Evoko Workplace suite

Security Whitepaper Version 1.0 (002)

Naso room manager Kleeo desk manager Workplace mobile app Workplace admin portal Naso setup app Naso mobile app Naso admin portal Naso outlook add-in Guava ipad app

About Evoko Wokplace suite

Our room booking solutions have been used worldwide since 2010 in many industries where security is of the highest level. This list includes governments, banks, and defence contractors. Security is a top priority for Evoko and the Workplace suite has been specifically developed to be a highly secure, enterprise grade solution, following the best global security practices and guidelines.

The Workplace suite is a set of software applications and a custom-built booking device made to help organizations enable business advantage from worksplace optimisation.

The hardware and software used by the Naso room manager is custom built, using a hardened software specifically designed for Naso room manager.

The hardware and software used by the Kleeo desk manger is custom built, using a hardened software specifically designed for Kleeo desk mangar.

As part of our Testing, Security and Quality Assurance processes, we have also had external security experts perform penetration testing (PEN-testing) on the system before it was released. These tests include a 360-degree assessment of all components included in the solution, e.g.

- Attack Surface Mapping
- Embedded Device testing
- Firmware Reverse Engineering and analysis
- Web, Mobile and Cloud endpoints assessment
- Radio communication security assessment

With the ever-changing threat landscape, building and maintaining a system with the highest security demands is an ongoing process. New attack vectors and tools are invented by hackers all the time. To ensure the most robust cyber-attack resilience, we have alongside our regular internal testing processes, engaged an independent company to carry out security reviews on new software releases and to regularly review hardware installations to ensure ongoing compliance with our security requirements and industry standards. These tests not only simulate real-world installations but, to ensure the highest levels of security, they go even further. With access to all source code, they can search for vulnerabilities and variations that would not be available to a regular hacker. Every new software release improves security further.

We do not share our PEN-test reports as the testers we use (unlike a hacker) have had access to the actual source code. This is for our internal use only and is sensitive, confidential, and proprietary information that is not shared.

New features, performance improvements, and bugfixes are deployed multiple times per month. While agile, our development cycle relies heavily on a strict system for code quality and security. All code is peer reviewed and requires multiple levels of acceptance on test/staging environments prior to deployment on production.



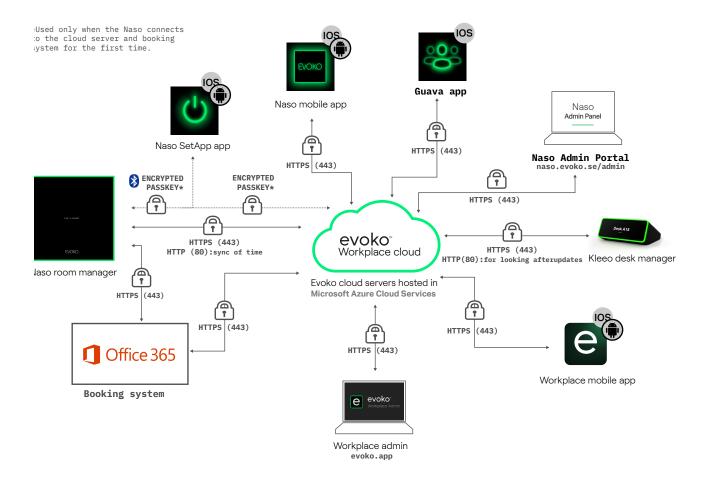
System architecture

Network Architecture

The diagram below provides a high-level overview of the Cloud suite architecture and external entities connected to our environment.

Ports

All traffic is sent over encrypted port 443 except for Naso room manager and Kleeo desk manager initialisation and boot sequences, which require port 80 to sync time prior to switching to port 443.





Hardware devices

Naso room manager

Connectivity

The Naso room manager connects to the network using Ethernet or Wi-Fi. For added security, you can isolate the installation on a VLAN (having the units on a separate virtual network with restricted access). The Naso room manager support 802.1x

The devices are powered by Power over Ethernet (802.3at PD type 1, 13W) or by a separate power supply. No other physical ports than RJ45 and DC barrel jack are exposed which eliminates the risk for tampering even on-site.

Setup

On first installation, each device needs to be connected to the Cloud suite using the smartphone app Naso SetApp ("claiming the device"). Not until the device is claimed it will connect to the Cloud suite or access the network. To claim a device, a user must sign into the Naso SetApp using their O365 credentials and the device can only be connected to the Cloud suite associated with the domain for that O365 account. The claiming process also uses two-step verification to avoid Man In the Middle (MITM) attacks.

Data access

The Naso room managers always boot directly into the application, and from within the application there is no way of exiting. The data pushed to the devices is limited to include only the data that is displayed on the screen, so the risk of sensitive data being eavesdropped or extracted from the device is effectively removed. The meeting data is stored in the RAM memory of the devices making sure that a stolen unit does not include any retrievable data.

Application architecture

- Presentation layer: This is the graphical user interface of our application that shows information and takes input from users.
- Business logic: We process input from the presentation and data layers and update each layer as required.
- Data layer: The data layer that resides in the Cloud suite outside the actual device. All data is maintained on the booking system. We send requests to read data and to update data. For business-critical data the booking system is the "master" which makes the the Cloud suite data layer less sensitive. Any data corruption or loss of meeting data would be read back automatically from the booking system.

Kleeo desk manager

Connectivity

The Kleeo desk manager connects to the network using Wi-Fi, WPA2-PSK. The Kleeo devices are powered by a single USB-C. The device ports have been disabled for data use and have a sole priority to provide electricity to the device. This eliminates the ability of tampering, even directly on the device.

Setup

On first installation, each Kleeo desk manager device needs to connect to the Evoko workplace cloud using the Evoko workplace mobile app. Not until the device is claimed will it connect to the Evoko workplace cloud or access the network. To claim a device, a user must sign into the Evoko workplace mobile app using their Microsoft O365, Google WS or email credentials and the device can only be connected to the Evoko Workplace cloud associated with that user and belong to that workplace white labelled domains. NFC is used for secure data transfer.



Encryption and authentication

Encryption

Customer data is encrypted when in-transit and at rest. All connections with the Workplace suite are encrypted and served through SSL/TLS 1.2. You cannot access the service without using HTTPS. All certificates are verified on both sides with third party authorities.

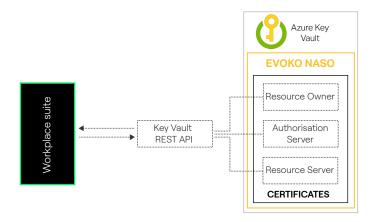
When at rest, customer data is encrypted using a key management system which logs all access automatically. Additionally, passwords are both hashed and salted using one-way encryption, which protects them even in the unlikely event of unauthorised database access. Application credentials are stored separate from the code base. Clients authenticate with Naso room manager and Kleeo desk manager using a token process.



The Workplace suite uses Microsoft Azure Key Vault. Azure Key Vault helps safeguard cryptographic keys and secrets used by cloud applications and services. By using Key Vault, the Cloud suite can encrypt keys and secrets (such as authentication keys, storage account keys, data encryption keys, .PFX files and passwords) by using keys that are protected by hardware security modules (HSMs).

Key Vault streamlines the key management process and enables limited access and encryption of your data.

When a Key Vault certificate is created, an addressable Key Vault and Key Vault secret is also created with the same name. The Key Vault key allows the Workplace suite to do key operations and Key Vault secret allows it to retrieve the certificate value as a secret.



Transparent Data Encryption

Transparent data encryption encrypts all Workplace suite databases, backups and logs at rest. Then a service managed key is used for encryption. Microsoft Azure automatically generates a key to encrypt the databases and manage key rotations.

Authentication

Password authentication is available by default to end users. The Workplace suite supports single signon through Microsoft and Google WS services using Modern Authentication (which encompasses SAML, OATH2 and MFA).



Data collection and storage

Calendar Syncing (only for room booking)

Once an external calendar account is connected to Cloud suite, it will begin to synchronise data with the designated room calendars. In doing so, a subset of your calendar events and their details will be saved in Cloud suite.

The Cloud suite will keep this data in sync with your calendar system. Events booked through different tools in the Cloud suite will similarly synchronise the data back to your calendar service, so that the Cloud suite and the connected calendar stays consistent. Synced event details include:

- Meeting subject
- · Start and end times
- Location (e.g. "Conference Room")
- Organiser

- Attendees
- Catering event information
- Online Video Conference links (e.g. Skype or Microsoft Teams link)

We do not store event attachments.

Privacy

We take the security of customer data very seriously. You can find more information about this in our privacy policy.

Security Polices

All employees with access to customer data are governed by documented strict security policies covering acceptable use, customer data, and encryption standards.

Disaster Recovery

Application and customer data are stored redundantly at multiple availability zones within Microsoft Azure Data Centres with backups available for immediate recovery,

Backups

Customer data is automatically backed up daily in our data centre. Backups are retained for 7 days to recover in the event of a disaster. They are destroyed automatically at the end of this period.

Data Centre

The Workplace suite is a cloud service, and hosted by Microsoft Azure data centres with the highest level of certifications including ISO27001 and SOC. For more compliance information, please visit Microsoft Azure Compliance. The servers are located in the UK and Northern Europe.

Decommissioning and Data Removal

All customers' data is stored on Microsoft Azure services, which follows a strict decommissioning policy outlined on the Microsoft Azure Security, Privacy and Complance Whitepaper.

For customer-specific data, we will manually remove all identifying calendar data associated with your account from our database. Derivate anonymised data (i.e. "Total events booked on platform this month") will not be removed, as it cannot be linked back to source data. User accounts associated with your organisation may also be removed on request. We retain backups for 7 days, after which time the data will be completely unobtainable.

Uptime & Reliability

We constantly monitor our service performance and have automatic notifications to ensure rapid response for service interruptions. All code is audited and approved by at least two engineers before deploying to production servers. We also monitor updates from the security community and immediately update our systems when vulnerabilities are discovered.

