



## **SYNOPSIS GROUP**

### **Email Classification using JanusSEAL**

Date Created: 27<sup>th</sup> November 2019

## Version Control:

Version	Description of Changes	Date	Author(s)
Draft	Creation of document	27/11/2019	Nardus Schroeder

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## What is JanusSEAL for Outlook?

JanusSEAL for Outlook is an add-in to Microsoft® Outlook® that compels your users to assign a classification to every email, calendar item they send. JanusSEAL for Outlook is scalable, centrally deployed via Microsoft Group Policy, and helps you to:

- Create more security awareness among your users
- Lighten the load on your IT security team
- Enhance performance of other IT security systems.

### How it works

Once you've decided the security classifications you wish to use, such as **External/Public, Privileged/Confidential** and **Internal** as well as which message types must use them, JanusSEAL for Outlook will do the rest, with these key benefits:

- **Consistency** - users must choose a security tag depending upon their clearance, or authority, level;
- **Peace of mind** - emails and calendar items can't be sent from Outlook unless security labelled
- **Awareness** - the security label is visible to recipients so they know how to handle the email
- **Improved monitoring** - email security labels can be linked to your IT security systems
- **Adaptability** - your range of security labels can be easily updated if your needs change
- **Compliance** - JanusSEAL for Outlook is easily configured to comply with a range of Email Protective Marking Standards including UK Government GPMS (GCSx CoCo 4.1), and the Australian Government EPMS 2012.3 and many more.

### What you need

To use JanusSEAL Outlook you need:

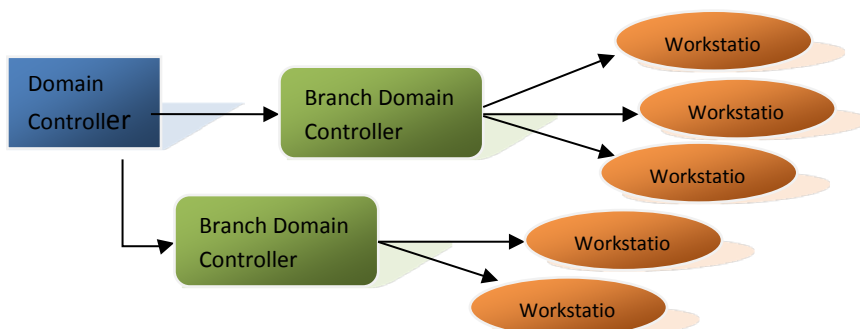
- Microsoft® Outlook® 2013 (x86 and x64), 2010 (x86 and x64) or 2007
- Windows® 8, Windows® 7 or Windows® Vista®.

### The type of application modules available:

1. **JanusSEAL for Documents**
2. **JanusSEAL for outlook**
3. **JanusSEAL for Outlook Web App**
4. **JanusGATE Mobile App (Requires JanusGATE Exchange)**

## Server Architecture:

- JanusSEAL does not require an independent server, it makes use of Group policies which consist of a set of predefined policies easily imported by the existing Active Directory Group Policy Editor
- As the application makes use of the Active Directory Structure, Policies can be applied at OU level allowing for easier management of departmental requirements
- Application has a very small data footprint (39MB)
- Group Policies are replicated to branch domain controllers via normal replication channels, policies are then applied to workstations
- Group Policies are implemented using the JanusSEAL Schema application which creates the Admin Policy Template, the template is then imported into the AD Group Policy Schema and assigned to the relevant OU's



## Workstation Architecture:

- JanusSEAL works via Active Directory Group Policies, these policies determine the classification list, order of classification, administrative functions
- A client is deployed to the workstations, and is installed as an add-in to the Outlook client
- Once deployed the following changes will be seen on the Outlook messages and functions:

On New e-mails, the user will be prompted to classify the mail prior to allowing the mail to be sent.

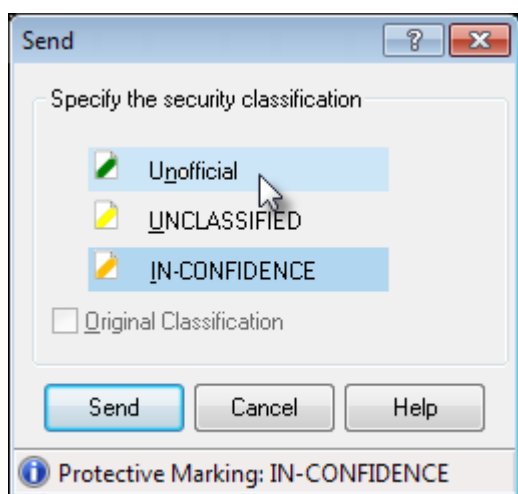
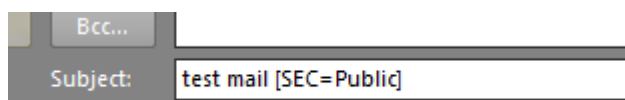


Figure 2: Prototype image of security classification dialog showing IN-CONFIDENCE selected (med blue) with mouse moving over Unofficial (Windows 7 buttons)

The e-mail subject line is appended with the Mail classification



The message footer will display the classification status.



## Outlook Policy Settings – server level:

### Administrative Templates

Policy definitions (ADMX files) retrieved from the local machine.

[Google/Google Toolbar/Popup Whitelists](#)[show](#)

Policy	Setting	Winning GPO
<a href="#">Popup whitelist</a>	Enabled	Google Toolbar

Popup whitelist

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kn.cat.com

epp.bweafrica.com

mybarloworld.com

myportal.bweafrica.com

myhrinfo.bweafrica.com

epq.bweafrica.com

epd.bweafrica.com

[janusNET/janusSEAL/Enabled security schema elements/when any user is sending a message from this group of machines/Security classifications and qualifiers](#)[show](#)

Policy	Setting	Winning GPO
<a href="#">define display of External/Public /Confidential</a>	Enabled	Local Group Policy

Allow selection of External/Public /Confidential classification      Enabled

Policy	Setting	Winning GPO
<a href="#">define display of Internal</a>	Enabled	Local Group Policy

Allow selection of Internal classification      Enabled



Policy	Setting	Winning GPO
<a href="#">allow the user to control the check box</a>	Enabled	Local Group Policy
<a href="#">modify the caption of the check box</a>	Enabled	Local Group Policy
Title Barloworld Equipment-Mail Classification		

Policy	Setting	Winning GPO
<a href="#">modify the X-header label</a>	Enabled	Local Group Policy
X-Header Label Barloworld Equipment - Mail Classification		
<a href="#">janusNET/janusSEAL/Outlook Specific Settings/Email specific Security Classifications</a> <a href="#">show</a>		

Policy	Setting	Winning GPO
<a href="#">Allow External/Public /Confidential to be selectable</a>	Enabled	Local Group Policy
<a href="#">Allow External/Public /Confidential to be visible</a>	Enabled	Local Group Policy
<a href="#">Allow Internal to be selectable</a>	Enabled	Local Group Policy
<a href="#">Allow Internal to be visible</a>	Enabled	Local Group Policy
<a href="#">Allow External/Public to be selectable</a>	Enabled	Local Group Policy
<a href="#">Allow External/Public to be visible</a>	Enabled	Local Group Policy
<a href="#">janusNET/janusSEAL/Outlook Specific Settings/Protective Marking Formatters</a> <a href="#">show</a>		

Policy	Setting	Winning GPO
<a href="#">define the Human Readable formatter</a>	Disabled	Local Group Policy
<a href="#">define the primary e-mail x-header formatter</a>	Disabled	Local Group Policy
<a href="#">define the primary Subject Line formatter</a>	Disabled	Local Group Policy
<a href="#">janusNET/janusSEAL/Protective Marking Policy/Protective Markings from file naming conventions</a> <a href="#">show</a>		

Policy	Setting	Winning GPO
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<u>define the file name component separator</u>	Disabled	Local Group Policy
<u>define the list of file extensions to exclude</u>	Disabled	Local Group Policy
<u>define the list of file extensions to include</u>	Disabled	Local Group Policy
<u>turn ON qualifier interpretation from file naming convention</u>	Disabled	Local Group Policy
<u>turn ON security classification interpretation from file naming convention</u>	Disabled	Local Group Policy

**janusNET/janusSEAL/Protective Marking Policy/Protective Markings on email messages**[show](#)

Policy	Setting	Winning GPO
<u>turn OFF Subject Line Protective Markings for ALL classifications</u>	Enabled	Local Group Policy
<u>turn ON Internet eXtension Header for keeping history of Protective Marking in replies</u>	Enabled	Local Group Policy
<u>turn ON Internet eXtension Header Protective Markings for ALL classifications</u>	Enabled	Local Group Policy
<u>turn ON Internet eXtension Header Protective Markings for SOME classifications</u>	Enabled	Local Group Policy

add Internet eXtension Header marking when sending Internal messages	Enabled
add Internet eXtension Header marking when sending External/Public /Confidential messages	Enabled
add Internet eXtension Header marking when sending External/Public messages	Enabled
add Internet eXtension Header marking when sending Public messages	Enabled

Policy	Setting	Winning GPO
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turn ON Message Flag Protective Markings for      Enabled      Local Group Policy

ALL classifications

Text to use for all classifications in Message Flag (tokens permitted)	%DISPLAY_VALUE%
--	-----------------

Policy	Setting	Winning GPO
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turn ON Message Flag Protective Markings for      Enabled      Local Group Policy

SOME classifications

Add Message Flag marking when sending Internal messages	Enabled
Text to use for Internal in Message Flag (tokens permitted)	%DISPLAY_VALUE%
Add Message Flag marking when sending External/Public /Confidential messages	Enabled
Text to use for External/Public /Confidential in Message Flag (tokens permitted)	%DISPLAY_VALUE%
Add Message Flag marking when sending External/Public messages	Enabled
Text to use for External/Public in Message Flag (tokens permitted)	%DISPLAY_VALUE%
Add Message Flag marking when sending Public messages	Enabled
Text to use for Public in Message Flag (tokens permitted)	%DISPLAY_VALUE%

Policy	Setting	Winning GPO
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turn ON Outlook User Property (internal only)      Enabled      Local Group Policy

Protective Markings for ALL classifications

Text to use for all classifications in Outlook User Property (tokens permitted)	%DISPLAY_VALUE%
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Policy	Setting	Winning GPO
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turn ON Outlook User Property (internal only)      Enabled      Local Group Policy

Protective Markings for SOME classifications

Add User Property marking when sending Internal messages	Enabled
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Text to use for Internal in Outlook User Property (tokens permitted)	%DISPLAY_VALUE%
Add User Property marking when sending External/Public /Confidential messages	Enabled
Text to use for External/Public /Confidential in Outlook User Property (tokens permitted)	%DISPLAY_VALUE%
Add User Property marking when sending External/Public messages	Enabled
Text to use for External/Public in Outlook User Property (tokens permitted)	%DISPLAY_VALUE%
Add User Property marking when sending Public messages	Enabled
Text to use for Public in Outlook User Property (tokens permitted)	%DISPLAY_VALUE%

Policy	Setting	Winning GPO
<u>turn ON Subject Line Protective Markings for SOME classifications</u>	Enabled	Local Group Policy

add Subject Line marking when sending Internal messages	Enabled
add Subject Line marking when sending External/Public /Confidential messages	Enabled
add Subject Line marking when sending External/Public messages	Enabled
add Subject Line marking when sending Public messages	Enabled

**janusNET/janusSEAL/Protective Marking Policy/Protective Markings on email messages/Message Body Protective Markings**[show](#)

Policy	Setting	Winning GPO
<u>turn ON append Message Body Protective Markings for ALL classifications</u>	Disabled	Local Group Policy
<u>turn ON append Message Body Protective Markings for External/Public /Confidential classified messages</u>	Disabled	Local Group Policy

<u>turn ON append Message Body Protective Markings for Internal classified messages</u>	Disabled	Local Group Policy
<u>turn ON append Message Body Protective Markings for External/Public classified messages</u>	Disabled	Local Group Policy
<u>turn ON append Message Body Protective Markings for Public classified messages</u>	Disabled	Local Group Policy
<u>turn ON prepend Message Body Protective Markings for ALL classifications</u>	Disabled	Local Group Policy
<u>turn ON prepend Message Body Protective Markings for External/Public /Confidential classified messages</u>	Disabled	Local Group Policy
<u>turn ON prepend Message Body Protective Markings for Internal classified messages</u>	Disabled	Local Group Policy
<u>turn ON prepend Message Body Protective Markings for External/Public classified messages</u>	Disabled	Local Group Policy
<u>turn ON prepend Message Body Protective Markings for Public classified messages</u>	Disabled	Local Group Policy

**janusNET/janusSEAL/Protective Marking Policy/Protective Markings on Office files**[show](#)

<b>Policy</b>	<b>Setting</b>	<b>Winning GPO</b>
<u>define the list of file extensions to exclude</u>	Disabled	Local Group Policy
<u>define the list of file extensions to include</u>	Disabled	Local Group Policy
<u>turn ON Microsoft Office document security classification metadata</u>	Disabled	Local Group Policy
<u>turn ON Microsoft Office document security classification qualifier metadata</u>	Disabled	Local Group Policy

**janusNET/janusSEAL/Security Schema Definitions**[show](#)

Policy	Setting	Winning GPO
<u>define display text values of all Security</u>	Enabled	Local Group Policy

Classifications

```

define Internal classification's display text values:

Internal DisplayValue

Internal DisplayWithQualifierLayout

Internal ToolTip

define External/Public classification's display text values:

External/Public DisplayValue

External/Public DisplayWithQualifierLayout

External/Public ToolTip

define External/Public /Confidential classification's display text values:

External/Public /Confidential DisplayValue

External/Public /Confidential DisplayWithQualifierLayout

External/Public /Confidential ToolTip

```

Policy	Setting	Winning GPO
<u>turn ON security schema definition of mail schema</u>	Enabled	Local Group Policy

test

```

WARNING: It is HIGHLY RECOMMENDED that you leave ALL of these items checked!

To disable specific items from janusSEAL user interfaces, modify policy settings elsewhere!

unchecking any one of these items could BREAK your janusSEAL configuration

turn on bweafrica.com namespace definition                               Disabled
turn on bweafrica.com namespace version 3 definition                   Disabled
turn on Public classification definition                                Enabled

```

turn on Internal classification definition	Enabled
turn on External/Public classification definition	Enabled
turn on External/Public /Confidential classification definition	Enabled
turn off definition of PUBLIC from default installation settings	
turn off definition of EXTERNAL/PUBLIC /CONFIDENTIAL from default installation settings	

Policy	Setting	Winning GPO
<u>turn ON security schema definition of OWA</u>	Disabled	Local Group Policy
<b>janusNET/janusSEAL/User Interface Appearance and Behaviour</b> <u>show</u>		

Policy	Setting	Winning GPO
<u>messages displayed when an item's minimum classification changes</u>	Enabled	Local Group Policy

Minimum Classification Removed message	The item's minimum mail classification has been removed.\r\n\r\nCheck that the selected security classification is still appropriate.
Minimum Classification Lowered message	The item's minimum mail classification has been reduced.\r\n\r\nCheck that the selected security classification is still appropriate.
Minimum Classification Increased message	The item's mail classification has been changed.\r\n\r\nIt has been replaced with the security classification of the attachment you have just added.
Minimum Classification Increased and no longer selectable message	The items' mail classification has been changed to a classification that is normally not selectable, and so cannot be appropriately handled.\r\n\r\nTry removing the most recently added attachment.

Policy	Setting	Winning GPO
<u>Print Classified button is NOT visible in Outlook 2007/2010</u>	Disabled	Local Group Policy
<u>text to display when a message being viewed does not have a discernable classification</u>	Enabled	Local Group Policy

No classification text	Mail Unclassified
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Policy	Setting	Winning GPO
<u>text to display when a message is being composed, and no classification has been set</u>	Enabled	Local Group Policy
<div style="background-color: #e0e0e0; padding: 5px;">           Still to be classified text to be classified         </div>		
<div style="background-color: #e0e0e0; padding: 5px;"> <b>janusNET/janusSEAL/User Interface Appearance and Behaviour/in ALL janusSEAL applications on this group of machines/Compose Security Classification Toolbar</b><a href="#">show</a> </div>		

Policy	Setting	Winning GPO
<u>allow a caption to be present next to the security classification drop list</u>	Enabled	Local Group Policy
<div style="background-color: #e0e0e0; padding: 5px;">           Text to be used as caption of the security classification drop list Mail &amp; Classification         </div>		

Policy	Setting	Winning GPO
<u>define a tool tip for the security classification toolbar</u>	Enabled	Local Group Policy
<div style="background-color: #e0e0e0; padding: 5px;">           Text to be used as the tool tip for the security classification drop list Specify the item's mail classification         </div>		

Policy	Setting	Winning GPO
<u>security classification toolbar is NOT visible</u>	Enabled	Local Group Policy
<div style="background-color: #e0e0e0; padding: 5px;"> <b>janusNET/janusSEAL/User Interface Appearance and Behaviour/in ALL janusSEAL applications on this group of machines/On Send Classification Dialog</b><a href="#">show</a> </div>		

Policy	Setting	Winning GPO
<u>modify the caption of the Cancel button on the OnSend classification dialog</u>	Enabled	Local Group Policy
<div style="background-color: #e0e0e0; padding: 5px;">           Cancel button caption Cancel         </div>		

Policy	Setting	Winning GPO
<u>modify the caption of the Help button on the OnSend classification dialog</u>	Disabled	Local Group Policy

modify the caption of the OK (main) button on the OnSend classification dialog Enabled Local Group Policy

OK button caption Send

Policy	Setting	Winning GPO
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modify the caption of the Original button on the OnSend classification dialog Enabled Local Group Policy

Original button caption &Original Classification

Policy	Setting	Winning GPO
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modify the classification groupbox label of the OnSend classification dialog Enabled Local Group Policy

Classification groupbox label Specify the mail classification

Policy	Setting	Winning GPO
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modify the text leader of the Status Bar on the OnSend classification dialog Enabled Local Group Policy

Status bar leader Mail Classification

Policy	Setting	Winning GPO
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modify the title of the OnSend classification dialog Enabled Local Group Policy

Title bar text Barloworld Equipment - Mail Classification

Policy	Setting	Winning GPO
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modify the tooltip text of the Original button on the OnSend classification dialog Enabled Local Group Policy

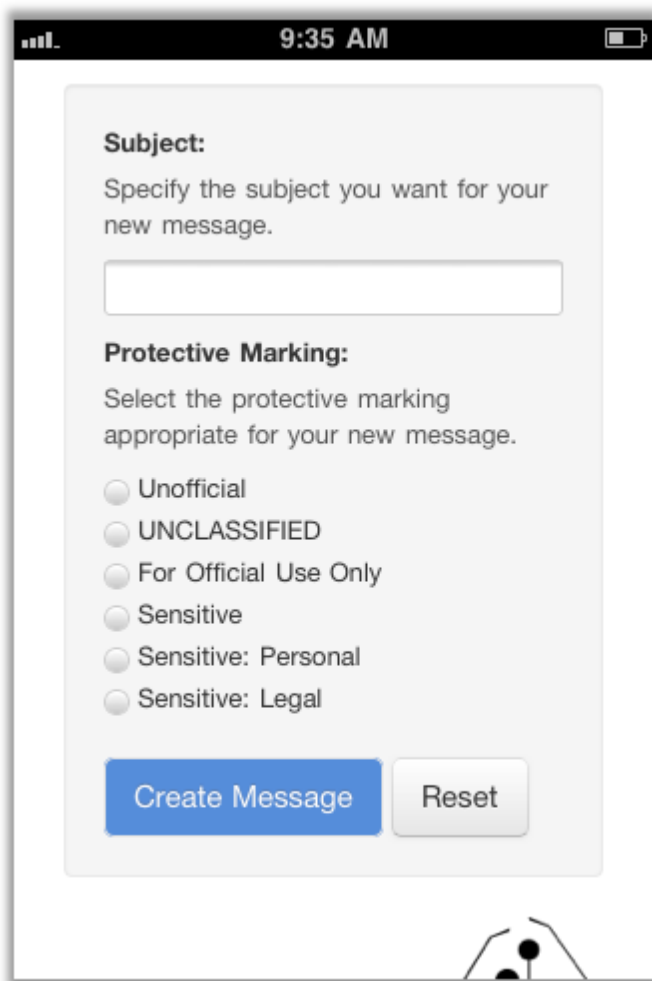
Original button tooltip text (Classification of the original message)

Policy	Setting	Winning GPO
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## JanusGate Mobile (Active Sync):

janusSEAL Mobile App is a helper application for mobile devices that assists users to create Email messages with a protective marking in the subject line. On a mobile device, it's main Screen looks like, the order and wording to be customised:



- Group policies are applied on the Active Sync server , as for JanusSEAL for Outlook
- Clients are required to download the mobile app to their devices and register prior to being able to classify mail via a mobile device (Android or Apple OS)
  - Process to get this done.
    - Visit web site <http://m.janusNET.com/jsm>

## Register email address

To access janusSEAL Mobile, first tell us who you are.

Submit your email address. If your organisation is licensed to use janusSEAL Mobile you'll be emailed a verification code. Good luck!

your email address:

your preferred language:

English (United Kingdom)



English is the only currently supported language, but select your preference for future use.

submit

- Client to use the existing @Barloworld-equipment e-mail address when subscribing.
- Client will receive a confirmation e-mail at the e-mail address provided with a verification code.

From: janusSEAL Mobile [janusSEAL.Mobile@m.janusnet.com]  
To: janusNET  
Cc:  
Subject: janusSEAL Mobile - email address verification

Thanks for registering to use janusSEAL Mobile.

To complete the registration process, please visit  
<http://m.janusnet.com/jsm/?c=99d28f81e8fb41d1ad5f3c288348d458&l=en-GB>

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### Manual verification

If the link above does not work, then you need to go to  
<http://m.janusnet.com/jsm/V.aspx>  
and copy and paste the verification code (supplied below) into the page.

#### verification code

99d28f81-e8fb-41d1-ad5f-3c288348d458

This verification code will expire in 48 hours from the time you applied for it.

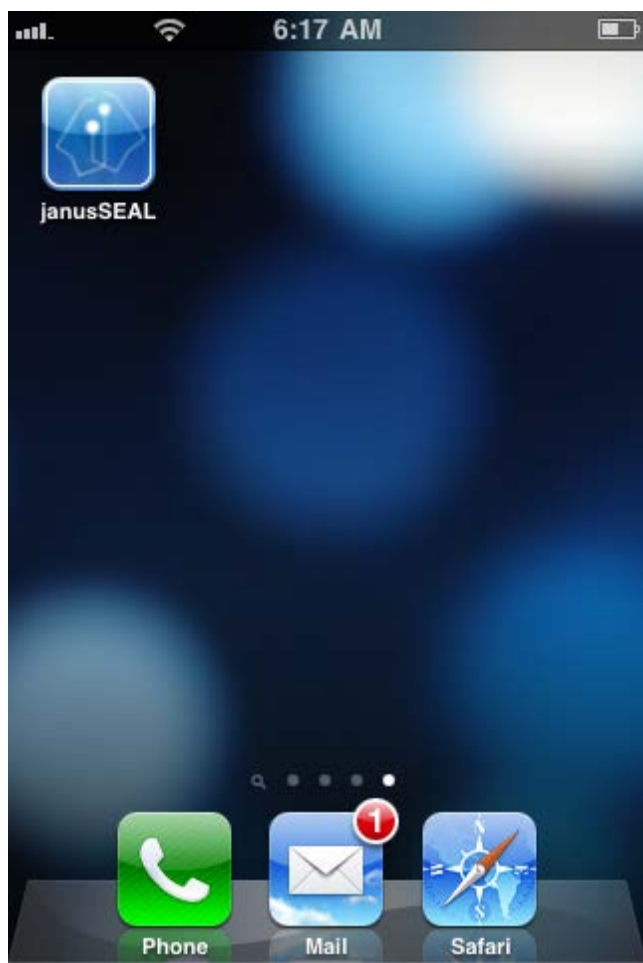
## Verify email address

### Success

Your janusSEAL Mobile account has been activated. Click [here](#) to send an email.

janusSEAL Mobile

- Once done the client will see a JanusSEAL application on the device.



- In order to classify mail the janusSEAL application must be used to send mail

#### **NOTE:**

For some devices, if the user has multiple email accounts configured on the device, then when janusSEAL Mobile App creates a new message the from address field may be that of the default mail account on the device rather than the email address registered with janusSEAL Mobile App.

janusSEAL Mobile App does tell the email software on the device that the registered email address should be used for the from field of the new message, but some devices ignore this information and simply revert to that of the default mail account on the device.

## Workaround(s)

The only real work-arounds to this problem are:

1. The user should change the default email account on the device to that which they registered for use with janusSEAL Mobile Application
2. For every message created by janusSEAL Mobile App the user has to change the From field
  - to that which is registered for use with janusSEAL Mobile App

## Rules Engine settings – server level (active sync):

After install, the janusGATE Rules Engine has a single rule with two sub-rules:

1. The parent rule is used to detect any items being synchronised to the device *and* which are security classified as, EXTERNAL/PUBLIC, INTERNAL and PRIVILEGED/CONFIDENTIAL (according to their subject line security classification label based on the Australian Government standard); the sub-rules then
  - a. if the item is an email message (which includes meeting requests) then the message content is replaced
  - b. if the item is a calendar item then the item is dropped so it is never synchronised to the device

For rule 1a, the Engine:

- a. replaces the text of the body with the content:

A message sent to you has not been delivered to your mobile device because the original message contained sensitive data.

WARNING - do NOT delete this message as doing so will delete the original message in your inbox!!

The original message is available in your e-mail inbox at work.

-----  
Original message details -

Subject : %Subject%

From : "%From.Name%" <%From.Address%>

Received : %DateReceived%

Attachments: %Attachments.Count%

where the token %Subject% is replaced with the subject of the original message prior to modification, %From.Name% is replaced with the display name of the sender of the message, %From.Address% is replaced with the email address of the sender of the message, %DateReceived% is replaced with the date and time the message was received in the mailbox at work and %Attachments.Count% is replaced with the number of attachments that are in the original message.

- b. removes any attachments that are present
- c. replaces the subject of the message with the content:

Message delivery blocked [SEC=UNCLASSIFIED]

- d. replaces the thread topic (used in conversation view) of the message with the content:

Message delivery blocked [SEC=UNCLASSIFIED]

- e. changes the message class to

REPORT.IPM.Note.NDR

On some devices this causes the message icon to appear as an alert icon so the recipient is aware a message has not been delivered to their device.

- f. removes any reminder flag information if present
- g. sets the message importance to Normal.

For rule 1b, the Engine:

- a. prevents the calendar item from being synchronised to the device, with no notice being sent to the end-user that the item has not been synchronised.

## JanusSEAL for OWA: (Outlook Web Access)

This is to allow mail classification when accessing business mail via OWA (mail.barloworld-equipment.com/owa) using an Internet Browser.

- No client requirements / configuration
- Server based policy settings as with JanusSEAL for Outlook
- The same policies apply as shown above for Outlook
- Same scenarios apply as for Outlook client

### Phase 1 of rollout:

- Define policy settings
  - List classification criteria
  - Exclusions – if required
- Rollout of client application to test user base
- Confirm satisfaction of functionality
- Rollout of application to organisation

### Phase 2 of Rollout:

- Define Mobile e-mail policies
- Setup Policies on Exchange ActiveSync Server / BES server/OWA

- Deploy policies to test user base
- Confirm satisfaction of functionality
- Rollout policy to organisation

### **Phase 3 of rollout:**

- Document classification (janusSEAL for MS Office)
- Define policy for classification of Office documents
- Rollout policy to test user base
- Confirm satisfaction of functionality
- Rollout policy to organisation