



Blending Embedded Hardware OTP, SSO, and Out of Band Auth for Secure Cloud Access

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(an Intel company)

Session ID: SP01-201

Session Classification: Intermediate

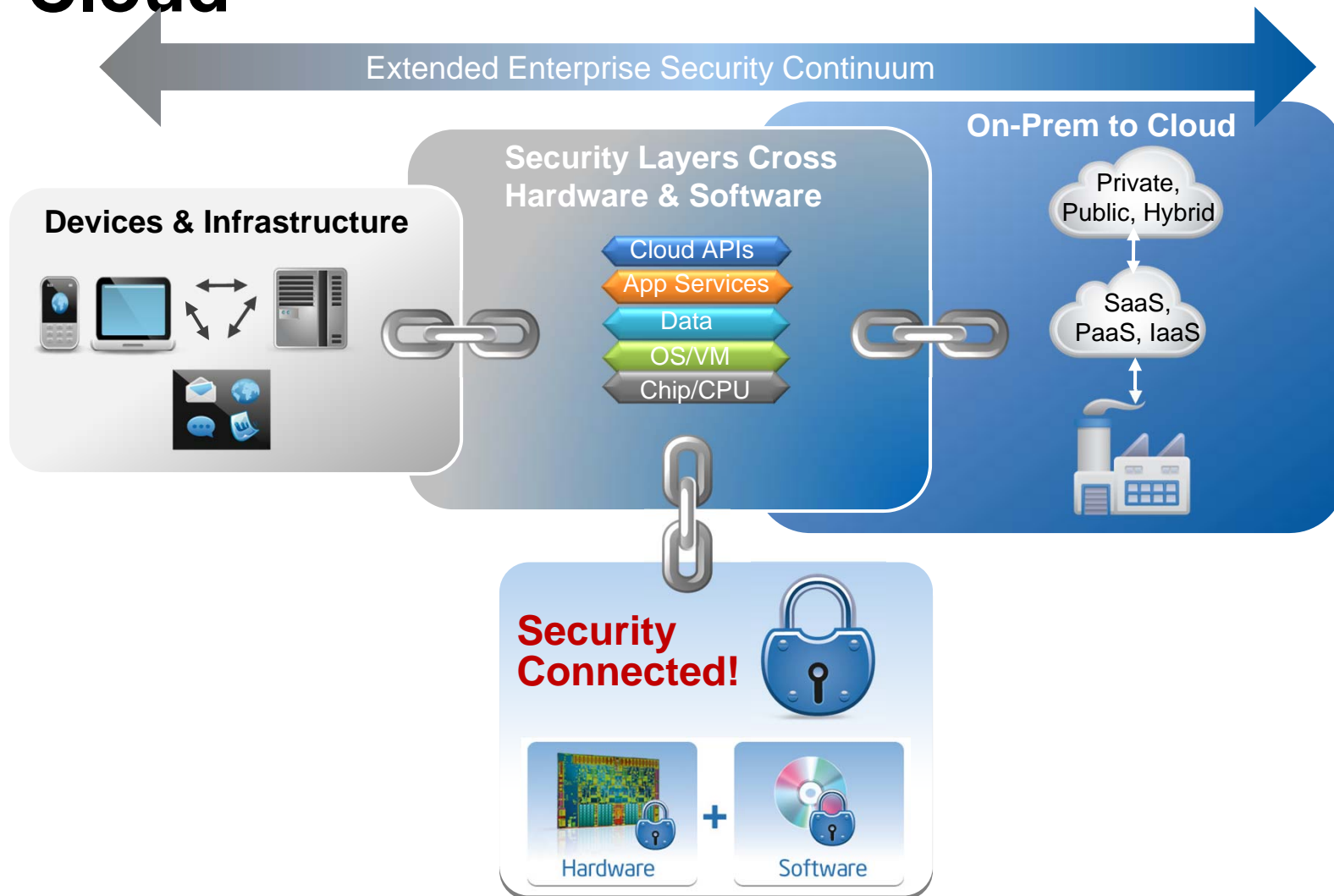
RSACONFERENCE2012

Agenda

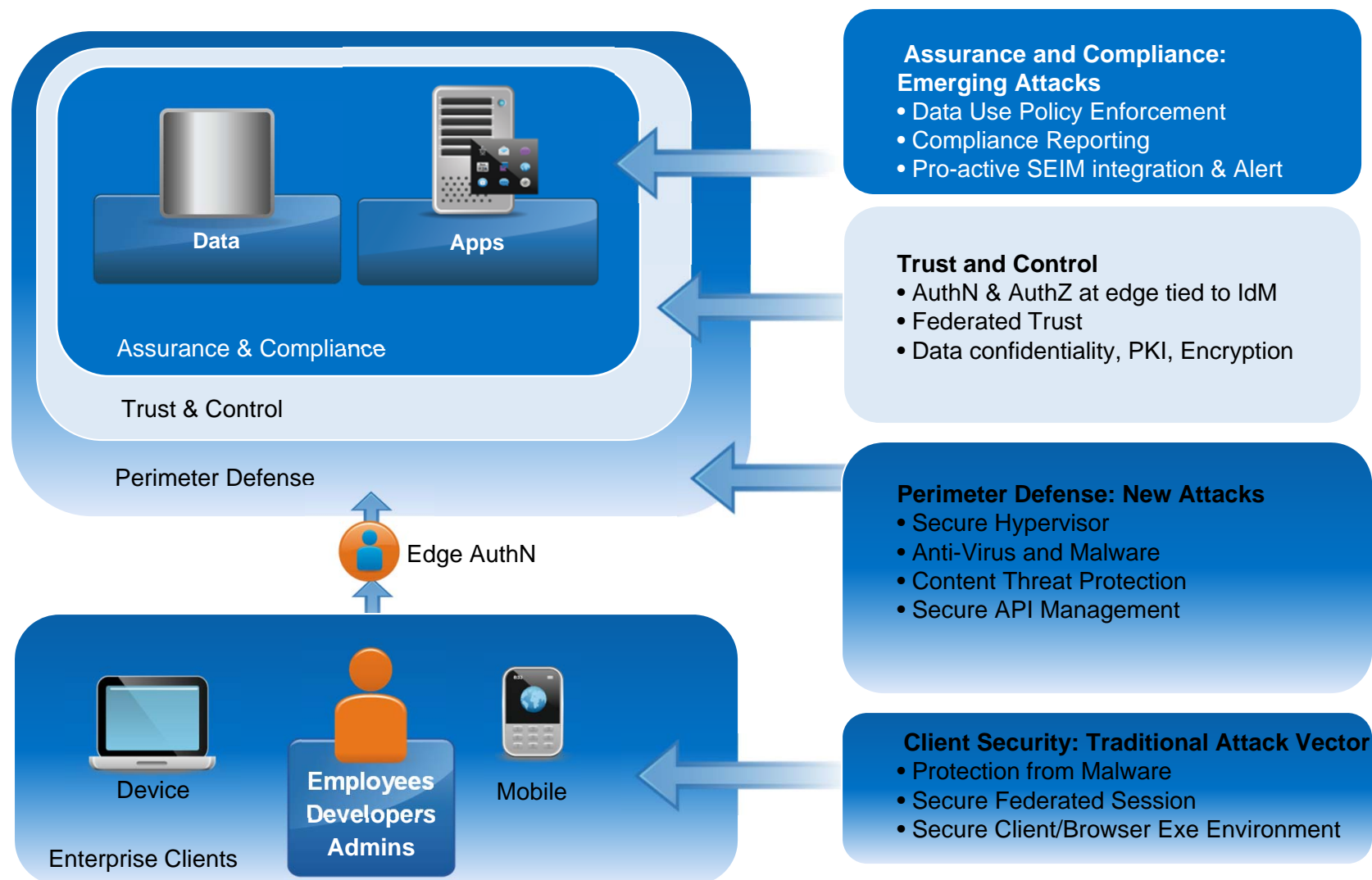
- Client to Cloud Security Layers
- User to Cloud SSO
- Strong Auth for Cloud
- Cloud App API Security
- Demo



The Goal “Security Connected” Client to Cloud



Anatomy of Client to Cloud Security Layers to Address



Effective Client to Cloud Trust Involves Connecting these Layers of Cloud Security

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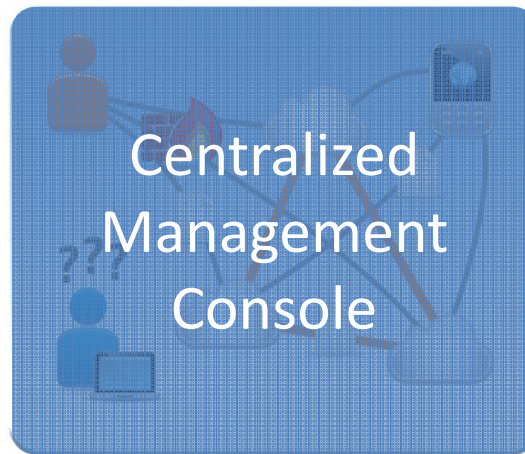


User to Cloud Access Challenges?

Multiple Logins / Weak Security



Lack of Visibility



Manual Provisioning



ID Infrastructure Integration



Audit Silos

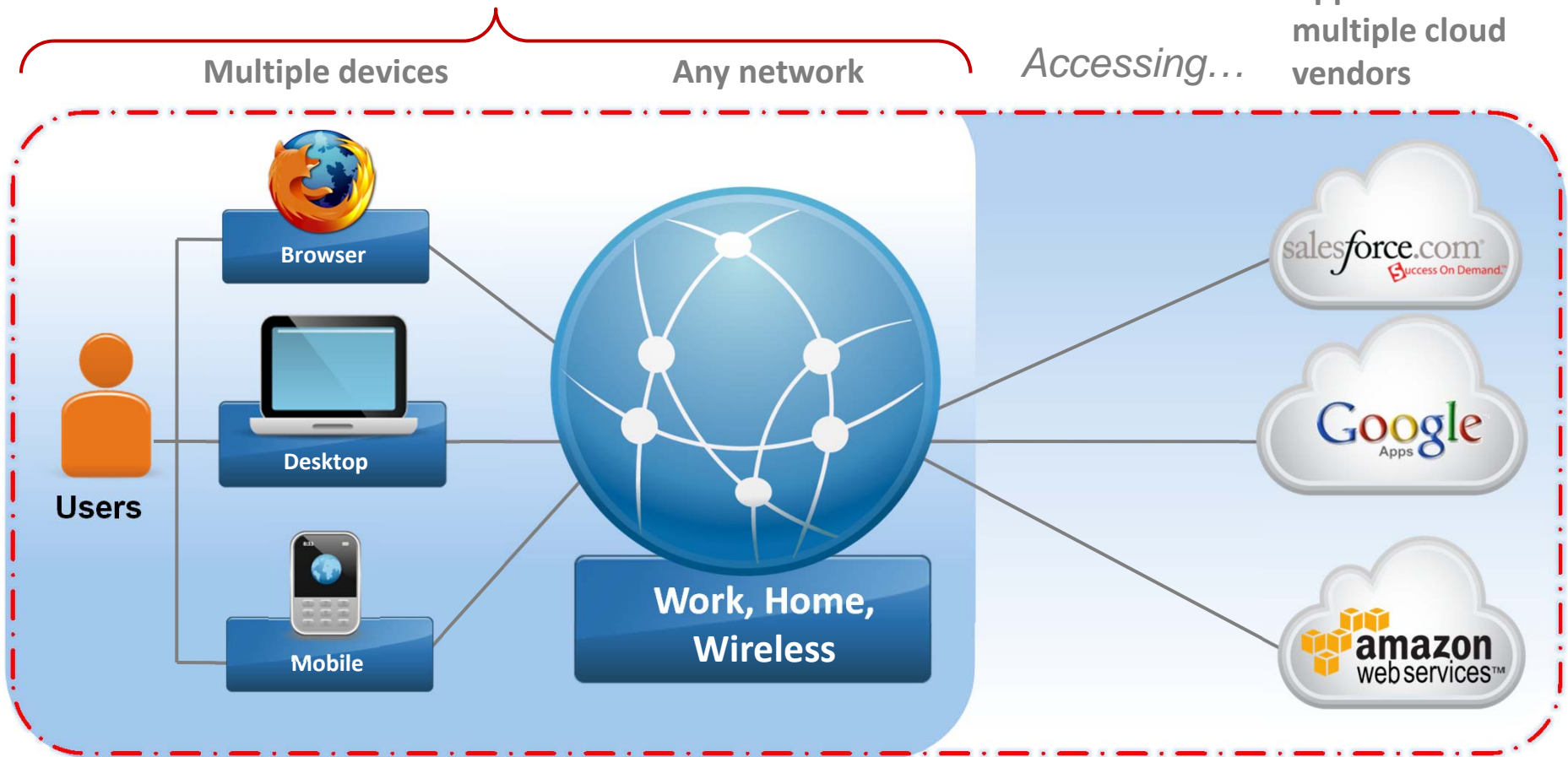


Scalable, Federated Trust



Ubiquitous Access Requirement: Any Device, Any Network, Any Cloud App

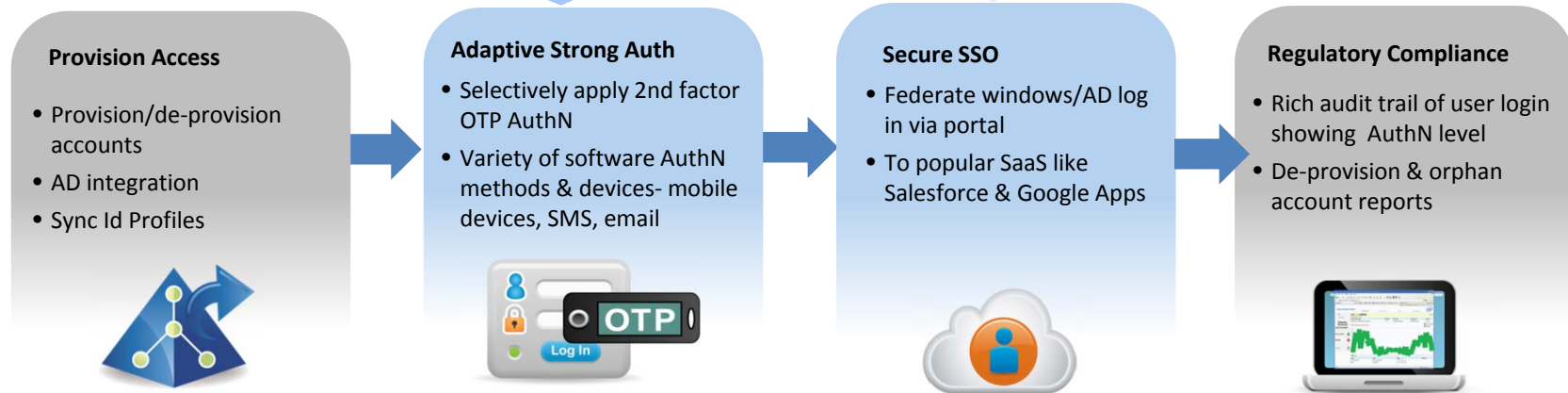
Client Aware Security



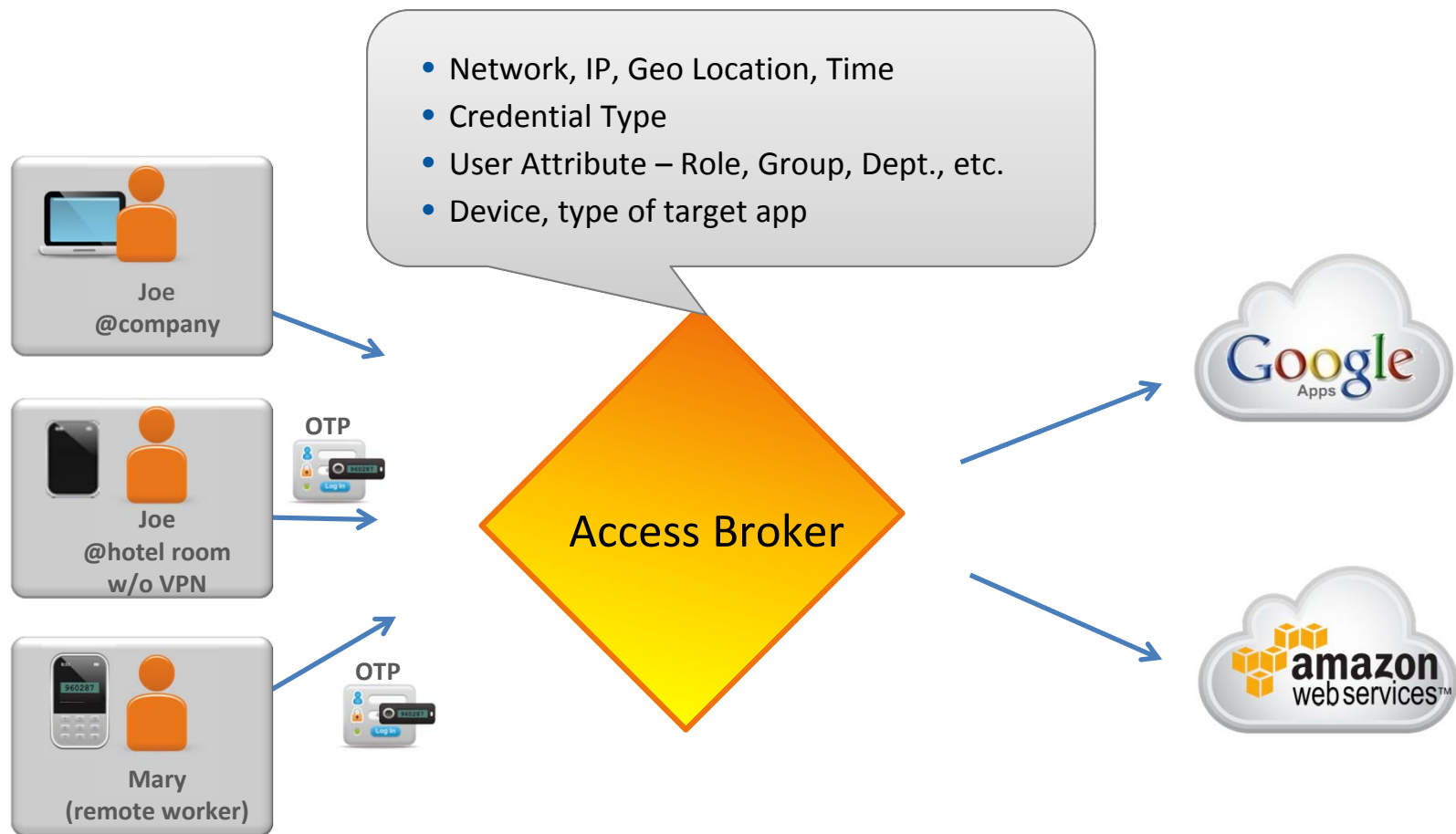
Typical solution should include ...



Combine Enterprise Class Strong Auth with SSO



Client Aware, Adaptive Authentication



Out of band Signed Authentication

- More secure way for 2nd factor authentication
 - Authentication is performed on a separate channel different from the transaction channel
- Convenient
 - User approves using a simple Approve/Reject button from their mobile phone



Authentication

The screenshot displays the iBank website interface. At the top, the iBank logo is on the left, and a navigation bar contains links for Private, Business, Services, and About iBank. On the left side, there are two main menu sections: 'Personal Banking' and 'Business Banking', each with a list of services. The central area features a large banner with a ballerina's feet and the text 'Balance your savings'. Below the banner are three promotional boxes: 'Apply for home loans', 'Save smart with BSU', and 'Make a budget'. On the right side, there is a 'Demo Log in iBank' section with input fields for Username and Password, a Login button, and a link to 'Register new account'. Below the login section is a 'News' section listing various offers and updates.

iBank

Private | Business | Services | About iBank |

Personal Banking

- Personal Checking
- Personal Money Market
- Mortgages
- Personal Loans
- Personal Savings
- Personal Banking Cards
- Personal Internet Banking

Business Banking

- Business Checking
- Business Loans
- Business Money Market
- Business Savings
- Business Banking Cards
- Business Internet Banking

Services

- iBusiness Services
- iStatements
- Order Checks Online
- View All Services

Banner: Balance your savings. A few simple steps can help you retire with more. iBank

Apply for home loans

Save smart with BSU

Make a budget

Demo Log in iBank

Username (e-mail address):
Password:
[Login](#)
[Register new account »](#)

News

- Email Alerts
- \$50 Star Checking Bonus Offer
- Sign Up! Text Messaging
- FDIC Insurance Increase
- Student Checking
- Cash Back Debit Rewards
- Save 5% on Auto Insurance
- Reverse Mortgage Financing
- Transaction Account Guarantee
- iBank declares dividends
- In the news

An IRA should be at the center of your retirement strategy. iBank, Inc.® [Learn More »](#)

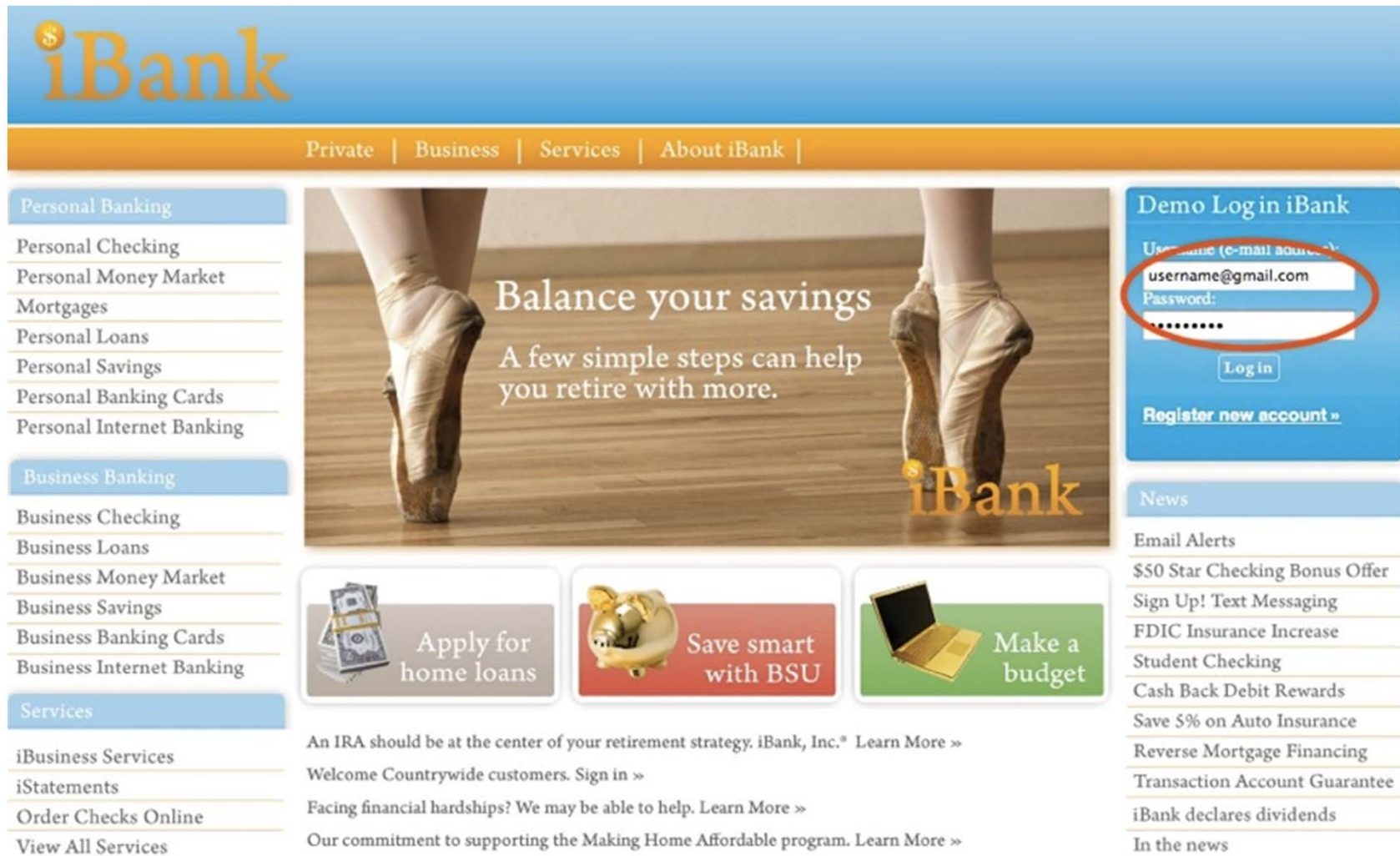
Welcome Countrywide customers. [Sign in »](#)

Facing financial hardships? We may be able to help. [Learn More »](#)

Our commitment to supporting the Making Home Affordable program. [Learn More »](#)



Authentication



The screenshot shows the iBank website interface. The header features the iBank logo and navigation links: Private | Business | Services | About iBank |. The left sidebar contains a menu with categories: Personal Banking, Business Banking, and Services. The main content area includes a large banner with the text "Balance your savings" and "A few simple steps can help you retire with more." Below the banner are three promotional boxes: "Apply for home loans", "Save smart with BSU", and "Make a budget". On the right, there is a "Demo Log in iBank" section with a login form. The login form has a "Username (e-mail address)" field containing "username@gmail.com" and a "Password" field with masked characters. A red circle highlights both the username and password fields. Below the login form is a "Log in" button and a "Register new account »" link. Further down is a "News" section listing various offers and updates.

iBank

Private | Business | Services | About iBank |

Personal Banking

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Services

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Balance your savings

A few simple steps can help you retire with more.

iBank

Demo Log in iBank

Username (e-mail address):
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Password:

Log in

[Register new account »](#)

News

- Email Alerts
- \$50 Star Checking Bonus Offer
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- FDIC Insurance Increase
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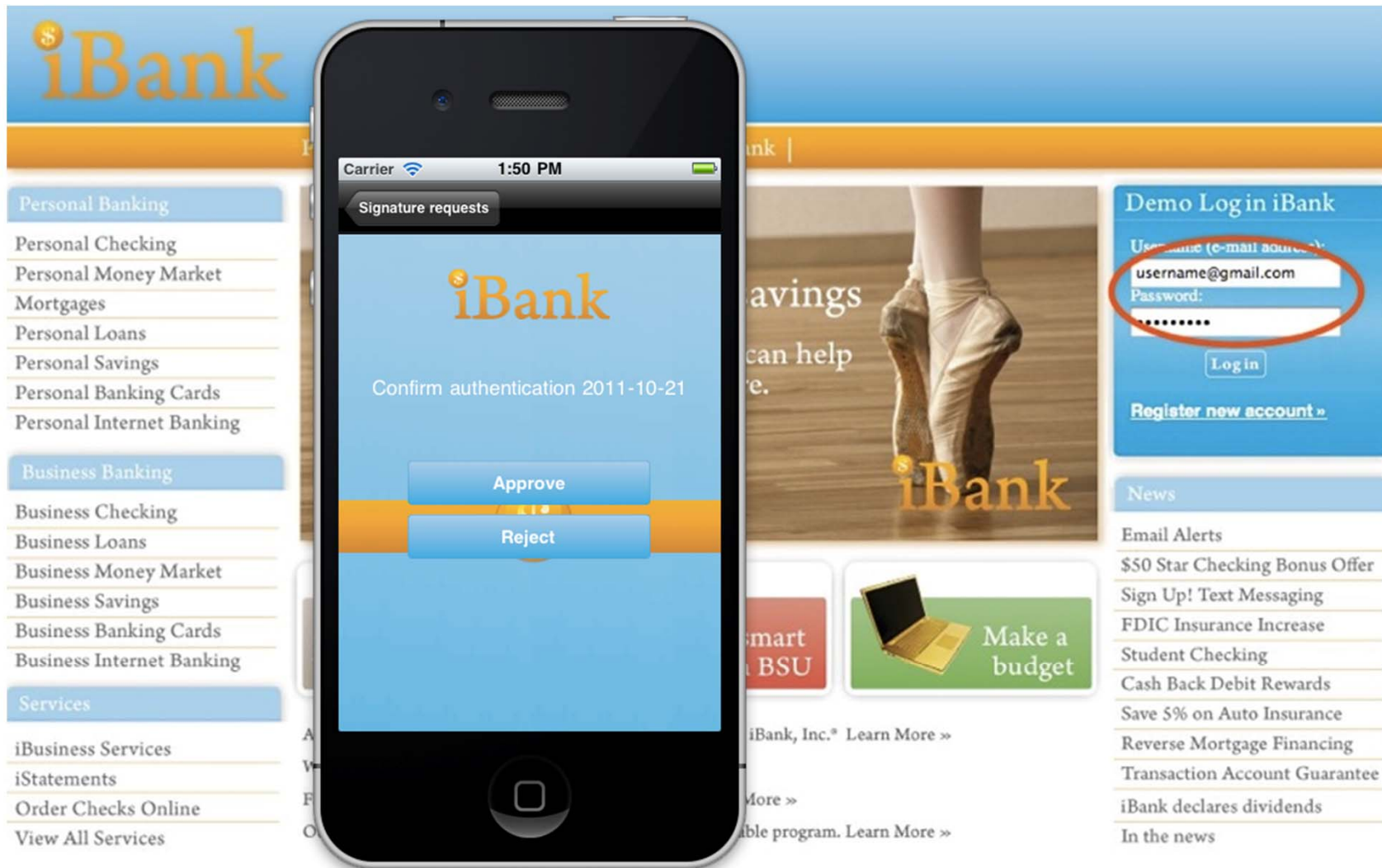
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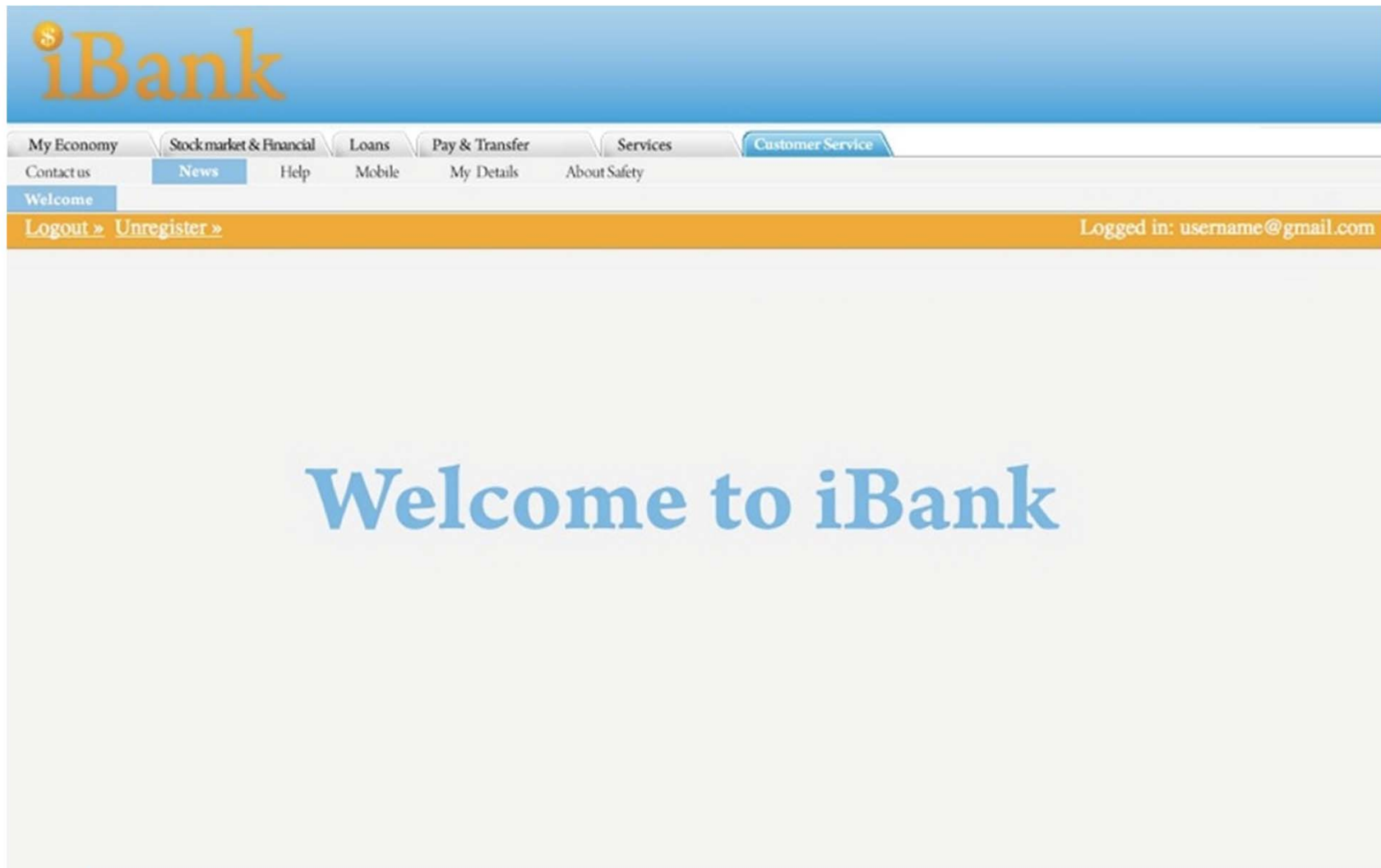
Authentication



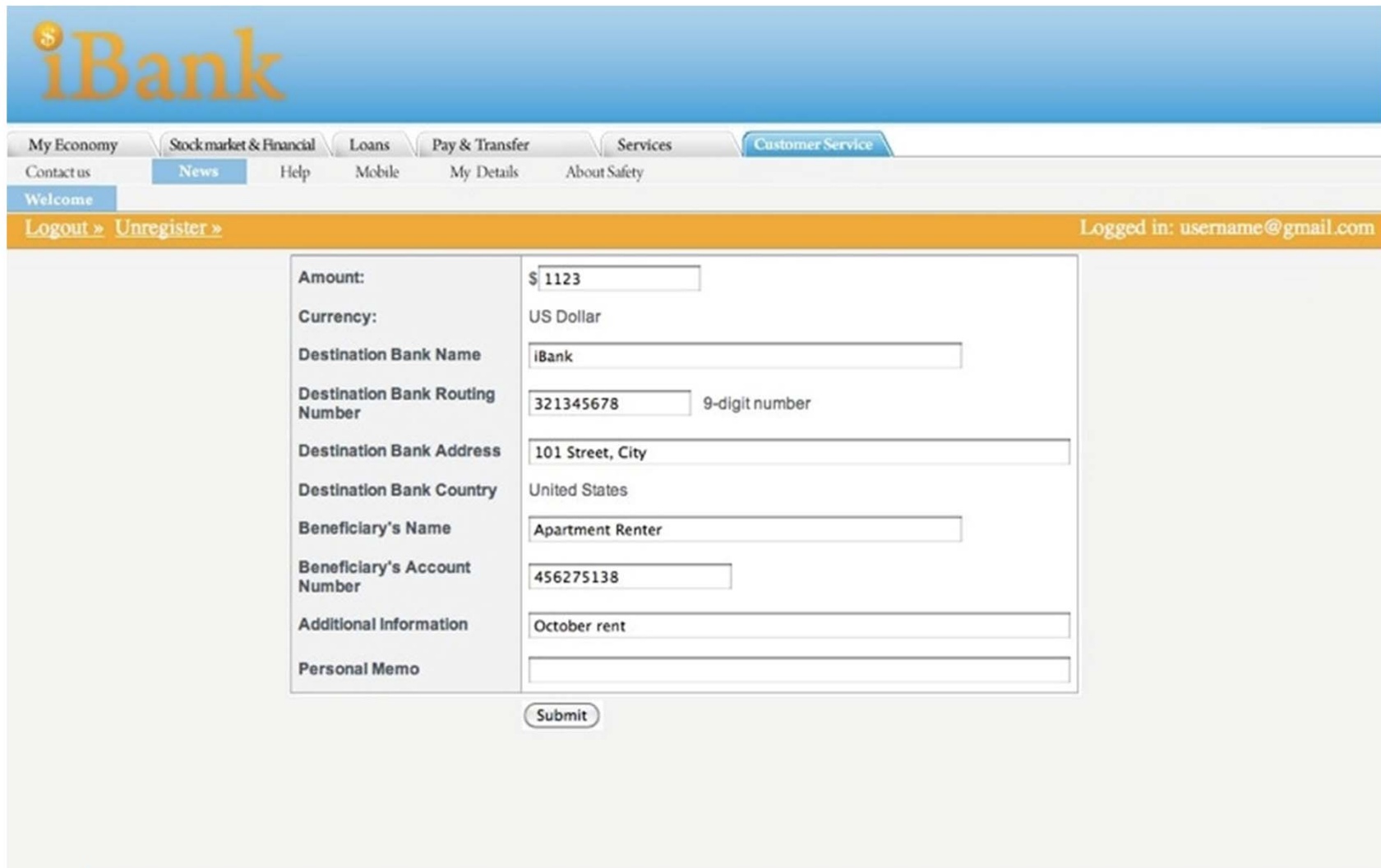
Authentication



Authentication



Digital Signing



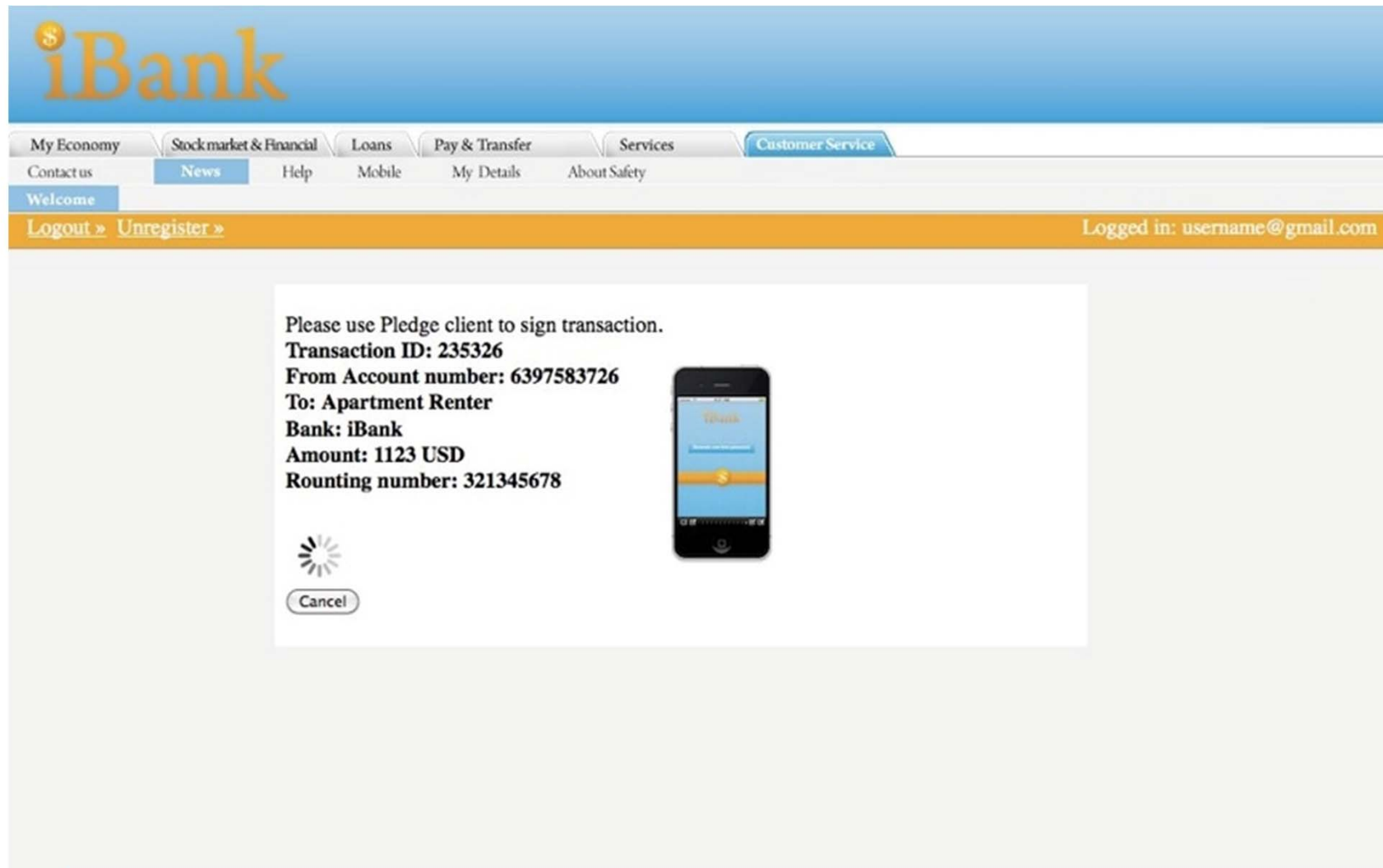
The image shows a screenshot of the iBank website. The header features the iBank logo in orange and blue. Below the logo is a navigation bar with tabs for 'My Economy', 'Stockmarket & Financial', 'Loans', 'Pay & Transfer', 'Services', and 'Customer Service'. A secondary navigation bar includes links for 'Contact us', 'News', 'Help', 'Mobile', 'My Details', and 'About Safety'. A 'Welcome' banner is visible. The main content area shows a user is logged in as 'username@gmail.com'. A form for transferring money is displayed with the following fields:

Amount:	<input type="text" value="\$ 1123"/>
Currency:	US Dollar
Destination Bank Name	<input type="text" value="iBank"/>
Destination Bank Routing Number	<input type="text" value="321345678"/> 9-digit number
Destination Bank Address	<input type="text" value="101 Street, City"/>
Destination Bank Country	United States
Beneficiary's Name	<input type="text" value="Apartment Renter"/>
Beneficiary's Account Number	<input type="text" value="456275138"/>
Additional Information	<input type="text" value="October rent"/>
Personal Memo	<input type="text"/>

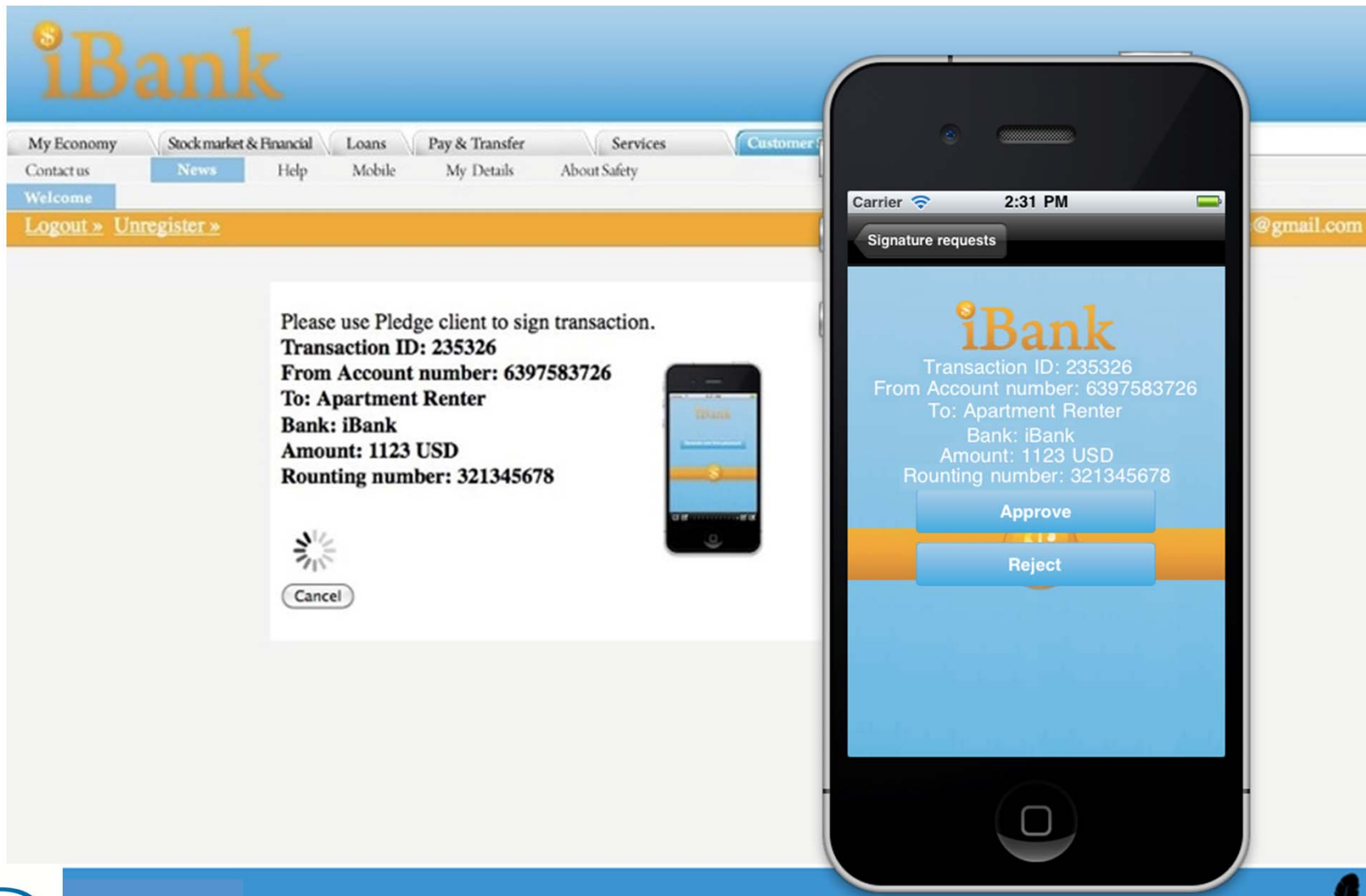
Below the form is a 'Submit' button.



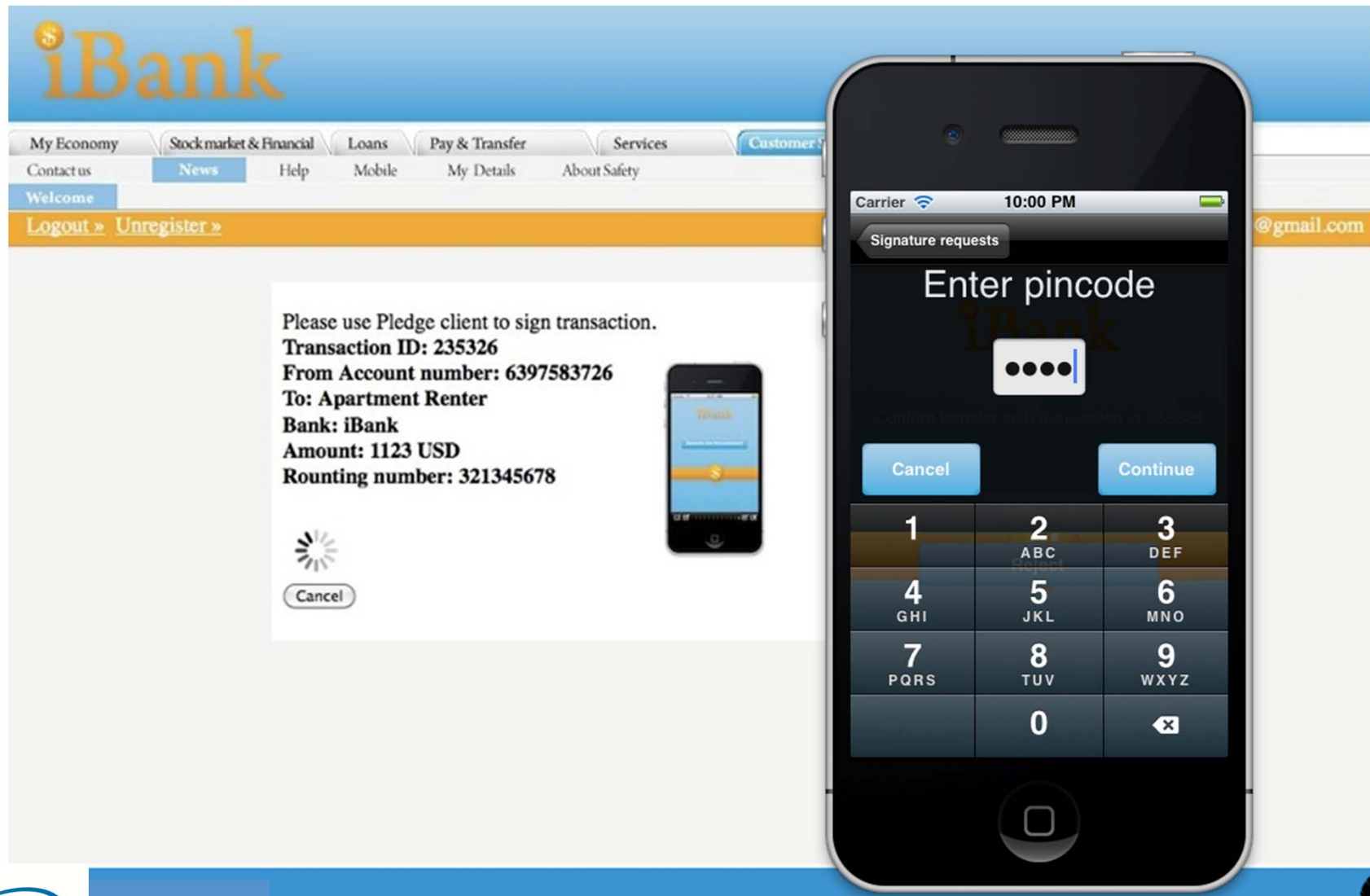
Digital Signing



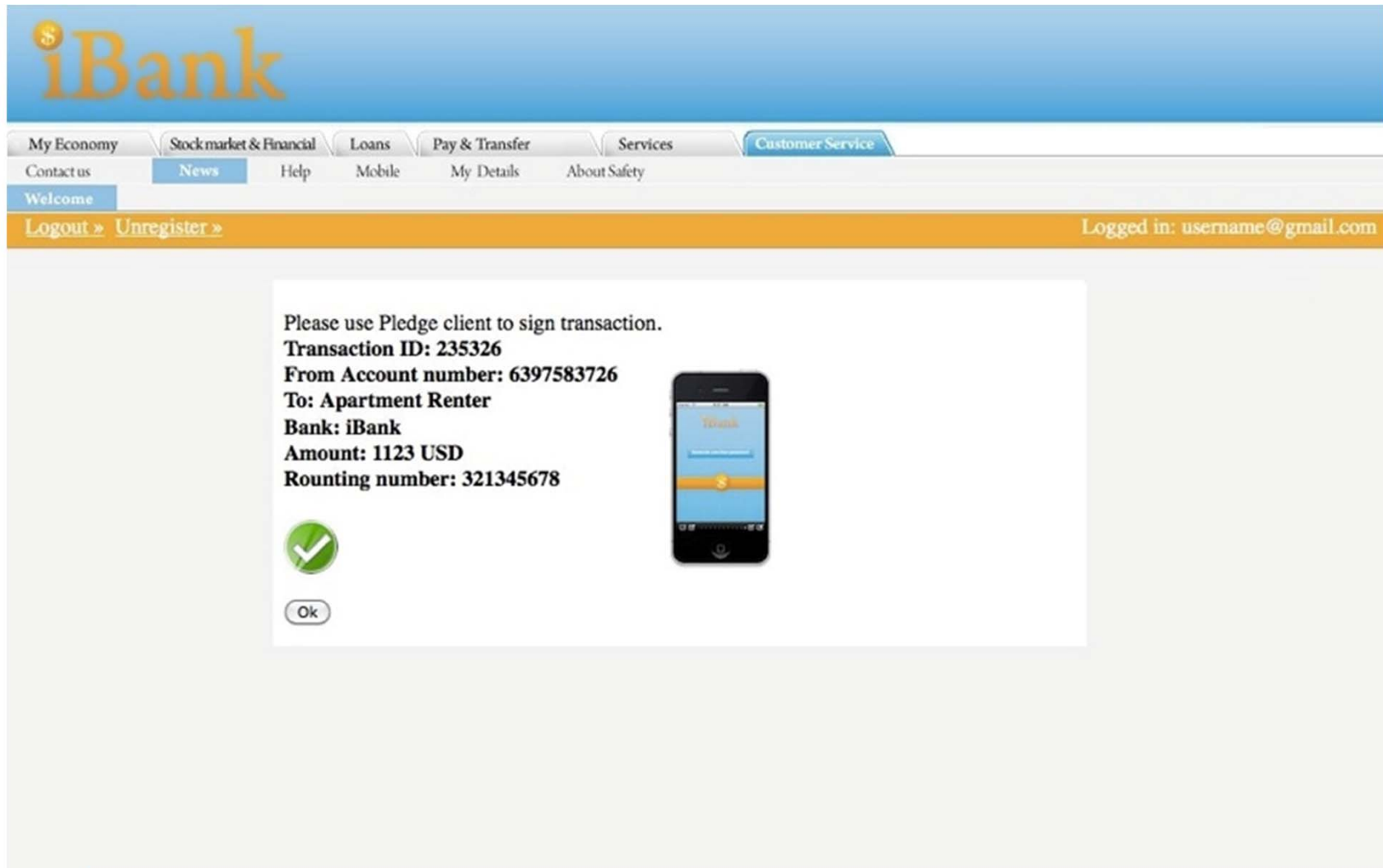
Digital Signing



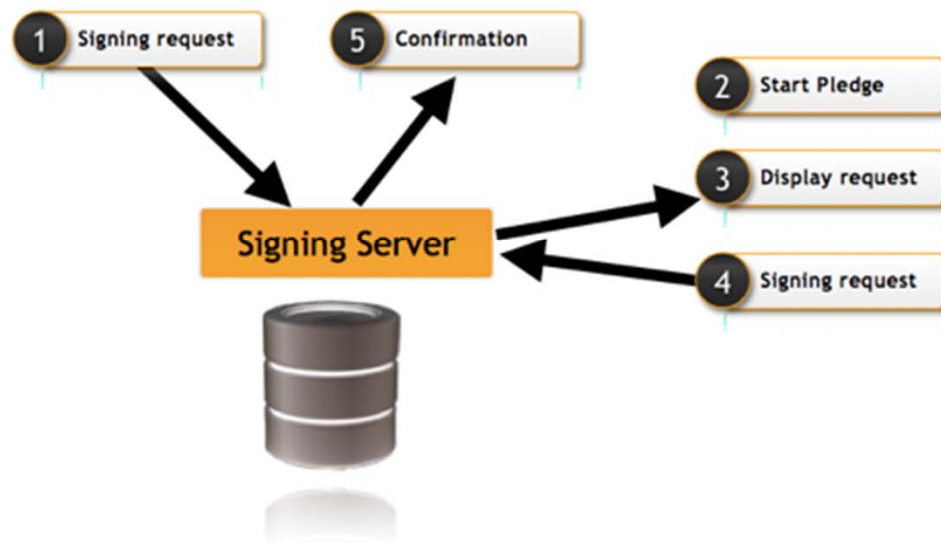
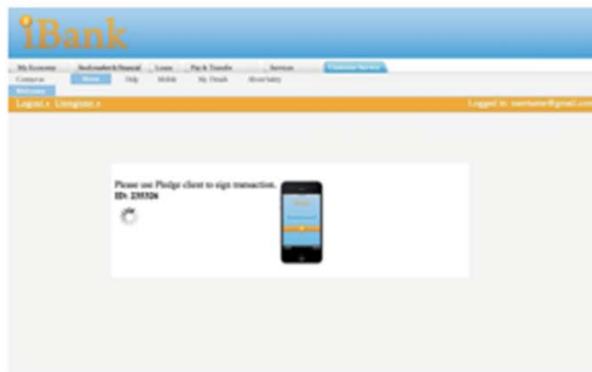
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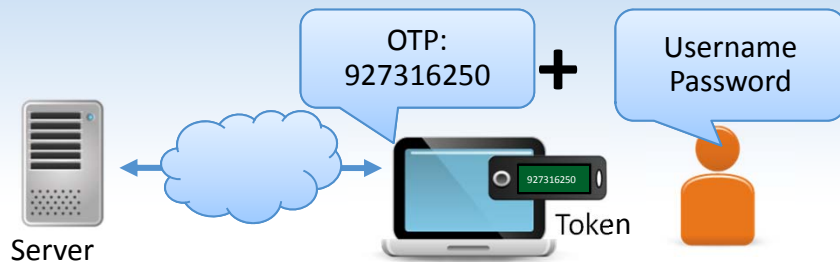


Digital Signing



Hardware Assisted Security at the Endpoints

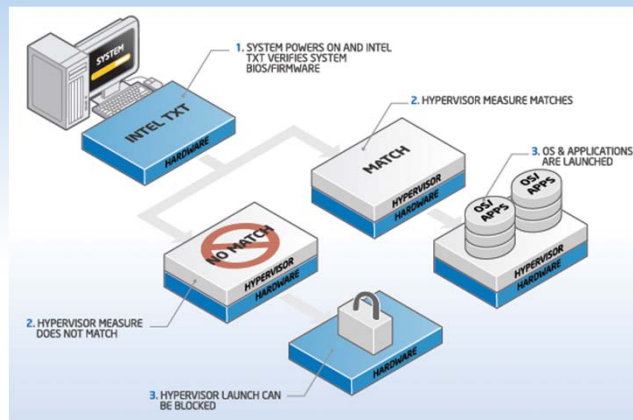
Silicon OTP- Enables frictionless 2-factor user authN. Determines trusted platform.



Virtual Keypad- Protects PC display from malware scraping and proves human presence at PC. Great for transaction verification and ACH fraud prevention.



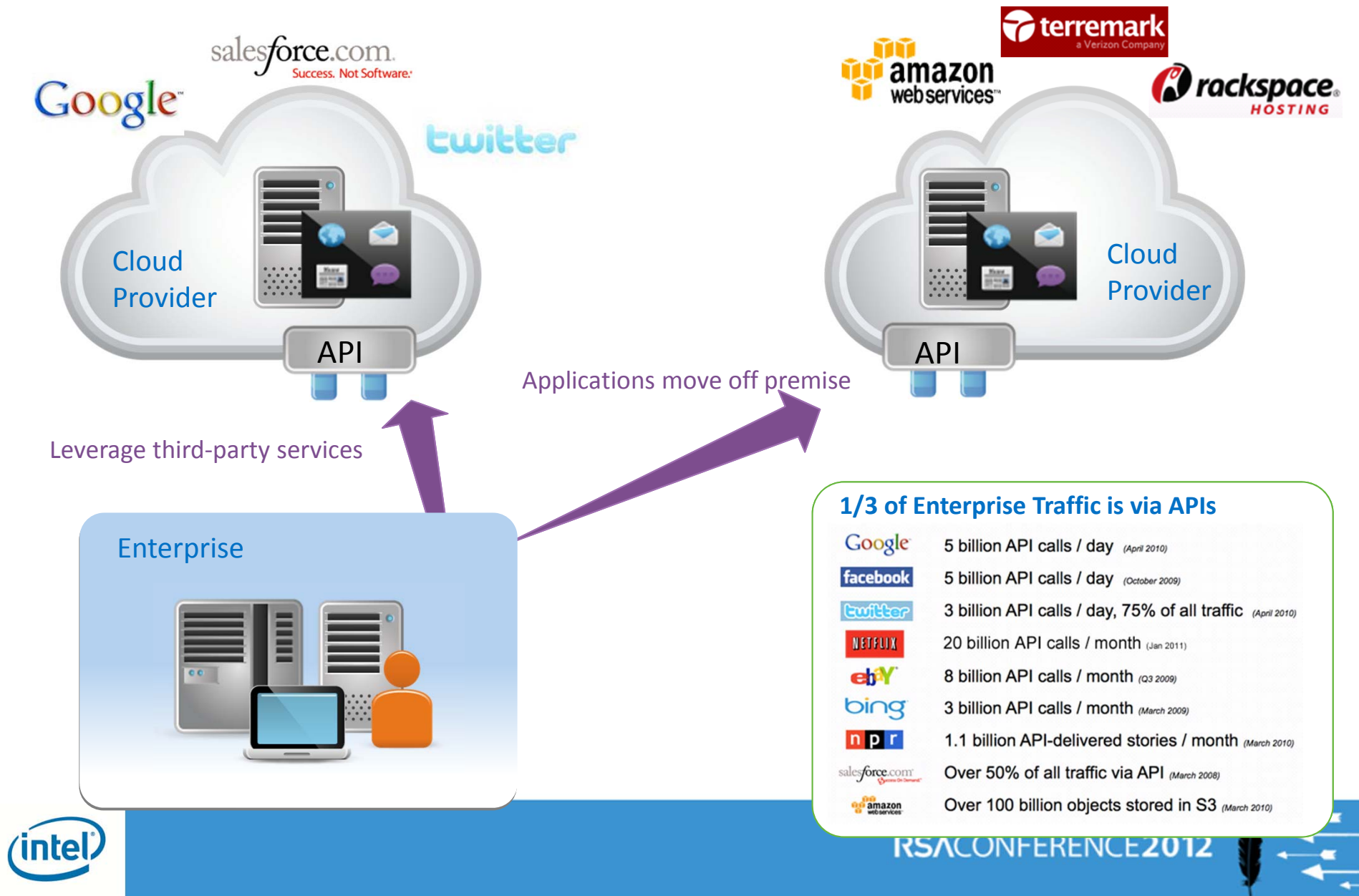
TXT Data Center Root of Trust- Secure boot of VMs in Cloud



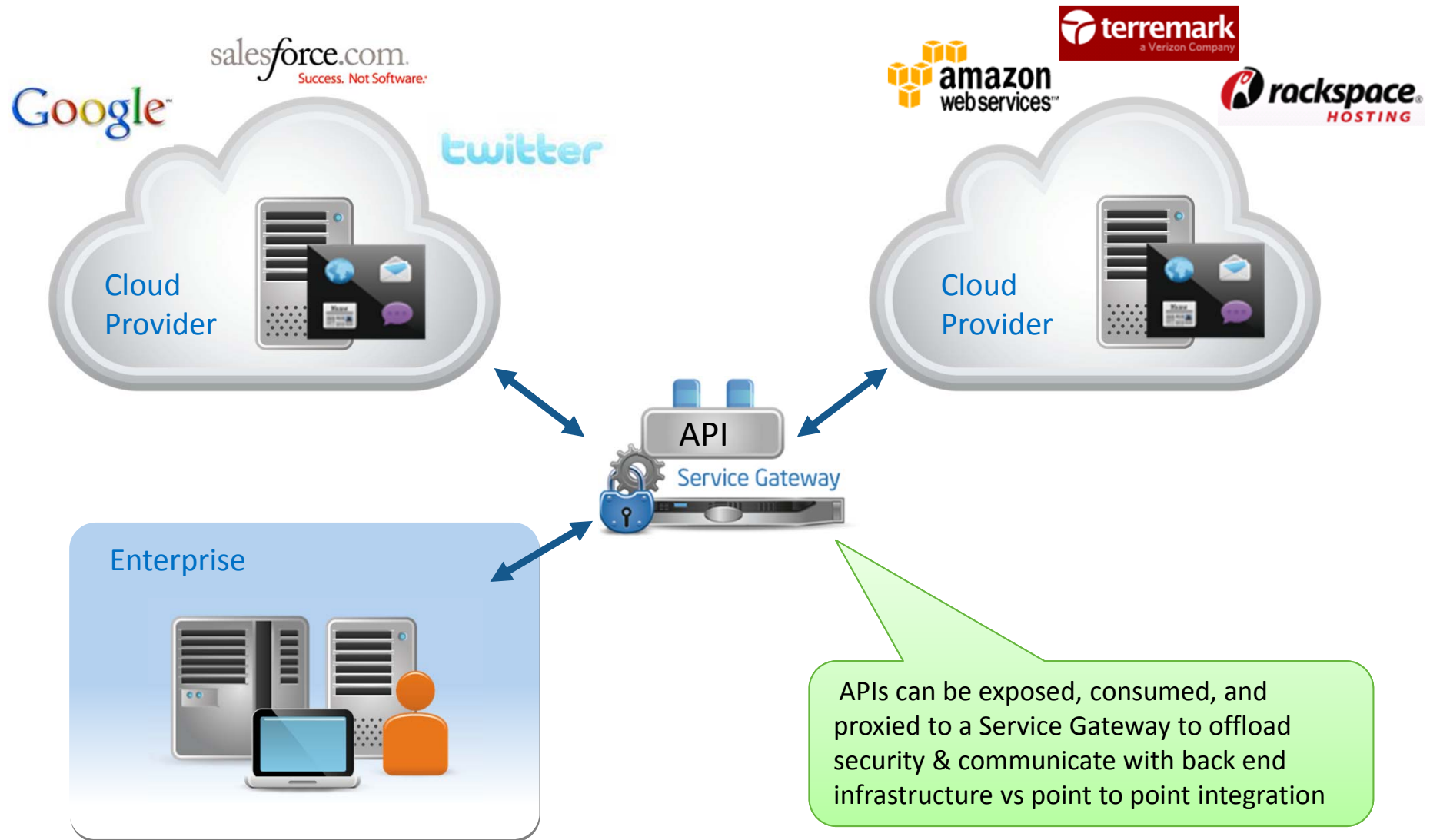
PKI certificates to authenticate User and Server to each other, digitally sign documents and emails and encrypt files and messages.



Cloud Apps- APIs are New Cloud Control Point



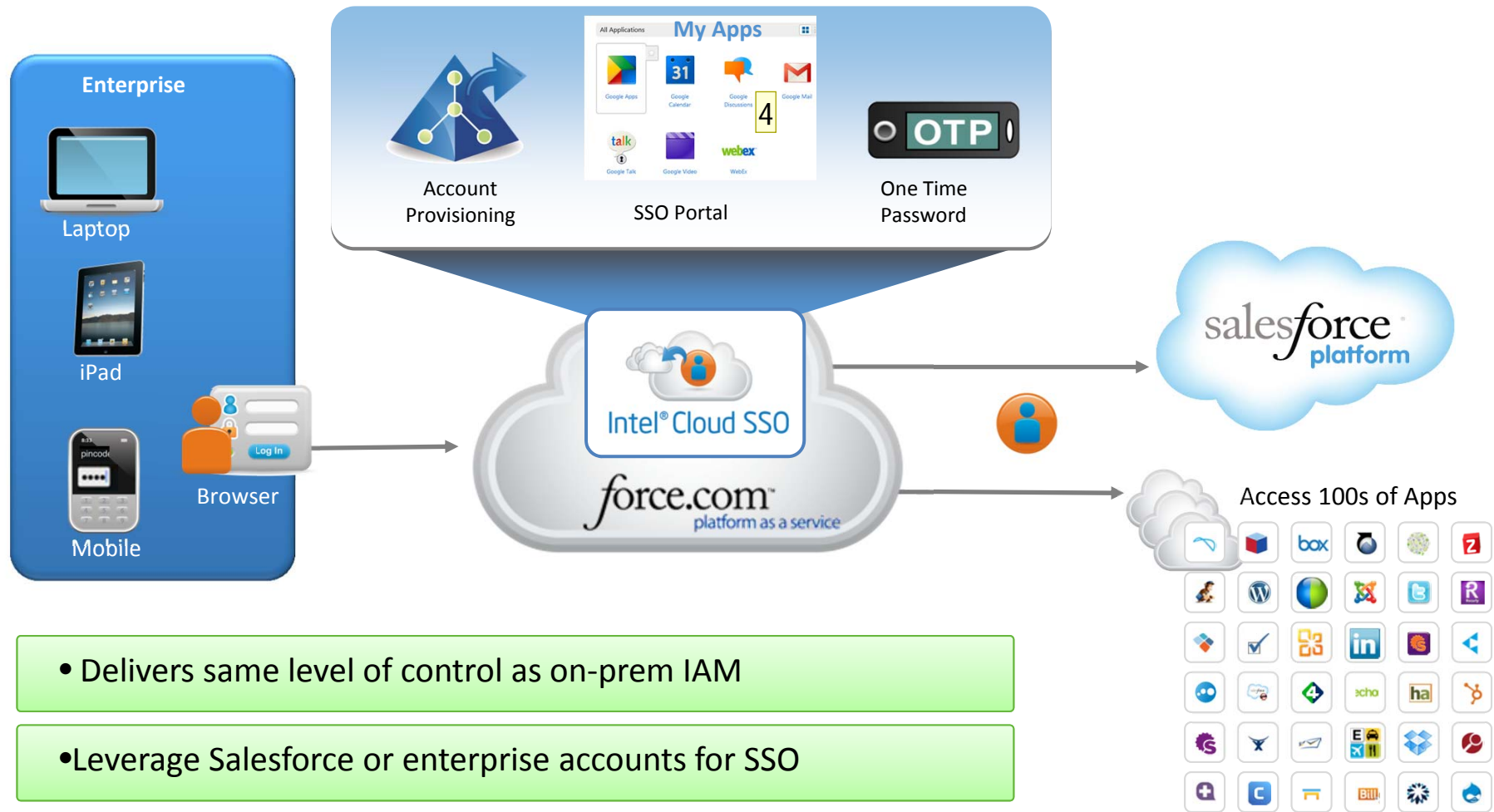
Service Gateway Broker Technology Makes a lot of Sense





Demo

Demo 1- 100% In the Cloud SSO



- Delivers same level of control as on-prem IAM
- Leverage Salesforce or enterprise accounts for SSO
- Trigger mobile & hardware assisted strong authentication



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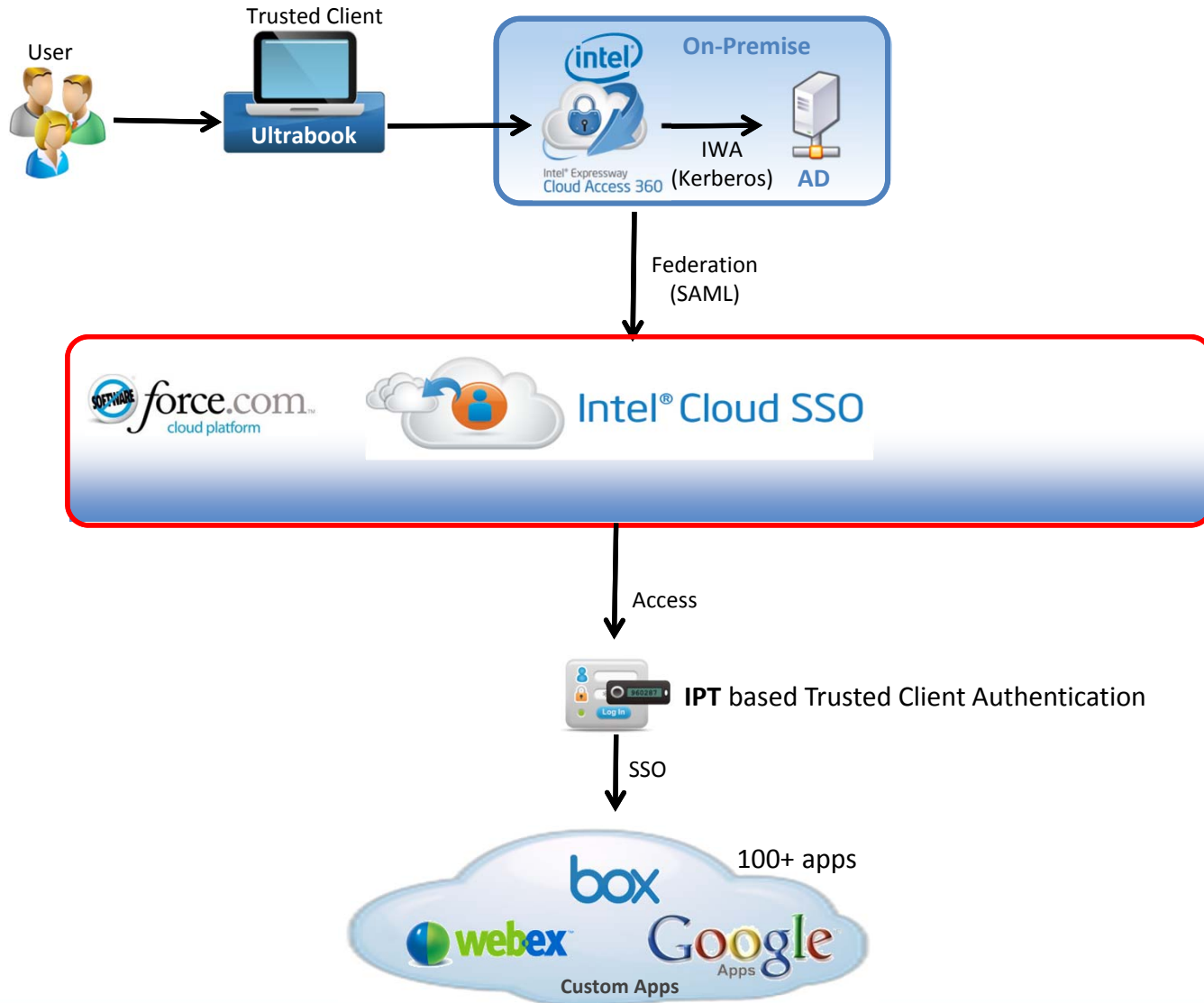
Slide 25

4

new slide to import SSO Portl

Kelly Anderson, 2/17/2012

Demo #2: Trusted Client to Cloud SSO



Unique Context Aware Strong Authentication

salesforce 12

Search All... Search

Options...

Home MyApps Admin Users & Groups Report Alerts +

Configure GoogleApps

Configure App Assign Users Restrict Access

☒ **One Time Password Requirement.**
Select this option if additional authentication using One Time Password (OTP) is required to access this application. [Learn more about how users will use OTP.](#)

☒ Requires Intel Identity Protection Technology (IPT)

☐ **IP Restrictions**
Specify the subset of IP ranges from which this application may or may not be accessible.

☐ **Mobile Restrictions**
Specify mobile browsers for which this application may not be accessible.

☐ **Time restrictions**
Specify time frames when an application may or may not be accessed by users.

☐ **Day restrictions**
Specify the days of the week when the application may or may not be accessed by users.

Intel Identity Protection Technology
Embedded in 120 million Ultra Books

Fast enrollment mobile OTP



Equip IT with Same Level of On-prem Security Controls



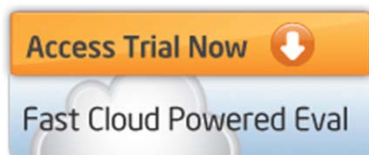
How to Apply What You Have Learned Today

- In the first three months following this presentation you should:
 - Identify all the cloud applications your Enterprise uses
 - Understand how many passwords are being managed
 - Define appropriate compliance controls for events such as a user leaving the company
- Within six months you should:
 - Select an IAM system which allows policy based integrated SSO portal according to your organization's needs
 - Drive an implementation project to secure access to cloud applications



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www.intelcloudsso.com



Free Trial
April 12



Bonus Free Box.net
Account

www.intel.com/go/identity

www.mcafee.com/cloudsecurity

Mar 29- Kuppinger Cole Webinar

- How To Outsource Identity to the Cloud

On-Demand Webinar

- Cloud Service Brokers w/CSA & NIST
- Meet the Cloud API w/Forrester Research



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