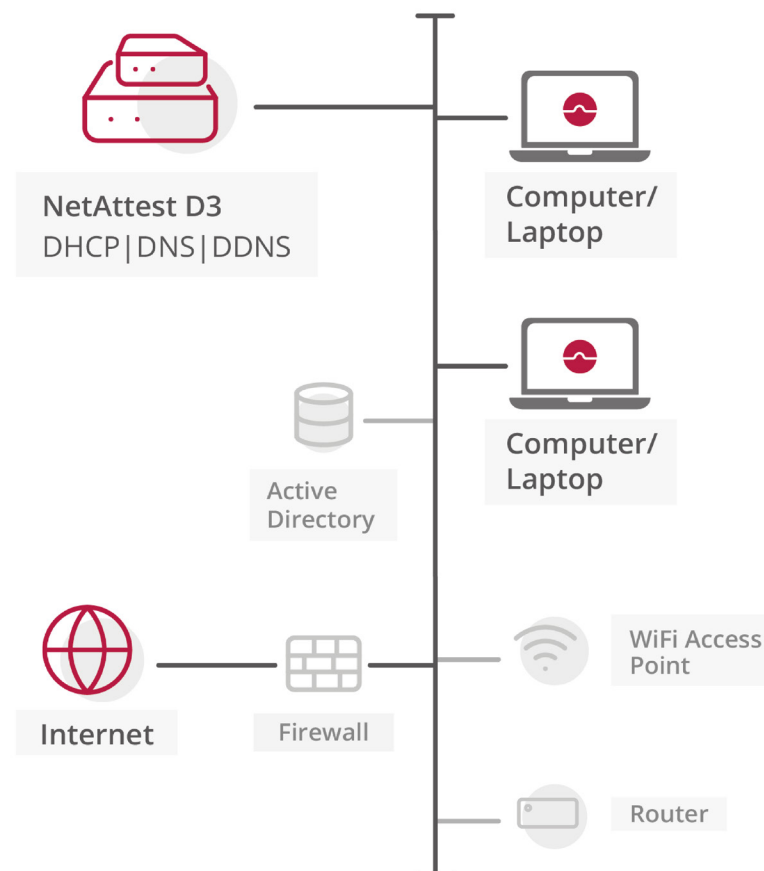
* Windows, Mac, iOS and Android

NetAttest D3

The NetAttest D3 is a dedicated high-speed DHCP, DNS and DDNS server designed to complement NetAttest EPS. It is a security component which checks connections go to the right place - every time.

With a high-speed DHCP IP address allocation speed that is ten times faster than competitive solutions and redundancy configurations intended for organisations that target zero downtime, the D3 enhances network connectivity and management.

NetAttest D3 is suitable for organisations that want to:

- Enhance their network security

- Ensure stability with dedicated tooling for DHCP, DNS and DDNS

- Create a highly available environment with no burden on management

- Operate a DHCP/DNS server that meets the needs of each specific location

- Implement DHCP/DNS servers at multiple locations at a low cost

Often the router, WiFi access points, Active Directory or firewall are deployed to these tasks, But when designing your network infrastructure, ideally products are only used for their original purpose, to prevent overstretched performance.

NetAttest D3
DHCP|DNS|DDNS

Computer/ Laptop

Computer/ Laptop

Active Directory

WiFi Access Point

Internet

Firewall

Router

Specifications NetAttest EPS

	Model Number	Model EPS-ST06A-A & EPS-ST06A-V	Model EPS-DX05A-A & EPS-DX05A-V
General	Client certificates	100–5,000	100–100,000
	Max. number of RADIUS clients	Unlimited (please select the model according to your environment, such as system load)	
Radius Extension	Supporting authentication protocol	EAP-TLS, EAP-MD5, EAP-PEAP (MS-CHAPv2, GTC), EAP TTLS (PAP, CHAP, MS-CHAP, MS-CHAPv2), PAP, CHAP, MS-CHAP, MS-CHAPv2	
	Redundancy	√	√
	One time password	√	√
	MAC address authentication	√	√
	Group profile	√	√
Certificate Authority (CA)	Issue external server certificate	√	√
	Max. number of certificates	20,000	400,000
	Extended CA function	√	√
External database	Windows domain	√	√
	External LDAP database	√	√
	RADIUS proxy	√	√
Log management	RADIUS accounting	√	√
	Log maintenance	x	√
	Other	SNMP (agent) NTP synchronisation Syslog (TCP/UDP) Support UPS	

Physical Appliance

Model	EPS-ST06A-A	EPS-DX05A-A
Form factor	EIA19 inch (incl. rack mount kit)	
Dimensions (W x D x H)	438 x 44 x 292 mm	443 x 44 x 386 mm
Network interface	10/100/1000BASE-T(X) Auto recognition & Auto-MDI-X 4 ports	
Weight	3.3 kg	7.2 kg
Power supply	90 ~ 264VAC, 47 ~ 63Hz	90 ~ 264VAC, 47 ~ 63Hz Redundancy (hot swap supported)
Max. power consumption	40VA	120 VA
Calorific value	136.4BTU/h 34.4kcal 40W	409.2BTU/h 103.1kcal 120W
Operating environment	Temperature 0 ~ 40°C Humidity 20 ~ 90% non-condensing	
Certifications	VCCI (Class A) FCC (Class A) CE, UL, RoHS	

Virtual Appliance

Model	EPS-ST06A-A	EPS-DX05-V
Supporting virtual platform	VMware ESXi 7.0 / 8.0 Microsoft Hyper-V : Windows Server 2016/2019/2022	
VMware virtual machine version	13	
Virtual machine image	OVA(VMWare ESXi) / Installer(Hyper-V)	
Number of CPU	4	
Memory size	8,192 MB	
HDD 1	4GB	
HDD 2	–	96GB
Network adapter	4	

- Supports redundancy with virtual and physical appliance.
- No support for displacement by using virtual platform function such as vMotion and VMwareFT (use the NetAttest EPS redundancy function)
- Support back-up/restore between virtual and physical appliance

Specifications NetAttest D3

Model Number		D3-SX15-A & D3-SX15-V	D3-ST82-A & D3-ST82-V
DHCP	Number of leased IP addresses	2,500	25,000
	Number of pool IP addresses	16,384	150,000
	Number of scopes	200	2,000
	Number of registered clients	2,500	25,000
	Number of static allocations	2,500	25,000
	DHCP performance *1	about 1,250 leases/sec	About 3,300 leases/sec
	IPv6 compatible	-	√
DNS	Number of records	Primary: 5,000 Secondary: 5,000	Primary: 50,000 Secondary: 50,000
	Number of zones	200	1,000
	DNS performance *1	About 23,000 queries/sec	About 100,000 queries/sec
	IPv6 compatible	√	√
	DNSSEC	√	√
Redundancy	DHCP service	√	√
	Network interface *2	-	√
Other functions		SNMP (agent) NTP (server) Syslog output UPS compatible	

D3 Physical Appliance

Model	D3-SX15-A	D3-ST82-A
Form factor	Desktop type	EIA 19 inch rack mount type
Dimensions (W x D x H)	165 × 43 × 106 mm	443 × 44 × 386 mm
Network interface	10/100/1000BASE-T(X) automatic recognition 4 ports (LAN3, LAN4 unused)	10/100/1000BASE-T(X) automatic detection 4 ports
Weight	0.65kg	7.1kg
Power supply	90-264Vac, 47-63Hz (only 90-135Vac supported)	90-264Vac,47-63Hz (only 90-135Vac supported), redundant (hot swappable)
Max. power consumption	22VA	120 VA
Calorific value	75BTU/h 18.9kcal 22W	409.2BTU/h 103.1kcal 120W
Operating environment	Temperature 0 ~ 40°C, Humidity 20 ~ 90% RH, non-condensing	
Certifications	VCCI Class B FCC Class B CE, UL, RoHS PSE (power adapter)	VCCI Class A FCC Class A CE, UL, RoHS PSE (power cable)

D3 Virtual Appliance

Model	D3-SX15-V	D3-ST82-V
Supporting virtual platform	VMware ESXi 6.5 / 6.7 / 7.0 Microsoft Hyper-V (tested on Windows Server 2016/2019/2022)	
VMware virtual machine version	13	
Virtual machine image	OVA (VMWare ESXi) / Installer (Hyper-V)	
Number of CPU	2	4
Memory size	2,048 MB	4,096 MB
HDD	4GB	
Network adapter	2	

EMEA Headquarter

Soliton Systems Europe N.V.

Barbara Strozzilaan 364 | 1083 HN Amsterdam | The Netherlands

+31 (0) 20 896 5841 | emea@solitonsystems.com | www.solitonsystems.com

Soliton®

Soliton Systems helps companies solve IT security challenges with a unique set of high quality, cost-effective products and solutions. As a global company with over 40 years of IT security experience, its solutions are deployed by many of the world's leading companies.