



RSA Adaptive Authentication On-Premise Implementation Guide

Last Modified: June 12, 2013

Partner Information

Product Information	
Partner Name	Monitise
Web Site	www.monitise.com
Product Name	Monitise Mobile Banking Solution
Version & Platform	5.0
Product Description	Monitise's Bank Anywhere product provides complete account management services, including account balances, statements, transfers and alerts. Bank Anywhere supports major mobile operating systems, ensuring availability on the widest range of device models, including tablets.

monitiseTM

Solution Summary

The Monitise Mobile Banking Solution platform's key banking services include balance enquiry, personal financial management, account transfer and business banking. The platform also offers strong security options that protect access to sensitive financial data with RSA Adaptive Authentication On-Premise (AAOP) risk-based authentication.

AAOP works behind the scenes to authenticate Monitise end-users based on individual user and device profiles. It relies on the RSA Risk Engine to estimate the level of risk associated with each login attempt. Customer policy determines whether to admit, deny or challenge the user based on the engine's risk score and a host of additional parameters.

All Bank Anywhere clients support login authentication, but only the iPhone and Android mobile applications support user-enrollment. Before enrolling with AAOP, end-users must create a mobile banking account. They can do so with either the iPhone or Android mobile applications or by contacting their bank.

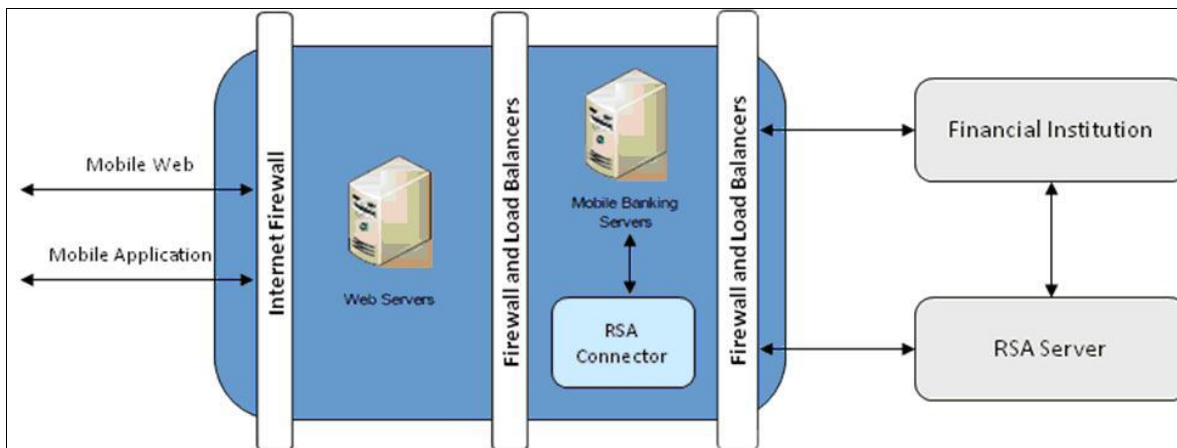
RSA Adapted Authentication On-Premise Supported Features	
Monitise Mobile Banking Solution 5.0	
RSA Adaptive Authentication User Enrollment	Yes ¹
RSA Adaptive Authentication Login Monitoring	Yes
RSA Adaptive Authentication Login Authentication	Yes
RSA Adaptive Authentication Transaction Monitoring	No
RSA Adaptive Authentication Transaction Authentication	No
RSA Adaptive Authentication Web Channel Data Collection	Yes
RSA Adaptive Authentication Mobile Channel Data Collection	No
Challenge Question Authentication	Yes
Out-of-Band Phone Authentication	No
Out-of-Band Email Authentication	No
Out-of-Band SMS Authentication	No

The Monitise – AAOP integration consists of two key components:

- **Bank Anywhere Client** – Bank Anywhere clients provide a mobile interface to a banking customer's website. Monitise offers a mobile browser client and a variety of mobile application clients. Monitise Professional Services configures these clients to collect device profile information and pass it to a Monitise Server.
- **AAOP Connector** – An AAOP connector sits on a Monitise server and enables bidirectional communication between Bank Anywhere clients and an AAOP server. Connectors are implemented and by Professional Services.

¹ User enrollment is only supported on the Bank Anywhere iPhone and Android mobile applications. Users must pre-enroll with Adaptive Authentication before they can use a mobile browser client.

Each Bank Anywhere client includes JavaScript code that collects data from an end-user's device and passes it to a connector deployed on a Monitise server. The connector forwards this data to the customer's AAOP server for analysis. The server uses the data to identify potential fraud and recommends further action based on the customer's policies. The connector then instructs the client to take the appropriate action.



Partner Product Configuration

Monitise Professional Services is responsible for:

- delivering AAOP connectors and Bank Anywhere clients
- customizing Bank Anywhere clients to meet the customer's branding requirements
- deploying a connector on the Monitise server
- configuring the connector to communicate with the AAOP server and the mobile clients.
- customizing Bank Anywhere clients to meet the customer's branding requirements
- customizing the connector according to the customer's requirements
- making the iPhone and Android mobile applications available to end users

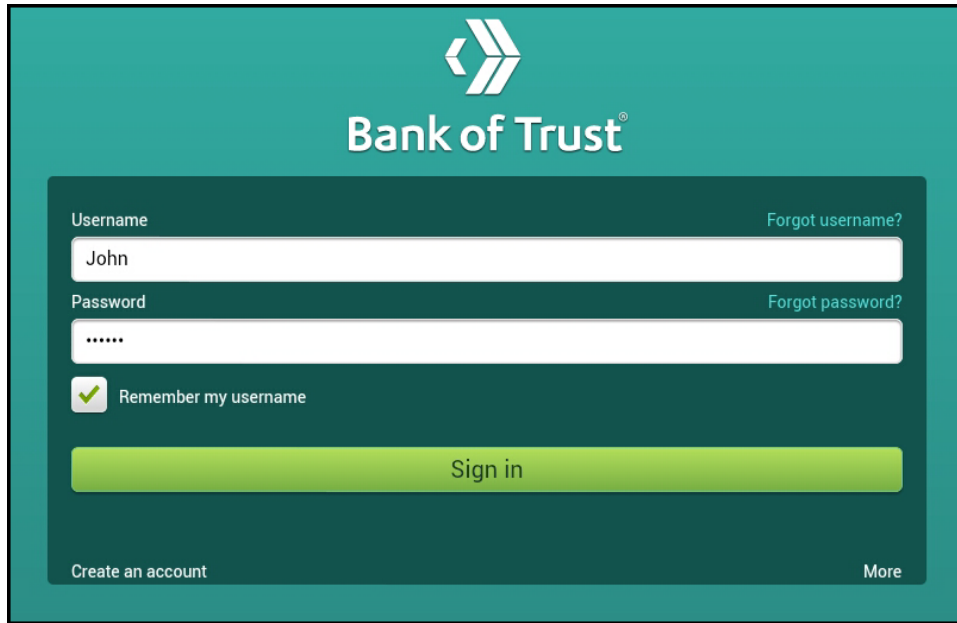


Note: The customizations mentioned above require collaboration between the Monitise implementation team and the customer's security experts (typically the IT Security team and/or RSA).

Software Requirements

- Monitise Server 5.0.
- RSA AAOP 6.0.2.1 SP3.

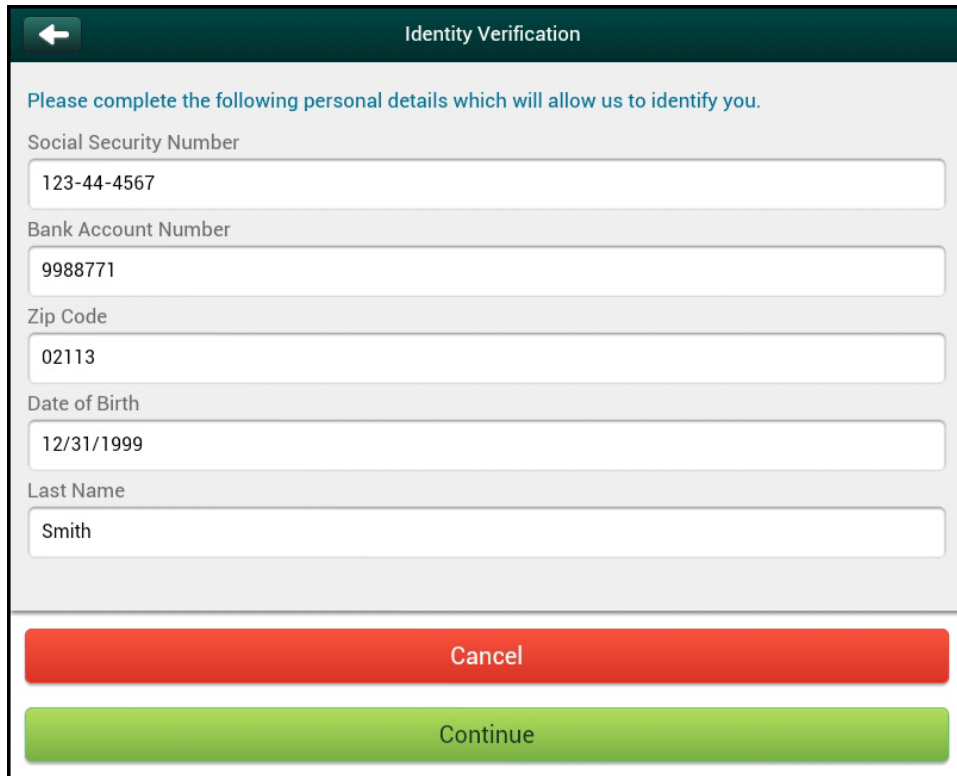
Android Client Application Screenshots²

A screenshot of the Bank of Trust mobile banking application login screen. The screen has a teal background. At the top center is the Bank of Trust logo, which consists of three white chevrons pointing right, followed by the text "Bank of Trust®". Below the logo is a dark teal rectangular box containing the login form. Inside this box, there are two input fields: "Username" with the text "John" and "Forgot username?" to its right; and "Password" with masked characters "*****" and "Forgot password?" to its right. Below these fields is a checkbox with a green checkmark icon and the text "Remember my username". At the bottom of the box is a large green button with the text "Sign in". At the very bottom of the screen, outside the dark teal box, are two links: "Create an account" on the left and "More" on the right.

Standard Logon Prompt (Create an Account link)³

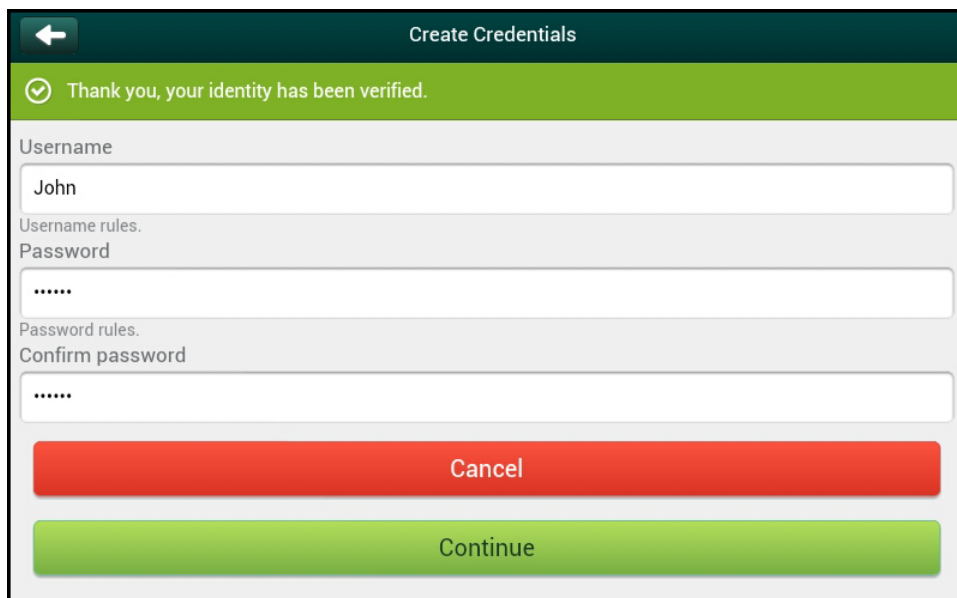
² The iPhone client and Android client have very similar GUIs. Screenshots of the iPhone client have been omitted.

³ The *Create Account* link allows an existing bank user to create a mobile profile for the account and to enroll with AAOP.



The Identity Verification form features a dark teal header with a back arrow and the title "Identity Verification". Below the header, a light gray box contains the instruction "Please complete the following personal details which will allow us to identify you." in blue text. The form includes six input fields: "Social Security Number" (123-44-4567), "Bank Account Number" (9988771), "Zip Code" (02113), "Date of Birth" (12/31/1999), and "Last Name" (Smith). At the bottom, there are two large buttons: a red "Cancel" button and a green "Continue" button.

Identity Verification Form



The Mobile Account Credentials Enrollment form has a dark teal header with a back arrow and the title "Create Credentials". A green success banner at the top displays a checkmark icon and the text "Thank you, your identity has been verified." Below this, the form contains three input fields: "Username" (John), "Password" (masked with dots), and "Confirm password" (masked with dots). Each input field is preceded by its label and a "rules" link. At the bottom, there are two large buttons: a red "Cancel" button and a green "Continue" button.

Mobile Account Credentials Enrollment Form

Select Questions

✔

Your account has been created. Please enter the following information to complete your security profile:

Select Questions

What is the first name of the maid of honor at your wedding?

>

Answer

Sally

Select Questions

What is your maternal grandfather's first name?

>

Answer

Stu

Select Questions

What was the name of your High School?

>

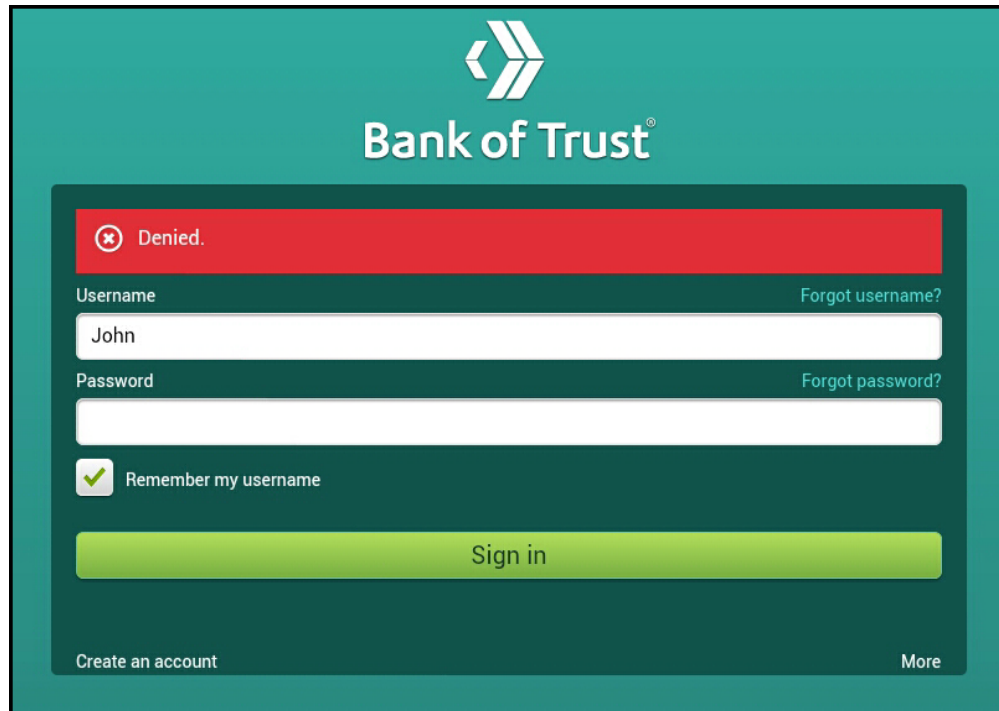
Answer

City Public High

Cancel

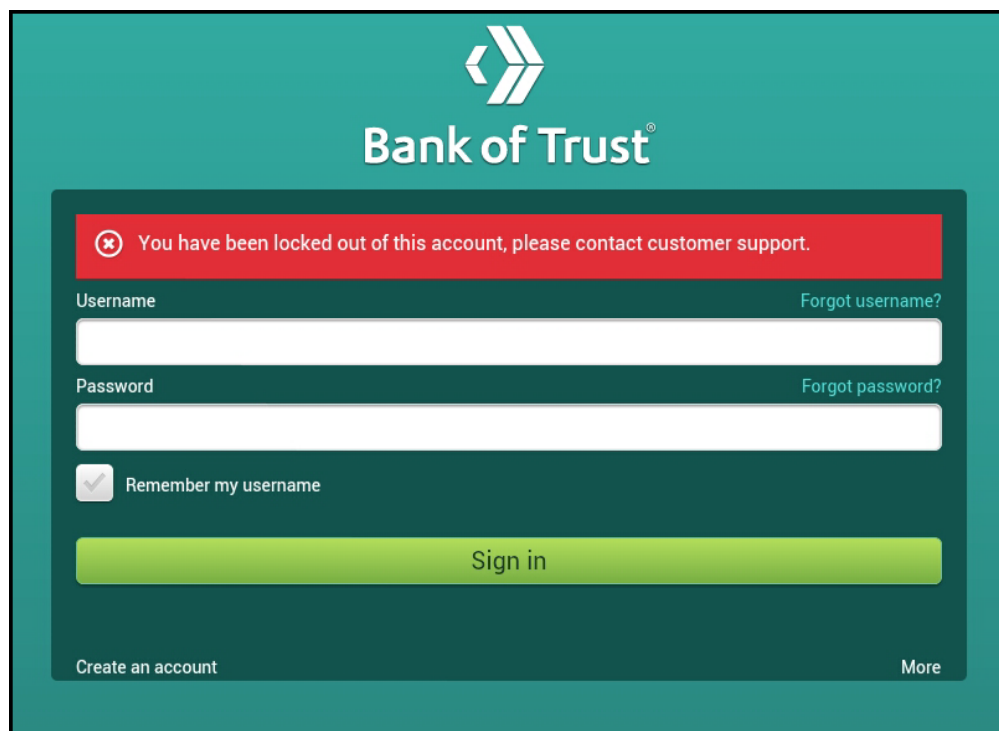
Continue

Challenge Question Enrollment Form




The image shows a mobile banking login screen for Bank of Trust. At the top is the Bank of Trust logo and name. Below this is a red banner with a white 'x' icon and the text 'Denied.'. Under the banner are two input fields: 'Username' with the value 'John' and 'Password' which is empty. To the right of each input field is a link: 'Forgot username?' and 'Forgot password?'. Below the password field is a checked checkbox labeled 'Remember my username'. A large green 'Sign in' button is centered below the checkbox. At the bottom left is a link 'Create an account' and at the bottom right is a link 'More'.

Access Denied Message



The image shows a mobile banking login screen for Bank of Trust. At the top is the Bank of Trust logo and name. Below this is a red banner with a white 'x' icon and the text 'You have been locked out of this account, please contact customer support.'. Under the banner are two input fields: 'Username' and 'Password', both of which are empty. To the right of each input field is a link: 'Forgot username?' and 'Forgot password?'. Below the password field is a checked checkbox labeled 'Remember my username'. A large green 'Sign in' button is centered below the checkbox. At the bottom left is a link 'Create an account' and at the bottom right is a link 'More'.

Lockout Message


Bank of Trust®


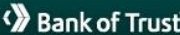
Your Secret Question
What is the first name of your oldest nephew?
Answer


☒ Remember My Device


Cancel Sign in


Submit


Challenge Question Prompt







VIEW ACCOUNTS



TRANSFERS



PAYMENTS



DEPOSIT


VIEW ACTIVITY


FIND LOCATIONS


CHANGE PREFERENCES


SET ALERTS


HELP

Main Menu Page

Account Summary		
DDA		
Checking Account		
CHK1: xx3456		
Available Balance	Current Balance	
-\$457.47	-\$457.47	
Checking Account		
CHK2: xx4567		
Available Balance	Current Balance	
\$5,000.00	\$5,000.00	
Checking Account		
CHK3: xx5678		
Available Balance	Current Balance	
\$5,000.00	\$5,000.00	
Savings Account		
SAV1: xx6789		
Available Balance	Current Balance	
\$15,000.00	\$15,000.00	
Savings Account		
SAV2: xx7890		
Current Balance		
\$15,000.00		
Savings Account		
SAV3: xx3456		
Available Balance		
\$15,000.00		
Checking Account		
CHK4: xxx6784		
Available Balance	Current Balance	
\$4,000.00	\$5,000.00	
Savings Account		
SAV4: xxx4564		
Current Balance		
\$6,000.00		
Checking Account		
CHK6: xx6787		

Account Summary Page

← Select Questions

Select Questions

What is the first name of the maid of honor at your wedding? >

Answer

Sally

Select Questions

What is your best friend's first name? >

Answer

Grover

Cancel

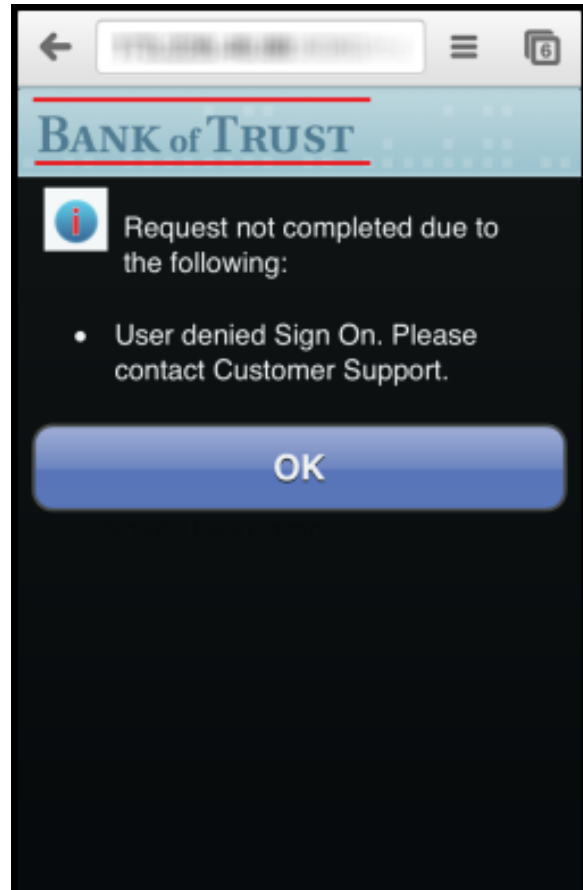
Continue

Change Security Questions Form

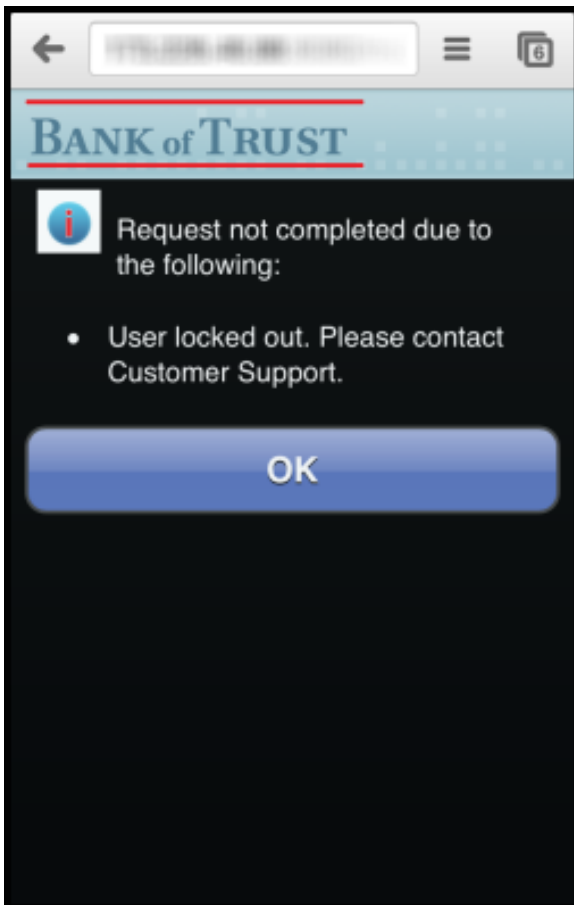
Mobile Browser Enrollment and Login Screenshots



Standard Logon Prompt



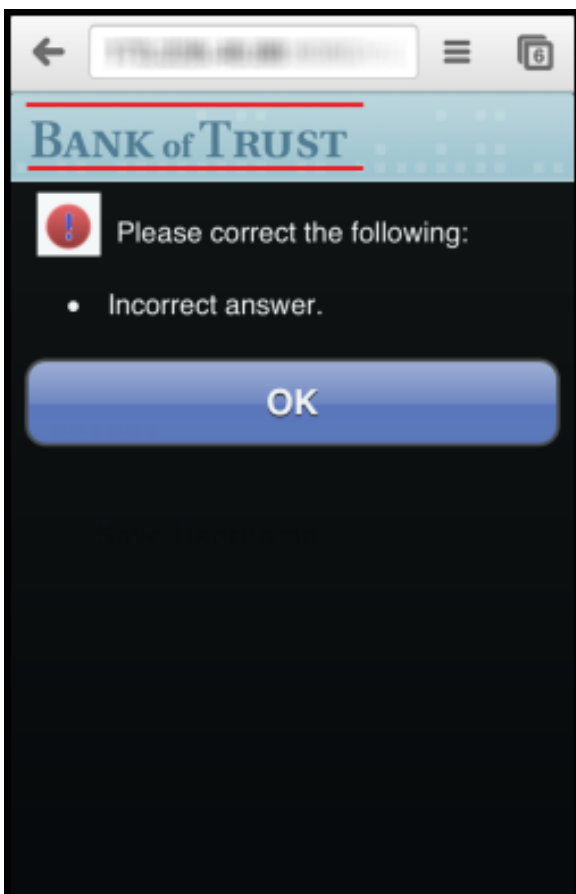
Access Denied Page



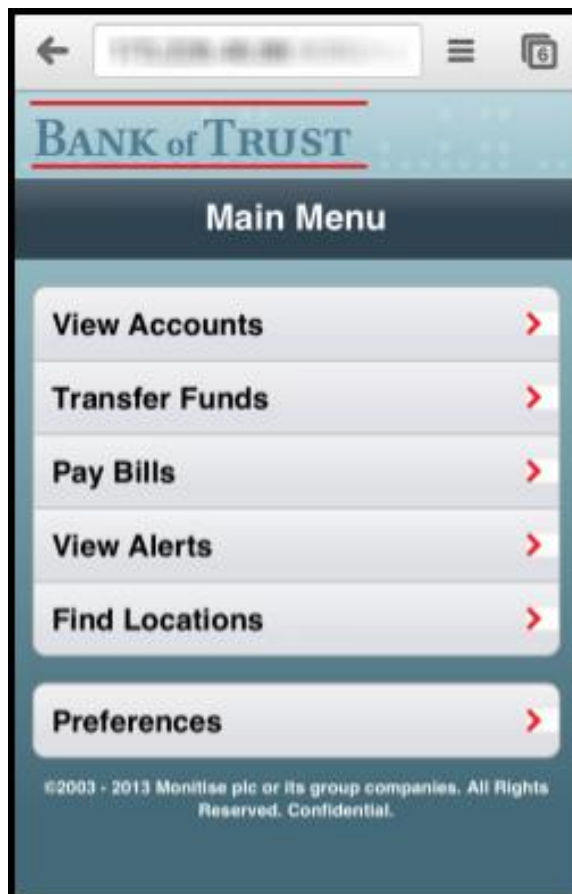
Lockout Page



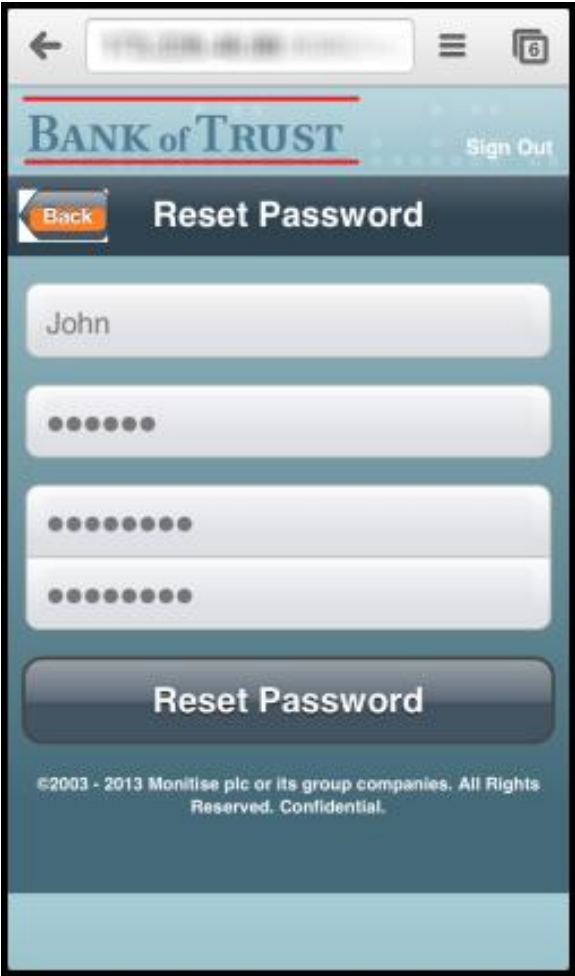
Challenge Question Prompt



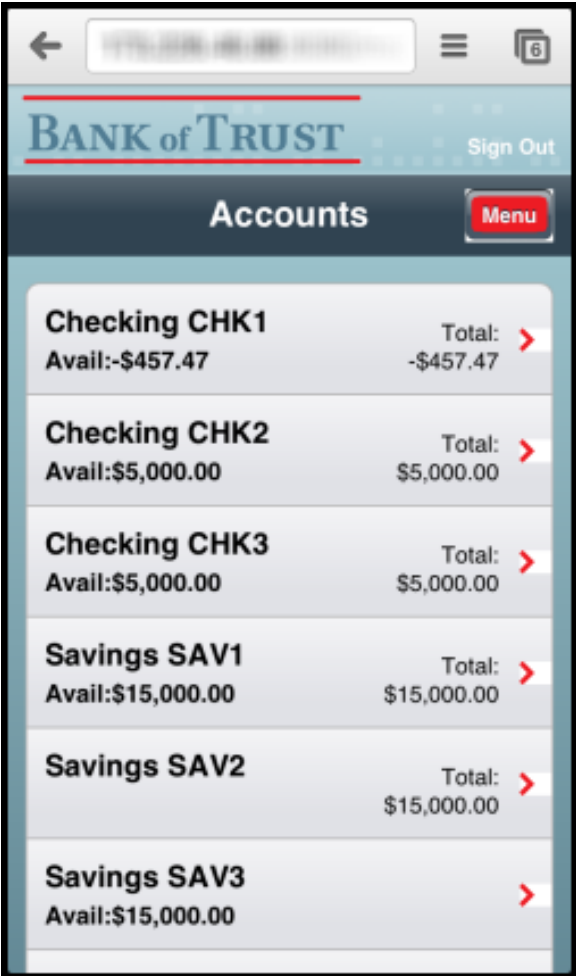
Challenge Authentication Failure Page



Main Menu Page



Preferences Page



Account Summary Page

The screenshot shows a mobile application interface for 'BANK of TRUST'. At the top, there is a navigation bar with a back arrow, a search bar, a menu icon, and a notification icon with the number '6'. Below the navigation bar, the 'BANK of TRUST' logo is displayed on the left, and a 'Sign Out' link is on the right. The main heading of the screen is 'Reset Password', preceded by a 'Back' button. The form contains four input fields: the first is labeled 'John', the second is a password field with seven dots, the third is a confirmation password field with ten dots, and the fourth is another confirmation field with ten dots. A large 'Reset Password' button is positioned below the input fields. At the bottom of the screen, a copyright notice reads: '©2003 - 2013 Monitise plc or its group companies. All Rights Reserved. Confidential.'

Change Password Page

Certification Checklist for RSA Adaptive Authentication Login

Date Tested: June 18, 2013

Certification Environment		
Product Name	Version	Operating System
AAOP	6.0.2.1 SP3 P2	CENTOS 6
Monitise Server	5.0	NA
Mobile Browser	Safari	iOS 6.0.1
Android Bank Anywhere Application	5.0	Android 4.0.4
iPhone Bank Anywhere Application	5.0	iOS 6.0.1

Login Authentication			
	Mobile Browser	Android	iOS
User Status			
Unknown Bank Users	✓	✓	✓
Un-enrolled Users	✓	✓	✓
Unverified Users	✓	✓	✓
Deleted Users	✓	✓	✓
Locked Users	✓	✓	✓
Unlocked Users	✓	✓	✓
Verified Users	✓	✓	✓
Analysis Response Actions			
Allow	✓	✓	✓
Review	✓	✓	✓
Challenge	✓	✓	✓
Deny	✓	✓	✓
Authentication Methods			
Challenge Questions	✓	✓	✓
Out-of-Band Phone	NA	NA	NA
Out-of-Band Email	NA	NA	NA
Out-of-Band SMS	NA	NA	NA

User Enrollment and Profile Maintenance			
	Mobile Browser	Android	iOS
User Enrollment			
Enroll User with AAOP	NA	✓	✓
Profile Maintenance			
Change Challenge Questions	NA	✓	✓
Change Phone Number(s)	NA	✓	✓
Change Email Address	NA	✓	✓

JGS/PAR

✓ = Pass ✗ = Fail N/A = Not Applicable to Integration

Checklist for RSA Adaptive Authentication Device Data Collection

Web Channel Data Collection			
	Mobile Browser	Android	iOS
Device Data			
Device Fingerprint	✓	✓	✓
HTTP Accept	✓	✓	✓
HTTP Accept Character Set	✓	✓	✓
HTTP Accept Encoding	✓	✓	✓
HTTP Accept language	✓	✓	✓
HTTP Referrer	✓	✓	✓
IP Address	✓	✓	✓
Device Token Cookie	✓	✓	✓
Device Token FSO	✓	NA	✓
User Identification Data			
Username	✓	✓	✓
User Login Name	✓	✓	✓
Org Name	✓	✓	✓

Mobile Channel Data Collection			
	Android		iOS
Device Data			
SIM ID	NA	SIM ID	NA
Hardware ID	NA	Hardware ID	NA
Other ID	NA	Other ID	NA
Phone Data			
Phone Number	NA	Phone Number	NA
Country Code	NA	Country Code	NA
Area Code	NA	Area Code	NA

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