



Very secure and extremely convenient  
User authentication  
SSH Key Management Made Easy  
Supports public key expiration  
central LDAP/AD directory  
RCDevs WebADM console  
SSH key server for OpenSSH  
SpanKey agent is deployed

# SSH KEY MANAGEMENT SERVER SPANKEY™ SOLUTION

## A BETTER WAY TO MANAGE SSH KEYS

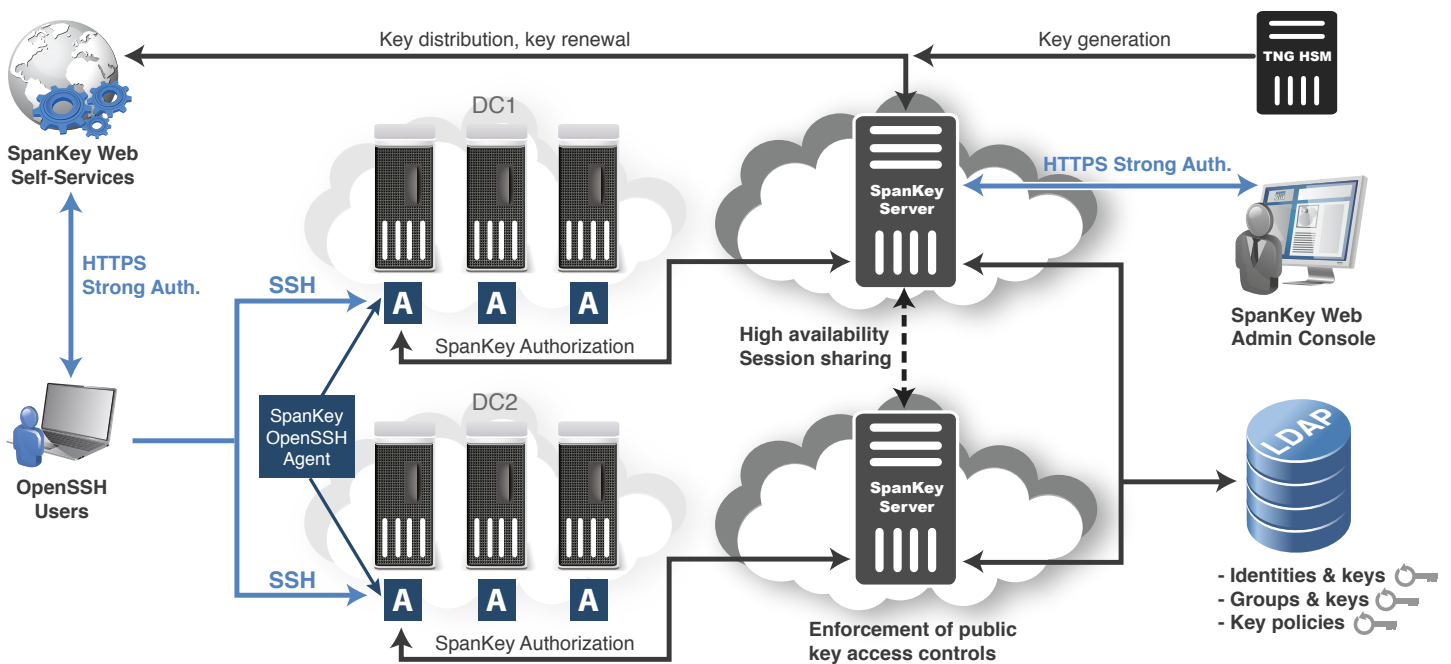
SpanKey is a centralized SSH key distribution server with session monitoring for OpenSSH. Public keys are centrally managed in your Enterprise LDAP/AD directory. Both personal and shared accounts are supported with a fine-grained access control based on user/group policies. With SpanKey there is no need to manually distribute, expire or maintain keys. Instead, the SpanKey agent is responsible for authorizing and controlling user sessions on-demand.



## SSH KEY MANAGEMENT MADE EASY

Identity and access management (IAM) is an essential part of an enterprise's security solutions portfolio. IAM solutions enable enterprises to control and visualize how users access their resources. However, most IAM solutions largely ignore users with privileged access to systems over Secure Shell (SSH), the protocol used to securely log in to and manage remote servers, execute remote commands and transfer files. SSH is the de-facto way for administrators to manage UNIX and Linux based operating systems, with enterprises around the world relying on it every day, which makes poorly managed SSH controls a gaping hole in security and a business risk of highest magnitude.

Most SSH deployments use private/public key pairs to authenticate user access. Key pairs are in many senses more secure than passwords, but they open a whole new Pandora's box to enterprises: key management, the need to control how keys are securely stored and managed, from creation to revocation and deletion. Without proper key management, UNIX and Linux logins in an enterprise go ungoverned, lacking oversight on which key belongs to which identity and if the connections established with the keys comply with company's policies and guidelines. In practice, this means that an unknown identity may log in to a critical production system with a key that is not even known to exist.



SpanKey Server and SpanKey OpenSSH Agent

## RCDEVS SPANKEY - BRIDGING IDENTITY MANAGEMENT AND SSH KEY LIFE-CYCLE

RCDevs SpanKey is an SSH key life-cycle management solution that makes SSH key based controls and governance exceptionally easy and effortless, combining them with the existing standard Identity Management solutions. Unlike most SSH key management solutions, SpanKey does not depend on heavy to deploy key vaults, but operates together with a standard LDAP/AD, with user-to-key and key-to-host associations intuitively managed in LDAP/AD accounts and groups. SpanKey provides a centralized and complete SSH key life-cycle management solution with only subtle changes needed to an LDAP/AD.

## ENTITLEMENT AND IDENTITY MANAGEMENT

No more need to manage SSH authorizations by hand or with scripts. User-to-key, key-to-host and key-to-user associations are conveniently managed at the level of LDAP/AD accounts and groups. SpanKey is the only SSH key management solution fully to support organizational hierarchy and controls of LDAP/AD, without added key vaults or third party entitlements engines needed.

## ■ PROVISIONING

SpanKey automates provisioning and de-provisioning of public key based authorizations with simple operations of adding or removing user from an LDAP/AD group. To govern key validity, objects associated with keys can simply be set with expiration time - convenient, intuitive and scalable to match the largest and most complex of enterprise IT environments. SpanKey also manages automatic creation of home directories if required.



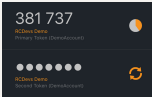
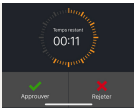








## ■ SELF-SERVICES

SpanKey features Web-based self-services to request and manage SSH keys. It also has web service APIs to create advanced key provisioning workflows as well as seamless integration with existing IAM solutions. All SpanKey Web self-services natively support Multi-Factor Authentication (MFA), ranging from YubiKey and PIV cards to soft tokens, U2F and FIDO2.

## ■ MULTI-FACTOR AUTHENTICATION AND LOCK SCREEN

If used together with OpenOTP, SpanKey makes it very easy to add second-factor authentication to SSH key-based authentication. This allows you to require for example a One Time Password for a SSH login. Lock screen implements a server-side screen lock which requires a password to unlock. With the server side lock screen you can implement a stricter lock screen requirement for privileged accounts.

## ■ SUPPORTED AUTHENTICATION METHODS

Supported Authentication Methods	
 <b>Hardware tokens</b> Any third party OATH TOTP and HOTP compliant hardware tokens are supported	 <b>RCDevs Hardware tokens</b> RC200, RC300 and RC400 OATH TOTP and HOTP hardware tokens are recommended
 <b>iOS and Android OTP App</b> RCDevs OpenOTP software Token	 <b>iOS and Android Push Notification App</b> RCDevs OpenOTP Token
 <b>Google Authenticator, OATH (SW)</b> Any third party OATH TOTP and HOTP compliant software token are supported	 <b>OCRA</b> Full support of OATH-OCRA suites
 <b>Out-Of-Band SMS / Email</b> Pre-fetched and on-demand SMS OTPs OTPs delivered via Email and Secure Email	 <b>QRCode</b> Automated login by scanning a QRCode (requires TiQR)
 <b>YubiKeys</b> Support for YubiKeys	 <b>Mobile Signature Service</b> ETSI GSM 102 204 MSS API support
 <b>SSH</b> SSH with hardware and software keys	 <b>Printed OTP List</b> Printed OATH One-Time Password Lists

## ■ NATIVE LDAP/AD SUPPORT

With SpanKey the SSH access control is centralized from individual UNIX and Linux hosts to the SpanKey authorization server, which provides a unique overlay service to LDAP/AD. This design allows all key authorizations to be stored directly in existing LDAP/AD, which not only simplifies the overall architecture but also provides unparalleled robustness compared to all competing SSH key management solution.

## ■ MONITORING

SpanKey provides advanced audit capabilities with real-time terminal recording and a viewer in WebADM allowing you to replay individual user sessions graphically. Additionally, SpanKey keeps track of all user commands and filesystem events like read/write operations. It also records operations in relation to SCP and SFTP sessions.



**RCDevs** is an award-winning security company specialized in next-generation multi-factor authentication and PKI. RCDevs is building its growing reputation over high-quality software and complete customer satisfaction. RCDevs provides cutting-edge solutions worldwide to customers ranging from SMEs to large scale enterprises in the IT, financial, healthcare and government sectors.