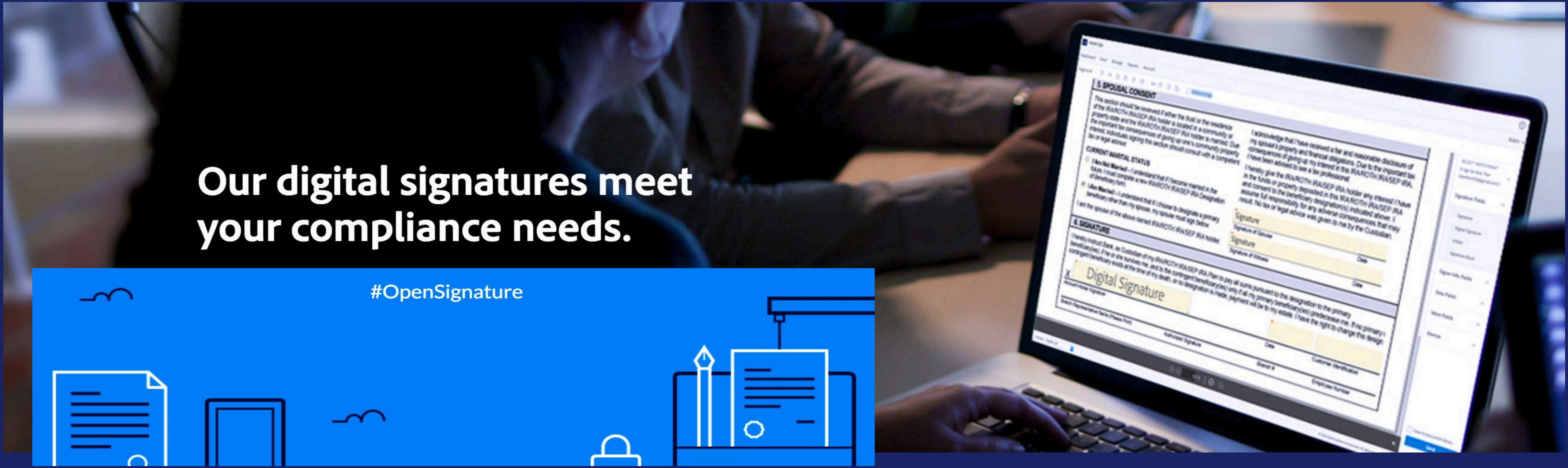
Cloud Signature Consortium Update

Andrea Valle JT2A Meeting – 7th November 2018

CLOUD SIGNATURE CONSORTIUM

Improving and simplifying Digital Signatures

- Provide highest **Integrity** and **Authenticity** to an electronic document.
- Meet compliance with the main regulatory and industry requirements.
- Allow users to complete digital signing anytime, anywhere and on any platform: web, mobile, desktop.



Building a standard for cloud signatures

A new industry consortium to pioneer
open digital signatures for mobile and the web

#OpenSignature

Meet the Cloud Signature Consortium

- The **Cloud Signature Consortium** was originally founded in 2016 by an international cooperation group of industry and academic experts, including solutions, technology and trust service providers
  - Promoting cloud-based Electronic Trust Services.
  - Design a common architecture and building blocks to facilitate their interaction
  - Develop technical specifications for protocols and APIs
    to make these interactions easy and interoperable.
  - Publish technical specifications as open standards.

Secure transactions,
on the go

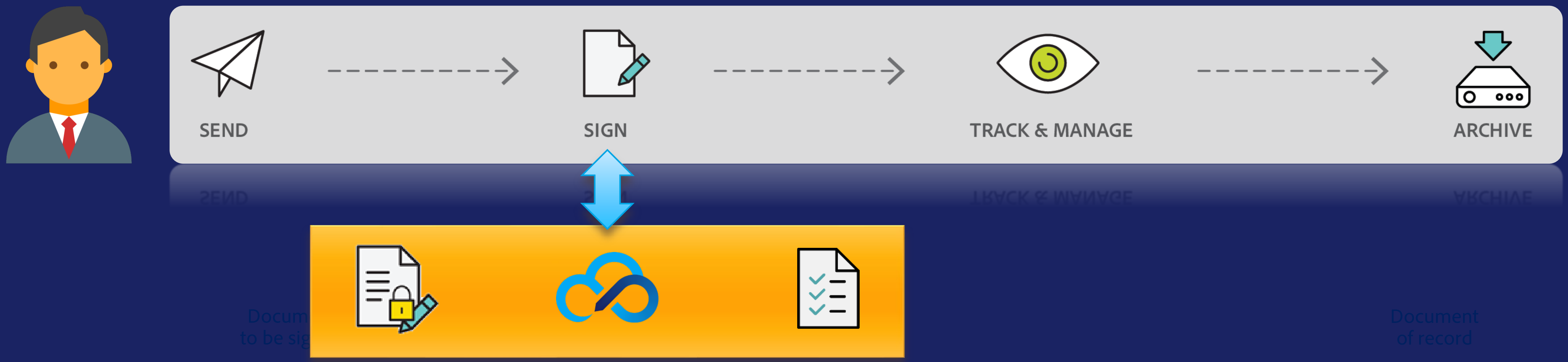
Cloud storage,
no download

Simple certificate
ownership

Easy deployment
for end users

Solving the Digital Signature challenges

- Define a unified and open standard for cloud-based digital signatures.
- Solve the issue with smart cards and USB tokens that only work on desktop computers.
- Create a network of specialized Trust Service Providers focusing on solutions.
- Combine highest security with powerful document intelligence for business agility.



Current activities

- **In January 2018 the Consortium became a Not For Profit Association**
  - Acquired legal personality to support membership expansion and advocacy worldwide
- **Cooperation**
  - Establishing a Cooperation Agreement with ETSI to allow mutual exchange of contributions for the development of standards for trust services.
  - The CSC API specification is referenced in ETSI TS 119 432 "Protocols for remote digital signature creation"
  - Active cooperation with Government agencies involved in public policies about remote signatures.
- **Making the CSC API V1 Specification publicly available**
  - Draft available at: https://cloudsignatureconsortium.org/specifications
  - JSON schema
  - OpenAPI schema

The Members

Adobe	USA/Ireland
Asseco Data Systems	Poland
BuyPass	Norway
Certinomis Docapost	France
CertSign	Romania
DigiCert	USA
D-Trust/Bundesdruckerei	Germany
eMudhra	India
GMO GlobalSign	USA/Japan
KPMG	Norway
InfoCert	Italy
Intarsys	Germany
Intesi Group	Italy
Notarius	Canada
QuoVadis WiseKey	Switzerland/Benelux
SafeLayer	Spain
Seiko	Japan
Technische Univ. Graz	Austria
Trans Sped	Romania
Universign	France
Validated ID	Spain
Worldline ATOS	France

Joining the Cloud Signature Consortium

- **The Cloud Signature Consortium is a technical community**
  - Joining the CSC means becoming part of an active community of adopters and endorsers:
    - Service Providers, Solution Providers, Technology Providers, System Integrators, Consultants, Auditors.
  - Contribute to the development of the standard:
    - Influence and drive strategic directions
    - Benefit from early access to API specifications.
  - Marketing initiatives, Public policies
- **Conformity Checker**
  - The Consortium has developed a Conformity Checker software to help testing service implementations for interoperability and performance analysis.

https://cloudsignatureconsortium.org/contacts

A quick look into the CSC Standard

CLOUD SIGNATURE CONSORTIUM Standard

Architectures and Protocols for Remote Signature applications

Public pre-release version 1.0.2.4 rev. PR (2018-09)

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Promoters: Adobe Systems, Asseco Data Systems, Certinomis, Cryptolog, D-Trust, Graz University of Technology, InfoCert, Intarsys Consulting, Intesi Group, SafeLayer Secure Communications, Unibridge.

Cloud Signature Consortium | Square de Meeus 37 | B1000 Brussels | Belgium, EU

The CSC Technical Specifications in a nutshell

- **The CSC Specification V1 covers architectures, protocols and APIs for Remote Signature Creation**
  - Web Service API based on REST protocol and JSON data-interchange. Modern and easy to implement.
- **Designed for growth. Self-discovery capacity**
  - Supports modular services, in line with the mission/capacity of providers and consumers.
  - Services may implement only a particular subset of the API. Clients can easily discover the supported APIs.
- **Native support of client and user authentication**
  - Covers multiple implementation contexts: desktop and mobile apps, cloud-based and on-premise services.
  - Supports Basic/Digest auth, TLS, OAuth, SAML, OpenID Connect.
- **Flexible support of credential authorization mechanisms**
  - Supports static secrets, synchronous and asynchronous OTP, OAuth, SAML, OIDC.
  - Multi-Factor-Authorization can be obtained by combining multiple mechanisms.
- **Designed to support eIDAS requirements and CEN / ETSI standards**
  - But flexible to support a broader set of requirements for Global adoption.

Standardization Roadmap

Standardization roadmap

- **Expand the API to support additional Trust Services**
  - Core API for Cloud Signatures (Remote Digital Signatures)
  - Identity Verification and Authentication
  - Certificate enrollment automation
  - Signature validation and augmentation
  - Long-term Preservation
- **All future services will benefit from a common API framework and unified design**
  - Client and user authentication
  - Flexible resource authorization
  - REST+JSON API
  - Open Standard and interoperable
  - Privacy by design

SIGNATURES AT THE
Speed
OF SIMPLE.

Adobe Sign

Fast deployment.

Our web and mobile apps are ready when you are. Your users will get a quick-start email. They can learn through our awesome tutorials. Or dive right in with our easy interface.

Mobile power.

Send, track, and manage signing processes on the go. Collect in-person signatures. Or scan paper docs with your mobile camera and send them for signature in a flash.

Error-proof workflows.

Design business processes that everyone can follow, every time. Just drag and drop to create workflow templates that reduce mistakes and improve compliance.

Branded experiences.

Your organization's brand is important — to you, your team, and your customers. Adobe Sign reflects your brand, not ours, so you can position your company as the leader it is.

Self-serve forms.

Put forms on your website, so customers can fill, sign, and return in seconds. Or create an internal portal for employees to find the right form quickly.

Document templates.

Upload any popular document type or get it from online storage. Easily add signature or form fields, and then send for signature or save it as a reusable template.

Online payments.

Connect to your Braintree account (a PayPal service) to securely collect payments — right when customers fill and sign forms.

Adobe Sign

Trusted and legal.

With Adobe Sign, your electronic signatures are legally valid and enforceable. They meet the most demanding requirements and comply with e-sign laws around the world.

Cloud signatures.

We delivered the first open, standards-based digital signatures for web and mobile. So you can offer easy-to-use, high-assurance digital IDs that are internationally compliant.

Automatic audit trails.

Reduce legal risk. Automatically store a complete audit trail of every transaction in a secure online repository. Quickly find what you need, when you need it.

Reliable and secure.

Get uptime you can count on, while ensuring security and privacy. Adobe Sign delivers high performance around the world and complies with the most stringent security standards.

ISO 27001

PCI DSS

SOC

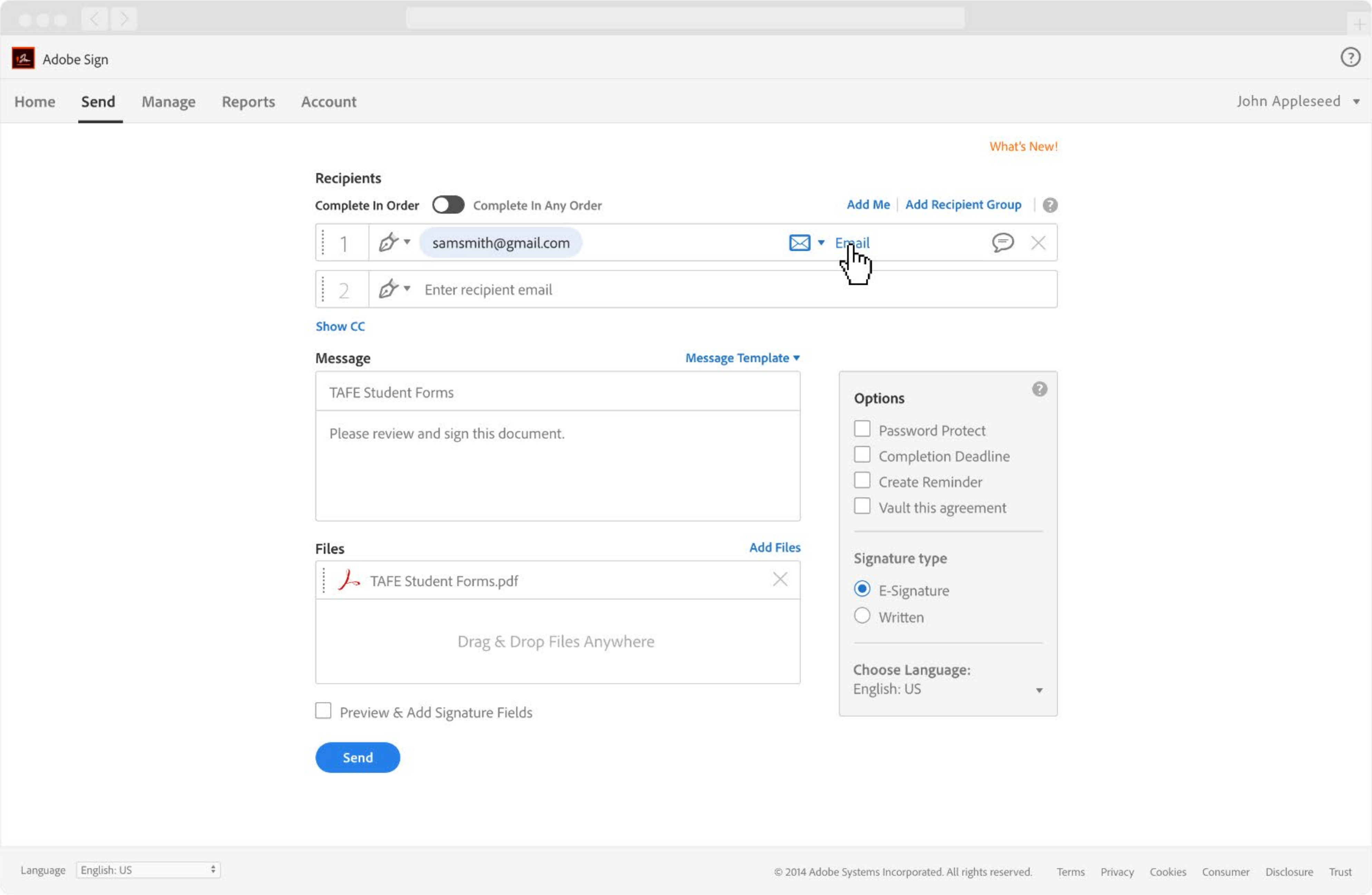
21 CFR

Adobe Sign adopts the CSC specifications

- **Adobe Sign implements the preliminary V0 of the CSC specifications**
  - Works from any laptop or mobile device, using a web browser or dedicated app
  - Supports OAuth for user-centric authentication
  - Supports ETSI standards for Advanced and Qualified Signature
  - Supports ETSI PAdES-B-LT for long term validity. Expanding to support PAdES-B-LTA

- **The CSC advantage**
  - A new CSC provider can be onboarded in 2 working days (Configure and Test)
  - Authentication and authorization mechanisms are under the control of the Provider
  - Unique market coverage for the Enterprise market
    - Work with multiple providers supporting multiple Regions and languages
    - Wide support of operational models
    - Wide industry and regulatory compliance (e.g. Pharma / Finance)

Adobe Sign Cloud Signature Demo



Recipients

Complete In Order ○ Complete In Any Order

1 samsmith@gmail.com Email

2 Enter recipient email

Message

TAFE Student Forms

Please review and sign this document.

Files

TAFE Student Forms.pdf

□ Preview & Add Signature Fields

Options

□ Password Protect
□ Completion Deadline
□ Create Reminder
□ Vault this agreement

Signature type

● E-Signature
○ Written

Choose Language:
English: US

Language English: US

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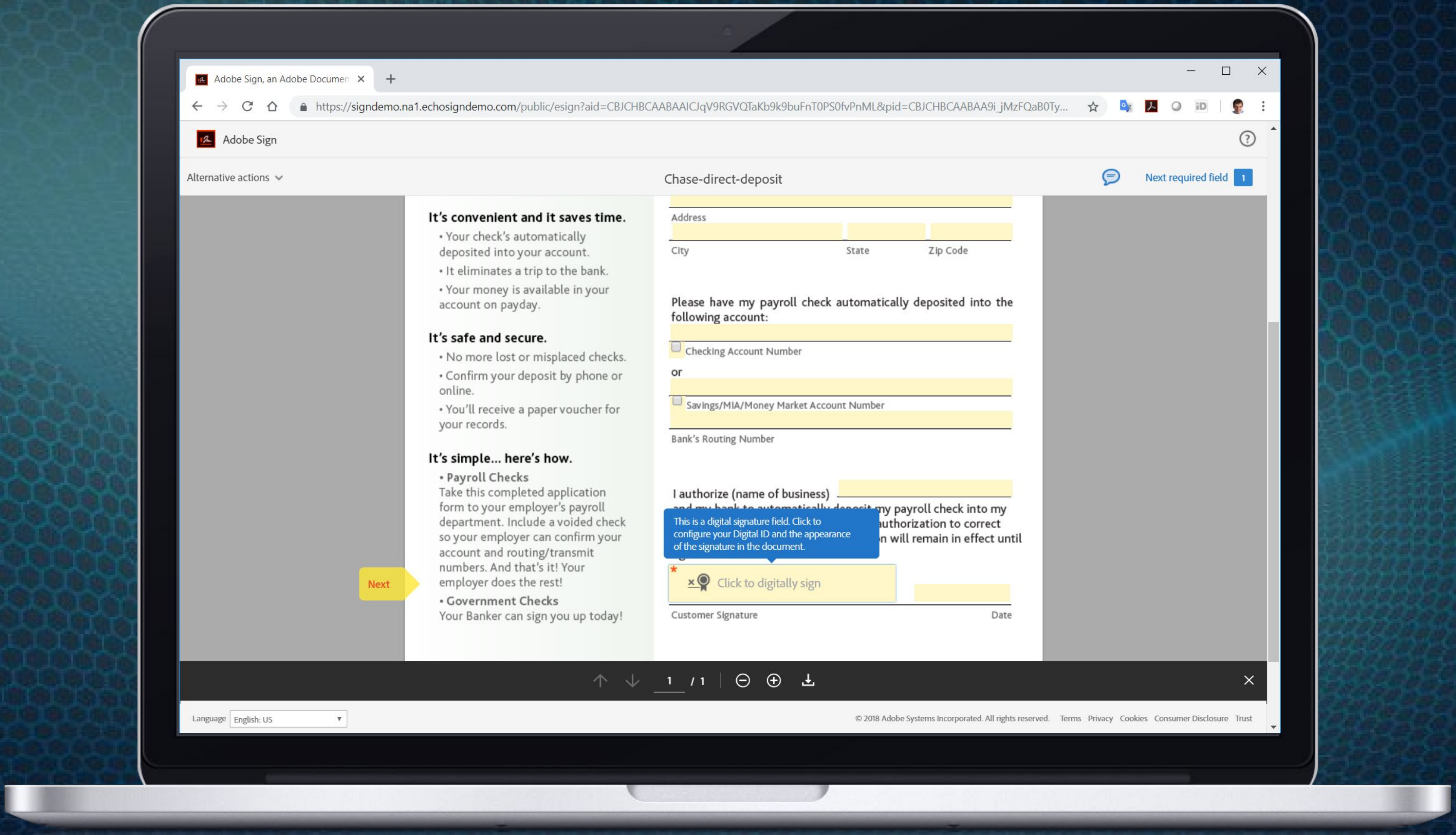
Click the signature field to start signing

- **Fill in data fields** as needed.

- Click on the **signature field** to apply the digital signature.



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Adobe Sign
Alternative actions
Next required field 1
Next
1 / 1
Language English: US
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Chase-direct-deposit

It's convenient and it saves time.

- Your check's automatically deposited into your account.
- It eliminates a trip to the bank.
- Your money is available in your account on payday.

It's safe and secure.

- No more lost or misplaced checks.
- Confirm your deposit by phone or online.
- You'll receive a paper voucher for your records.

It's simple... here's how.

- **Payroll Checks**
  Take this completed application form to your employer's payroll department. Include a voided check so your employer can confirm your account and routing/transmit numbers. And that's it! Your employer does the rest!
- **Government Checks**
  Your Banker can sign you up today!

Address

City State Zip Code

Please have my payroll check automatically deposited into the following account:

□ Checking Account Number

or

□ Savings/MIA/Money Market Account Number

Bank's Routing Number

I authorize (name of business) ______
my payroll check into my
authorization to correct
n will remain in effect until

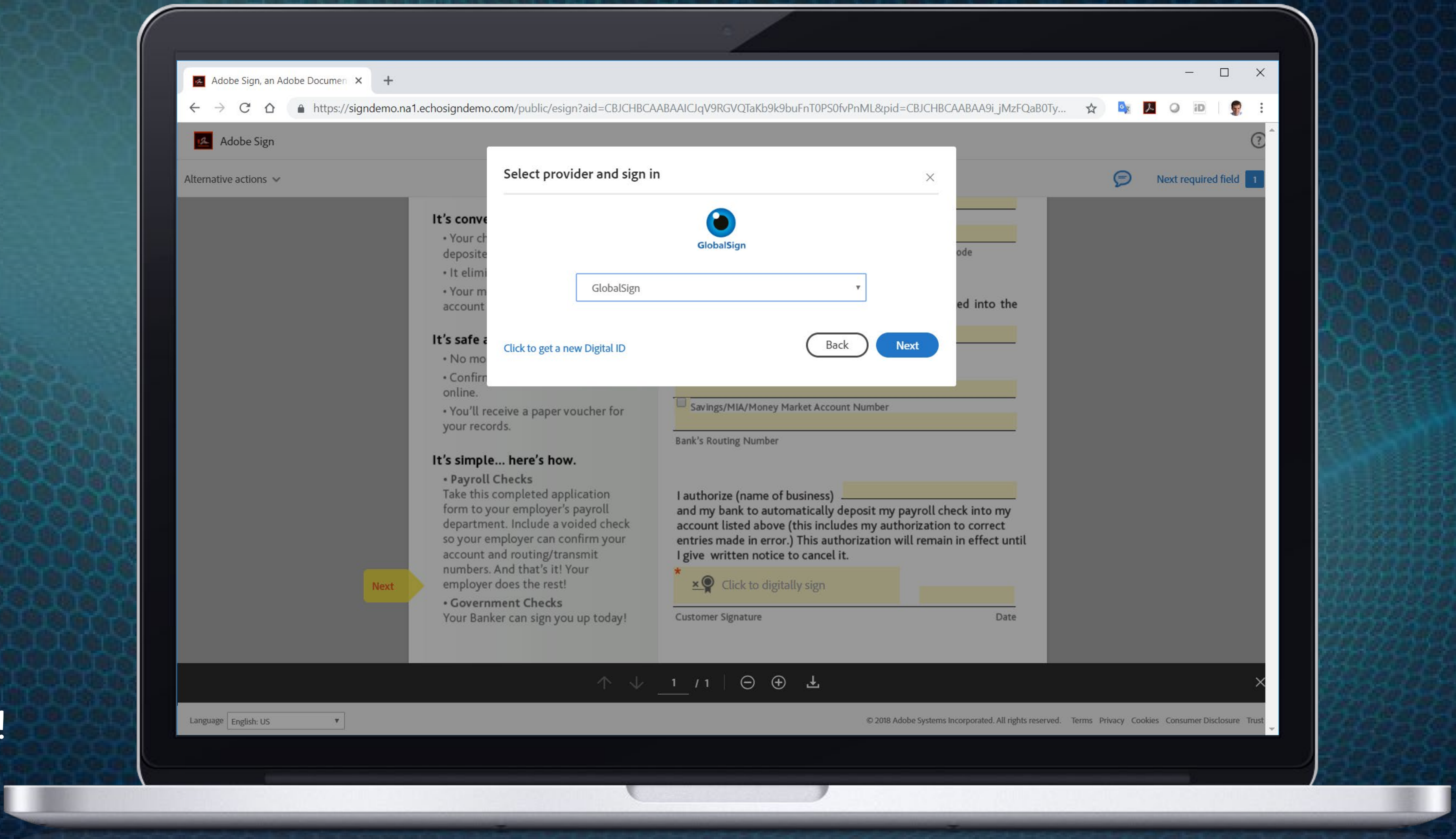
This is a digital signature field. Click to configure your Digital ID and the appearance of the signature in the document.

* Click to digitally sign

Customer Signature Date

Select your Provider

- **Select the CSC Provider** as needed.
- Currently available providers:
  - Asseco
  - BankID Sweden
  - BankID Norway
  - GlobalSign
  - InfoCert
  - Intesi Group
  - Seiko
  - Trans Sped
  - …more coming soon!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Adobe Sign
Alternative actions
Next required field
Select provider and sign in
GlobalSign
GlobalSign
Click to get a new Digital ID
Back
Next
Next
Click to digitally sign
Customer Signature
Date
Savings/MIA/Money Market Account Number
Bank's Routing Number
Language English: US
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• You'll receive a paper voucher for your records.

It's simple... here's how.

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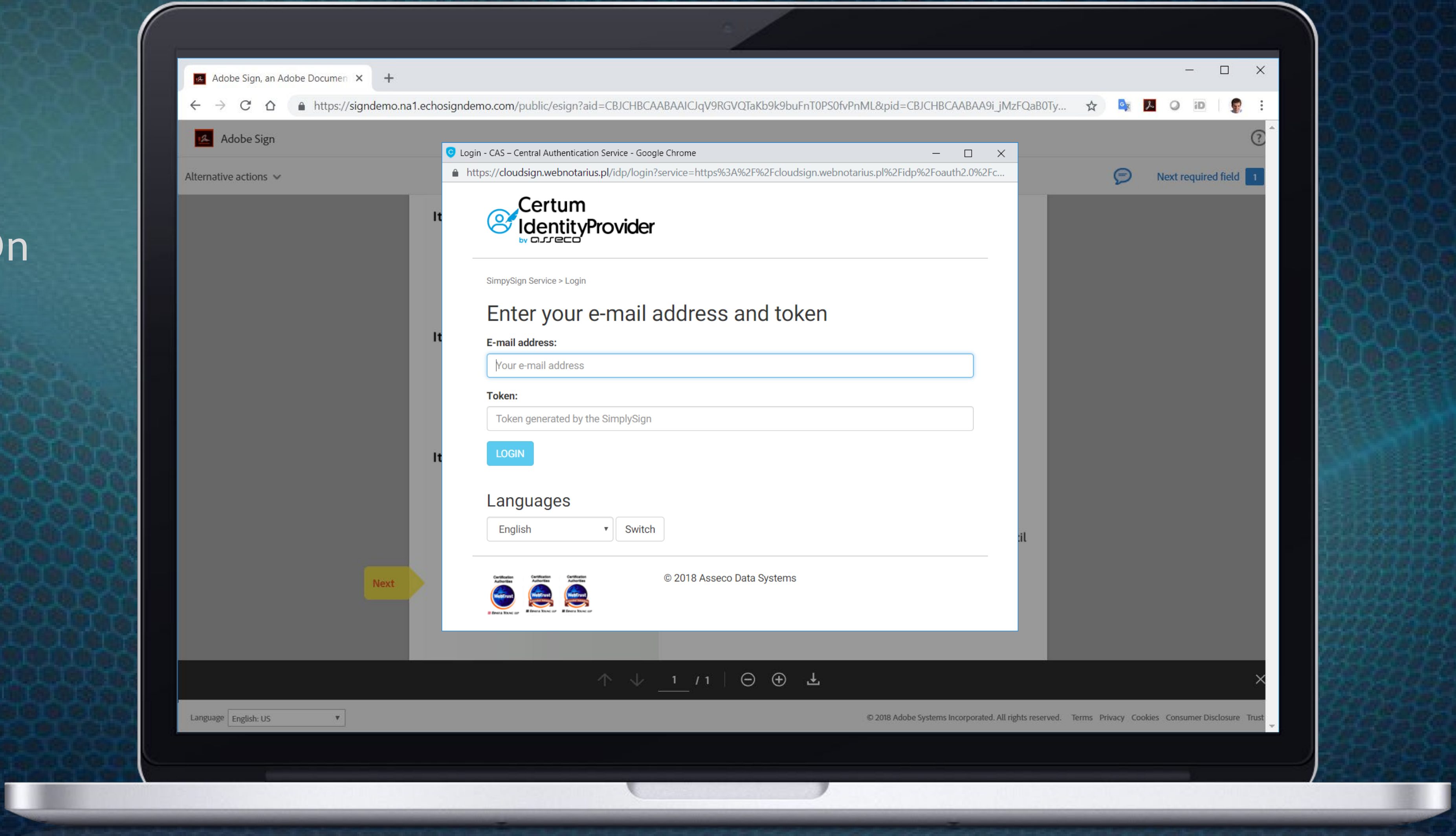
Take this completed application form to your employer's payroll department. Include a voided check so your employer can confirm your account and routing/transmit numbers. And that's it! Your employer does the rest!

• Government Checks
Your Banker can sign you up today!

I authorize (name of business) and my bank to automatically deposit my payroll check into my account listed above (this includes my authorization to correct entries made in error.) This authorization will remain in effect until I give written notice to cancel it.

Authenticate with your Provider

- **Authenticate** with the chosen Provider using OAuth.
- Supports Single Sign On for Enterprise environments



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Login - CAS – Central Authentication Service - Google Chrome

https://cloudsign.webnotarius.pl/idp/login?service=https%3A%2F%2Fcloudsign.webnotarius.pl%2Fidp%2Foauth2.0%2Fc...

Certum IdentityProvider by asseco

SimpySign Service > Login

Enter your e-mail address and token

E-mail address: Your e-mail address

Token: Token generated by the SimplySign

Languages

English

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Language English: US

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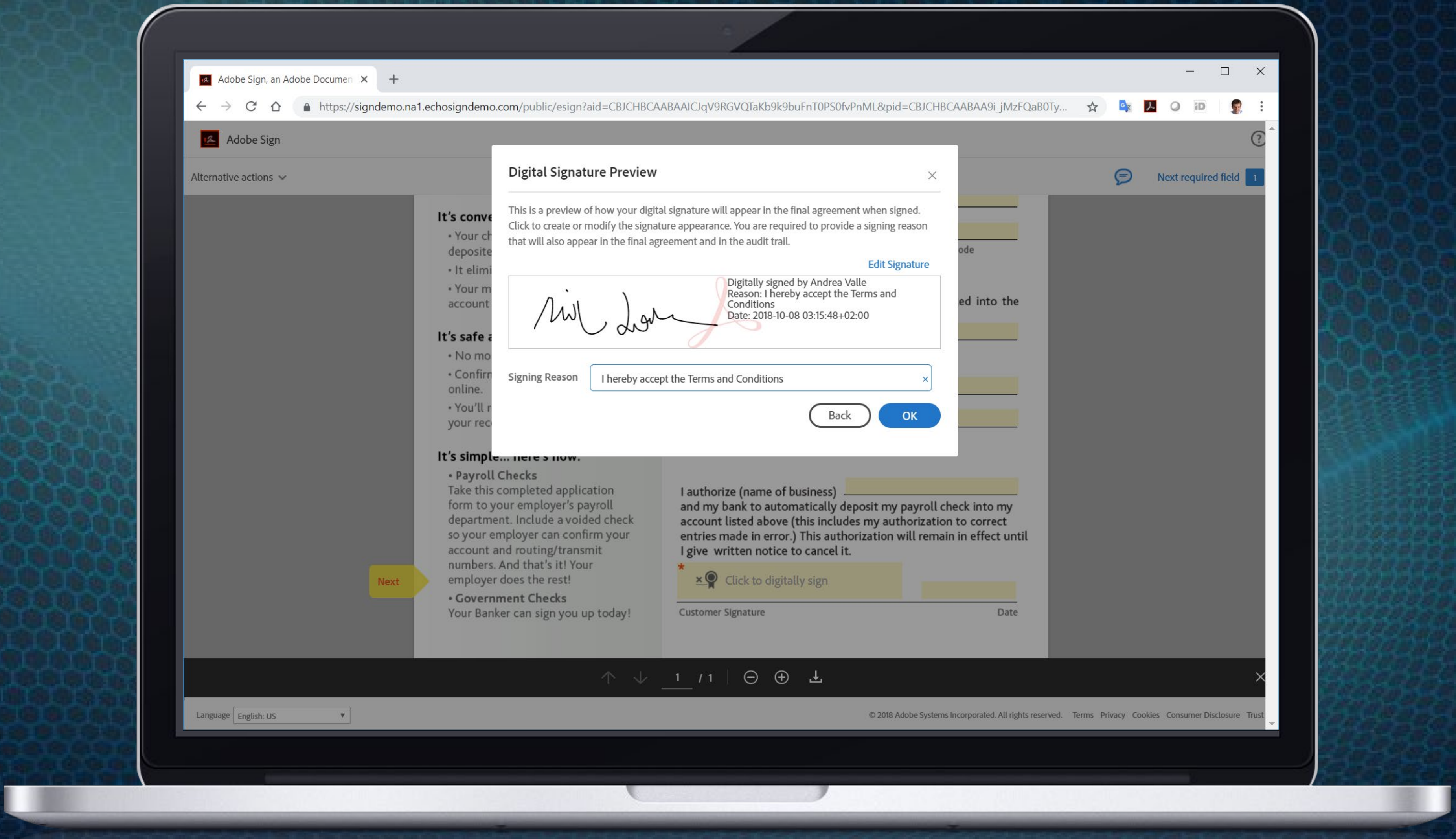
Configure and Preview your signature

- **Preview** the visual presentation of your digital signature. Shows how it will appear in the final signed agreement.

- Add a **Signing Reason** if needed.



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Alternative actions
Next required field 1
Next
1 / 1
Language English: US
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Digital Signature Preview

This is a preview of how your digital signature will appear in the final agreement when signed. Click to create or modify the signature appearance. You are required to provide a signing reason that will also appear in the final agreement and in the audit trail.

Edit Signature

Digitally signed by Andrea Valle
Reason: I hereby accept the Terms and Conditions
Date: 2018-10-08 03:15:48+02:00

Signing Reason: I hereby accept the Terms and Conditions

Back | OK

• Payroll Checks
Take this completed application form to your employer's payroll department. Include a voided check so your employer can confirm your account and routing/transmit numbers. And that's it! Your employer does the rest!

• Government Checks
Your Banker can sign you up today!

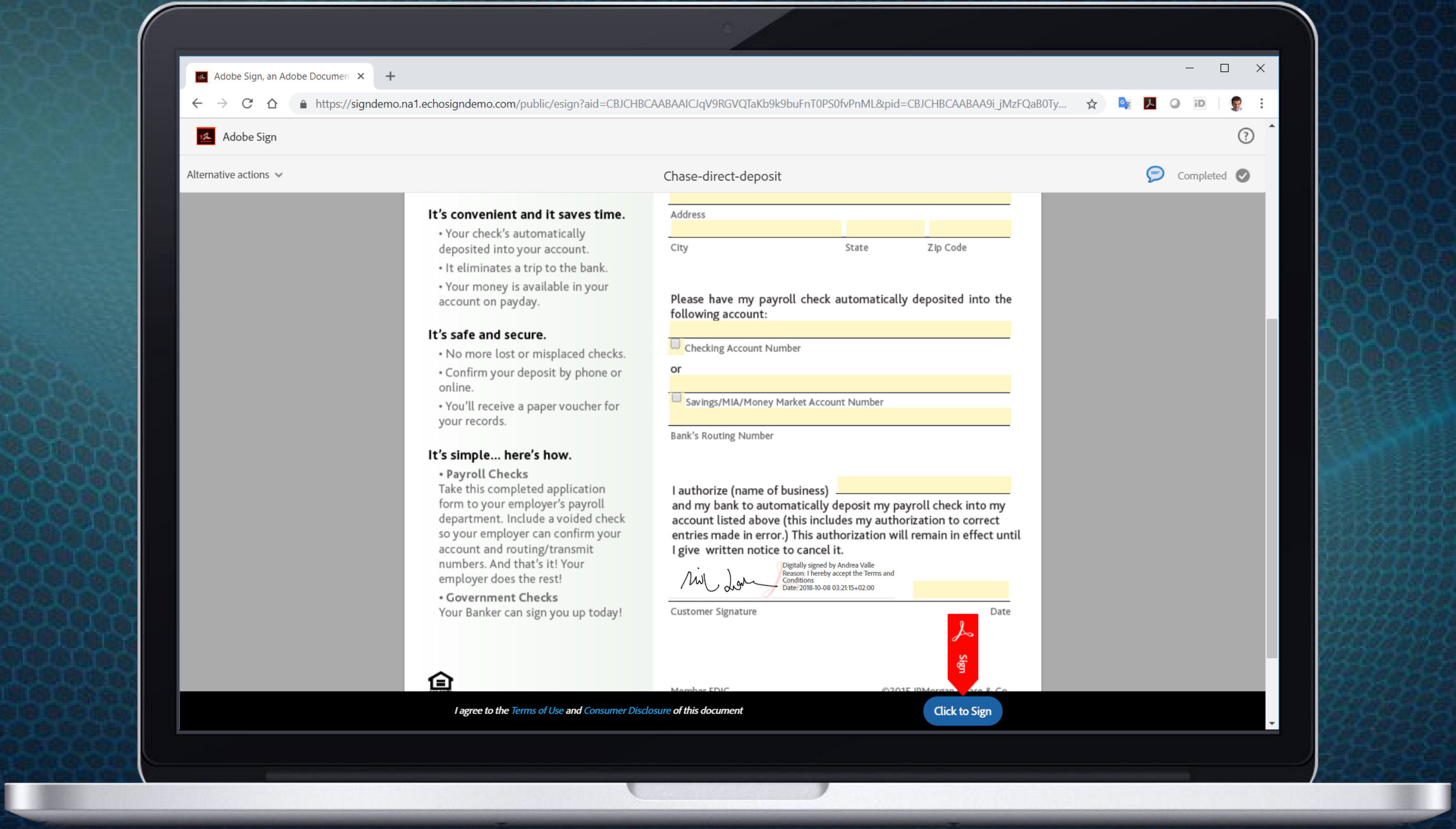
I authorize (name of business) ______ and my bank to automatically deposit my payroll check into my account listed above (this includes my authorization to correct entries made in error.) This authorization will remain in effect until I give written notice to cancel it.

* Click to digitally sign

Customer Signature | Date

Apply the digital signature to the document

- Complete any other required form fields.
- Accept the terms and conditions as required and press the **Click to Sign** button.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Adobe Sign
Alternative actions
Chase-direct-deposit
Completed
Sign

It's convenient and it saves time.

- Your check's automatically deposited into your account.
- It eliminates a trip to the bank.
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It's safe and secure.

- No more lost or misplaced checks.
- Confirm your deposit by phone or online.
- You'll receive a paper voucher for your records.

It's simple... here's how.

- Payroll Checks
  Take this completed application form to your employer's payroll department. Include a voided check so your employer can confirm your account and routing/transmit numbers. And that's it! Your employer does the rest!
- Government Checks
  Your Banker can sign you up today!

Address

City State Zip Code

Please have my payroll check automatically deposited into the following account:

□ Checking Account Number

or

□ Savings/MIA/Money Market Account Number

Bank's Routing Number

I authorize (name of business) ______ and my bank to automatically deposit my payroll check into my account listed above (this includes my authorization to correct entries made in error.) This authorization will remain in effect until I give written notice to cancel it.

Digitally signed by Andrea Valle
Reason: I hereby accept the Terms and Conditions
Date: 2018-10-08 03:21:15+02:00

Customer Signature Date

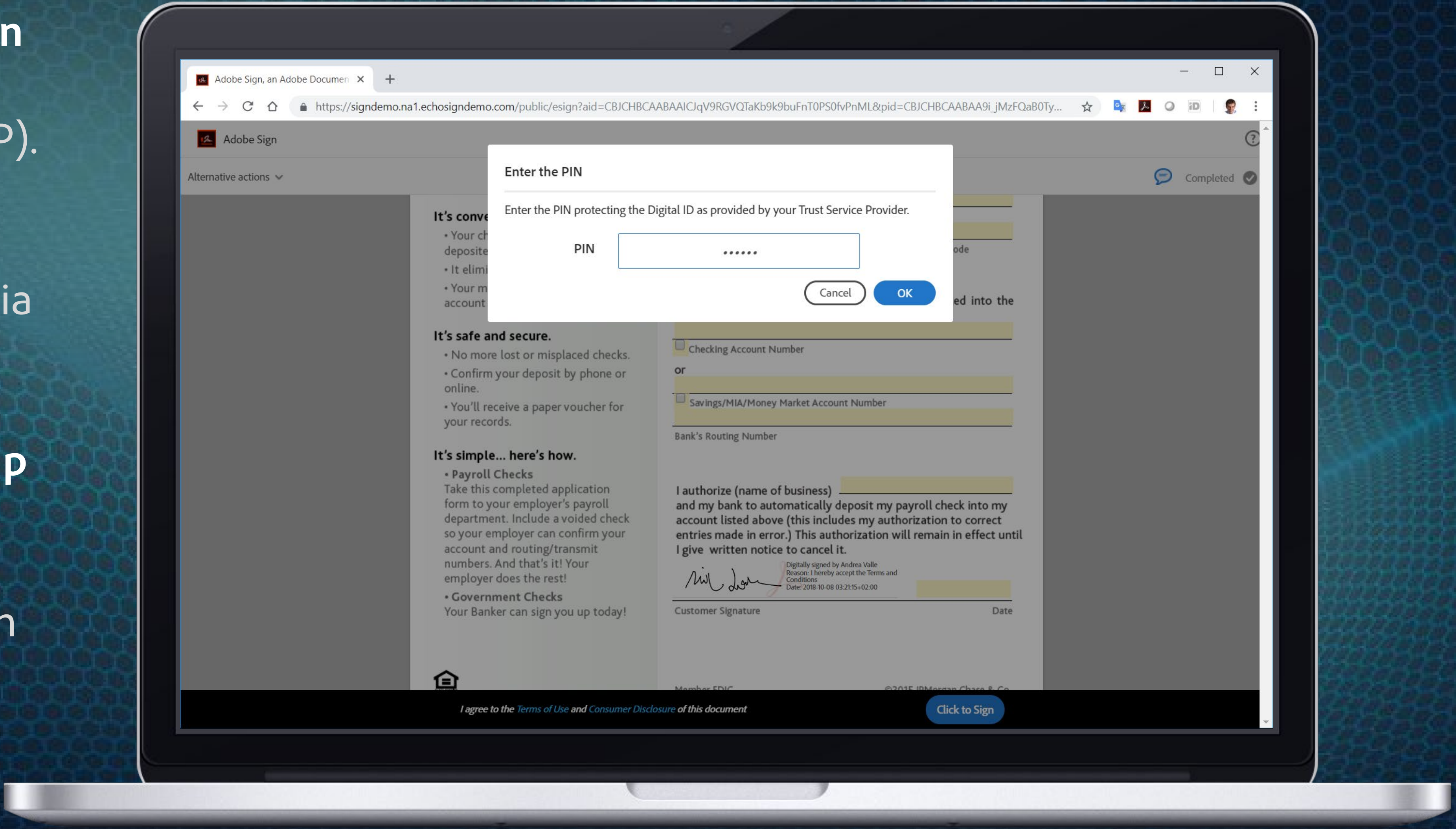
Member FDIC ©2015 JPMorgan Chase & Co.

I agree to the Terms of Use and Consumer Disclosure of this document

Click to Sign

Authorize the signature

- Enter the **authorization data** that protects the Digital ID (e.g. PIN/OTP).
- Also supports other authorization factors via OAuth.
- A **Qualified Timestamp** is also automatically applied as a proof of existence and to obtain a Long Term Validity signature.



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Alternative actions
Completed

Enter the PIN

Enter the PIN protecting the Digital ID as provided by your Trust Service Provider.

PIN: ••••••

Cancel | OK

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It's safe and secure.
- No more lost or misplaced checks.
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Digitally signed by Andrea Valle
Reason: I hereby accept the Terms and Conditions
Date: 2018-10-08 03:21:15+02:00

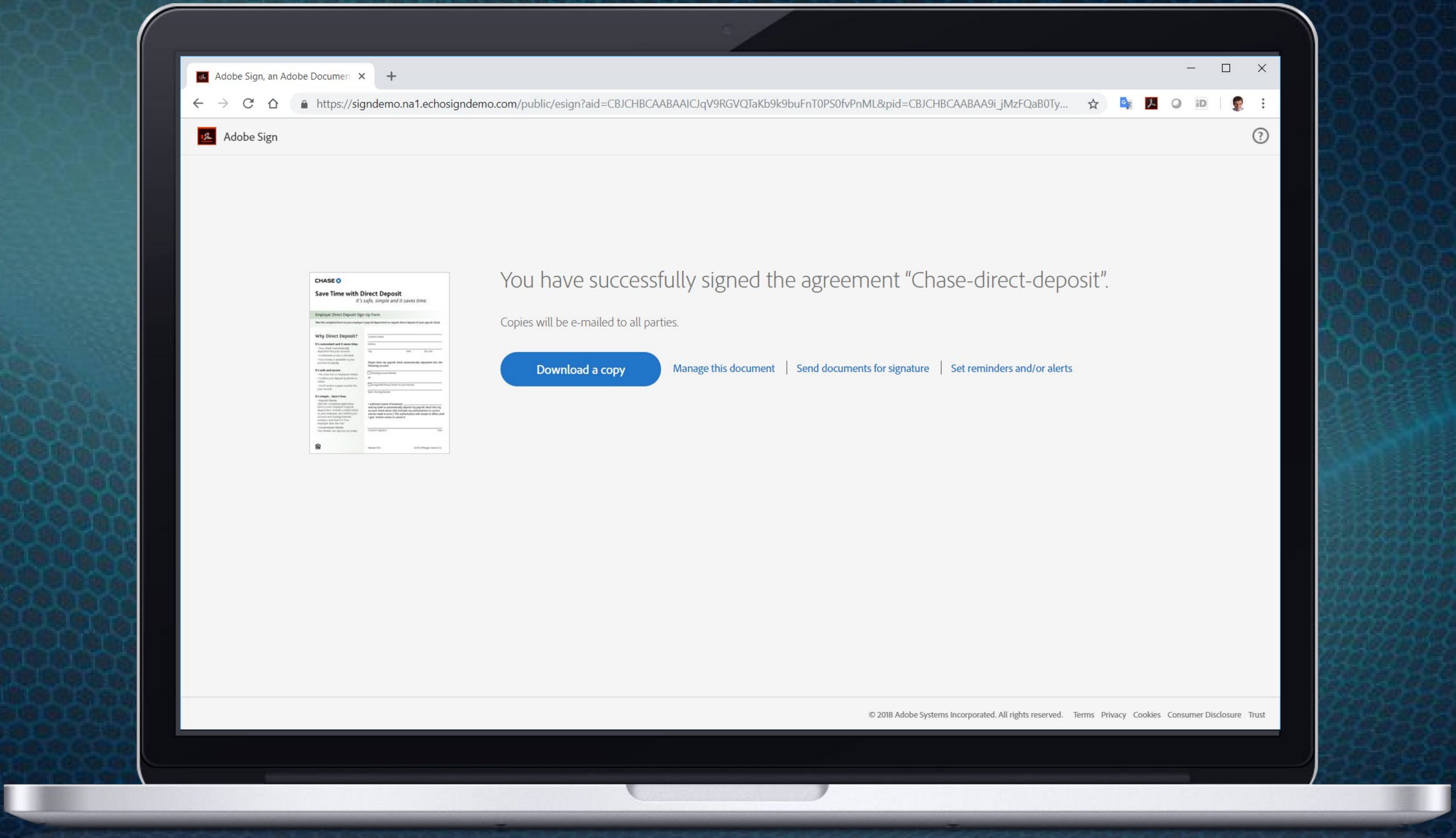
Customer Signature | Date

I agree to the Terms of Use and Consumer Disclosure of this document

Click to Sign

You have successfully signed the agreement!

- Your **Cloud Signature** has been applied successfully.
- The signed document is **archived** for unlimited time.
- You can **download a copy** of your signed document when needed at any time.



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Adobe Sign

You have successfully signed the agreement "Chase-direct-deposit".

Copies will be e-mailed to all parties.

Download a copy
Manage this document
Send documents for signature
Set reminders and/or alerts
CHASE
Save Time with Direct Deposit

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A look into Adobe’s 2019 Roadmap

Adobe's Cloud Signature Roadmap

- **Adobe Cloud Signature Partner program**
  - Co-sell and co-marketing opportunity for TSPs
  - Develop custom solutions with Adobe Sign APIs
- **Support of OAuth for signature authorization**
  - Gives the Provider full control of the authorization process
- **Add Cloud Signature support to Adobe Acrobat and Reader**
  - Create remote signatures from the ubiquitous desktop applications with *Zero Footprint Setup*
- **Expand Cloud Signature services with Dynamic Identity Verification**
  - Currently supporting multiple eID schemes in Europe, extending to other eID schemes (e.g. My Number in Japan)
  - Simplified integration with Corporate Identity Services with dynamic certificate generation.
- **User Experience enhancements**
- **Onboard additional Trust Service Providers**

CLOUD
SIGNATURE
CONSORTIUM

Thank you!

Andrea Valle
avalle@adobe.com