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Abbreviations

Abbreviation	Full Term
GDPR	General Data Protection Regulation
FINMA	Swiss Financial Market Supervisory Authority
ISAE	International Standard on Assurance Engagements
ISMS	Information Security Management System
ISO	International Standards Organization

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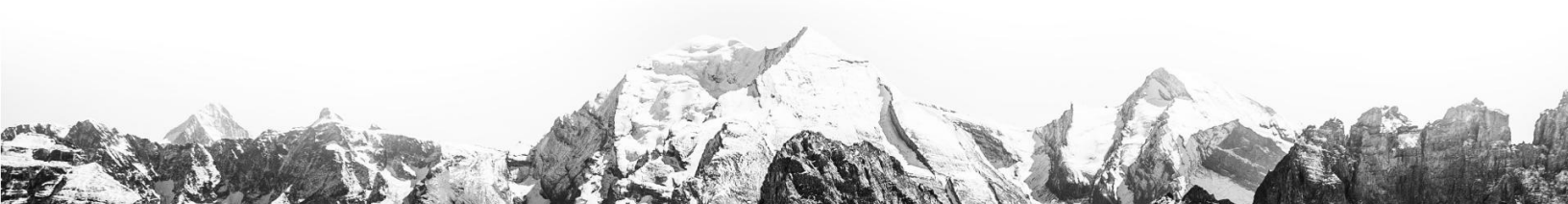

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Document Purpose and Structure

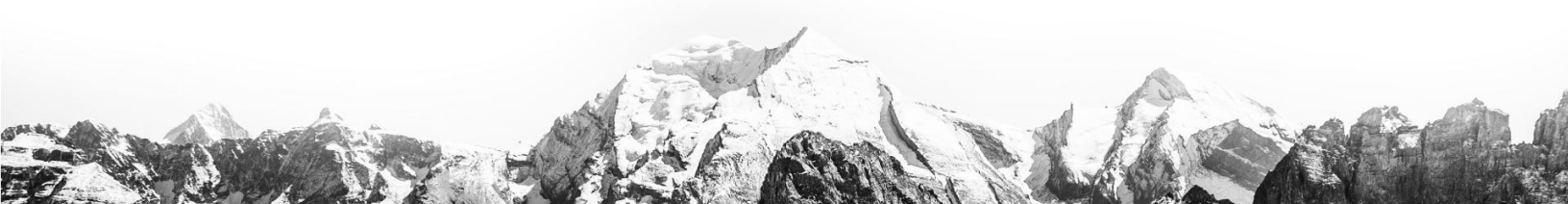
The typical user of our Meeting Management services entrusts us with very sensitive information. Therefore, we invest heavily in the security and resiliency of our infrastructure, application, and business operations. We recognise that security has to be integrated across the company within the development lifecycle, IT operations, and business processes. This paper outlines some of the measures and processes that are in place to safeguard our customers' valuable information.
It starts with a description of our End-to-End Security approach where the reader is guided along the path of an uploaded document, from when it enters the highly secured environment of our Meeting Management solution. Following this, we explain the organizational measures we have implemented in our Product, Engineering, IT as well as our business departments in order to achieve the ISO 27001, ISAE 3000 Type II, FINMA, and BAFIN outsourcing certifications. Finally, we review our set-up, which allows us to reach a guaranteed availability of 99.9%.

End-to-End Security Approach

In our experience, the easiest way to understand our security concept is by starting at our use-case with the login-process, and then following a file on its way through our cloud, and onto the different devices of end-users.

2-Factor-Authentication

To mitigate the risk of unauthorized access to a Sherpany account, a second factor — in addition to a password — is required in order to authenticate for the Sherpany application. While we offer the broadly-used option of an SMS token, which is sent to the mobile phone associated with the user, we recommend to our customers to use the innovative, more secure, and very convenient alternative called OneTouch. This is a mobile phone-based two-factor authentication solution that uses a secure mobile app to send a push notification to the user, who can then approve or reject the log-in attempt with a single tap. Minimal effort for maximum security!



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Strong Password and Login Policy

We do not solely rely on the significant advantages the 2-Factor-Authentication provides, and therefore have also implemented supporting measures to protect user accounts. They include:

- Enforced requirement to choose a strong password
- Overall maximum session duration
- Locking of accounts after several unsuccessful login attempts
- Active monitoring of suspicious login activities
- Strong encryption of stored user-credentials
- Possibility for IP-FIltering for access to individual Sherpany rooms

Secure and Platform Independent Access

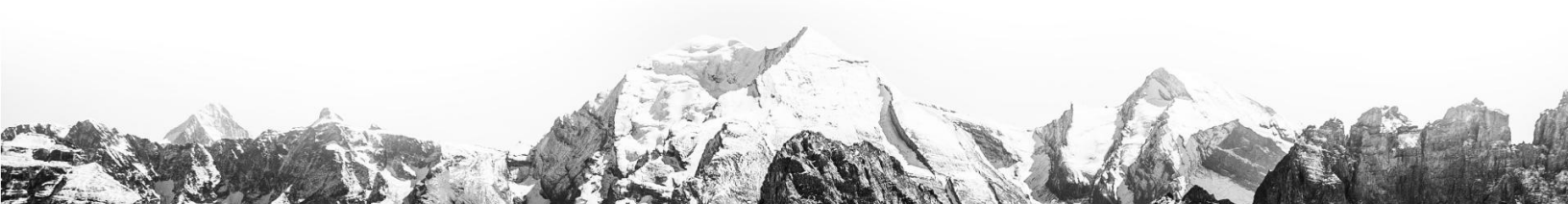
The Sherpany Application is accessible through a variety of user-interfaces. The possibility to login via browser enables the customer to access our service platform independently and without having to install anything. Additionally there is an iOS, Android, and Windows app available. The native mobile apps are optimised for the respective devices and give the possibility to work offline as well. All applications have been developed with a strong focus on security and locally stored information is protected through multiple layers of encryption.

Data in Transit

Once you have securely logged in to Sherpany, you can upload your file. While upload itself is simple from a user perspective, behind the scenes the Sherpany application is working to optimise the performance and security of all data in transit.
Any information, including user and login data (email address, password) and documents (download, upload), that is transmitted from a device to Sherpany servers (and back) is protected through SSL-TLS-256 encryption. To prevent man-in-the-middle-attacks, we use certificate pinning.

The Sherpany Cloud

Once the information has reached the Sherpany cloud, it is subject to very strict logical data-separation in combination with very restrictive permissioning. As an additional layer of security, every file is encrypted with military grade encryption methods and an individual encryption-key, which is stored in a dedicated environment named the Sherpany Vault. This highly secure solution stores and tightly controls access to



tokens, passwords, and certificates, as well as encryption keys, and handles leasing, key revocation, key rolling, and auditing. Access to the Vault is logged, monitored, audited, and limited to selected employees who undergo comprehensive background checks.
Our infrastructure runs on a Kubernetes environment. Built on containers, it inherits the significant security advantages that come with their strict modularisation. Within this highly scalable and already out of the box very secure environment, we run further top-notch security solutions as for example:

- ModSecurity Web Application Firewall (deployed as Reverse Proxy)
- Security Information and Event Management System
- Intrusion Detection and Prevention System
- Next-Generation-Antivirus
- DDOS mitigation

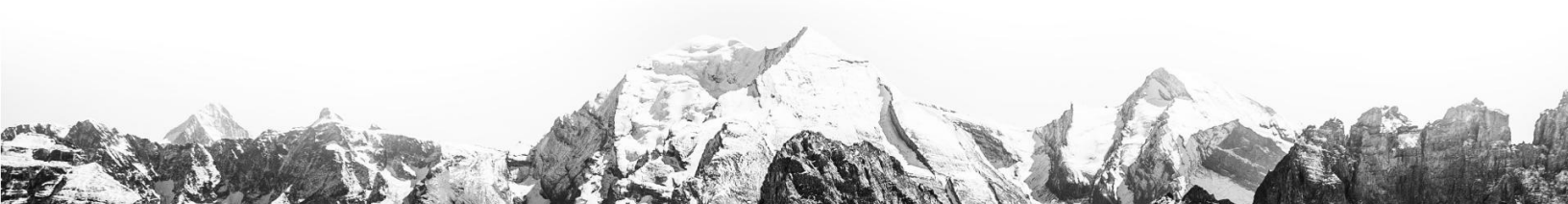
In collaboration with our Threat Intelligence Team, DevOps, and SecOps maintain and improve the security of our cloud on a daily basis.

In terms of availability, our high-performance setup offers a great amount of flexibility, scalability, and resilience. On top of the physical redundancies which are outlined below, we have several logical measures in place to ensure our availability of 99.9%. These include:

- Redundant load balancers and computing nodes
- Primary/secondary database clusters, replicated in real-time across data centers
- Resilient storage technologies
- Multiple log databases replicated in real-time across data centers
- Segmented clusters of application servers handling different functions
- Infrastructure that enables updates without downtimes
- Easily scalable hardware and software setup

Audit Trail

The Sherpany Application automatically logs all file and user activities and maintains a complete audit trail of all activity within an account. The log entries are date-and time-stamped, tracked by username, IP address, and action taken. We provide these logs through a functionality called reports inside the admin portal. The application owner can download and provide the reports to auditors or information security officers. This concept is a big advantage in terms of security and compliance, because it supports the 4-eyes-principle by default.



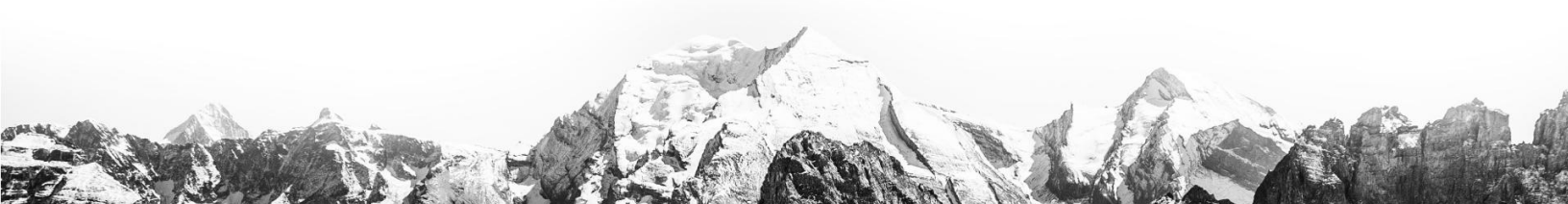
Backup, Replication, and Disaster Recovery

In order to be able to deliver a high availability and fast recovery times and with the knowledge that business continuity is important to our customers, the environment of the Sherpany solution runs on a geo-redundant setup. This means that not only our hardware is resilient to device failure, but, with two redundant and geographically independent data centers, we are prepared to lose a whole data-center without any major downtime. Additionally, to enable the replication between the two sites, we backup our data daily and are able to restore it at any given time.
Remember that backups are protected through encryption and are stored in a secure environment.
To be prepared for disaster scenarios beyond just a technical level, we regularly perform failover and restore tests.

Independent Assurance

We do not expect our customers to blindly trust us in terms of security. Therefore we work together with industry leaders in security and undergo regular audits by independent auditors. Among our partners are:

Partner	Area
Ernst & Young	Security Testing
Redguard AG	Security Testing
Security Cobalt Labs	Security Testing
Inc. Security	Security Testing
Bug Bounty Switzerland	Security Testing
GoSecurity AG	Consulting
Swiss Safety Center	Audit
BDO Switzerland	Audit



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Additionally, we are an active member of the Information Security Society Switzerland (ISSS). We use this platform to exchange know-how and best practices with other security enthusiasts and/or members of our industry.

Sherpany holds the following certifications:

ISO 27001

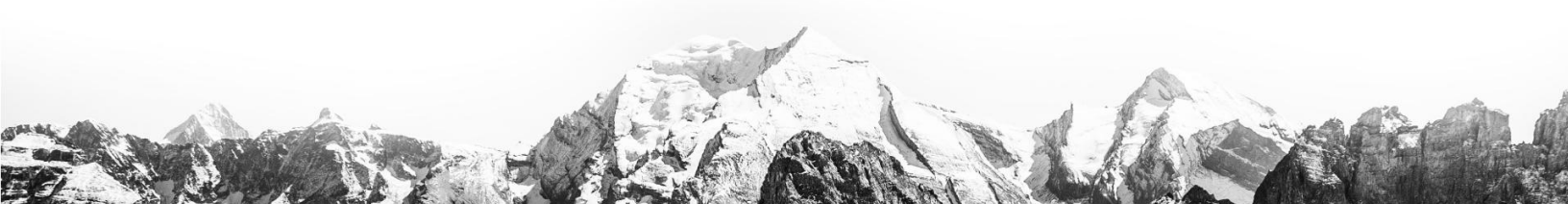
ISO/IEC 27001:2013 (ISO 27001) is the international standard that describes best practice for an ISMS (information security management system). Achieving accredited certification to ISO 27001 demonstrates that a company is following information security best practice, and provides an independent, expert verification that information security is managed in line with international best practice and business objectives.

An ISMS is a system of processes, documents, technology, and people that helps to manage, monitor, audit, and improve your organisation's information security. It helps you manage all your security practices in one place, consistently and cost-effectively. At the heart of an ISO 27001-compliant ISMS is business-driven risk assessments, which means you will be able to identify and treat security threats according to your organisation's risk appetite and tolerance.

When most cloud companies talk about ISO 27001 certification, they're talking about the data centers that they hire to host their services. Obviously, it is critical that these data centers meet high standards for security and availability. At Sherpany, we maintain the ISO 27001 certification and audits for the development, maintenance and operation of our platform as well, beyond the hosted data centers. So, since 2016 we're ISO 27001 throughout the stack – something that few other cloud-based service companies can boast.

ISAE 3000 Type II

ISAE 3000 is the assurance standard for compliance, sustainability and outsourcing audits. Service organisations report on how they deal with security, privacy or fraud by an ISAE 3000 report containing information on the internal processes and controls. The ISAE 3000 report is audited by professional audit firms to provide assurance that the controls included are actually in place and operate effectively. From 2015 on Sherpany has been audited and certified annually by BDO Switzerland. Sherpany undergoes an comprehensive audit annually and is then obligated to provide proof of compliance with the ISAE 3000 report.



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FINMA Outsourcing

FINMA is Switzerland's independent financial-markets regulator. It is charged with protecting creditors, investors and policyholders. FINMA is responsible for ensuring that Switzerland's financial markets function effectively. Its circular regarding outsourcing affects banks and insurances and consists of eight main requirements which address a variety of topics including security, banking secrecy and audit. As many of our customers are subject to the FINMA regulations and thus need to comply with its outsourcing requirements, we decided to make their lives easier and have an independent auditor (BDO Switzerland) certify compliance. This saves us and our customers valuable time, since we do not have to prove our compliance in every individual case.

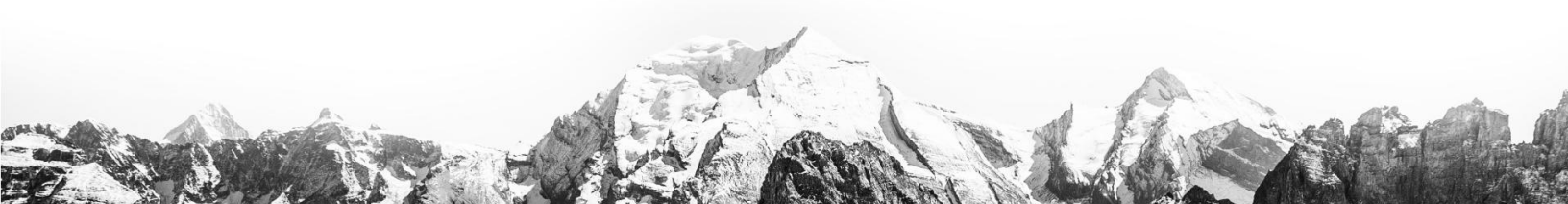
BAFIN Outsourcing

BAFIN is the equivalent to the Swiss FINMA, and ensures financial services supervision in Germany. It is also tasked with protecting creditors, investors, and policyholders. BAFIN is responsible for ensuring that the financial markets in Germany function reliably. Its circular on outsourcing affects banks and insurance companies and consists of fifteen requirements covering a wide range of topics such as security, banking secrecy, and auditing. As a selection of our customers are subject to BAFIN regulations and therefore have to comply with the outsourcing requirements, we decided to make their lives easier and have an independent auditor (BDO Switzerland) certify compliance. This saves us and our customers valuable time, as we do not have to prove our compliance in each individual case.

Security Testing

Since we do not only want to rely on our skilled developers, mature development lifecycle and quality assurance processes, we mandate multiple independent security auditors to perform penetration tests on a regular basis. This is not only a very valuable investment in the security of our service, but it also covers various compliance requirements of our customers.

On top of the security testing that we mandate on a regular basis, we offer our customers to perform their own pentests of the Sherpany plattform. This does result in a better assurance for the respective customer and an overall higher security level of our service.



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Sherpany's Secure Development Lifecycle

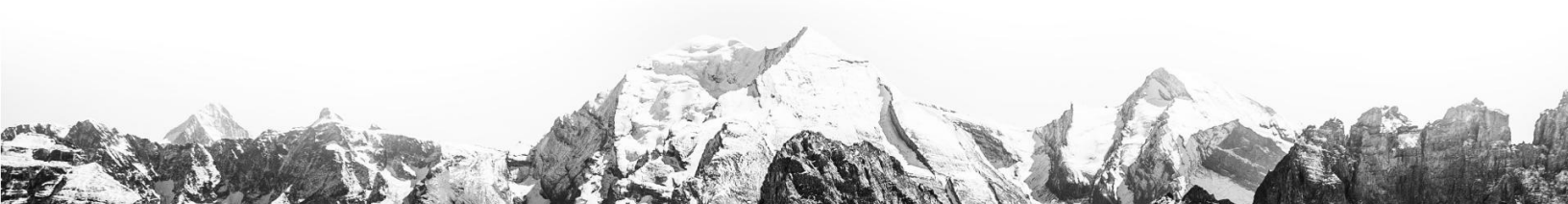
Ultimately, a commitment to security has to start with the software development process itself. Therefore, we have implemented DevSecOps into our development lifecycle. This means that our Development Team, DevOps, SecOps, and the CISO department work hand in hand to introduce security already very early in the development process. As a result, we can eliminate or identify weaknesses right where they arise in the code. These are some of the security controls which grew out the cross department collaboration into our development lifecycle:

- Highly skilled developers with a good understanding of security
- On the job training for our developers (internal/ external training, conferences, collaboration with the community...)
- Regular security trainings which cover the OWASP top 10 among other things
- Code reviews (4-eyes-principle)
- Automated testing
- Manual testing through our QA team
- Integration tests
- User acceptance tests
- Weekly vulnerability assessments
- Several penetration tests of all our application during the year
- Annual infrastructure penetration test

Data Center Security

Our IaaS subprovider and both data centers are located in Switzerland and offer a top-notch hosting environment with multiple layers of security. Our customers benefit from these locations, because of Switzerland's political and financial stability, modern infrastructure, and strict, business-friendly legislation. To prevent unauthorised access to the provided infrastructure, the data center providers have implemented extensive physical security measures. These include:

- All equipment is secured within locked cages or vaults
- Multiple layers of access controls including but not limited to keys, ID, biometric scanning
- 24-hour onsite monitoring and guards



- Mantraps
- Bulletproof windows
- CCTV with video archives
- Access control lists
- Access and surveillance audit logs

On top of the outstanding security level the data centers provide, there are various measures in place to ensure a very high availability. These include:

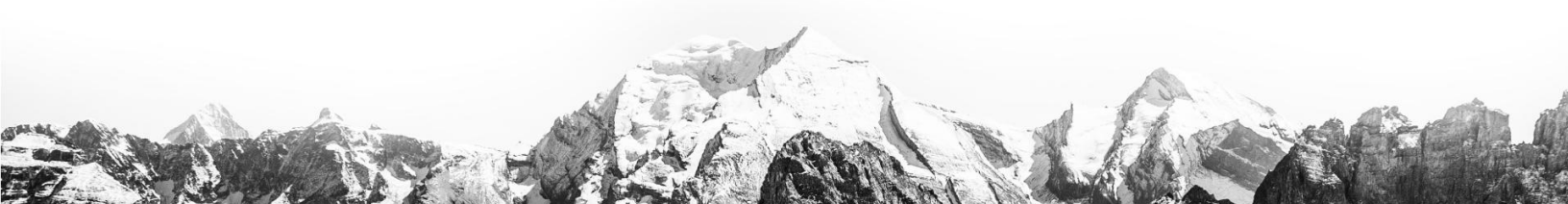
- A redundancy for all critical components, including cooling systems, power, internet providers, connectivity, and other essential systems.
- Uninterruptible power supply
- Emergency backup generators
- Advanced fire suppression
- Flood control

Subprovider and data center locations are ISO 27001 certified which guarantees sufficient control and independent audit through the supply-chain.

Sherpany Information Security Framework

As it is important to not only rely on technical security measures, we have implemented a sophisticated control/process framework to protect our valuable information also on an organisational layer. A few highlights of this layer are:

- A formal incident management process that ensures an effective and efficient reaction and compliance with contractual and regulatory requirements
- A formal incident communication process, which ensures that all stakeholders are properly informed
- Background checks on all of our employees
- Awareness training across the whole company to ensure a basic understanding of information security
- Social engineering tests to prepare the staff for possible social engineering threats
- A whistleblower policy to ensure that concerns are handled appropriately
- Regular access reviews
- Regular training on crisis situations



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Access to Customer Data

In rare incidents, Sherpany Customer Service or select administrators may need access to some of your data to provide support and resolve technical issues. For these cases, there are clear policies and controls in place to keep this access to the minimum, giving just enough access to provide first-class support without breaching your sensitive data (also known as a "least privilege" strategy). In any case, the order and confirmation for access in the context of such rare support cases is only given by the customer itself, and never by Sherpany employees.

Sherpany carefully enforces role-based segregation of access and the 4-eyes principle. For example, access to customer data is limited to specific and carefully selected employees, and includes limited views, such as:

- Ability to see the metadata, but not the content of a meeting room
- Ability to edit and view user account information (contact info, account status), but not files.

Exceptions to role-based access policies may be granted on a case-by-case basis and strictly following the four-eye principle. All customer data access is always logged, monitored, and audited.

Compliance

As a Swiss company with several customers from the heavily regulated financial industry, we are well aware of the compliance requirements which affect us and our customers. With the knowledge of the importance of this topic and many years of experience, we have grown to a compliance specialist in our area of work. As a result, we have developed several tools that help us to meet the compliance requirements we face in a very efficient and effective way. Some of the cases we encounter almost daily include:

- GDPR
- Local data protection laws
- FINMA and/or BAFIN regulations
- Banking secrecy