Securing the Modern Enterprise

A Guide to Duo for Enterprise Companies



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Executive Overview



To stay competitive and relevant today and in the future, companies need to digitally evolve and leverage technology to improve operational efficiency. Improving communication channels, business processes and creating a more user-friendly experience are all ways this efficiency can be realized.

At Duo, we know this. That's why we've partnered with CIOs and CTOs to help secure their digital transformation initiatives. We're dedicated to helping enterprise CIOs and CTOs with their security challenges, with a focus on the future of information security. We seek to discuss and solve for the

real-world dilemmas that security practitioners face, helping us continually innovate on ways to solve access management issues for the modern world.

To help enterprises stay ahead, Duo's Trusted Access platform is strategically developed to meet the needs of a modern workforce. We've designed a powerful, yet simple security solution to help IT and security teams protect and enable their organizations' digital transformation.

This document will highlight how you can leverage Duo's Trusted Access platform to enable and secure your business for the future.

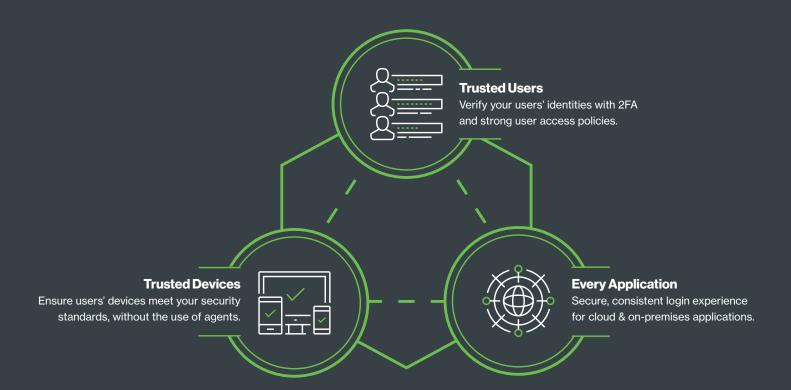
A Brief History

The most difficult aspect to secure and control — the human element, continues to remain so, and online criminals know it. It's a low-tech, easy yet effective way to get access to apps and remain undetected by logging in as a legitimate user.

Duo was founded with the belief that security can only be effective if it's easy to use and widely adopted by end users. This vision lead us to streamline two-factor authentication (2FA) technology by focusing on simplicity and an exceptional user experience. We are firm believers that usability and security can work together beautifully.

While our 2FA verifies the trust of your users, we've extended that philosophy to innovate on additional security features that verify the trust of your devices before granting access. The Trusted Access platform creates an easy, secure path of access for all users,

on any device, to every business application. Duo's solution gives you increased visibility of the users and devices connecting to your resources, giving admins the capability to enforce access policies and reduce the risk of a compromise.



Availability

To ensure access to your applications and data is always available and secure, Duo's uptime exceeds 99.995% with a hard service level guarantee, with premium private hosting available. To help you meet data compliance regulations, Duo's servers are hosted across independent PCI DSS and ISO 27001-certified and SSAE 16-audited service providers.

We provide a high-availability service split across multiple geographic regions (including support for European data restrictions), providers and power grids for seamless failover, and our multiple offsite backups of customer data are encrypted.

Customer Success

Duo's Customer Success team is centered on helping you before, during and after deployment. We are in the business of making you successful by ensuring a smooth security rollout to your end users.

For more advanced deployments, our Duo Care premium package, specifically tailored for enterprise customers, empowers you with extended coverage and a team of Duo experts dedicated to consulting with your organization during the lifetime of our relationship.

"Duo is a product name that everyone in the company touches, uses, and appreciates. Your product makes me as a CISO look very, very good."

Daniel Ayala, Director, Global InformationSecurity ProQuest Information and Learning Company

Extensibility

Your environment is one-of-a-kind and you have technologies and processes based on this uniqueness. It's extremely important to leverage a product that is both flexible and customizable to meet your organization's needs, while accounting for scalability needs to meet future company growth.

To help your team custom tailor integrations to best meet your needs, Duo provides open and extensible frameworks, such as our <u>Web SDK</u>. The data we provide on user access and device hygiene can be used to inform your incident response and operations teams.

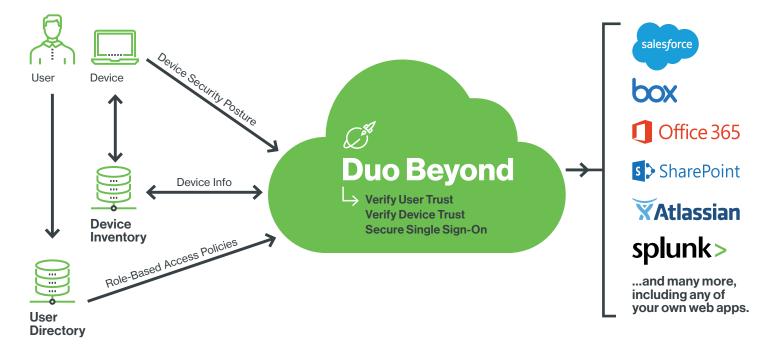
To make data analysis even easier, we give you the ability to share log file information with any desired tool. For our joint customers who leverage Splunk, we have built a **Duo Splunk Connector**. We also have deep partnerships with enterprise software providers to ensure a unified and highly functional platform. As an example, our partnership with Microsoft allows for the native use of Duo's multi-factor authentication via Microsoft Azure. We want to be part of your long-term strategy and provide value in the areas where you see the most optimal fit.

Future Proofing

The modern day workforce has become increasingly mobile, valuing the freedom to work from anywhere on any device. Unfortunately, traditional security models are limited in their ability to support this type of mobility.

Duo is focused on providing a dynamic security platform that is designed and built for tomorrow's enterprise. Trusted Access provides you with the infrastructure needed to secure your move past the traditional network perimeter. Our philosophy is a new way of thinking about security based on establishing trust with a user and their device prior to granting them access to business applications. Wendy Nather, our Principal Security Strategist, goes into depth around our long-term approach in her series

Moving Beyond the Perimeter.



Risk Reduction

Managing enterprise risk can be complicated and resource-intensive, especially with the dynamic nature of today's business world. Large companies run a complex, hybrid environment comprised of several different on-premises systems, software as a service (SaaS) and public cloud technologies. Users have the flexibility to work from anywhere and on any device.

Unfortunately, there is not a silver bullet to solve all of these risks with one platform. Organizations must rely on multiple

technologies, processes and procedures in tandem to reduce the overall level of risk to the organization.

Duo can be an integral component of your overall risk management program, providing visibility and insightful data to help you identify security risks to your organization. For example, you can quickly understand what devices are out-of-date and pose a risk to your organization with Duo's at-a-glance administrator dashboard.

Risk Reduction cont.

In addition to device and user visibility, you can implement policies to notify users that their devices are out-of-date, giving them the resources they need to update their own software.. You can also block access if devices aren't updated, or if the level of risk is too high, depending on your application and data sensitivity.

We provide industry benchmarking that allows you to compare your environment to that of your industry peers. This information can also be used to highlight the status of your risk reduction efforts. This service is available for Duo Care customers.

Mitigating Risks with Two-Factor Authentication

The 2017 Verizon Data Breach Investigation
Report reported that over 80% of
hacking-related breaches leveraged stolen
and/or weak passwords. Adding a second
factor to your authentication workflow is the

Gone are the days that only privileged users, like your IT administrators, need two-factor authentication. The amount of sensitive and confidential information accessed by your

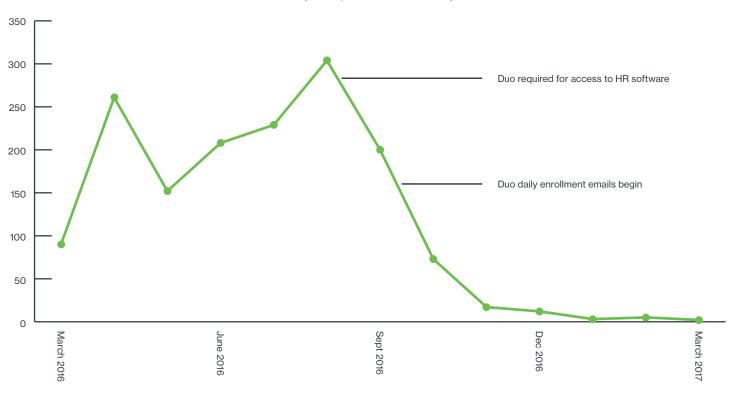
easiest way to mitigate this risk.

workforce increases daily and, therefore, proper access controls need to be enforced to protect every user.

With Duo's frictionless two-factor authentication (2FA) technology, it's easy for organizations to deploy 2FA broadly across their entire user base. Below is an overview of a successful risk mitigation of compromised accounts after an enterprise deployment of Duo.

COMPROMISED ACCOUNTS BY MONTH

Case Study: A Major Research University & Duo



Scalability

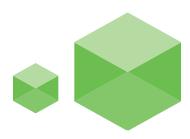
To help you meet your business objectives and ensure a reliable service, Duo is experienced in running large-scale systems in a scalable and secure manner. For protection against the latest security vulnerabilities, we follow an agile development cycle, releasing updates in hours and days compared to several months and quarters. Due to our hybrid SaaS architecture, we require very limited overhead in order to keep our platform

up to date, which means easy, non-disruptive maintenance on your end.

To help meet your specifications, we'll work with you during the design phase to properly scope the solution. We partner with enterprise organizations across all verticals to successfully accomplish their objectives. Our customers range from high tech organizations, like Palantir Technologies, to established firms like Stryker Corporation.

"The Duo solution is the only one that we can confidently and affordably scale up to support our entire organization."

Michael Hodges, IT Manager University of Hawai'i



Speed to Security

Enterprise deployments are complex and can be very time consuming - it is not uncommon for the entire process to take years.

The reasons behind why it takes so long are as unique as the environment the solution is being deployed in. This can be extremely frustrating for IT and security teams as they

We understand your pain - as part of our Duo Care package, we will work with you

deal with roadblock after roadblock.

to establish a timely deployment of our solution within your environment. To help large companies deploy Duo's platform smoothly in weeks to months, we provide strategic planning services, enterprise communication plans and end user and help desk training.

Duo has helped a company with 15,000 users deploy our platform over two days - maximizing their time to security.

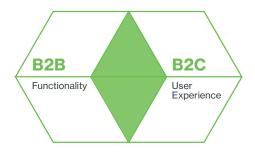
"It was a very successful deployment.

Information provided to support groups and end users was very clear and well-thought-out, making the registration process a success."

Phil Long, Director of Enterprise Support and Cybersecurity

<u>Day & Zimmerman</u>

User Experience



Your employees leverage consumer applications on a daily basis and those interactions shape their expectations for how all business applications should function.

They demand functionality and convenience. Unfortunately, there has been an oil and water relationship with users and security technologies - all too often a company has to choose either productivity or security.

At Duo, we don't want you to have to make that decision. Duo builds security for people. We fundamentally believe that peoplecentric security is the only effective security. That's why we designed our security solution to work with people and their devices.

Our product design objective is to create an exceptional user experience that focuses on ease of use for every user. Our user self-enrollment takes only a couple of minutes and our <u>Duo Push</u> technology is intuitive. We then provide a secure single sign-on (SSO) experience, giving your users a seamless login experience while accessing all of their enterprise applications - ensuring the easiest path to access.

Conclusion

Duo is committed to providing innovative security solutions that will grow and adapt with your business. As the modern enterprise workforce evolves, so must the security technologies that support them. Traditional security models are far too rigid and painful for end users. Duo has replaced them with flexible, easy-to-use security that focuses on user experience. Our vision is to ensure security and productivity go hand-in-hand.

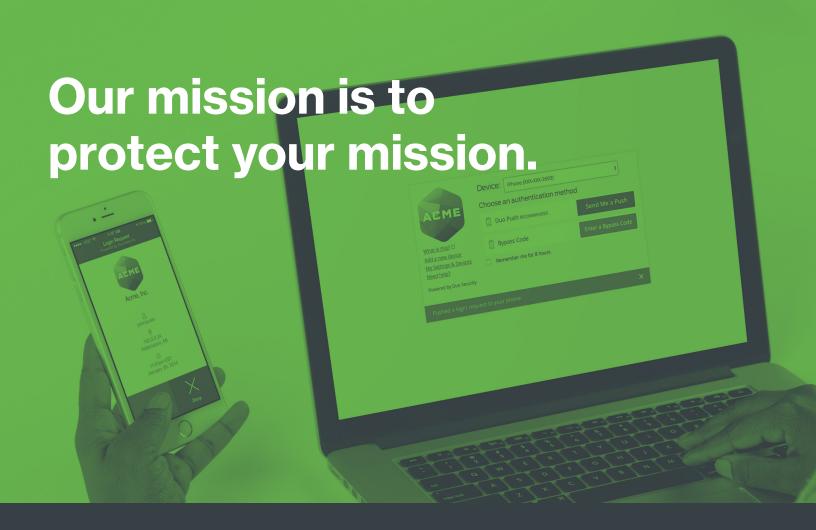
The easiest path for access is now the most secure. Duo helps reduce enterprise security risks associated with user and device access by providing seamless accessibility based on trust. Our technology provides your security teams with additional visibility and analytics capabilities to make informed, data-driven decisions around how to enforce your security access policies.

We take pride in being a strategic trusted advisor to your organizations by providing exceptional customer success and unrivaled support for your worldwide operations. We couple this with having a service that scales to meet your enterprise needs and is available anytime, anywhere. Our intention is to provide you a reliable trusted security service that meets the demanding needs of your organization.

We hope the guide has provided you with an overview of the value Duo can provide to your organization.

Our dedication is to your success now and into the future. We look forward to serving you.





Experience advanced two-factor authentication, endpoint visibility, custom user policies & more with your free 30 day trial.

Try it today at duo.com.

Duo Security makes security painless, so you can focus on what's important. Our scalable, cloud-based <u>Trusted Access</u> platform addresses security threats before they become a problem, by verifying the identity of your users and the health of their devices before they connect to the applications you want them to access.

Thousands of organizations worldwide use Duo, including Facebook, Toyota, Panasonic and MIT. Duo is backed by Google Ventures, True Ventures, Radar Partners, Redpoint Ventures and Benchmark. We're located from coast to coast and across the sea.

Follow @duosec and @duo_labs on Twitter.



