

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018



The *GiftWrap* Security Module

- Collection of existing and new GiftWrap security features
- Available bundled or on a line item basis
- Will be of interest to a variety of clients, depending on the size and vertical
- Demonstrates PG Calc's on ongoing commitment to maintaining the highest level of security in the face of ongoing security challenges

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

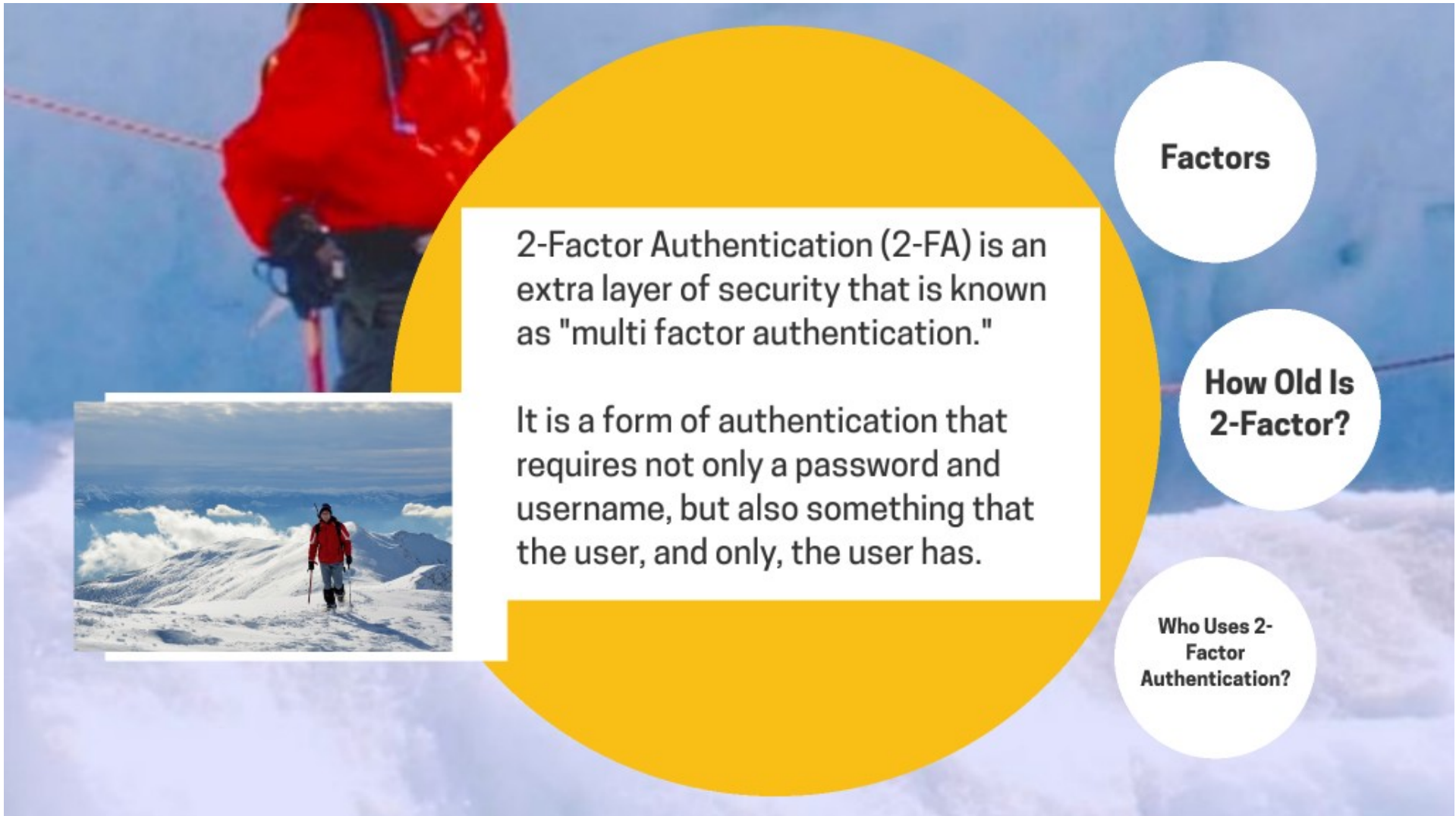
2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018



Factors

There are three types of factors:

Something you know, such as a personal identification number (PIN), password or a pattern

Something you have, such as an ATM card, phone, or fob

Something you are, such as a biometric like a fingerprint, your face, or your voice

**2-Factor
requires
two out of
the three**

2-Factor Requires Two of Three

- Something you know and something you are.
- Something you know and something you have.
- Something you have and something you are.
- The permutations are endless... or are they?

How Old Is 2-Factor

Older than you think!

2FA is nothing new. When you use your credit card and you must enter in your ZIP code to confirm a charge, that's an example of 2FA in action. You must provide a physical factor, the card, and a knowledge factor, the ZIP code.

Who Uses 2-Factor Authentication?



...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

2-Factor
Authentication

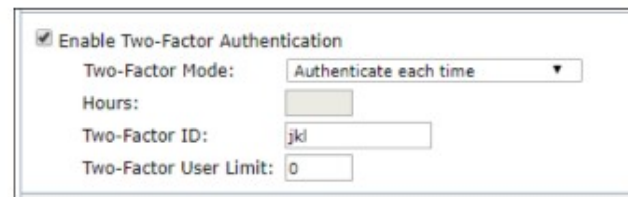
The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018

1. Turn on 2-factor in the Sysapp.



A screenshot of a web form for configuring Two-Factor Authentication. The form is titled "Enable Two-Factor Authentication" and contains the following fields: "Two-Factor Mode:" with a dropdown menu set to "Authenticate each time", "Hours:" with a text input field, "Two-Factor ID:" with a text input field containing "jkl", and "Two-Factor User Limit:" with a text input field containing "0".

<input checked="" type="checkbox"/> Enable Two-Factor Authentication	
Two-Factor Mode:	Authenticate each time ▼
Hours:	
Two-Factor ID:	jkl
Two-Factor User Limit:	0

<https://gwtest.pgcalc.com/SystemWebSupportBuild29/Login.aspx>

2. Enable 2-factor in the user account under Setup.



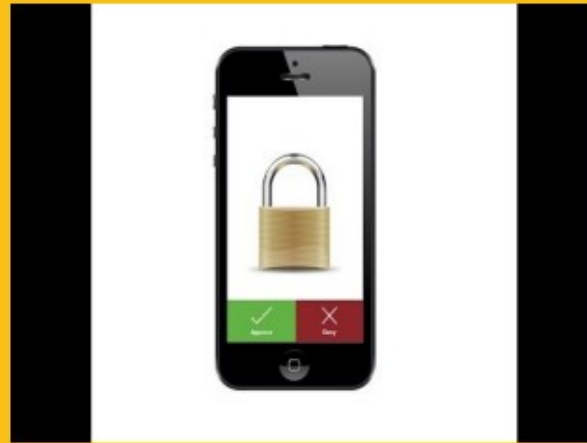
A screenshot of a web form for user account setup. The form contains the following fields: "Role:" with a dropdown menu set to "GiftAdmin", "User Status:" with three radio buttons (Active, Inactive, Locked) where "Active" is selected, "Use Single Sign-On" with an unchecked checkbox, and "Use Two-Factor Authentication" with an unchecked checkbox.

Role:	GiftAdmin ▼
User Status:	Active <input checked="" type="radio"/> Inactive <input type="radio"/> Locked <input type="radio"/>
Use Single Sign-On	<input type="checkbox"/>
Use Two-Factor Authentication	<input type="checkbox"/>

<https://gwtest.pgcalc.com/GW40SupportBuild29/Login.aspx>

**Activating
Duo Mobile**

Activating Duo Mobile

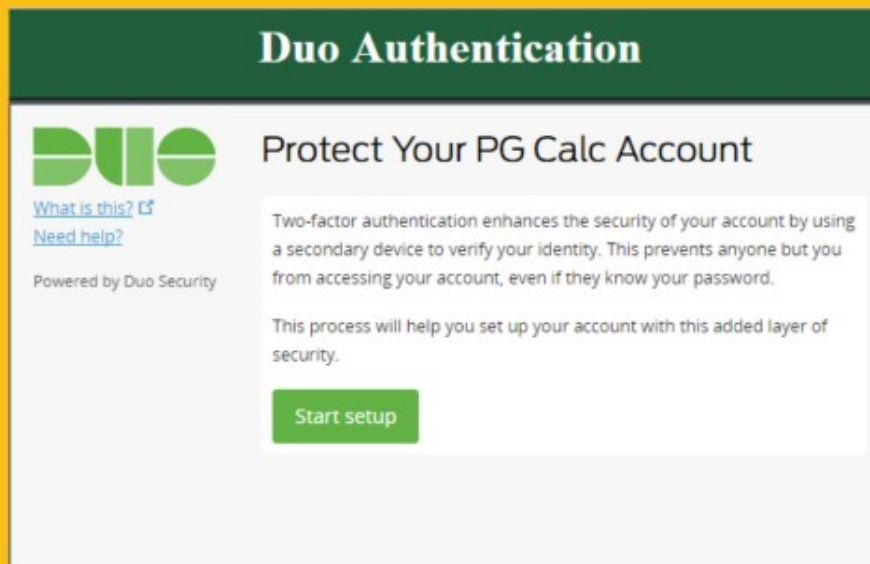




Setup Sequence

Screen 1

Upon first login, setup sequence is initiated. After entering *GiftWrap* clientname, username, and password, you will see this screen:



Screen 2

After clicking the Start Setup button, you will be prompted to add a device:



The image shows a web interface for Duo Authentication. At the top is a dark green header with the text "Duo Authentication" in white. Below the header is a light gray box containing the Duo logo (three green circles) on the left. To the right of the logo, the text "What type of device are you adding?" is displayed. Below this text are three radio button options: "Mobile phone" (which is selected and has the word "RECOMMENDED" in green next to it), "Tablet (iPad, Nexus 7, etc.)", and "Landline". At the bottom of the options is a green "Continue" button. On the far left of the light gray box, there are two links: "What is this?" and "Need help?", both in blue text. Below these links, it says "Powered by Duo Security" in a smaller font.

Mobile phone is the preferred device, although tablet and even landline can be used.

Screen 3 & 4

Next, you are prompted to enter your phone number. Note that tablets need to be cell capable.

Duo Authentication



[What is this?](#) [Need help?](#)

Powered by Duo Security

Enter your phone number

United States ▼

+1

ex: (201) 234-5678

Duo Authentication



[What is this?](#) [Need help?](#)

Powered by Duo Security

Enter your phone number

United States ▼

+1 ✓


ex: (201) 234-5678

☒ (781) 771-6697 Is this the correct number?

Screen 5 & 6

Verify ownership of phone number entered. Duo provides code via text or voice.

Duo Authentication



[What is this?](#) [Need help?](#)

Powered by Duo Security


Verify Ownership of 781-771-6697

1. We can call or text you with a verification code.

or

2. Enter your 6-digit code:

Duo Authentication



[What is this?](#) [Need help?](#)

Powered by Duo Security

Verify Ownership of 781-771-6697

1. We can call or text you with a verification code.

or Text sent

2. Enter your 6-digit code:

✓

Screen 6 & 7

Next, set up login. Choose method of obtaining authentication for all subsequent logins.

Duo Authentication



[What is this?](#) [Need help?](#)

Powered by Duo Security

My Settings & Devices

 iOS 781-771-6697 JUST ADDED

Default Device: iOS 781-771-6697

When I log in: Ask me to choose an authentication method ▼

Saved Continue to Login

Duo Authentication



[What is this?](#) [Need help?](#)

Powered by Duo Security

My Settings & Devices

 iOS 781-771-6697 JUST ADDED

Default Device: iOS 781-771-6697

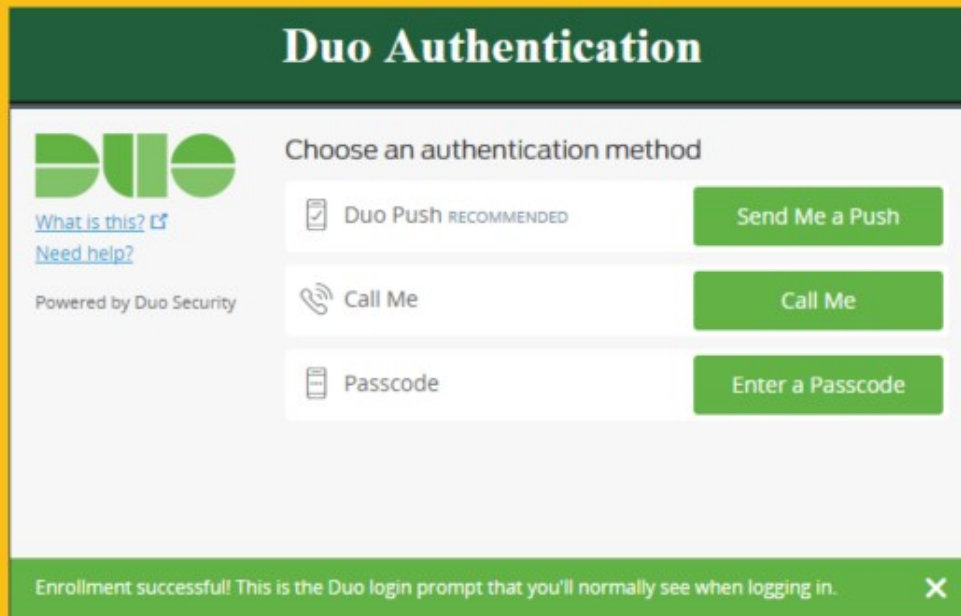
When I log in: Ask me to choose an authentication method ▼

Saved

Ask me to choose an authentication method
Automatically send this device a Duo Push
Automatically call this device

Screen 8

I chose "Choose and authentication method" and so I will see this screen with each authenticated login.



Method	Description
Duo Push	Pushes a login request to your phone or tablet (if you have Duo Mobile installed and activated on your iOS, Android, or Windows Phone device). Just review the request and tap Approve to log in.
Call Me	Authenticate via phone callback.
Enter a Passcode	Log in using a passcode, either generated with Duo Mobile, sent via SMS, generated by your hardware token, or provided by an administrator. Click Send codes to get a new batch of passcodes texted to your phone.

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

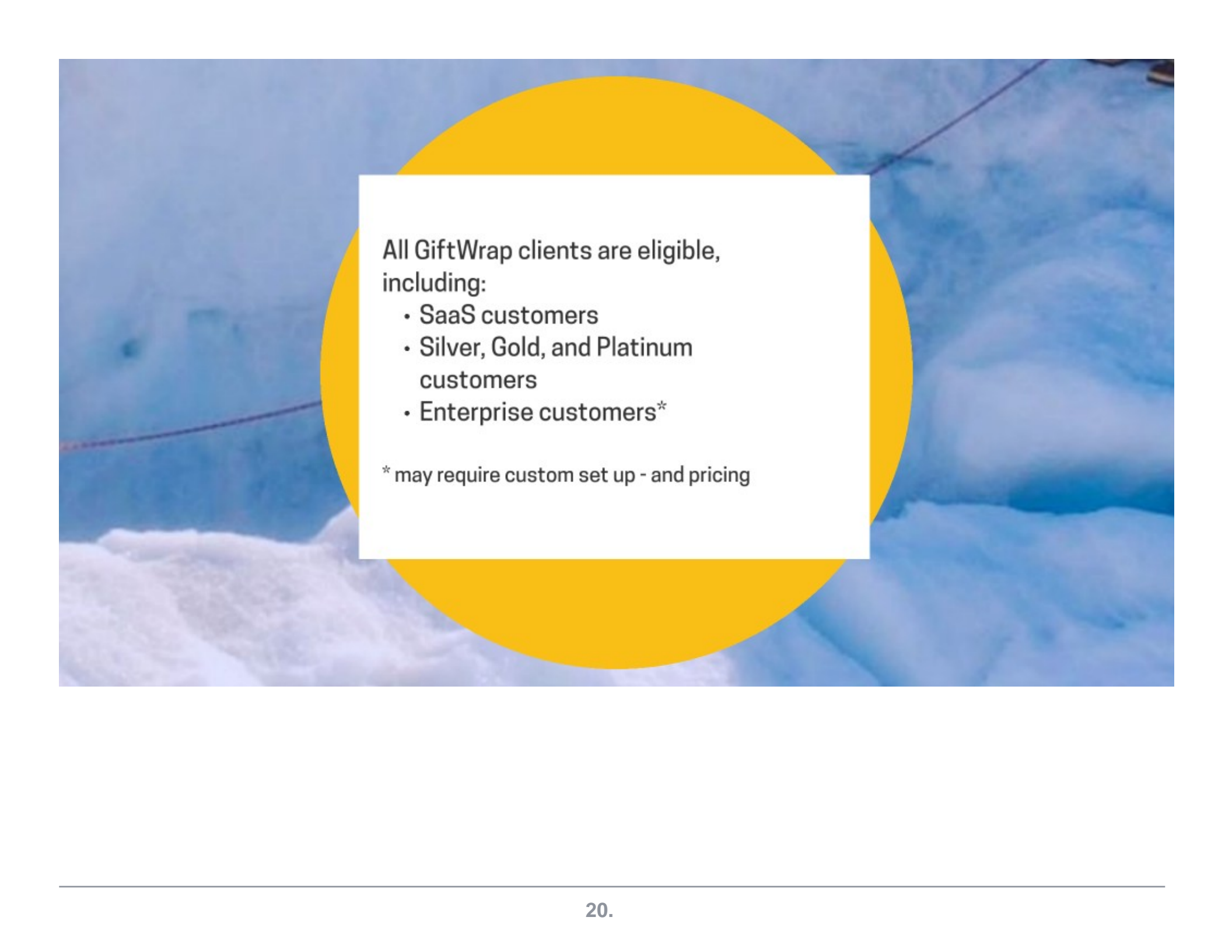
2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018




All GiftWrap clients are eligible,
including:

- SaaS customers
- Silver, Gold, and Platinum customers
- Enterprise customers*

* may require custom set up - and pricing



- 
- Any organization interested in enhanced security
 - Both service providers and charities/non-profits (although the former are likely to be more aware of enhanced security)
 - Financial services organizations seeking to conform to Federal Financial Institutions Examination Council (FFIEC) guidelines
 - Big hospitals and colleges/universities

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018

2-Factor Pricing

Standard pricing for 2-factor authentication is as follows:

- 1-Time, Set Up Fee: \$250
- Annual Maintenance Fee: \$500
- Monthly License fee: \$6/user/month in blocks of 5
- Hardware Token: \$20/token one time

2 current customers:

- BNY Mellon, for whom custom pricing is in effect
- Christian Church Foundation, for whom standard pricing is in effect



Questions

Q: Is there a 2-factor product row in Sugar:

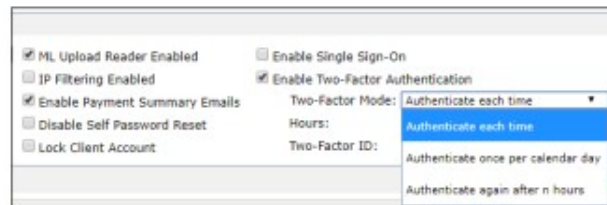
A: No; plan is to have an entry for Security Module

Q: Does it affect password resets or other routine operations?

A: No, unless the operations are specifically related to 2-factor

Q: Does the administrator have choices in applying 2-factor?

A: Yes. The admin can choose its periodicity, as follows:



The screenshot shows a configuration window with two columns of settings. The left column contains checkboxes for 'ML Upload Reader Enabled' (checked), 'IP Filtering Enabled' (unchecked), 'Enable Payment Summary Emails' (checked), 'Disable Self Password Reset' (unchecked), and 'Lock Client Account' (unchecked). The right column contains checkboxes for 'Enable Single Sign-On' (unchecked) and 'Enable Two-Factor Authentication' (checked). Below these, there are three fields: 'Two-Factor Mode:' with a dropdown menu showing 'Authenticate each time' (selected), 'Hours:' with a dropdown menu showing 'Authenticate each time', and 'Two-Factor ID:' with a dropdown menu showing 'Authenticate once per calendar day'. A fourth option, 'Authenticate again after n hours', is visible at the bottom of the dropdown.

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

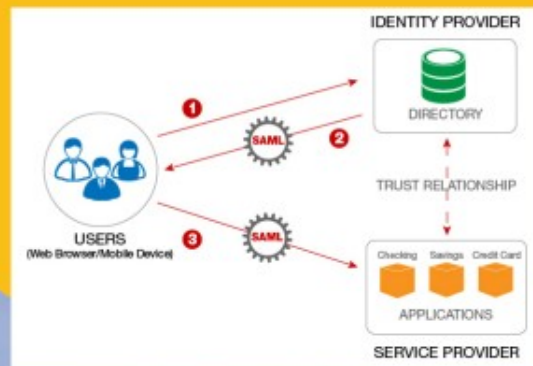
Larry Kerstein
June 2018

What Is SSO?

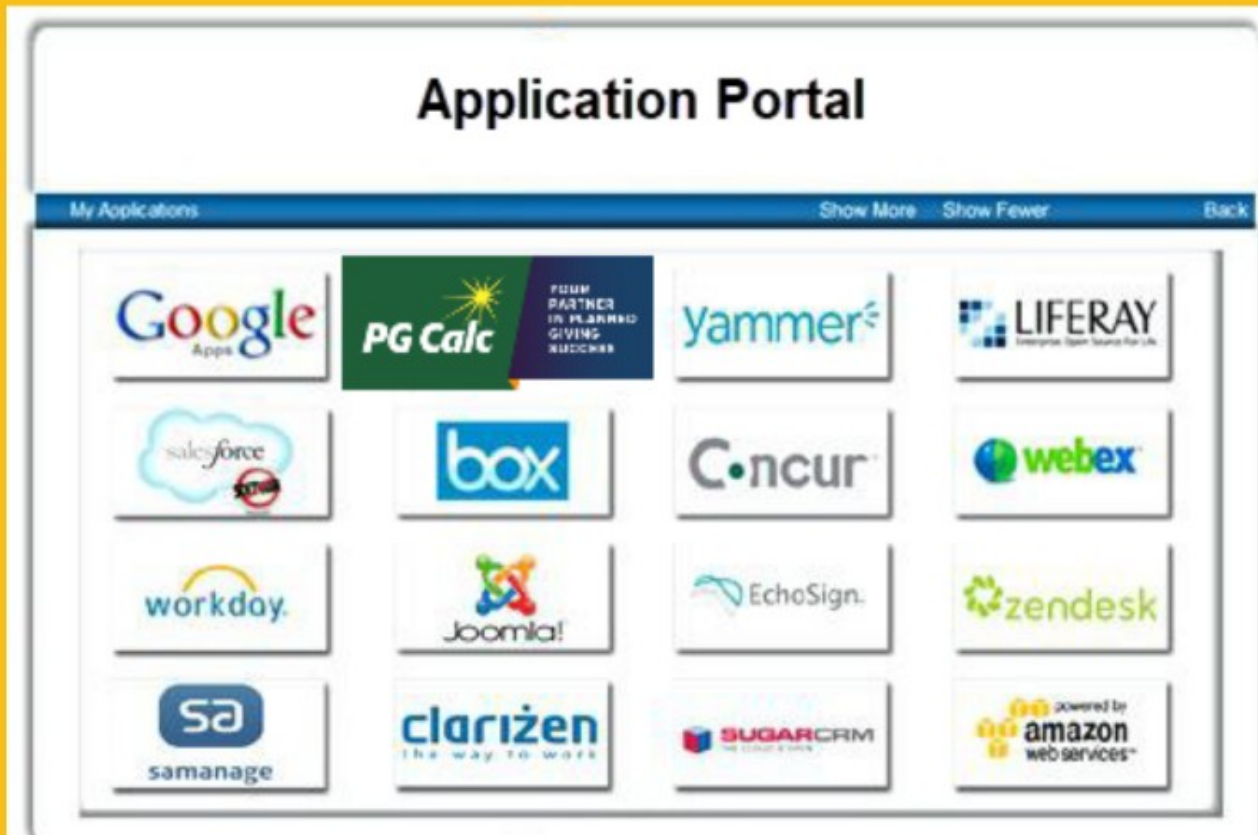
Single sign-on (SSO) is a user authentication service that permits a user to use one set of login credentials (e.g., name and password) to access multiple applications.

The service authenticates the end user for all the applications the user has been given rights to and eliminates further prompts when the user switches applications during the same session.

SSO From The
User Perspective



Sample Application Portal



...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018

SSO Setup

- PG Calc delivers xml configuration file to client for completion.
- Client sends meta data document to PG Calc.
- PG Calc modifies system module configuration enabling SSO for client.
- PG Calc updates SSO configuration file to include client's meta data.
- Client configures their user accounts to require SSO.

**Sysapp
Setup**

Configuring SSO

Sysapp setup

<input type="checkbox"/> Enable Two-Factor Authentication	<input type="checkbox"/> Enable Single Sign-On
Two-Factor Mode: <input type="text" value="Authenticate each time"/>	Single Sign-On User Limit: <input type="text"/>
Hours: <input type="text"/>	
Two-Factor ID: <input type="text"/>	
Two-Factor User Limit: <input type="text"/>	

User Account setup

Locked <input type="checkbox"/>	
Use Single Sign-On <input type="checkbox"/>	
Use Two-Factor Authentication <input checked="" type="checkbox"/>	
Charity:	
<input checked="" type="radio"/> All Charities	
<input type="radio"/> Selected Charities	<input type="button" value="Select"/>
<input type="radio"/> Specific Charity	<input type="text"/>

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

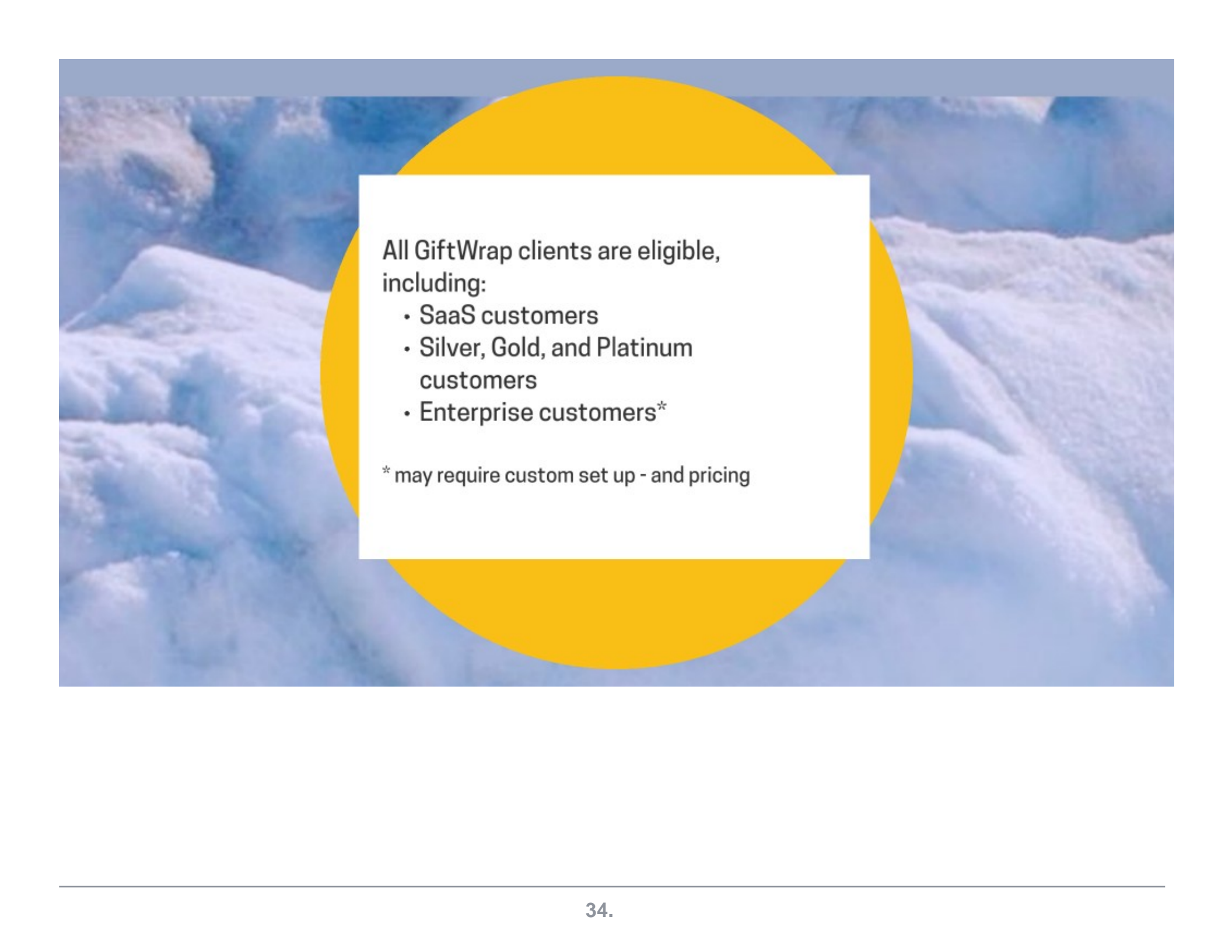
2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018




All GiftWrap clients are eligible,
including:

- SaaS customers
- Silver, Gold, and Platinum customers
- Enterprise customers*

* may require custom set up - and pricing



- 
- Any organization interested in enhanced security
 - Both service providers and charities/ non-profits (although the latter are much less likely to require this level of enhanced security)
 - Financial services organizations seeking to conform to Federal Financial Institutions Examination Council (FFIEC) guidelines
 - Big hospitals and colleges/universities

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018

...But Wait, There's More

Additional *GiftWrap* security features included in the *Security Module*, include the following:

- Enhanced Hosting Options, including Silver, Gold, Platinum, Double Platinum, Platinum Plated...
- IP Filtering
- Data Masking

Marketing rollout is planned over this and next month, beginning with targeted calls to likely prospects.

Hosting
Options

IP
Filtering

Enhanced
Data
Masking

IAM Data
Feeds

Enhanced
Security
Module Pricing

Hosting Options

You know them - Silver, Gold, and Platinum, but in case you need a reminder:

- Silver hosting - separate db on shared db server and accessed from shared *GiftWrap* application
- Gold hosting - separate db and db server and accessed from shared *GiftWrap* application
- Platinum hosting - separate db and application on separate, dedicated servers; accessible via Internet or VPN; Double Platinum, Platinum Plated???
No clue - See Warren ;^>

IP Filtering

- Filters by source address upon login
- Also filters with with each subsequent browser request
- Only valid users with *GiftWrap* credentials coming from IP addresses listed in *SysApp* are authenticated; all other users blocked

The screenshot displays the configuration interface for IP Filtering in SysApp. It includes sections for enabling two-factor authentication, single sign-on, and IP filtering, as well as other system settings like hosting level, masking type, and license information. At the bottom, there is an IP Filter List table.

☐ Enable Two-Factor Authentication
Two-Factor Mode:
Hours:
Two-Factor ID:
Two-Factor User Limit:

☐ Enable Single Sign-On
Single Sign-On User Limit:

☒ Enable IP Filtering

Other

Hosting Level:
Masking Type:
☒ Trial License License Expiration Date:
☐ Data Feed and Description
☐ Lock Client Account

☐ ML Upload Reader Enabled
☐ Enable Payment Summary Emails
☐ Disable Self Password Reset

IP Filter List

IP Filter Id	IP Information	Insert Date
6	192.168.55.76	06/18/2018

Enhanced Data Masking

- Confidential data, including Social Security numbers, bank account numbers, and dates of birth, can be fully masked on all GiftWrap UI screens
- Social Security numbers and bank account numbers are fully masked on all report previews rendered in the browser.
- Masking functionality is configurable at the Role level, enabling this functionality to be modified as desired by the customer.

IAM Data Feeds

- Identity Access Management (IAM) Data Feeds comprises a custom data feed, in the form of a plain text file, that provides updated user access data from the GiftWrap database for import into enterprise IAM systems at the customer site
- Enables enterprise IAM systems to remain current specifically with respect to GiftWrap user access data, ensuring only authorized access to GiftWrap.
- The IAM Data Feed typically requires specification of data elements to be included in the feed, and is delivered in the form of plain text files (e.g., CSV or XML) via secure FTP

Enhanced Security Module Pricing

	One-Time	Annual
Hosting		
Silver	\$1,250	\$2,500
Gold	\$3,000	\$15,000
Platinum	\$3,750	\$25,000
IP Filtering	\$250	\$500
Data Masking	\$250	\$300
2-Factor Authentication	\$250	\$500 support plus \$6/user/month in license fees in blocks of 5
SSO	\$5,000	\$1,000

...But Wait,
There's
More

Who Wants
It?

Who Is
Eligible?

SSO
Setup

Single
Sign On

2-FA
Questions

2-Factor
Pricing

Who Wants
It?

Who Is
Eligible?

2-Factor
Setup

2-Factor
Authentication

The
GiftWrap
Security
Module



Crossing the Chasm: the *GiftWrap* Security Module

Larry Kerstein
June 2018