Pointsharp Enterprise

BENEFITS

- EASY ACCESS
- SECURITY
- MOBILE APPS

CHALLENGE

Cloud and mobility drives hybrid environments. Access to on-premises applications should be as easy as cloud applications.

SOLUTION

Don't make a difference in how your users´ access on-premises or cloud based applications.

INCLUDES

- On-Premises Apps
- Pointsharp Portals
- Single-Sign On
- User Authentication
- App DNA
- Conditional Access
- ActiveSync Security
- Infrastructure Protection
- Insight & Analytics

With everything included in Pointsharp MFA – the Pointsharp Enterprise allow your users to access on-premises applications in an easy and secure way that meet the requirements of your digital workplace. With Pointsharp Enterprise your users don't need to know if you applications are located on-premises or in the cloud, they login once and access all applications.

EASY ACCESS

Pointsharp Enterprise enable an easy and secure way to publish on-premises applications. Your users can access both cloud and on-premises applications with one login with e.g. the Pointsharp App Portal.

SECURITY

Pointsharp Enterprise protect the access to applications in your infrastructure with reverse proxy technology. The access is protected by user authentication and advanced policies. The authentication of the user can be based on all authentication options included in Pointsharp MFA like the Pointsharp Login App.

MOBILE APPS

With Pointsharp Enterprise you can allow mobile apps to access on-premises applications protected by access policies and smart authentication with Single-Sign On. Including special protection for mobile email and Exchange ActiveSync as well as Microsoft Outlook.

ON-PREMISES APP

With the Pointsharp Gateway, a reverse proxy, enable publishing of on-premises applications. It gives user's easy access to applications, as well as the organization control which users that are allowed access to which applications and with your requirements.
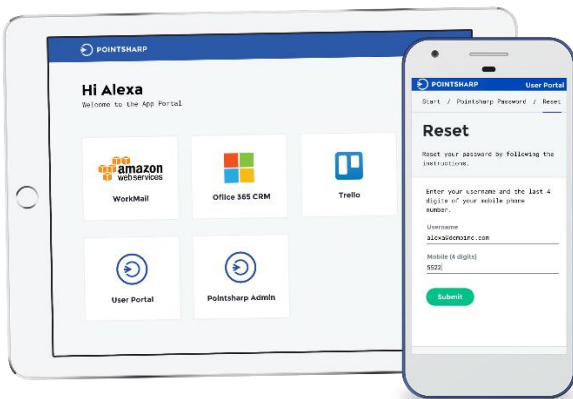

All applications based on HTTPS can be published.

- Web Portals e.g. Intranet, Webmail.
- PC/MAC Apps e.g. Microsoft Outlook.
- Mobile Apps e.g. mobile email, company apps.

POINTSHARP APP PORTAL

The Pointsharp App Portals can be published by the Pointsharp Gateway. Both access and authentication of the user is performed by Pointsharp.


- Admin Portal
- App Portal
- AD Password Reset
- Certificate Portal
- User Portal

SINGLE SIGN ON

With Pointsharp Enterprise your users get both access and Single Sign-On to all on-premises applications using Kerberos.

Cloud and On-Premises SSO

Combine Pointsharp Gateway, App Portal and Pointsharp ADFS integration. Your users don't need to know where the apps are located, they login once to the App Portal and get SSO to both on-premises and cloud applications.
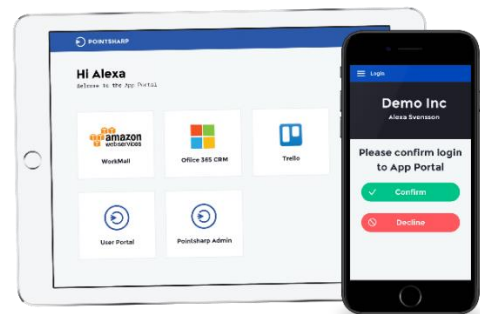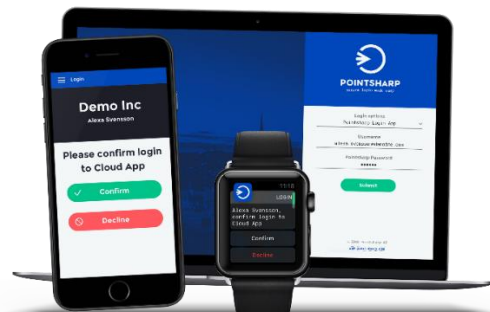

Smart Cards

With the Pointsharp Password/Pincode you can bridge a smart card environment and provide SSO from mobile devices that don't support Smart Cards.

USER AUTHENTICATION

All applications are protected and only users authenticated properly are allowed access. Pointsharp Gateway support following user authentication methods.
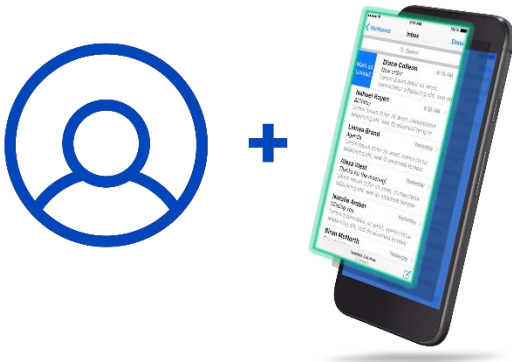

- AD/LDAPv3 Credentials
- Pointsharp Password
- Pointsharp Login App
- SMS and One-Time Password
- Google Authenticator One-Time Password

APP DNA

To allow an easier login experience for the end-user, unique information about the app (App DNA) can be used in combination with the user's credentials.

Email App DNA is combined with the user.

If the user credentials are stolen, it's not possible to login as the user without the valid App DNA which is unique per app and device. This can also be used as a cached Multi-Factor Authentication decision where the App DNA is registered securely using MFA.

- Exchange ActiveSync
- Exchange Outlook PC/MAC MAPI/EWS
- Skype for Business
- Web Browser

CONDITIONAL ACCESS

All access to applications published by Pointsharp Gateway is protected by policies unique for that application. Policies can be built up with a unique set of rules based on information about user and device.

- User Active Directory profile (Group/Attributes)
- User Authentication methods
- App information
- Device information

INFRASTRUCTURE PROTECTION

Pointsharp Gateway is a reverse proxy that ensure that no external access to internal infrastructure is allowed without being compliant to your organizations security policies and requirements.

Security Enforcement
- User Authentication with MFA
- Access Control
- Pre Authentication
- Brute Force & DoS Protection

INSIGHT & ANALYTICS

Pointsharp Dashboard visualize in real-time how user login and to what application. The Dashboard is interactive providing detailed information about users and more with just a click.

Centralized Control
All access to applications published by Pointsharp Gateway can be both granted and denied with centralized control. It's as easy to enable a user as to disable the user when required.

Cybercrime Activities
Pointsharp protects from Brute-Force and Denial-of-Service Attacks, with the Dashboard is also visualized.

Big Data
All information how user login is stored in a SQL database, allowing access from 3d party tools for more analytics.

ACTIVESYNC SECURITY

Pointsharp Gateway include specific functionality for mobile email with Exchange. The ActiveSync protocol is filtered providing more security and control of who, what devices and what content is allowed to be synchronized with Microsoft Exchange.
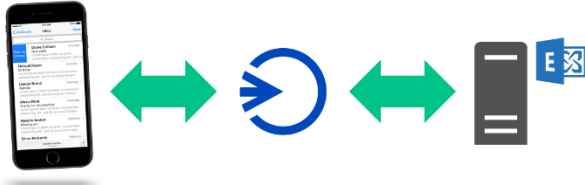
Security is applied in the protocol which is transparent to the user. There's no footprint on the user's devices. Based on the ActiveSync protocol means that all email clients that follow the specification are supported.

- iPhone/iPad (all iOS devices)
- Android (e.g. Samsung, Sony, Google, Huawei)
- Windows Phone, Windows 10

User Authentication

To ensure it's the right user synchronizing email the user can be authenticated with different methods and combinations.

- Domain Password
- Certificates
- Pointsharp Password/Pincode
- One Time Password
- App DNA

Example 1
Users are only allowed to synchronize with correct domain password + valid App DNA.

Example 2
Users are only allowed to synchronize using Pointsharp Password with an OTP appended in the password field, which is also combined with a valid App DNA. After 1 week the OTP has to be updated.

Access Control

To add to the security chain additional policies can be configured as global or user specific.

- Device type
- Number of devices
- OS level
- User profile

Example
A user member of a specific AD group is only allowed to synchronize 1 device and is has to be an iPhone X with the latest iOS.

Content Filter

- Email attachment, Contacts, Calendar, Tasks
- Email classification
- Antivirus & 0-day protection via ICAP
- Email signing & filtering

Account Protection

Pointsharp protect the user account by performing the authentication and if the domain password is used, validates it with Active Directory.

A user that change the domain password but forget to change on the mobile device, will never be locked out. Pointsharp see it's the same password that is wrong and will not forward that to the Active Directory.

- AD account lockout protection.
- Brute-force protection.
- Denial-of-Service protection.

TECHNICAL SUMMARY
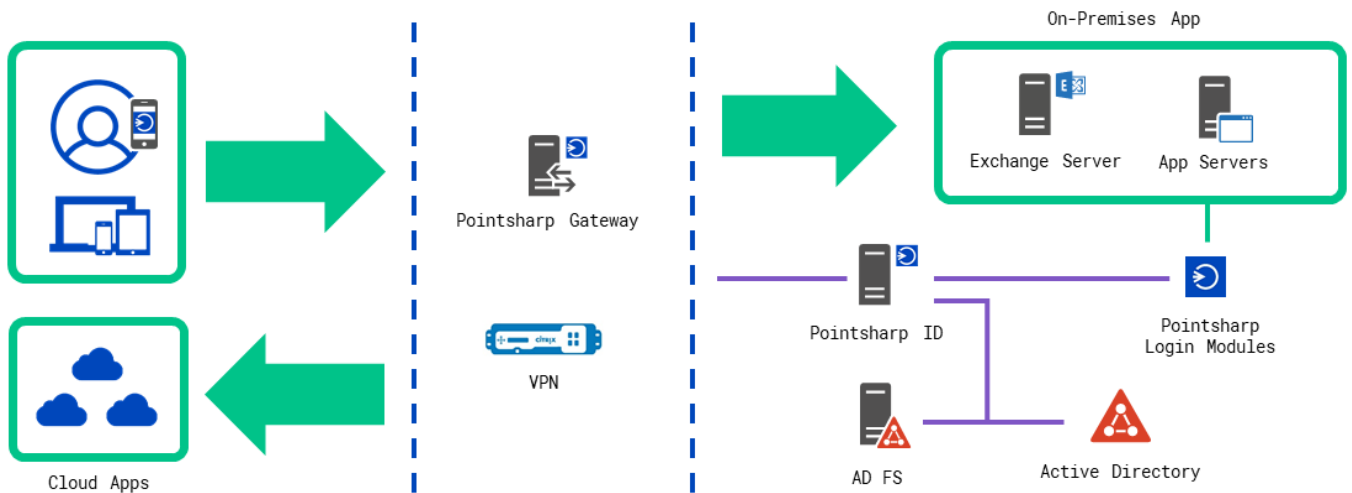
Pointsharp provide software that run on Windows Servers, with the choice of deploying in your on-premises or cloud infrastructure. A non-redundant deployment exist of two instances, the internal Pointsharp ID and the Pointsharp Gateway placed on a DMZ. It's a split security design that meet Enterprise security requirements. Redundancy is easily achieved by multiplying the servers.

Pointsharp ID

- Authentication Server.
- Read users from Active Directory (or LDAPv3).
- Store user information in Pointsharp User Storage (can be same AD). Encrypted with AES-256.
- Auditing information stored in SQL-Express or 3rd party SQL-database.
- Hosting User Portal, Admin Portal, App Portal, Password Reset and other web interfaces. Can be separated.
- APIs – RADIUS | Web Service | Power Shell.

Pointsharp Gateway

- Authentication Proxy for Pointsharp Login App.
- Publish Web and Mobile Apps
- Single Sign-On
- Runs on Microsoft IIS.

Pointsharp Login Modules

- Credential Provider for Windows Server, Remote Desktop, VDI solutions.
- IIS SSO Module

POINTSHARP SECURITY GATEWAY

Pointsharp Security Gateway runs as one or multiple modules on Pointsharp Gateway depending on functionality in place. Technically it's a reverse proxy built on Microsoft IIS with modules performing different functionalities.

Compared to other reverse proxies more focused on the network layer, Pointsharp Mobile Gateway is an application-layered reverse proxy, interacting with authentication and content to provide to secure the login and access for with focus on ease-of-use for the end user.

Redundancy

Minimum 2 of each Pointsharp Gateway and Pointsharp ID is required for a redundant setup.

Performance and Scaling

Pointsharp ID and Pointsharp Gateway are built to scale. In larger deployments where a lot of access to application are performed it easy to add more Pointsharp Gateways as required with an overtime increased traffic load. There are no requirements to have one Pointsharp Gateway per Pointsharp ID, so e.g. 4 Pointsharp Gateways can be served by 2 Pointsharp ID.

Load Balancing

Externally Pointsharp recommends a 3rd party load balancer like Citrix Netscaler, F5, Kemp or similar.

Published Applications by Pointsharp Security Gateway can be load balanced.

- Round Robin
- Failover based on response code.