Sub Rosa® for iOS

User Guide



Version 5.1

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Description	3
Installing and First Launch	3
Using Sub Rosa	4
Gestures	5
Sub Rosa User Interface	5
1. Card Slot Status	5
2. Address Bar	6
2.1 QR Code Scanner	6
3. Google Search	6
4. Enhanced OWA Client	6
4.1 OWA Mailbox	7
4.2 Creating a Message	8
4.3 Message Attachments	8
4.4 S/MIME	8
4.5 Save	8
4.6 Delegated or Shared Mailboxes	9
4.7 Calendaring	9
4.7a Creating and Editing a New Calendar Item	10
4.7b Additional Calendars	10
5. Page Navigation	10
6. Action	11
6.1 Secure Reset	11
6.2 Print	11
6.3 Add/Edit Bookmark	11
6.4 Mail Link to this Page	11
7. Bookmarks	11
8. Tabs	11
9. Settings	12
9.1 Advanced	13
PDF Signing and Editing Introduction	13
Subscribing	14
Signing a PDF	15
PDF Editing	17
PDF Signing with Zero Data at Rest	17
Troubleshooting	18
Requirements	19
Further Information and Support	19

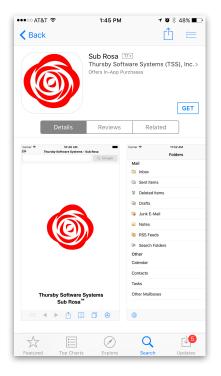
Description

Sub Rosa is a mobile web browser that supports smart card authentication. Sub Rosa does not require any certificates to be installed onto the iPad or iPhone, and reads the certificates directly from the card. The Sub Rosa app license is bundled at no additional cost with licensed card readers.

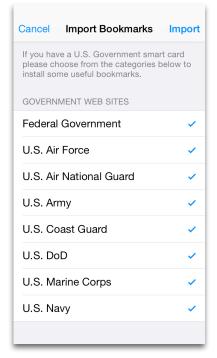
Installing and First Launch

Connect your reader to your iOS device. You may be presented with a dialog stating the accessory requires an app and it will direct you to the App Store to download Sub Rosa. If not, open the App Store and search for Sub Rosa.

Once the application is installed, tap the icon to launch Sub Rosa. You will be prompted to register (optional), asked to select a group of bookmarks based on the branch of government with which you are associated, and notified of any new features in the app.



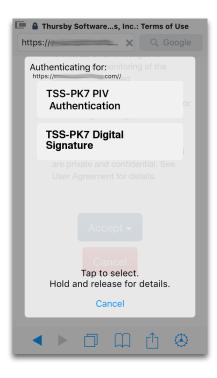


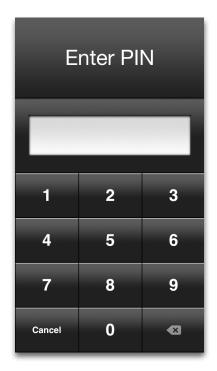


Using Sub Rosa

To use Sub Rosa, connect the reader to your device, insert your smart card into the reader, and then type in the desired URL, use one of the provided bookmarks, or use the camera icon to scan a QR code. When authentication is needed, you may be prompted to select a certificate and then enter the card's PIN number.







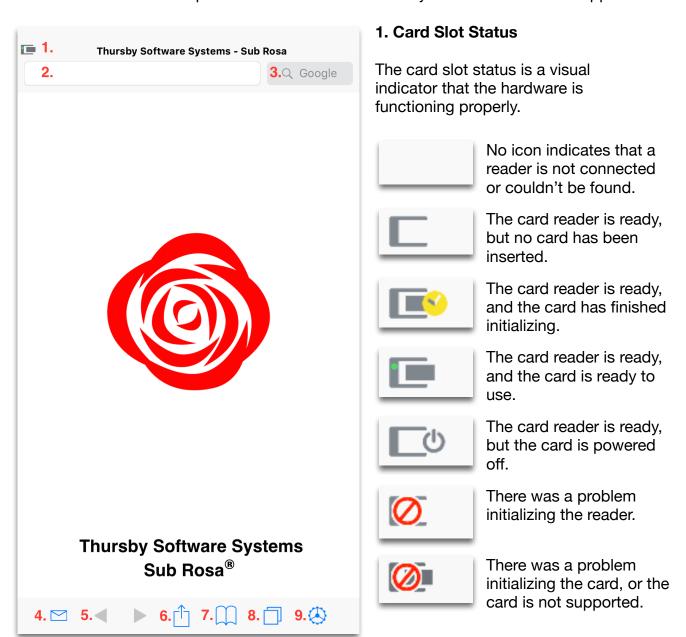


Gestures

Sub Rosa has a few gestures that you may notice by using the app. Scrolling down will cause the Address bar and Toolbar to scroll out of view. Scrolling back up will bring them back. If you do a long scroll upward, then you will see our Tabs menu appear; another long scroll upward will make it go away.

Sub Rosa User Interface

Detailed below are descriptions of each button and icon you will find within the app:



2. Address Bar

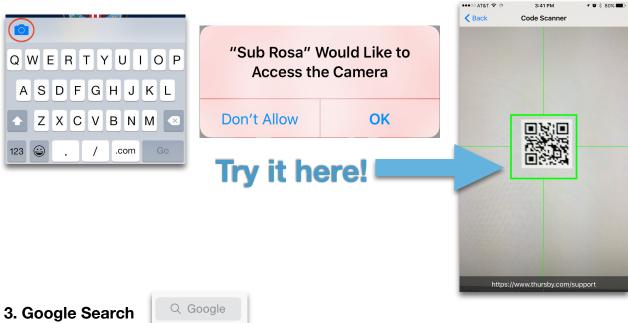
Thursby Software Systems - I

The address bar works just like any other browser's address bar. While most sites should be accessible, the only time you should run into an issue is if the site is using a very old/expired certificate, if the SSL certificate was signed by an authority not in our trust list and is inaccessible, or running a protocol that isn't supported by Apple's iOS; e.g. Flash, Java, or Active X.

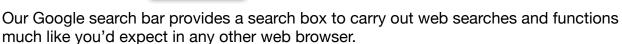
2.1 QR Code Scanner



When you tap the address bar, not only will you see the keyboard, but there will also be a camera icon just above the keyboard. This camera will open our QR scanner to allow you to scan the QR code of a URL. If this is the first time Sub Rosa has accessed your camera, you will also see a prompt asking you to allow it.



o. Google oculon

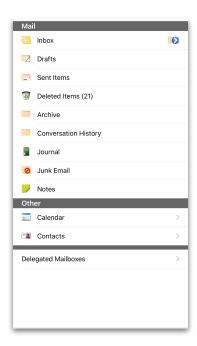


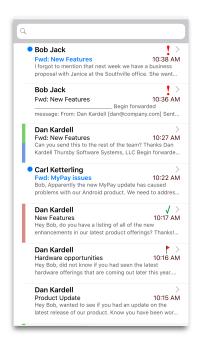
4. Enhanced OWA Client

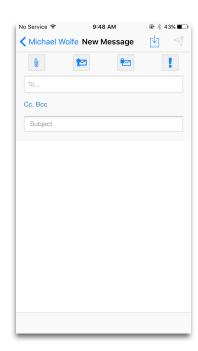




With Enhanced OWA Client enabled, Sub Rosa will open your webmail in a view similar to an email client with advanced features such as S/MIME. You can switch between your mailbox and the browser by tapping either the Envelope button or the Globe button. If the URL for your webmail changes, simply go to the new URL in the browser to update the URL Sub Rosa has cached. This button will change from gray to blue when you have successfully logged into your webmail.







Other features that are included in Enhanced OWA view is the ability to create new folders by tapping the + or deleting folders by tapping the Edit button, connecting to shared mailboxes, as well as view your calendar.

4.1 OWA Mailbox

When viewing your mailbox, you will see the different folders that you can find in an email client. Once a folder is selected, Sub Rosa pulls messages from the server and displays them as a list. When you get to the bottom of the list you can swipe up to prompt Sub Rosa to get more messages from the server. When viewing your email,

you can sort them by tapping the sort button. This will allow you to sort the list with the same options you see in a browser.

Folders that contain a icon have sub folders within them. Tapping this button will drill down into the folder structure and display the additional folders that reside within the parent folder.

Folders with numbers next to the name indicate that there are unread messages in the folder. Tapping on the folder name will display all emails within the folder. When viewing sub folders, you can go back to the parent folder by tapping the folder's name in the upper left corner.

While you are viewing the list of emails within the folder, you can quickly view the sub folders within it by tapping the Sub Folders icon in the lower right portion of the screen.

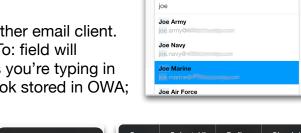
Swiping a message to the left allows you to delete, flag, change category, or move emails. Swiping to the right allow you to mark the message as read or unread.

4.2 Creating a Message



Creating a message works just like any other email client. To begin, tap the compose button. The To: field will automatically attempt to find the address you're typing in your local contacts and your Address Book stored in OWA;

you may see a prompt to allow access to your contacts. To verify that the email address is in the GAL, double tap the email address or address field once it has been added, then tap "Check name". If you are in the middle of composing



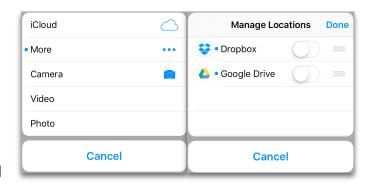


an email, but need to look at another, Sub Rosa will save the email as a temporary draft. To get back to this email, open your drafts folder and select the email. To send the email, tap the paper airplane icon in the upper right corner.

4.3 Message Attachments



To attach an item to your email, tap the paper clip button to display the different locations available to pull the attachment from. If you access your photos you may see a prompt asking if Sub Rosa can access your photos. Sub Rosa's Enhanced OWA Client will enable you to preview attachments,



but does not allow attachments to be saved outside of the app.

4.4 S/MIME

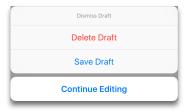


In Enhanced OWA Client, you have the ability to sign, encrypt, and decrypt email. When composing a message you will see two buttons at the top with envelopes. The one on the left is to mark that you would like to Sign the email, and the one on the right is to mark that you would like to Encrypt the email; you can select both if you wish. Any encrypted email that you open may prompt you to enter your PIN, and any email that you sign will prompt you to enter your PIN. Encrypting an email does not require your PIN.

4.5 Save

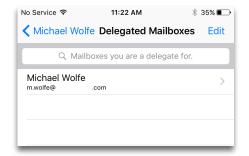


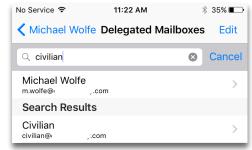
Tapping the save button will allow you to discard the draft, save the draft, or continue editing.



4.6 Delegated or Shared Mailboxes

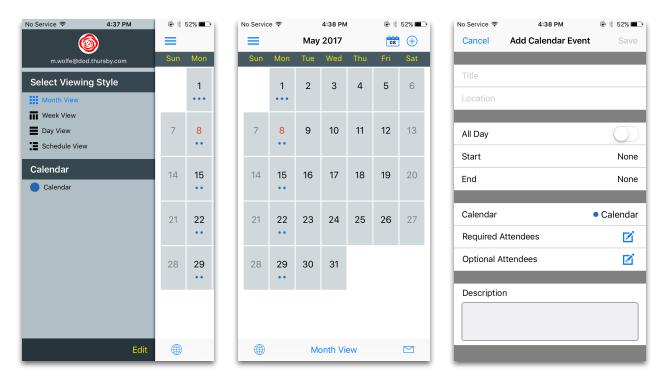
To connect to your shared or delegated mailbox, tap "Delegated Mailboxes", then enter the email address of the mailbox you can access and select it.





4.7 Calendaring

Enhanced OWA Client includes an intuitive calendar that is capable of pulling your past and current appointments and events. The user is able to create new personal events or new appointments with invitees. Like the native calendar on your phone, you have the ability to change your view to Schedule, Day, Week, or Month view. You can edit or delete the events and appointments of which you are the owner.



When you first open the calendar, the left side panel is exposed to show you the different views available, and your calendars. To dismiss the side panel, tap the hamburger menu, or swipe the panel divider bar to the left. The default view that is opened is the Month view. If you change views between sessions, the last view you used will be the one that is displayed.

4.7a Creating and Editing a New Calendar Item

To create an event, tap the plus + in the top right corner of the app window, or long press the day or time of when you'd like the event. The "Add Calendar Event" window has the same fields you would find in most Calendar apps. When you are adding an Attendee, Sub Rosa will query the GAL for the user's email address and display it for you to select. Once you have finished creating the event, tap Save. Any attendees will be emailed with the option to accept, decline, or tentatively attend the event.

You can edit any calendar items you are the creator of by going to the day of the event, tapping on the event you wish to modify, then tap the edit icon in the upper left corner. Once you have made your changes, tap Save or Send in the upper right corner.

Note: The text of the button is determined by if you have invited other people to the event. If changes are made, tapping send will email the invitees and notify them of the changes.

Emails that contain an event sent from OWA or Outlook contain buttons which allow the user to Accept, Decline, or mark that they may attend the meeting.

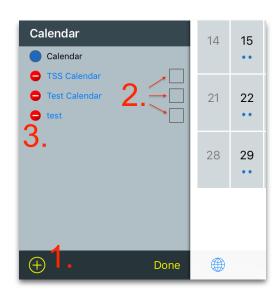


4.7b Additional Calendars

To create a new calendar, swipe open the side panel, tap the Edit button at the bottom of the panel, tap the + 1, name your Calendar, then tap the box next to the name to place a check in it; calendars with a check will be displayed, hidden calendars do not have a check.

To hide calendars, swipe open the side panel, tap the Edit button at the bottom of the panel and remove the check ².

To delete Calendars, swipe open the side panel, tap the Edit button at the bottom of the panel, then tap the red circle ³ to the left of the calendar you wish to delete.



Click Done when you are finished editing

5. Page Navigation



These buttons allow you to browse back and forth to pages you have previously visited.

6. Action



The Action button allows you to perform different tasks such as Secure Reset, Printing the page, adding or editing a bookmark, or send a link to the page you are on. When viewing a document like a PDF, you can use the Action button to open the document in a different app.



6.1 Secure Reset

Secure Reset will remove any browser and certificate cache, as well as close any open tabs. This is a great utility to use if you are having trouble accessing a website.

6.2 Print

The Print button allows you to print the page to any printers that are compatible with Apple AirPrint.

6.3 Add/Edit Bookmark

Add Bookmark allows you to create your own custom bookmarks based on the page you are currently visiting in Sub Rosa. If the page you are on is already bookmarked, then this button will change to Edit.

6.4 Mail Link to this Page

Mail Link to this Page opens up a new email for you to send a link to the page you are visiting.

7. Bookmarks



During the setup of Sub Rosa you were prompted to select the branch or branches of government and military with which you are associated. This selection allows Sub Rosa to create bookmark folders and populates them with some of the most common URL's. These bookmarks are not permanent, and can be deleted or edited. This is where any custom bookmarks that you have created will be stored.

8. Tabs

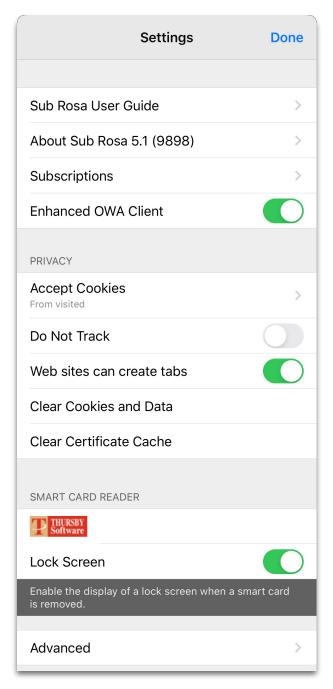


The tabs button allows you to open new tabbed windows or access tabbed windows. The plus sign will create a new tab. To close a window, drag the desired window in an upward motion.



9. Settings

The Settings menu contains a variety of information and options that you can enable or disable.



Sub Rosa User Guide opens a web page to this user guide

About displays the version and build number of Sub Rosa that is installed. By tapping this button you are able to access the licensing agreement and registration page.

Subscriptions enables the monthly and vearly subscriptions for PDF Signing.

Enhanced OWA Client enables or disables our Enhanced OWA Client.

Accept Cookies allows you to change how cookies are managed within the app.

Do Not Track when enabled, a request will be sent to a website to not have your browsing data collected or tracked. However, what happens to your data depends on how a website responds to the request.

Allow New Tabs allows websites to open windows in a new tab. This does not affect tabs you open manually.

Clear Cookies and Data clears your current website information.

Clear Certificate Cache clears any cached certificate information.

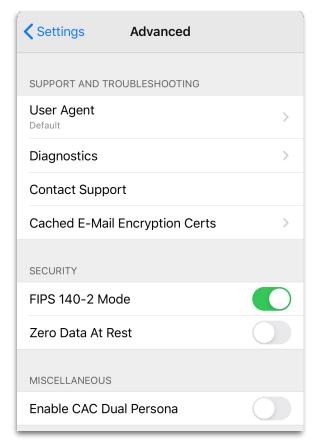
Tapping the reader icon displays basic information about the connected reader and your certificates.

Lock Screen enables or disables the Thursby lock screen when you exit the app or remove your card.

Advanced will allow you to change additional options within Sub Rosa, and contact Thursby Support.

9.1 Advanced

The advanced section of our Settings menu allows you to change additional settings within the app, as well as enabling and sending diagnostic data to Thursby Support.



User Agent This allows Sub Rosa to change the user agent it sends to websites. Changing the user agent allows our browser to emulate other web browsers and bypass some browser restrictions.

Diagnostics allows you to start and send diagnostic log files to Thursby Support.

Contact Support will open your email and allow you to send an email to Thursby Support.

Cached E-Mail Encryption Certs displays email recipient certificates that may be used to send encrypted emails via Sub Rosa's Enhanced OWA Client.

FIPS 140-2 Mode forces FIPS140-2 level of encryption when connecting to web servers. Sub Rosa will fail to connect if the server does not meet this specification.

Zero Data At Rest configures Sub Rosa to not store any information on the device.

Enable CAC Dual Persona enables or disables PIV on CAC certificates from being displayed.

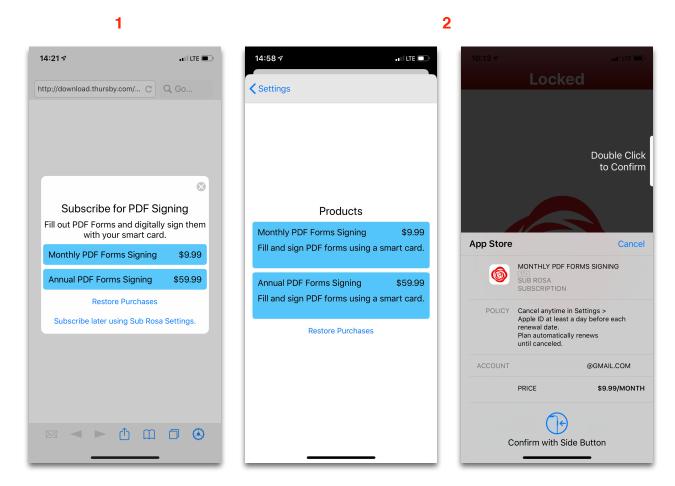
PDF Signing and Editing Introduction

Sub Rosa has the ability to not only view, but sign PDFs using a digital certificate as well as edit them upon subscribing to the service. You can still view documents without the subscription, and you will be prompted to subscribe the first time you open a PDF, but subscribing is not required. PDFs that are downloaded using Sub Rosa, or opened within Sub Rosa's Enhanced OWA Client can be signed, saved to the Sub Rosa folder in the Files app, and emailed.

Subscribing

There are two methods by which you can subscribe to the PDF Signing feature. The first time you open a PDF, such as loading this User Guide in Sub Rosa, you will see a prompt about the PDF Signing subscription and you are given the option at this time to subscribe ¹; dismissing the dialog won't prevent you from viewing normal PDFs.

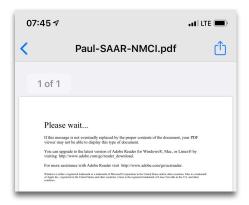
If later you choose to add the PDF Signing feature to Sub Rosa, tap the Gear to open Settings from the main Sub Rosa window, tap Subscriptions, and then select your subscription ².



You may cancel your subscription at any time by going into your device's Settings menu, search for Subscriptions, tap Sub Rosa, and then tap Cancel Subscription. You will continue to be able to use the PDF Signing feature until the subscription expires.

Signing a PDF

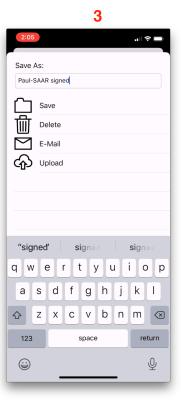
PDFs on the surface may all look the same, but some contain a format called XFA, or XML Forms Architecture, that can only be viewed by specific PDF viewers. By default, Sub Rosa uses Apple's PDF viewer for all PDFs. When you view a PDF that has XFA formatting, you will be see a page that says "Please wait..." and the page will never change. This is a known limitation of Apple's PDF viewer and you will need to purchase the PDF Signing subscription in order to view and modify these kinds of documents.



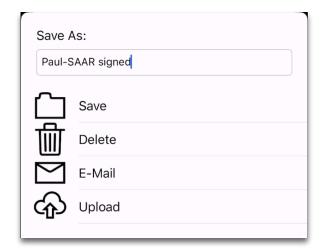
Signing a PDF with a digital certificate is a simple process. Once you have the document opened, find the field that requires your signature ¹, tap the field to bring the certificate selection window and select your certificate then enter your PIN if prompted ², name the PDF and select whether you wish to Save, Delete, Email, or Upload ³.







Here are the various options you have after you have signed a PDF:



Save As: this field is used for you to give the PDF any name you wish.

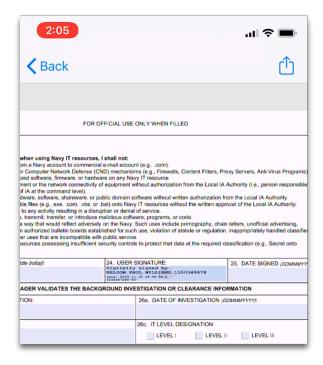
Save will save the PDF in the Files app within the Sub Rosa folder.

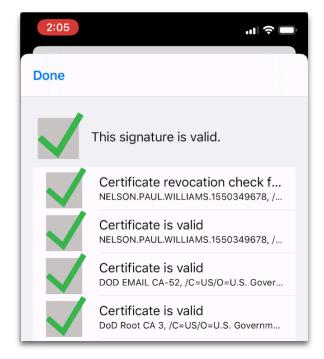
Delete deletes the PDF from your device.

Email opens Sub Rosa's Enhanced OWA Client and attaches the PDF to be emailed.

Upload will save the PDF in the Sub Rosa folder of the Files app, and then take you back to the browser page you had opened so that you can upload the file to the web site, such as SharePoint.

You can view your signature on saved documents by opening the PDF and going to the page you signed. The field will contain your digital ID, the date when it was signed, and a Sub Rosa watermark. If you tap on the signed field you will see the certificate validity check window. Tapping the action button in the upper right corner gives you the ability to E-Mail, Upload, or Print the PDF.





PDF Signing and Editing isn't limited to PDFs that you download using the browser. If you are emailed a PDF you can open the PDF attachment, sign and edit the PDF, and email it back using the same steps you would take as if you had downloaded it using a browser. PDFs that you place in the Sub Rosa folder within Files will open in Sub Rosa.

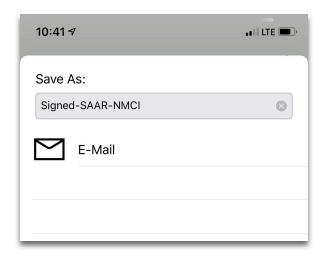
PDF Editing

To edit a PDF, tap on the field you wish to edit and the keyboard will display for you to make your changes. Above the keyboard you will find two arrow buttons to help you navigate the document, Reset will clear the contents of the field you're currently editing, and Done will dismiss the keyboard. You should also see a dotted line around the field you are editing.



PDF Signing with Zero Data at Rest

With Zero Data at Rest enabled, Sub Rosa will not save any data to the local device. This means the Sub Rosa folder is removed from the Files app and any documents stored in this folder are no longer available and have been removed from the device. If you have documents in the Sub Rosa folder, make sure you copy them to another folder or cloud storage prior to enabling Zero Data at Rest. PDF Signing and Editing is functionally identical with Zero Data at Rest enabled, but your options are limited to only emailing a document upon completion and you must have already connected to your OWA account with our Enhanced OWA Client, otherwise the email option won't be available.



Troubleshooting

Sub Rosa is fully supported by our US based support team by phone or email. Should you run into any issues when using the app or hardware, please use the support contact information at the end of this guide to contact our support department.

- When you connect the reader to your device, a white light should appear. If Sub Rosa is opened, then the white light should stay solid. If the app is in the background, or if the device is locked, then the white light should slowly pulse until it is put to sleep. If this light appears, and doesn't stay on, open your devices Settings, tap General, tap About, and scroll to the bottom. You should see PKard Reader below SEID when the reader is connected. If you do not see PKard Reader, disconnect the reader, restart your device, and try again. If you continue to have an issue, please contact support.
- Inserting your card into the reader will activate a blue light at the bottom of the reader.
 When the card is idle, it will be a solid blue light. Anytime card data is being read the blue light will flicker on and off.
- Sub Rosa is a mobile web browser and requires your device to be connected to the
 internet via cellular or WiFi. If you are unsure that your device is connected to the
 internet, open Safari and try going to www.thursby.com. If you are able to see this
 website, try logging into a CAC enabled web site with Sub Rosa.
- If you have chosen the wrong certificate, tap share button, then tap Secure Reset. This will clear all certificate choices that we save as "Identity Preferences".
- Incorrectly entering your PIN number too many times will lock your CAC. If you see a
 notice that your CAC is locked then you will need to go to your nearest CAC office in
 order to get your CAC unlocked.
- You may see the error "Unable to establish a secure connection to the server" when attempting to log into a website. If after several attempts you still get this message, close the app by tapping your home button twice, and swipe the app off of the screen. Once the app is closed, open Sub Rosa, and try the website again.
- If a website is loading incorrectly, or is failing to log you in, closing the app, or using Secure Reset, will remove any cached data from the browser and should correct the problem you are having. Either one of these actions will fix a majority of problems you may see or experience when using the application.
- "I am unable to send an encrypted email". Sending an encrypted email requires the recipients signing certificate to be available. If the recipient is in the GAL, then Sub Rosa should be able to look up this certificate. If the recipient has sent you a signed email, and you've opened it within Sub Rosa, or are replying to the email, then Sub Rosa should be able to use the cert. If you continue to have trouble sending an

encrypted email, try sending an encrypted email using OWA on a Windows computer with Internet Explorer.

• "When should I be prompted to type in my PIN?" You will be required to enter your PIN number the first time you need to log into a website. This PIN entry will unlock the card and you won't see another authenticate PIN prompt until the card has left the reader and returned. This action happens if you physically remove the card or card reader, if you force close the app, or if you use Secure Reset. You will also see a PIN prompt every time you sign an email. You will not, however, see a PIN prompt if you only encrypt an email, this action does not require a PIN. Decrypting an email will always prompt you to enter your PIN number.

Requirements

- Apple iPhone or iPad running iOS 11 or later
- Enhanced OWA Client supports Exchange 2010, 2013, and Office 365
- PDF Signing requires the purchase of a Monthly or Yearly subscription
- CAC, CIV, PIV, and PIV-I cards
- Thursby Software Systems, Inc. PKard® Reader hardware. (Note: FIPS 140-2 encryption is not compatible with jailbroken devices)

Further Information and Support

Web http://thursby.com

• Forum http://thursby.com/forum

Email Thursby Software Systems, LLC

sales@thursby.com or support@thursby.com

• **Phone** +1 (817) 478-5070