

Keyfactor Product Briefing

What's new, what's next, and
what's on the roadmap ahead

Before we start

01 Questions

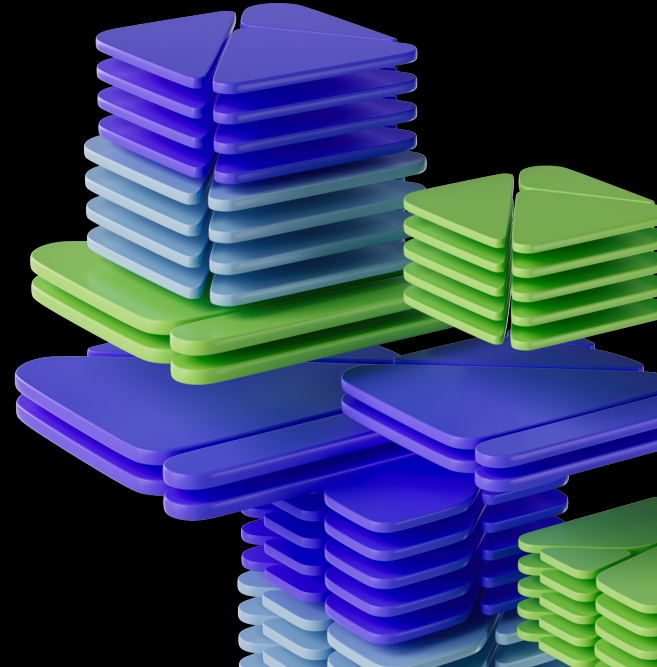
Drop your questions in the “Q&A” tab at any time

02 Poll Questions

We encourage you to engage and provide your feedback

03 Attachments

Check out the attachments and links after the webinar



Poll #1

What are current strategic priorities for your team/business?

(Select all that apply)

- | | |
|--|--|
| 1. Generative AI | 4. Cloud Migrations |
| 2. Dashboarding & Metrics | 5. Extending IAM's Cybersecurity Value |
| 3. 3 rd Party Risk Management | 6. Post Quantum Cryptography |

*Have another idea? Drop it in the chat!

Here's what we'll cover

- (10 mins) ■ [Intro](#): Product Roadmap Milestones
- (10 mins) ■ [Documentation](#): Updates and live demo
- (10 mins) ■ [Command 12](#): June updates
- (10 mins) ■ [EJBICA 8.3](#): June updates
- (10 mins) ■ [Signing](#): Future of Signing at Keyfactor
- (15 mins) ■ [Insider Updates](#): Become an Insider, Insider Awards, and Upcoming Events
- [Q&A](#): Open discussion

Roadmap Milestones and Themes, 2024

Mark Thompson, SVP
of Product
Management



2024 Roadmap Themes

Containerization Modernization

- Command
- EE EJBICA
- Next Gen Hardware Appliance

Post Quantum

- BC Support & FIPS
- SignServer
- EJBICA
- Hybrid Certs
- Command PQ Management

Self Service

- Command SaaS Light
- Enhanced Self-service workflow
- Guided Enrollment
- Efficient Deployment

FedRAMP

- FedRAMP
- CLAaaS

Analytics / AI

- Advanced Cert and Key Discovery
- RoT Management

Expand the ways we deploy platforms
Efficient cloud solutions
Updates to hardware & software stacks

Asset Management from cloud
providers and Agency suppliers

Partnership

Documentation Updates

Magnus Normark, Senior
Product Manager

KEYFACTOR





Product Documentation

doc.primekey.com

=> docs.keyfactor.com

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April 2024: doc.primekey.com

- ✓ EJBCA 8.2
- ✓ SignServer 6.2
- ✓ Bouncy Castle

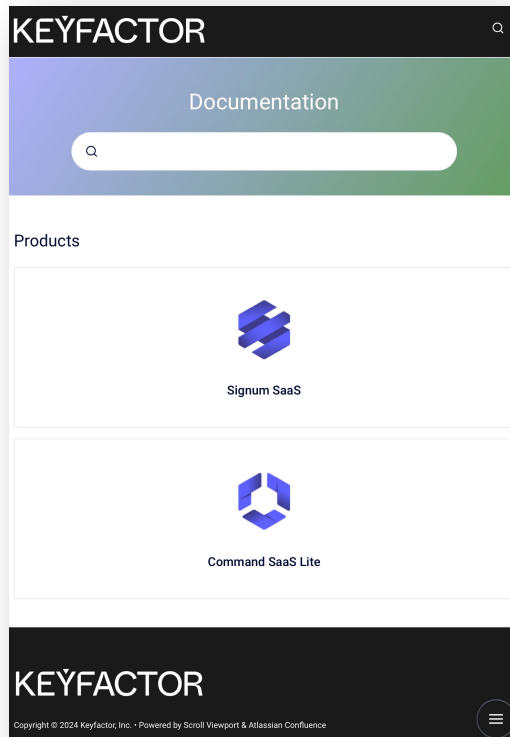
The screenshot displays the Keyfactor Product Documentation website. The header includes the Keyfactor logo, a 'Contact us' link, and a 'Category' dropdown. The main heading is 'Product Documentation' with a subtext 'Browse product documentation' and a search bar. The content is organized into several sections:

- Get Started:** Three cards with icons and text: 'Solution Areas' (introduction to PKI), 'Get Started with EJBCA' (guides and tutorials), and 'Get started with SignServer' (guides and tutorials).
- EJBCA Deployment Options:** Six cards arranged in two rows. The first row includes 'EJBCA' (Enterprise covers all needs), 'EJBCA Software Appliance' (turnkey software), and 'EJBCA Hardware Appliance' (turnkey hardware with HSM). The second row includes 'EJBCA Cloud' (flexible CA and PKI) and 'EJBCA SaaS' (full access to EJBCA as a Service).
- SignServer Deployment Options:** Three cards in the top row: 'SignServer' (server-side digital signature software), 'SignServer Software Appliance' (turnkey software), and 'SignServer Hardware Appliance' (turnkey hardware with HSM). A fourth card, 'SignServer Cloud' (built-in modules for signing), is shown in a separate section below.
- Other Products:** Two cards: 'Bouncy Castle' (widely used FIPS-certified open source cryptographic APIs) and 'NPKD' (National Public Key Directory solution for e-passports).



April 2024: docs.keyfactor.com

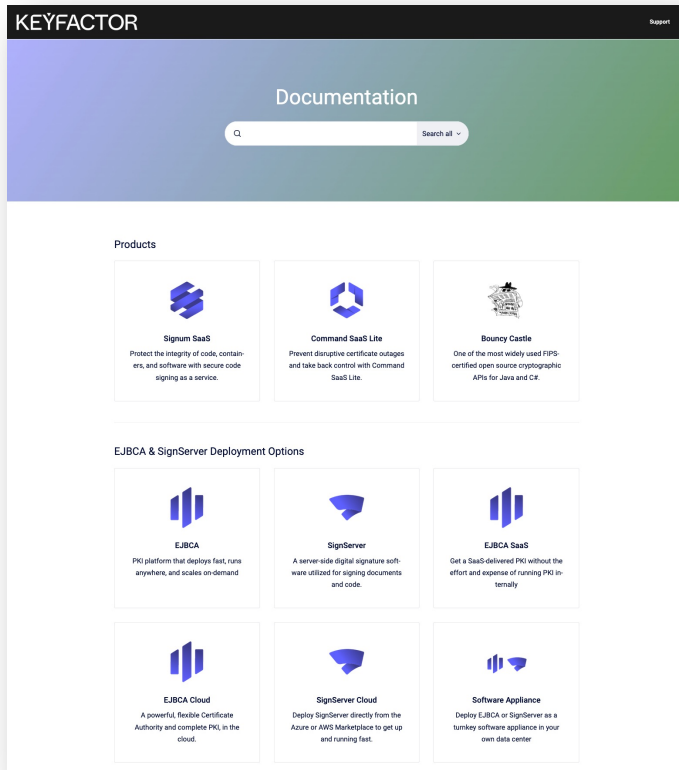
- ✓ Signum
- ✓ Command SaaS Lite





May 2024: docs.keyfactor.com

- ✓ Signum
- ✓ Command SaaS Lite
- +
- ✓ EJBCA 8.3
- ✓ SignServer 6.3
- ✓ Bouncy Castle





May 2024: docs.keyfactor.com

- Let's take a closer look

EJBCA & SignServer Deployment Options



EJBCA

PKI platform that deploys fast, runs anywhere, and scales on-demand



SignServer

A server-side digital signature software utilized for signing documents and code.



EJBCA SaaS

Get a SaaS-delivered PKI without the effort and expense of running PKI internally



EJBCA Cloud

A powerful, flexible Certificate Authority and complete PKI, in the cloud.



SignServer Cloud

Deploy SignServer directly from the Azure or AWS Marketplace to get up and running fast.



Software Appliance

Deploy EJBCA or SignServer as a turnkey software appliance in your own data center



May 2024: docs.keyfactor.com

- EJBCA & SignServer as variants of SW Appliance

The screenshot displays the Keyfactor Software Appliance Documentation website. The top navigation bar is dark with the 'KEYFACTOR' logo on the left, a 'Support' link, and a dropdown menu currently set to 'EJBCA'. Below the navigation bar is a search bar. The main content area features the 'Software Appliance' logo and the title 'Documentation'. A prominent blue banner reads: 'Browse the latest EJBCA Software Appliance and SignServer Software Appliance documentation. Select EJBCA or SignServer in the variant picker in the menu bar to view documentation for your product.' Below this banner, there are three cards: 'Appliance releases', 'overview of the different EJBCA Software Appliance models', and 'and set up the initial configuration'. At the bottom, a 'Documentation' section is visible with three sub-sections: 'Introduction', 'Installation', and 'Operations'.

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Support EJBCA

Software Appliance

Documentation

Browse the latest EJBCA Software Appliance and SignServer Software Appliance documentation. Select EJBCA or SignServer in the variant picker in the menu bar to view documentation for your product.

Appliance releases.

overview of the different EJBCA Software Appliance models.

and set up the initial configuration.

Documentation

Introduction
New to the Software Appliance? Get an introduction and review information on

Installation
Find information on system requirements and step-by-step instructions for

Operations
Get information about software appliance operations and find out how to



Live demo

Say hello to

<http://docs.keyfactor.com>

Keyfactor Docs

Click to stop screen recording

← → ↻

https://docs.keyfactor.com/?l=en

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KEYFACTOR


Support

Documentation

Q


Search all ▾

Products




Signum SaaS

Protect the integrity of code, containers, and software with secure code signing as a service.



Command SaaS Lite


Prevent disruptive certificate outages and take back control with Command SaaS Lite.





Bouncy Castle

One of the most widely used FIPS-certified open source cryptographic APIs for Java and C#.

EJBCA & SignServer Deployment Options







Command 12 Release

Sami Van Vliet, Principal
Technical Product
Manager

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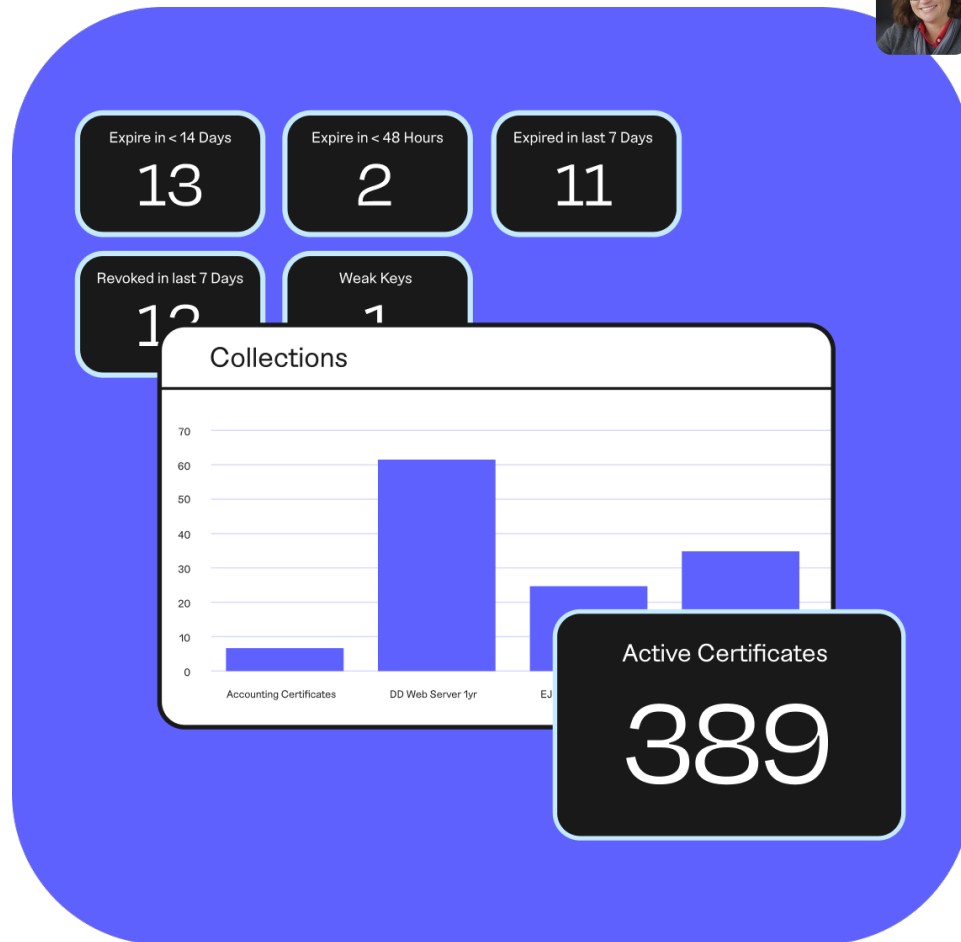
What's new, what's next

NEW RELEASE SCHEDULE

A new release schedule to deliver more consistent, predictable software updates

NEXT MAJOR RELEASE

What's coming in the next major software update, Keyfactor Command 12





How we release updates today

- Delivers major updates, but infrequently
- Difficult to predict upgrade schedule

Major

A significant update to the product, including a full version update

Every 12+ months

- Large roadmap features
- Smaller features to address customer requests/tech debt
- Bug fixes

Incremental

Includes improvements and bug fixes to build upon major release

Every 1-2 months

- Small, but high-priority features
- High-priority bug fixes

Hotfix

Urgent fixes to address business-critical issues

As needed

- Critical bug fixes



Moving forward, what to expect

- More predictable, time-based releases versus feature-based
- More frequent delivery of new features and capabilities

Quarterly

Steady updates deliver new features and bug fixes regularly

~ Every 3 months

- Features to address customer requests
- Features to address technical debt

Monthly

Focused entirely on improvements and fixes

~ Every 30 days

- Bug fixes

Hotfix

Urgent fixes to address business-critical issues

As needed

- Critical bug fixes that cannot wait for monthly release



Updates since March

Documentation

The documentation is no longer embedded in the product, reducing the file size significantly. Now, when you select Documentation and Help within the Management Portal, you will be directed to the Keyfactor Software & Documentation Portal (<https://software.keyfactor.com>).

Multiple OAuth IdP Support

The configuration wizard now allows creation of multiple OAuth identity providers, any of which may be used to authenticate to Keyfactor Command.

Requester Can Approve

Workflow approval step includes a new Requester Can Approve parameter that, when disabled, prevents the initiator of a workflow from being one of the approvers on that specific workflow instance.

Orchestrator Deletion

Orchestrators may now be deleted. Any associated data such as certificate stores, jobs, and SSH servers will automatically be removed.



What's Coming in Command 12

- New CA configuration from the portal
- Ability to modify collection display order
- Alerts reworked for workflow
- Updates to enrollment and revocation workflows
- New certificate store container inventory workflow

EJBCA Enterprise 8.3

Magnus Normark, Senior
Product Manager





What's coming in EJBCA 8.3

Quantum-ready capabilities

- Hybrid certificate support
- Next level PQC-transition preparations

EJBCA Container Set

- Focus on Helm-based deployment automation for customer Kubernetes deployment
- Best practice separation of CA, RA, and VA

Updates to product documentation

- Migration to docs.keyfactor.com
- Evolution and restructuring to cover container deployment
- CycloneDX SBOM

Other changes

- MS Auto-enrollment improvements
- EJBCA UI menu aligned with Keyfactor products

Coming in EJBCA 8.3

Hybrid certificates to enable PQC

What is it?

Enables backward compatible combination of 2 sets of keys, algorithms, and signatures with one certificate.

How does it work?

Through the use of a non-critical extension, combines quantum-safe algorithm with classic algorithm.

When will it be available?

Available in EJBCA 8.3 through new settings on the CA and certificate profiles.

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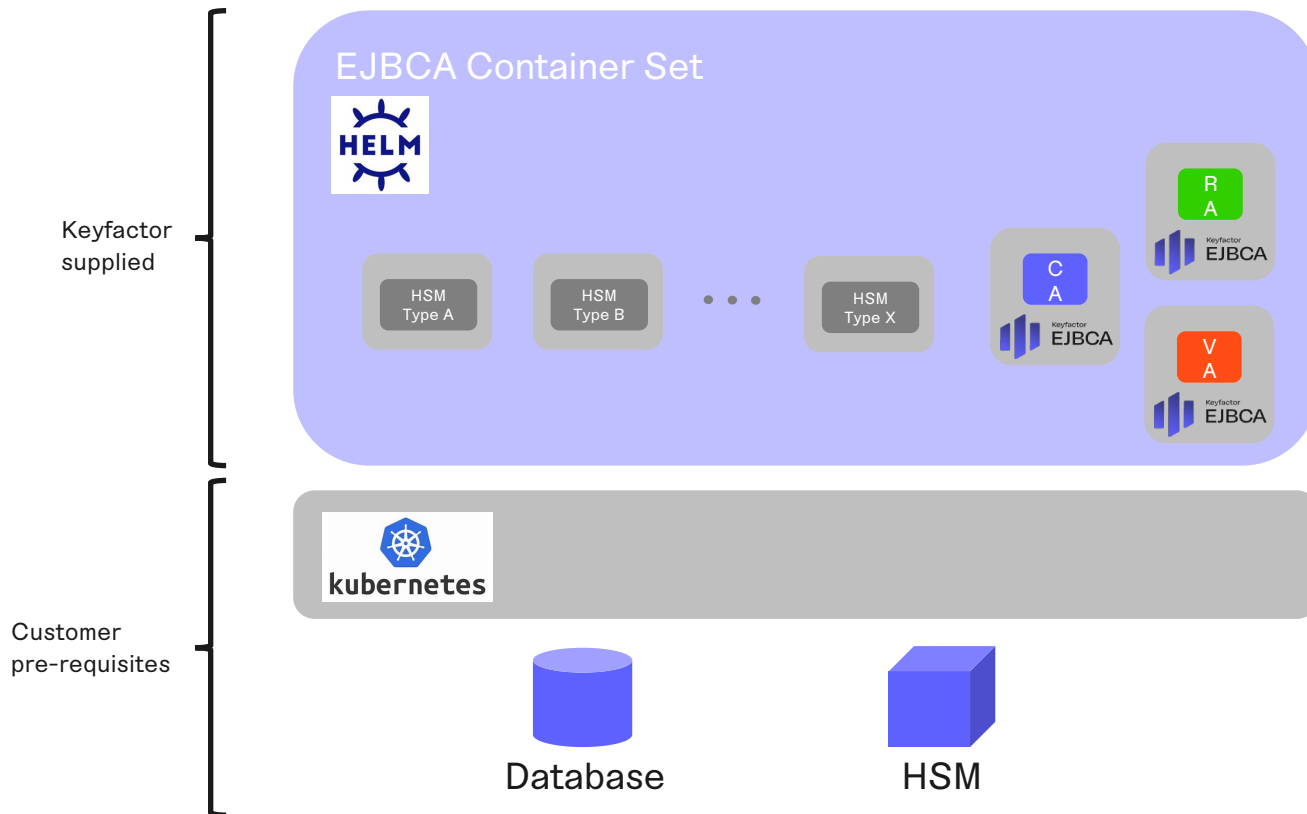
Post Quantum
Cryptography

Pqc

*Not for production use, test in a safe lab environment



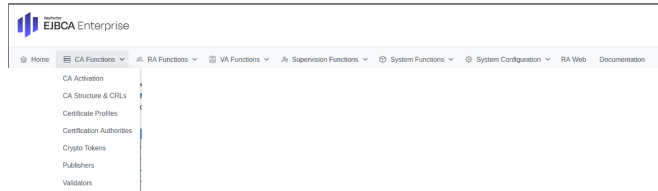
EJBCA Container Set





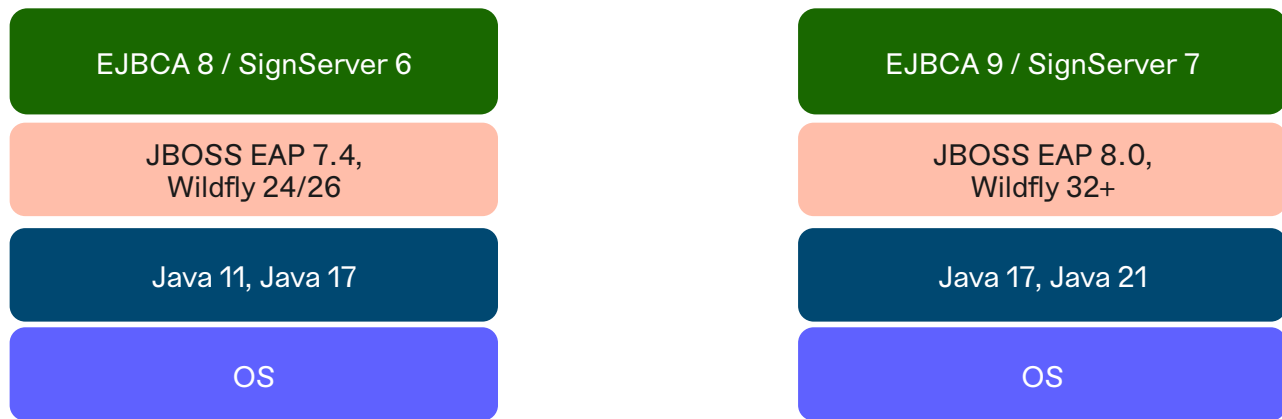
EJBCA 8.3 – Other Changes

- Microsoft Auto-enrollment improvements
 - Centralized configuration enables operational enhancements in multi-domain and multi-RA setups
 - Enrollment of certificates using elliptic curves algorithm now supported
- Admin Web UI now on top (same menu structure)





EJBCA 8 / SignServer 6 vs EJBCA 9 /SignServer 7: Tech Stack Upgrade



Future of Signing at Keyfactor

Ben Dewberry, Product
Manager

KEYFACTOR





Current vs future state

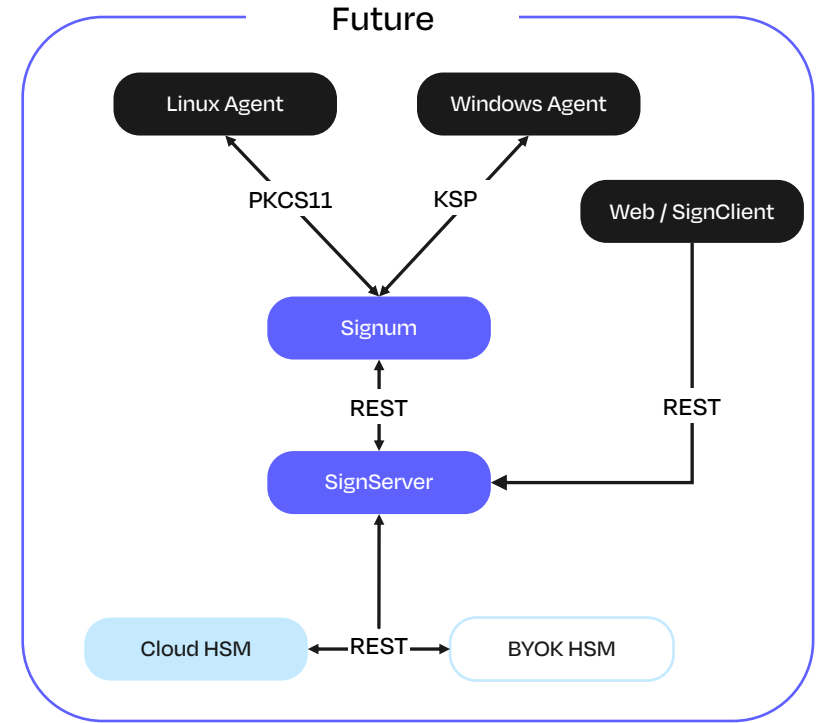
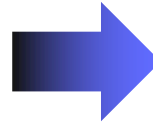
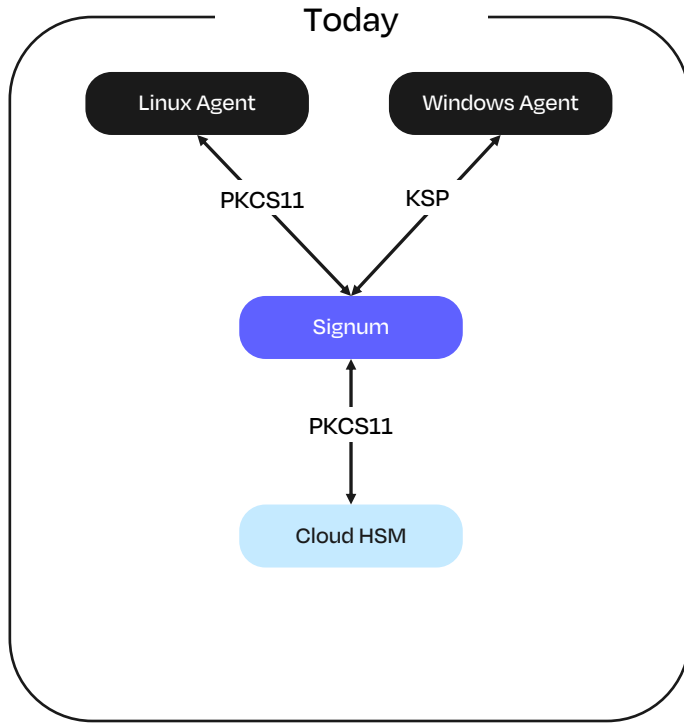
Keyfactor signing solutions



Turnkey

Self-configured

New Architecture





Why is signing important?

Risk

- Supply chain attacks have increased **three-fold** from 2021: 45% of organizations are expected to experience attacks in 2025 (Gartner)
- Provides integrity and authenticity to your artifacts
- Suggested and/or required by frameworks and best practice guides to mitigate risk

Regulations

- [Supply-chain Levels for Software Artifacts - SLSA](#)
- [Secure Software Development Framework NIST-800-218](#)
- [EU Cyber Resiliency Act – CRA](#)



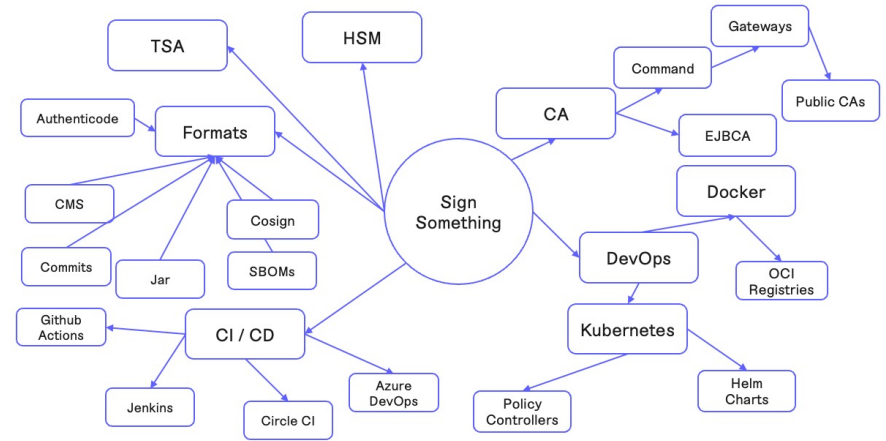
Development Complexity is Accelerating

2000s

Self-signed cert
(if at all)

2010s

Sign with a key issued
from internal MSFT
CA or other CA



Today: Accelerating complexity in a
continuously-changing environment



What's coming in SignServer 6.3

Container-based deployments

- Focus on Helm-based deployment automation for customer Kubernetes deployment
- Signing and Time Monitoring mode for container

Updates to product documentation

- Migration to docs.keyfactor.com
- Evolution and restructuring to cover container deployment
- CycloneDX SBOM

Other enhancements

- MS SQL database support
- REST API extensions



SignServer Software Bill Of Materials (SBOM)

- 3rd party libraries in SW distribution listed in documentation
- Container SBOM in CycloneDX format starting with SignServer 6.3

```
{
  "bomFormat": "CycloneDX",
  "specVersion": "1.4",
  "serialNumber": "urn:uuid:3827937f-7c5d-477e-93f2-47418d3bd723",
  "version": 1,
  "metadata": {
    "timestamp": "2024-04-05T10:47:38+02:00",
    "tools": [
      {
        "vendor": "anchore",
        "name": "syft",
        "version": "v0.46.3"
      }
    ]
  },
  "component": {
    "bom-ref": "aa4537d0a7c26bfa",
    "type": "container",
    "name": "art.primekey.com/con-develop-container/primekey/signserver-ee:6.3.0.Beta1",
    "version": "sha256:a7129f3f735bf1141adb47026421c20f3bac96c7849ed8c27892f3a7fb44fbb9"
  }
},
```

```
▼ Object
  bomFormat: "CycloneDX"
  specVersion: "1.4"
  serialNumber: "urn:uuid:3827937f-7c5d-477e-93f2-47418d3bd723"
  version: 1
  ► metadata: Object
  ▼ components: Array[1329]
    ► 0: Object
    ► 1: Object
    ► 2: Object
    ► 3: Object
    ► 4: Object
    ► 5: Object
    ► 6: Object
    ► 7: Object
    ► 8: Object
    ► 9: Object
    ► 10: Object
```



What's coming in Signum 4.10.0

Container-based Agent

- A deployable container of the Signum Linux Agent.
- Can be modified to accommodate multiple different signing tools.

Updates to Agents

- Proxy support in the Linux Agent
- Migrated Linux Agent to dotnet 8.
- Improved CLI feedback

Signum Admin Web

- Completely updated the UI of the Admin Web to bring consistency across Keyfactor products.



SignServer GitHub Action Demo

Summary

Jobs

- build

Run details

- Usage
- Workflow file

Manually triggered now

pkiben -> a1f73ed [main](#)

Status: Queued

Total duration: -

Artifacts: -

build-sign-java-app.yml
on: workflow_dispatch

build → sign → verify

GitHub Action

SignServer Signing

v1.0.0 Latest version

SignServer by Keyfactor SignServer Enterprise

SignServer Signing action

The SignServer Signing action can return a signed input produced by the provided SignServer endpoint and upload it as an artifact for access or further use.

```
- name: SignServer Signing
  uses: Keyfactor/signserver-signing-action@v1.0.0
  with:
    endpoint: ${secrets.SIGNSERVER_URL}
    file-path: ${github.workspace}/HelloWorld.jar
    worker-name: JArchiveSigner
    worker-type: JArchiveSigner
    client-cert: ${github.workspace}/client-cert.p12
    password: ${secrets.SIGNSERVER_CLIENT_CRED}
```



Signum GitHub Action Demo

The screenshot shows the GitHub Actions interface for a workflow named "Workflow Controller #78". The left sidebar contains a "Summary" tab and a "Jobs" section with a "build" job. The main area displays the workflow graph for "Orchestrator.yml" on the "workflow_dispatch" event. The workflow consists of the following steps:

- build / build** (Job: build)
- cont... / Signum-Container-Sign** (Job: container / build)
- verification / verify-signed-files** (Job: container / sign-and-verify)
- container / build** (Job: container / sign-and-verify)
- container / sign-and-verify** (Job: container / sign-and-verify)

The status of the workflow is "Queued".

The screenshot shows the GitHub repository page for "signum-container-agent". The repository is public and has 1 branch and 0 tags. The "main" branch is selected. The page title is "About the Signum Container Agent".

The Signum Container Agent is a base image that runs the Signum Agent service and it can be modified as shown in the examples with additional signing tools for handling a variety of different scenarios.

Usage examples of several popular signing tools can be found in [signing-tool-examples](#).

Want to double
click?

KEYFACTOR



Keyfactor's solutions enable enterprises to establish digital trust – then maintain it.

Issue certificates

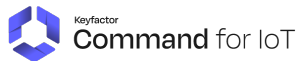


Flexible and highly scalable
PKI platform

Manage certificates



Certificate lifecycle automation
to prevent outages



IoT identity management to
secure connected devices



Lightweight certificate
management

Sign code and artifacts



High-speed signing engine for
IoT and manufacturing



Policy-driven signing engine for
DevOps and security teams

Poll #2

Are you interested in learning more about a product you do not have today?

Select all that apply (we will schedule a call with you)

1. EJBCA Enterprise (PKI)
2. Command (CLA)
3. PKI as a Service (PKI + CLA)
4. Command SaaS Lite (CLM)
5. SignServer or Signum (Signing)
6. Not sure/not right now

Customer and Insider Program Updates

Warsan Ahmed,
Customer Marketing
Manager

KEYFACTOR





Keyfactor Insider Program

Get insider access to the latest updates, events, exclusive content, and opportunities to engage with industry peers.

Benefits:



Be the First
to Know



Insider Tips
& Training



Access Insider
Opportunities



Insider Newsletter

Monthly updates on product releases, relevant content, and events.



Release Notifications

Timely alerts on software and feature releases relevant to you.



Content & Feedback

Participate in surveys and get early access to exclusive content.



Unique Experiences

Invitations to exclusive events and speaking opportunities.



Roadmap Sessions

Virtual session with product owners.

Insider Program

Benefits & Value



Exclusive Content

Insider members receive early access to product updates, reports, and expert-led webinars



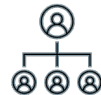
Opportunity to Influence

Actively share your insights and ideas. Share your experience through peer reviews and success stories.



Latest Updates

Timely product notifications and Keyfactor news. Emerging industry trends and regulatory announcements.



Grow your Personal and Professional Brand

With nearly 800 members, the Insider Program continues to expand, fostering a valuable network of industry peers



Peer Engagement

Connect and collaborate with peers from the world's top brands through virtual and in-person events



VIP Access

Access to exclusive Keyfactor and third-party events, passes, awards, and so much more

A stage with red curtains and a spotlight. The scene is dimly lit, with a spotlight shining down on the stage. The red curtains are the central focus, and the silhouettes of the audience are visible in the foreground.

2024 Insider Awards

KEYFACTOR



Most Engaged Insider of 2024

Honored for their valuable feedback and active participation in webinars and Keyfactor events



Josh Nash
Sr. PKI Engineer
Nationwide



Insider Influencer of 2024

Recognized for educating peers and being a powerful voice for customers and prospective customers

Lokesh Ethirajan

VP, Identity & Access Management
AIG

KEYFACTOR

QUANTUMANIA

Friday, July 18th 8:30 AM PDT | 11:30 AM EDT | 5:30 PM CEST

Our first-ever virtual
customer workshop



Why attend?

- Hear from our PQC experts on what's coming down the line
- Discuss openly with peers in an informal and open format
- Walk away with CPE credits and a free pass to the next Marvel movie



What we'll cover

- The impact of NIST PQC algorithm candidates and standardization
- How you can begin to prepare for the transition to PQC
- A look at the roadmap and what we're doing to prepare

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Save the Date

KEYFACTOR *Tech Days*

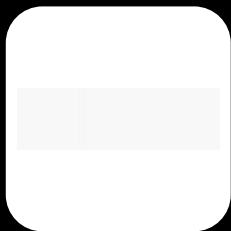


Fontainebleau Miami Beach



March 4-5, 2025

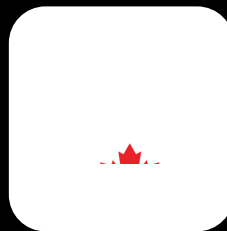
Upcoming Events



Black Hat
Aug 7-8, 2024



ISC2 Congress
Oct 14-26, 2024



SecTor Canada
Oct 21-22, 2024



KubeCon North America
Nov 12-15, 2024

Net Promoter Score (NPS) Intro

Jack Herman, Customer
Success

KEYFACTOR



Keyfactor Annual NPS Survey



What is Net Promoter Score (NPS)?

Measure Satisfaction

- Assess your satisfaction with our products and services

Simple & Powerful

- A quick tool to gather your feedback

Quick Survey

- 5 questions taking less than 5 minutes to complete



Why it Matters to Our Customers

Your Voice Matters

- Your feedback fuels continuous improvement

Drive Change

- Help us improve and shape future developments

Share Freely

- Your honest opinions are invaluable



Why Your Feedback Matters

Prioritize Your Needs

- Ensure we focus on what's important to you

Act on Knowledge

- We can only improve what we know

Influence Roadmap

- Shape our product development

Enhanced Experience

- Tailored offerings based on your feedback



Next Steps and Survey Duration

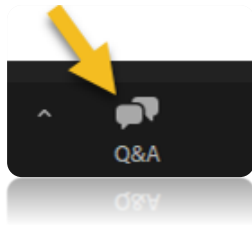
Follow-Up Plan

- Customer Success Managers will follow up with an email

Survey Duration

- The survey is live until Thursday, June 27th

Q&A: Please put
your questions
in the Q&A box!



Poll #3

Do you plan to attend Black Hat this year August 7-8?

1. Yes
2. No
3. Unsure

Open Q&A

Ask us anything

Thank you!

- Give us your feedback!
- Check out the attachments
- Register for the Insider Program
- Reach out to your CSM