

# SMTP Implementation in IBM Sterling B2B Integrator

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# Introduction to SMTP

SMTP - Simple Mail Transfer Protocol, is an application layer protocol used for sending e-mail over the Internet. Email is emerging as one of the most valuable service in internet today. Most of the internet systems use SMTP as a method to transfer mail from one user to another.

The email server responsible for sending emails is called the SMTP (Simple Mail Transfer Protocol) server. One SMTP server can pass on the mail to another SMTP server and relay it to the destination through several hops. Each domain name represents a unique Web address, called an Internet protocol (IP) address.

The client who wants to send the mail opens a TCP connection to the SMTP server and then sends the mail across the connection. The SMTP server is always on listening mode. As soon as it listens for a TCP connection from any client, the SMTP process initiates a connection on that port. After successfully establishing the TCP connection the client process sends the mail instantly.

SMTP communication between mail servers uses TCP port 25. Mail clients on the other hand, often submit the outgoing emails to a mail server on port 587 or 465.

SMTP connections are secured by TLS/SSL, can be made using STARTTLS

# **What are POP and IMAP protocols**

## **POP3**

POP3 stands for Post Office Protocol3. It is used to retrieve email messages from a mail server to a mail client. The latest version, which is what's widely used, is version 3 - hence the term "POP3".

The POP3 protocol is simple and does not offer many features except for download. It's design assumes that the email client downloads all available email from the server, deletes them from the server and then disconnects. POP3 normally uses port 110 (or 995 for SSL/TLS connections).

In a nutshell, the POP3 client retrieves email in the following manner:

1. Connects to the mail server on port 110 (or 995 for SSL/TLS connections)
2. Retrieves email messages
3. Deletes copies of the messages stored on the server and
4. Disconnects from the server

## **IMAP**

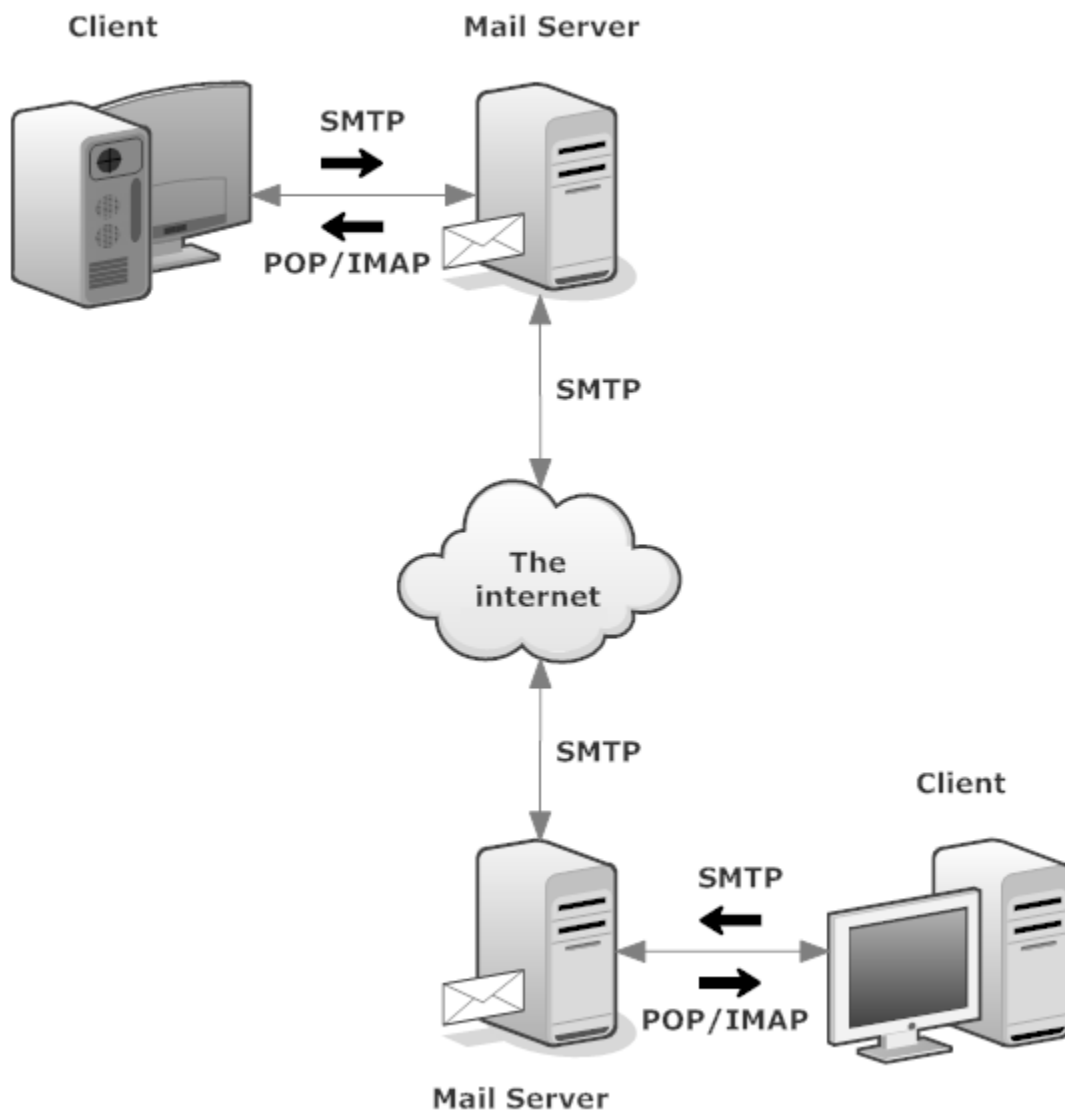
IMAP stands for Internet Message Access Protocol. It is a more sophisticated protocol. It too, is a protocol that an email client can use to download email from an email server. However, IMAP includes many more features than POP3. The IMAP protocol is designed to let users keep their email on the server. It's also equipped with message flags that indicate whether a message has been read, deleted, or replied to. It even allows users to carry out searches against the server mailboxes.

IMAP requires more disk space on the server and more CPU resources than POP3, as all emails are stored on the server. IMAP normally uses port 143.

Here's how IMAP works in a nutshell:

1. Connects to the mail server on port 143 (or 993 for SSL/TLS connections).
2. Retrieves email messages.
3. Stays connected until the mail client is closed and downloads messages on demand.
4. Messages will remain on the server.

Pictorial view of how SMTP, POP3 and IMAP protocols are used.



## **Services/Adapters used in Sterling B2B Integrator to connect to mail servers**

### **1. SMTP Send Adapter**

The SBI SMTP Send adapter is used to send documents to any valid email address by using an accessible mail server (usually of the trading partner that is running Sterling B2B Integrator).

The back-end mail server system examines the document and does further processing, including the actual sending of the email.

From the business perspective this adapter is commonly used to send email notification about documents that have been sent or processed or need some action from the recipient.

### **2. B2B Mail Client Adapter**

The SBI B2B Mail client adapter is used to collect mail from an RFC 1725-compliant mail server using the POP3 protocol or an RFC 2060-compliant mail server using the IMAP protocol. Locate an appropriate business process or contract and start a business process with the data appended.

From the business perspective, it polls the mail host at a specific interval to retrieve any mail in the mailbox. If there is no mail, the adapter tries again at the next interval.

It requires an RFC 821-compliant mail server and a mail server that supports POP3 or IMAP. The Mail server should be configured to mark mail as SEEN, ANSWERED, NEW, or DELETED when they are requested from B2B Mail Client adapter.

## Configuring an SMTP Send Adapter

1. To create SMTP send Adapter, go to Deployment -> services configuration. Select SMTP send adapter as the service type and create new adapter.
2. The most important parameters are “Default SMTP server” which is the mail server host, “Default SMTP server port” which is the port the mail server is running on.
3. If mail server is using an SSL connection, the “SSL” value has to be set to MUST and the respective certificate from mail server has to be obtained and checked in under CA section.
4. In the adapter CA section, the name of CA certificate checked in has to be chosen

### SMTP Send Adapter

#### Service Settings

Service Type	SMTP Send Adapter
Description	SMTP Send Adapter
System Name	SMTP_SEND_ADAPTER
Environment	ALL ASI Nodes
Group Name	None
Default SMTP Server	0.0.0.0:25
Default SMTP Server Port	25
SMTP Authentication required	No
User Name	None provided
Password	None provided
Connection Retries	3
Retry Interval(Sec)	5
Subject	None provided
Encoding Type	ASCII
Request for a delivery receipt notification	No
Request for a read notification	No
SSL	SSL_NONE
Cipher Strength	STRONG

5. The SMTP Send Adapter parameters can be set at the BP level by using assign statements as below, the values set at the BP level takes precedence over the values set at the adapter level.

```
<assign to="xport-smtp-auth">true</assign>
  <assign to="xport-smtp-
mailBCC">Recipient@company1.com</assign>
  <assign to="xport-smtp-
mailCC">Recipient2@company2.com</assign>
  <assign to="xport-smtp-
mailfrom">sender@company1.com</assign>
  <assign to="xport-smtp-mailhost">000.000.1.103</assign>
  <assign to="xport-smtp-mailport">25</assign>
  <assign to="xport-smtp-mailsubject">Test</assign>
  <assign to="xport-smtp-
mailssubjectencoding">ASCII</assign>
  <assign to="xport-smtp-
mailto">receiver@company2.com</assign>
  <assign to="xport-smtp-notify-delivery">true</assign>
  <assign to="xport-smtp-notify-read">true</assign>
  <assign to="xport-smtp-retries">3</assign>
  <assign to="xport-smtp-retryinterval">1</assign>
  <assign to="xport-tp-cakeycert-id">server:105e37:
f3be012345:-52e9</assign>
  <assign to="xport-tp-cipher">STRONG</assign>
  <assign to="xport-tp-keycert-id">server:218e57:
f3bd123456:-733b</assign>
  <assign to="xport-tp-ssloption">SSL_MUST</assign>
```

6. From V5.2.6 and higher, the security protocol version the SMTP Send adapter uses is defaulted in b2bMailsvs.properties to **TLS 1.2**. If your mail server uses TLS 1.0 or 1.1, you must update the value of the “mail.sslProtocol” property to set the proper TLS version. Otherwise, sending documents using SMTP will fail.

7. As of V5.2.4.2, Interim Fix 1, you can adjust the timeout properties for this service if you encounter hung threads. In the b2bMailsvs.properties file, you can adjust the following parameter values

mail.smtp.timeout=30000 (default in milliseconds) - length of the socket  
I/O timeout

mail.smtp.connectiontimeout=30000 (default in milliseconds) - length of  
the socket connection timeout

## **Configuring B2B Mail Client Adapter**

1. To create B2B Mail Client Adapter, go to Deployment -> services configuration. Select B2B mail client adapter as the service type and create new adapter.
2. The most important parameters are “Default Mail server” which is the mail server host, “Default Mail server port” which is the port the mail server is running on, “Default Message Access Protocol” the protocol POP3 or IMAP and URI where the username value is configured.
3. The URI must be the same name that is entered in the User Name field. We also have to set either a predefined contract or a business process. The URI name is then compared with the Userid (that matches a contract or business process). If a contract match is found, the business process ID is obtained from the contract and the adapter starts that business process. If a business process match is found, the adapter starts that business process.
4. You can configure multiple URIs when configuring the B2B Mail Client adapter for the first time. If you want to modify a URI, you need to change only the username and password of the URI.



5. If mail server is using an SSL connection, the “SSL” value should be set to MUST and the respective certificate from mail server must be obtained and checked in under CA section. In the adapter CA certificates field, the name of CA certificate checked in should be chosen


### **BH\_B2B\_MAILCLIENT**

#### **Service Settings**

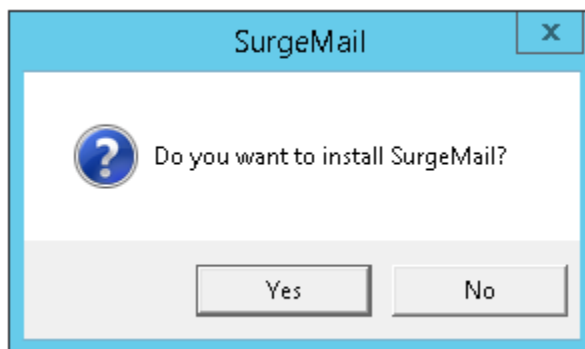
Service Type	B2B Mail Client Adapter
Description	BH_B2B_MAILCLIENT
System Name	BH_B2B_MAILCLIENT
Group Name	None
Default Message Access Protocol	POP3
Default Mail Server	*****
Default Mail Server Port	995
User Name	jas1
Password	*****
Connection Retries	3
Retry Interval(Sec)	1
Max Messages per Session	1
Remove inbox mail messages	Yes
Ignore Errors During Processing Mails	No
Specify the path where you want any corrupted mail(s) to be dumped	None provided
Cipher Strength	STRONG
CA Certificates	Jassi_mail
SSL	SSL_MUST
URI	jas1 Business Process: CustomBP1 Send Raw Messages: No
Insert into Process Data	All mail header fields

# Installing Surge Mail Server

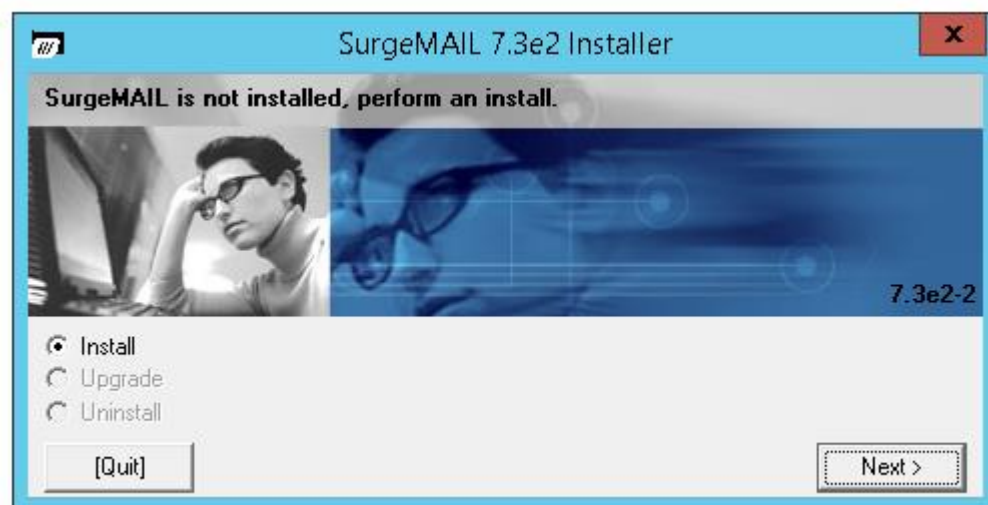
1. Download it

 surgemail\_73e2\_windows.exe

2. Double click on the .exe and the install window will appear



3. Choose install option



4. Click on “I agree” in the license agreement window



5. Chose the install location



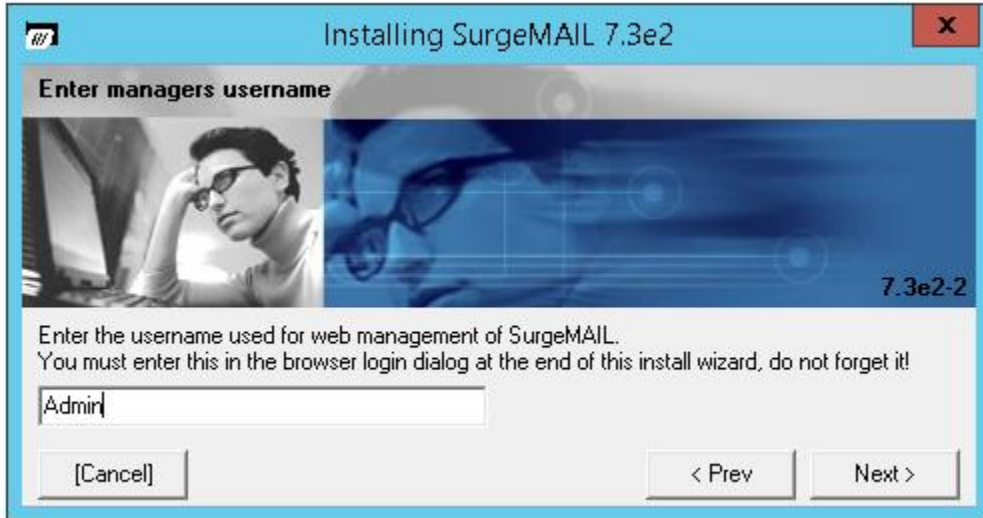
6. Enter the domain name for the mail server.



7. Provide the IP address or host name of the machine where the surge mail server is being installed



8. Enter the user name and password which will be used to login to web portal



The screenshot shows a window titled "Installing SurgeMAIL 7.3e2" with a close button (X) in the top right corner. The window has a header bar with the title and a small icon on the left. Below the header, there is a banner image on the left showing a person wearing glasses and a blue background on the right with the text "7.3e2-2". The main text area contains the instruction: "Enter managers username" followed by "Enter the username used for web management of SurgeMAIL. You must enter this in the browser login dialog at the end of this install wizard, do not forget it!". Below this text is a text input field containing the word "Admin". At the bottom, there are three buttons: "[Cancel]", "< Prev", and "Next >".

Installing SurgeMAIL 7.3e2

Enter managers username

7.3e2-2

Enter the username used for web management of SurgeMAIL.  
You must enter this in the browser login dialog at the end of this install wizard, do not forget it!

Admin

[Cancel] < Prev Next >



The screenshot shows a window titled "Installing SurgeMAIL 7.3e2" with a close button (X) in the top right corner. The window has a header bar with the title and a small icon on the left. Below the header, there is a banner image on the left showing a person wearing glasses and a blue background on the right with the text "7.3e2-2". The main text area contains the instruction: "Enter managers password" followed by "Enter the password for web management of SurgeMAIL twice. You must enter this in the browser login dialog at the end of this install wizard, do not forget it!". Below this text are two text input fields, both containing "xxxxxxx". At the bottom, there are three buttons: "[Cancel]", "< Prev", and "Next >".

Installing SurgeMAIL 7.3e2

Enter managers password

7.3e2-2

Enter the password for web management of SurgeMAIL twice.  
You must enter this in the browser login dialog at the end of this install wizard, do not forget it!

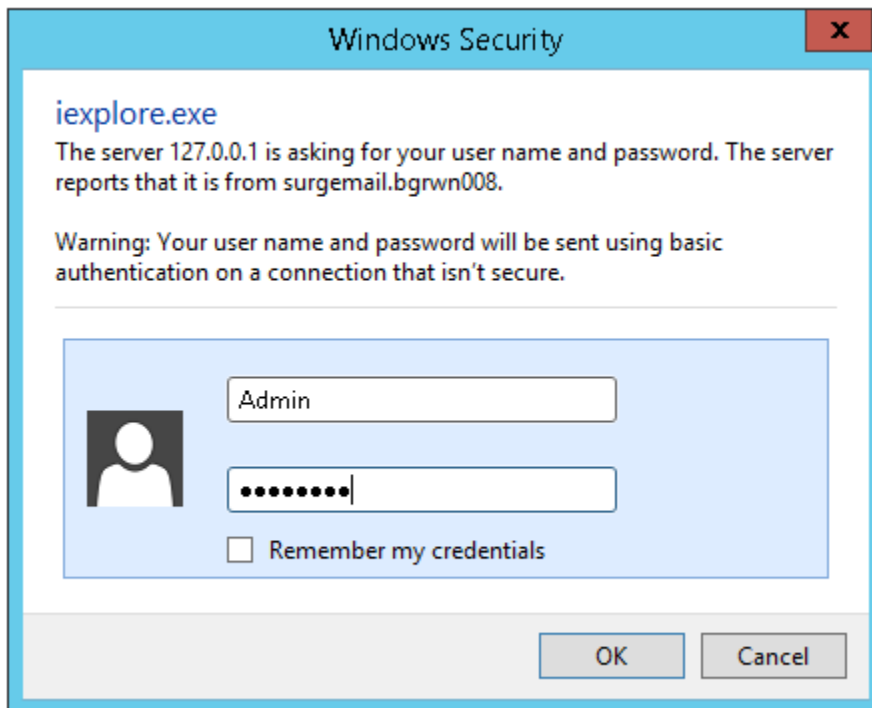
xxxxxxx xxxxxx

[Cancel] < Prev Next >

9. Provide the email address

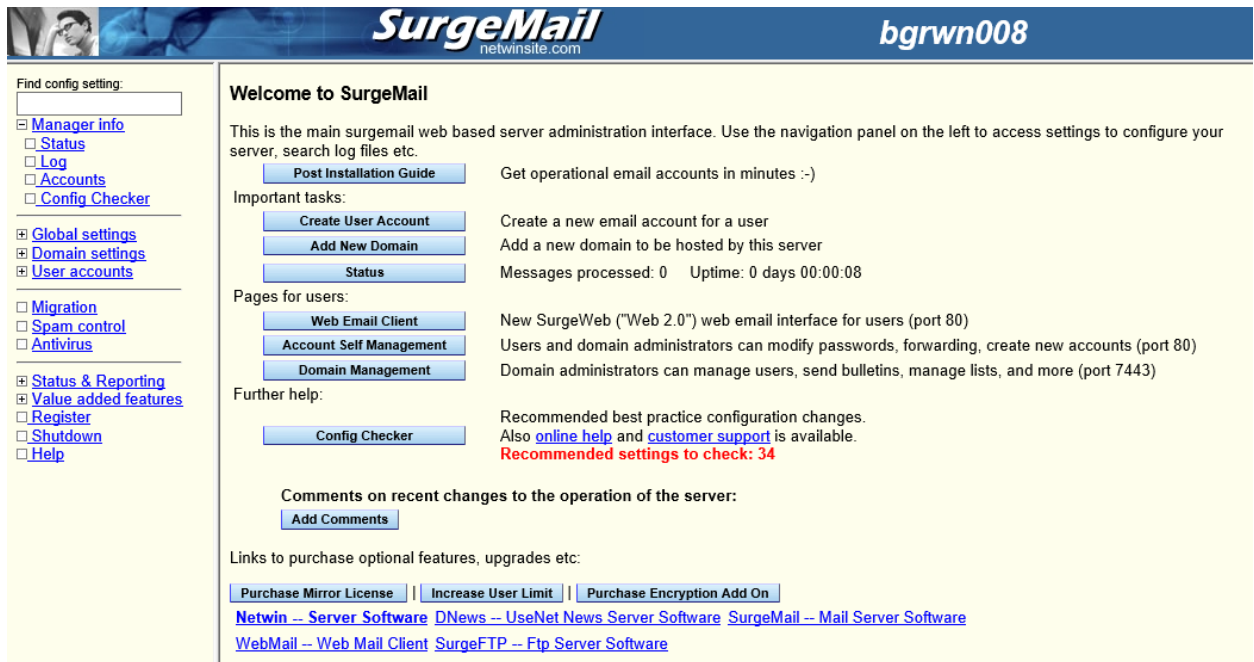


10. As in the below screenshot enter the user name password and in the following window enter the password twice. Next proceed with default and click on install



11. After the install completes, the surge mail web UI comes up and use the user name password that was used during the install.

12.This is how the Surge Mail web portal looks



13.User accounts can be created using the “Create User Account” option

14. Here i have created a user named “jas1” which will be used as the “to” address in the test cases.

**Account details**

To load a user pick a domain, enter a username, and click 'lookup'. Alternately cannot remember the exact email enter what you remember and click 'lookup'.

Domain:

Username	<input type="text" value="jas1"/>	<input type="button" value="Lookup"/>
Password	<input type="password" value="••••••••"/>	<input type="button" value="Create account"/>

## Test Cases: Connecting to Surge Mail server from SBI

### Test Case1 – Send email from SBI to Surge Mail server using SMTP Send Adapter (Non- SSL)

1. Firstly, collect the information like Host name, Port, Mail-To, username and password (if authentication is required) from the mail server side.
2. Create SMTP send adapter as shown below.

#### SMTP Send Adapter

##### Service Settings

Service Type	SMTP Send Adapter
Description	SMTP Send Adapter
System Name	SMTP_SEND_ADAPTER
Environment	ALL ASI Nodes
Group Name	None
Default SMTP Server	95.254.254.254
Default SMTP Server Port	25
SMTP Authentication required	No
User Name	None provided
Password	None provided
Connection Retries	3
Retry Interval(Sec)	5
Subject	None provided
Encoding Type	ASCII
Request for a delivery receipt notification	No
Request for a read notification	No
SSL	SSL_NONE
Cipher Strength	STRONG

Note: The Non- SSL port is 95.



3. Create a BP to use the SMTP send adapter to connect to mail server and send email. Below is the sample BP

```
<process name="SMTP_SEND_BH">
  <sequence name="optional">
    <operation name="One">
      <participant name="SMTP_SEND_ADAPTER"/>
      <output message="Xout">
        <assign to="." from="*"></assign>
        <assign to="xport-smtp-mailhost">9.1.1.1:25</assign>
        <assign to="xport-smtp-mailport">25</assign>
        <assign to="xport-smtp-mailto">jas1@jassi.com</assign>
        <assign to="xport-smtp-mailfrom">bhavyred@in.ibm.com</assign>
        <assign to="xport-smtp-mailsubject">Test Mail</assign>
      </output>
      <input message="Xin">
        <assign to="." from="*"></assign>
      </input>
    </operation>
  </sequence>
</process>
```

4. Ensure the adapter is enabled and the Mail server is up

5. Execute the BP by passing a sample input file

Name: SMTP\_SEND\_BH Instance ID: 245084 User: admin

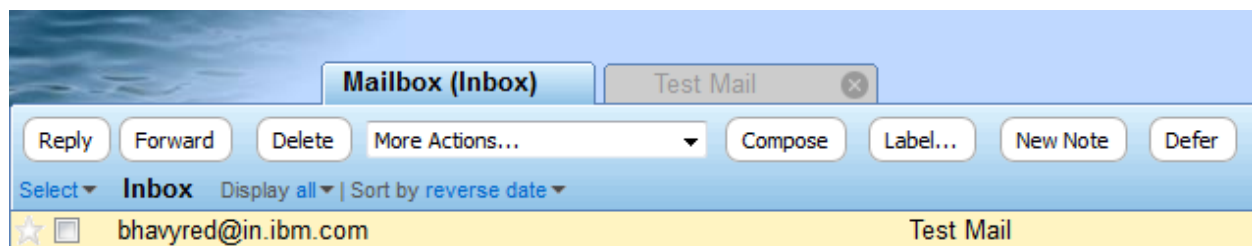
Completed  
Status: Success

Step	Service	Status	Advanced Status	Started	Ended	Execution Node	Status Report	Document	Instance Data
1	SMTP Send Adapter	Success	None	04/17/2018 5:38:36 PM IST	04/17/2018 5:38:42 PM IST	node1 [-]	None	<a href="#">info</a>	<a href="#">info</a>
0	INITIATING_CONTEXT from user 'admin'	Success	None	04/17/2018 5:38:35 PM IST	04/17/2018 5:38:35 PM IST	node1 [-]	None	<a href="#">info</a>	<a href="#">info</a>

\* Inline Invocation

[-] Load Balanced, [p] Preferred Node, [m] Mandatory Node, [r] Execution Role

6. You can see the mail now in the inbox of jas1.



## Test Case2 – Send email from SBI to Surge Mail server using SMTP Send Adapter(SSL)

1. Firstly, collect the information like Host name, Port, Mail-To, username and password (if authentication is required), certificate (as it is SSL) from the mail server side.
2. Firstly, let us see how to fetch the certificate from the SurgeMail server.
3. Open the SurgeMail portal and as indicate click on Security -> SSL certificates -> configure -> Create CSR -> Show CSR

Follow the steps in the screenshot below

**SurgeMail**  
netwinsite.com

Find config setting:

- ☒ [Manager info](#)
  - ☐ [Status](#)
  - ☐ [Log](#)
  - ☐ [Accounts](#)
  - ☐ [Config Checker](#)
- ☒ [Global settings](#)
  - ☐ [Server](#)
  - ☐ [Mail services](#)
  - ☐ [Msg delivery](#)
  - ☒ [Security](#)
  - ☐ [Clustering](#)
- ☒ [Domain settings](#)
  - ☐ [\[new\]](#)
  - ☐ [\\_jassi.com](#)
- ☒ [User accounts](#)
- ☐ [Migration](#)
- ☐ [Spam control](#)

### Security

Lockdown of management interfaces and security related settings.

**Management :** For extra safety, remote administration can be limited by IP address.

[Mask of valid IP addresses for web admin users \(default \\*\)](#)

[Allow localhost web admin without user/pass](#) ☒

[Save Changes](#) ( 6 additional settings in [advanced](#) mode)

**SSL :** SSL provides for secure communication between mail client / web browser and mail server. certificate from a Certification Authority to avoid this warning.

<a href="#">SSL Certificates</a>	<a href="#">Configure</a>
<a href="#">Create/use an SSL certificate for each domain</a>	<input type="checkbox"/>
<a href="#">IP Wild card list to allow SSL encryption from</a>	<input type="text" value="*"/>
<a href="#">IP Wild card list to require SSL encryption from</a>	<input type="text"/>




Find config setting:

Manager info

- Status
- Log
- Accounts
- Config Checker

Global settings

- Server
- Mail services
- Msg delivery
- Security
- Clustering

Domain settings

- [new]
- jassi.com

User accounts

Migration

Current certificate for server bgrwn008

Domain (Common Name)	:
Alternative URLs	:
Issued by	:
Valid until	:
Organization Name	:
Organizational Unit Name	:
Locality Name	:
State or Province Name	:
Country Code	:
Extra info	:



Create CSR

Show CSR

Upload Certificates

### How to get a signed certificate

- Click on 'Create CSR', if you have never done this before, a

Find config setting:

Manager info

- Status
- Log
- Accounts
- Config Checker

Global settings

- Server
- Mail services
- Msg delivery
- Security
- Clustering

Domain settings

- [new]
- jassi.com

User accounts

Migration

Self control

Current certificate (UNTRUSTED) for server bgrwn008

Domain (Common Name)	:	Test.com
Alternative URLs	:	
Issued by	:	Test.com
Valid until	:	Fri Apr 14 12:55:00 2028
Organization Name	:	TestOrg
Organizational Unit Name	:	TestOU
Locality Name	:	
State or Province Name	:	
Country Code	:	IN
Extra info	:	Created private key file (ssl/surge_priv.pem) bits 2048


Created private key file. Created CSR file. Created certificate file.

Create CSR

Show CSR

Upload Certificates

### How to get a signed certificate



[Click to go back, hold to see history](#)

Find config setting:

☒ [Manager info](#)

☐ [Status](#)
☐ [Log](#)
☐ [Accounts](#)
☐ [Config Checker](#)

☒ [Global settings](#)

☐ [Server](#)
☐ [Mail services](#)
☐ [Msg delivery](#)
☐ [Security](#)
☐ [Clustering](#)

☒ [Domain settings](#)

☐ [\[new\]](#)
☐ [\\_jassi.com](#)

☒ [User accounts](#)

☐ [Migration](#)

Current certificate (UNTRUSTED) for server bgrwn008

Domain (Common Name)  
Alternative URLs  
Issued by  
Valid until

: Test.com  
:  
: Test.com  
: Fri Apr 14 12:55:00 2028

Organization Name  
Organizational Unit Name  
Locality Name  
State or Province Name  
Country Code  
Extra info

: TestOrg  
: TestOU  
:  
:  
: IN  
:

Create CSR

Show CSR

Upload Certificates

How to get a signed certificate



[Click to go back, hold to see history](#)

Find config setting:

☒ [Manager info](#)

☐ [Status](#)
☐ [Log](#)
☐ [Accounts](#)
☐ [Config Checker](#)

☒ [Global settings](#)

☐ [Server](#)
☐ [Mail services](#)
☐ [Msg delivery](#)
☐ [Security](#)
☐ [Clustering](#)

☒ [Domain settings](#)

☐ [\[new\]](#)
☐ [\\_jassi.com](#)

☒ [User accounts](#)

☐ [Migration](#)

☐ [Spam control](#)

☐ [Antivirus](#)

☒ [Status & Reporting](#)

☒ [Value added features](#)

☐ [Register](#)

☐ [Shutdown](#)

☐ [Help](#)

Current certificate (UNTRUSTED) for server bgrwn008

Domain (Common Name)  
Alternative URLs  
Issued by  
Valid until

: Test.com  
:  
: Test.com  
: Fri Apr 14 12:55:00 2028

Organization Name  
Organizational Unit Name  
Locality Name  
State or Province Name  
Country Code  
Extra info

: TestOrg  
: TestOU  
:  
:  
: IN  
:

CSR Certificate Signing Request

```

-----BEGIN CERTIFICATE REQUEST-----
MIICiDCCAXACAQAwQzERMA8GA1UEAwIVGV
cmcxZDZANBgNVBAsMB1Rlc3RPUVTELMakGA1U
AQUAA4IBDwAwggEKAoIBAQC+ZOzQNU7/D1y
3B44A6u4F41JOnYeGcWVUKif+hiHNRUjE9x
bacBQHKM410ZMj+tUzDuWpvXd68YlM81ssk
r/6XOjne6aVmHy/3UjO5MYTuItsw4thRq7y
hFlLeXDV2BcbP0+vl4tMUbmrbpGM6mQceyZ

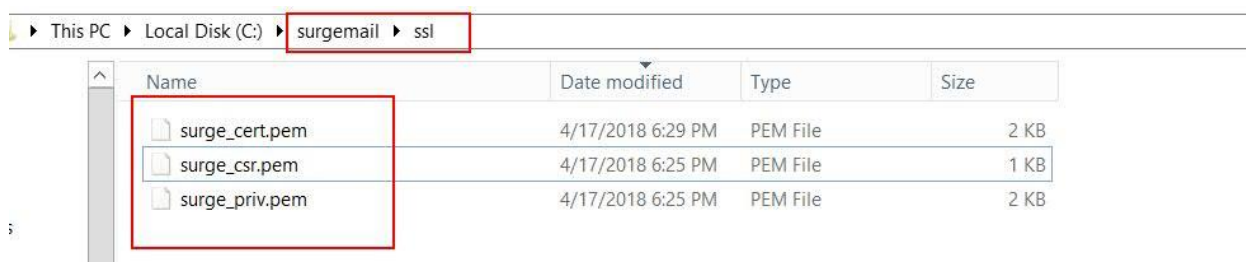
```



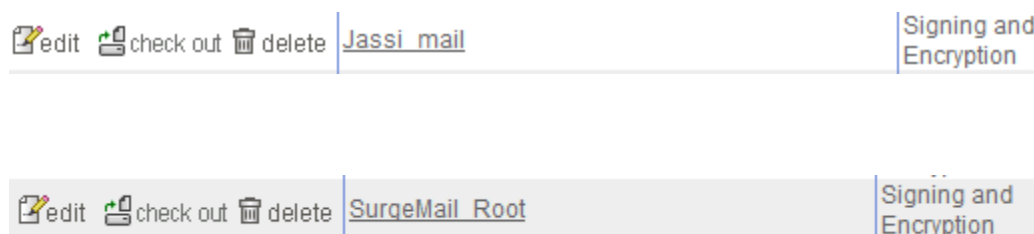
4. Copy this CSR and get it signed using a signing tool and save it in a folder on filesystem.
5. Upload the signed certificate in the Upload Signed Certificate section of SurgeMail server.



6. when cert is uploaded. this folder gets updated, this has the private key + CSR + final certificate (which will be shared with the client SBI)



7. Next, check in the root and the final mail cert into SBI dashboard under Trading partner -> Digital certificate-> CA, section



8. Once done, we are ready with the certificate, port, host name. Edit the already created SMTP send adapter and update the port as 465(SSL port), choose SSL must and choose the Final mail certificate that was checked in, in the previous step as the CA certificate.

### SMTP Send Adapter

#### Service Settings

Service Type	SMTP Send Adapter		
Description	SMTP Send Adapter		
System Name	SMTP_SEND_ADAPTER		
Environment	ALL ASI Nodes		
Group Name	None		
Default SMTP Server	<input type="text"/>		
Default SMTP Server Port	465	<input type="checkbox"/>	
SMTP Authentication required	No		
User Name	None provided		
Password	None provided		
Connection Retries	3		
Retry Interval(Sec)	5		
Subject	Test SMTP SSL		
Encoding Type	ASCII		
Request for a delivery receipt notification	No		
Request for a read notification	No		
SSL	SSL_MUST		
CA Certificates	Jassi_mail		
Cipher Strength	STRONG		

## 9. Create a sample BP like below

```
<process name="SMTP_SEND_BH">
  <sequence name="optional">
    <operation name="One">
      <participant name="SMTP_SEND_ADAPTER"/>
      <output message="Xout">
        <assign to="." from="*"></assign>
        <assign to="xport-smtp-mailhost">.....</assign>
        <assign to="xport-smtp-mailport">465</assign>
        <assign to="xport-smtp-mailto">jas1@jassi.com</assign>
        <assign to="xport-smtp-mailfrom">bhavyred@in.ibm.com</assign>
        <assign to="xport-smtp-mailsubject">Test Mail ssl</assign>
      </output>
      <input message="Xin">
        <assign to="." from="*"></assign>
      </input>
    </operation>
  </sequence>
</process>
```

## 10. Execute the BP by passing a sample file

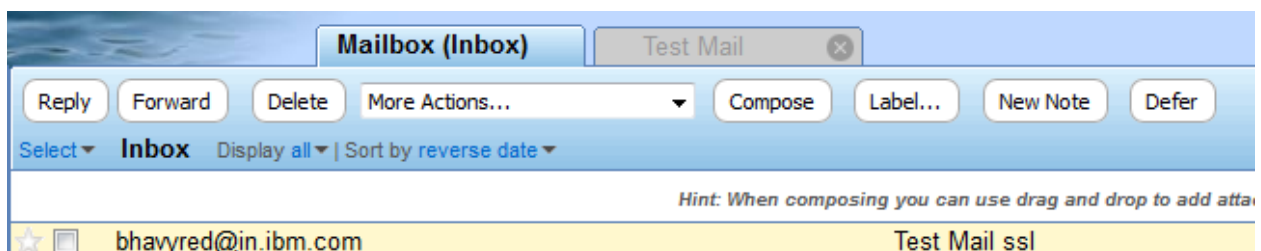
Name: SMTP\_SEND\_BH Instance ID: 245335 Status: Success State: Completed User: admin  
Deadline: None Contract ID: None

Action: Restart Go!

Steps 1-2 of 2

Step	Service	Status	Advanced			Execution Status			Instance Data
			Status	Started	Ended	Node	Report	Document	
0	INITIATING_CONTEXT from user 'admin'	Success	None	04/17/2018 7:44:34 PM	04/17/2018 7:44:34 PM	node1 [-]	None	<a href="#">info</a>	<a href="#">info</a>
1	<u>SMTP Send Adapter</u>	Success	None	04/17/2018 7:44:35 PM	04/17/2018 7:44:38 PM	node1 [-]	None	<a href="#">info</a>	<a href="#">info</a>

## 11. In the Jas1 inbox we will be able to see a mail with subject "Test Mail SSL"



### Test Case3 – Fetch email from Surge Mail server using B2B Mail Client Adapter in SBI (Non- SSL)

1. Firstly, collect the information like Host name, Port, username and password (if authentication is required), protocol used for fetching mail from the mail server side.
2. Create a Non- SSL B2B Mail Client Adapter with name BH\_MAIL\_CLIENT\_ADAPTER as shown below

Group Name	None
Default Message Access Protocol	POP3
Default Mail Server	surge.mail.ru
Default Mail Server Port	110
User Name	jas1
Password	*****
Connection Retries	3
Retry Interval(Sec) <input type="checkbox"/>	1
Max Messages per Session	1
Remove inbox mail messages	Yes
Ignore Errors During Processing Mails	No
Specify the path where you want any corrupted mail(s) to be dumped	None provided
SSL	SSL_NONE
Cipher Strength	STRONG
URI	jas1
Business Process: CustomBP1	
Send Raw Messages: No	

3. Create a sample BP to connect to mail server and fetch email.



```

<process name="BH_MAIL_CLIENT_ADAPTER">
  <sequence>
    <operation name="Service">
      <participant name="BH_B2B_MAILCLIENT"/>
      <output message="Xout">
        <assign to="." from="*"></assign>
      </output>
      <input message="Xin">
        <assign to="." from="*"></assign>
      </input>
    </operation>
  </sequence>
</process>

```

4. Execute the BP, in the document info of the sub BP we can see the email.

Name: BH\_MAIL\_CLIENT\_ADAPTER Instance ID: 245169 Status: Success State: Completed User: admin  
 Deadline: None Contract ID: None

Action: Restart Go!

Steps 1-2 of 2

Step	Service	Status	Advanced Status	Started	Ended	Execution Node	Status Report	Document	Instance Data
0	INITIATING_CONTEXT from user 'admin'	Success	None	04/17/2018 6:22:21 PM	04/17/2018 6:22:21 PM	node1 [-]	None	None	None
1	<u>BH_B2B_MAILCLIENT Subprocess 245170</u>	Success	None	04/17/2018 6:22:21 PM	04/17/2018 6:22:21 PM	node1 [ ]	info	None	None

### Sub-Process Detail

Name: MailProcessingService Instance ID: 245170 Status: Success State: Completed User: admin  
 Deadline: None Contract ID: None

Parent Business Process:

Name: BH\_MAIL\_CLIENT\_ADAPTER Instance ID: 245169

Steps 1-6 of 6

Step	Service	Status	Advanced Status	Started	Ended	Execution Node	Status Report	Document	Instance Data
0	INITIATING_CONTEXT	Success	None	04/17/2018 6:22:21 PM	04/17/2018 6:22:21 PM	node1 [-]	None	info	info
1	Assign Service	Success	None	04/17/2018 6:22:21 PM	04/17/2018 6:22:21 PM	node1 [-]	None	info	info
2	Decision Engine Service	Success	1	04/17/2018 6:22:22 PM	04/17/2018 6:22:22 PM	node1 [-]	None	info	info
3	Mail Processing Service	Success	None	04/17/2018 6:22:22 PM	04/17/2018 6:22:22 PM	node1 [-]	info	info	info
4	Assign Service	Success	None	04/17/2018 6:22:22 PM	04/17/2018 6:22:22 PM	node1 [-]	None	info	info
5	Decision Engine Service	Success	2	04/17/2018 6:22:22 PM	04/17/2018 6:22:22 PM	node1 [-]	None	info	info

Service Name: INITIATING\_CONTEXT

Document Name: None provided Document Store: Database

Document ID: 439383162d39f0bb8node1

Document in process data:

```
X-Default-Received-SPF: pass (skip=forwardok (res=PASS)) x-ip-name=127.0.0.1;
Received: from bgrwn008 (unverified [127.0.0.1])
    by jassi.com (SurgeMail 7.3e2) with ESMTP id 8-2000100
    for <jas1@jassi.com>; Tue, 17 Apr 2018 18:17:42 +0530
Return-Path: <jas2@jassi.com>
From: jas2@jassi.com
To: <jas1@jassi.com>
Subject: Test111
Date: Tue, 17 Apr 2018 18:17:42 +0530
Message-ID: <5ad5ecee.58c.1038.5ec@jassi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
X-Originating-IP: 127.0.0.1
X-Mailer: SurgeWeb - Ajax Webmail Client
X-Authenticated-User: jas2@jassi.com
X-Rcpt-To: <jas1@jassi.com>
X-Info: aspm skipped due to (g_smite_skip_relay)
X-MyRbl: Color=White (from rbl) ip=127.0.0.1
X-IP-stats: No info recorded yet ip=127.0.0.1
Status: U
X-UIDL: 4
```

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## Test Case4 – Fetch email from Surge Mail server using B2B Mail Client Adapter in SBI(SSL)

1. Firstly, collect the information like Host name, Port, username and password (if authentication is required), protocol used for fetching mail and certificate from the mail server side.

Note: Same certificate which we used for SMTP SSL can be used.

2. Edit the NON- SSL B2b mail client adapter, change the port to 995, SSL to SSL\_MUST, choose the CA certificate as shown below

## BH\_B2B\_MAILCLIENT

### Service Settings

Service Type	B2B Mail Client Adapter
Description	BH_B2B_MAILCLIENT
System Name	BH_B2B_MAILCLIENT
Group Name	None
Default Message Access Protocol	POP3
Default Mail Server	*****
Default Mail Server Port	995
User Name	jas1
Password	*****
Connection Retries	3
Retry Interval(Sec)	1
Max Messages per Session	1
Remove inbox mail messages	Yes
Ignore Errors During Processing Mails	No
Specify the path where you want any corrupted mail(s) to be dumped	None provided
Cipher Strength	STRONG
CA Certificates	Jassi_mail
SSL	SSL_MUST
URI	jas1 Business Process: CustomBP1 Send Raw Messages: No
Insert into Process Data	All mail header fields

### 3. Create a sample BP

```
<process name="BH_MAIL_CLIENT_ADAPTER">
  <sequence>
    <operation name="Service">
      <participant name="BH_B2B_MAILCLIENT"/>
      <output message="Xout">
        <assign to="." from="*"></assign>
      </output>
      <input message="Xin">
        <assign to="." from="*"></assign>
      </input>
    </operation>
  </sequence>
</process>
```

- Execute the BP, in the sub process document info we should be able to see the email. This is the main BP

Name: BH\_MAIL\_CLIENT\_ADAPTER Instance ID: 245318 Status: Success State: Completed User: admin  
Deadline: None Contract ID: None

Action: **Restart**

Steps 1-2 of 2

Step	Service	Status	Advanced Status	Started	Ended	Execution Node	Status Report	Document	Instance Data
0	INITIATING_CONTEXT from user 'admin'	Success	None	04/17/2018 7:37:13 PM	04/17/2018 7:37:13 PM	node1 [-]	None	None	None
1	<u>BH_B2B_MAILCLIENT Subprocess 245319</u>	Success	None	04/17/2018 7:37:14 PM	04/17/2018 7:37:14 PM	node1 [-]	info	None	None

This is the sub BP

#### Sub-Process Detail

Name: MailProcessingService Instance ID: 245319 Status: Success State: Completed User: admin  
Deadline: None Contract ID: None

Parent Business Process:

Name: BH\_MAIL\_CLIENT\_ADAPTER Instance ID: 245318

Steps 1-6 of 6

Step	Service	Status	Advanced Status	Started	Ended	Execution Node	Status Report	Document	Instance Data
0	INITIATING_CONTEXT	Success	None	04/17/2018 7:37:14 PM	04/17/2018 7:37:14 PM	node1 [-]	None	info	info
1	Assign Service	Success	None	04/17/2018 7:37:14 PM	04/17/2018 7:37:14 PM	node1 [-]	None	info	info
2	Decision Engine Service	Success	1	04/17/2018 7:37:14 PM	04/17/2018 7:37:14 PM	node1 [-]	None	info	info
3	Mail Processing Service	Success	None	04/17/2018 7:37:15 PM	04/17/2018 7:37:15 PM	node1 [-]	info	info	info
4	Assign Service	Success	None	04/17/2018 7:37:15 PM	04/17/2018 7:37:15 PM	node1 [-]	None	info	info
5	Decision Engine Service	Success	2	04/17/2018 7:37:15 PM	04/17/2018 7:37:15 PM	node1 [-]	None	info	info

This is the document info, which contains the email

Process Name: MailProcessingService Instance ID: 245319

Service Name: INITIATING\_CONTEXT

Document Name: None provided Document Store: Database

Document ID: 957522162d3e5bb71node1

Document in process data:

```
X-Default-Received-SPF: pass (skip=forwardok (res=PASS)) x-ip-name=127.0.0.1;
Received: from bgrwn008 (unverified [127.0.0.1])
    by jassi.com (SurgeMail 7.3e2) with ESMTP id 9-2000100
    for <jasi@jassi.com>; Tue, 17 Apr 2018 18:17:57 +0530
Return-Path: <jas2@jassi.com>
From: jas2@jassi.com
To: <jas1@jassi.com>
Subject: Test222222
Date: Tue, 17 Apr 2018 18:17:56 +0530
Message-ID: <5ad5ecfc.58c.2310.7e02@jassi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
X-Originating-IP: 127.0.0.1
X-Mailer: SurgeWeb - Ajax Webmail Client
X-Authenticated-User: jas2@jassi.com
X-Rcpt-To: <jas1@jassi.com>
X-Info: aspm skipped due to (g_smite_skip_relay)
X-MyRbl: Color=White (rbl) Age=0 Spam=0 Notspam=0 Stars=0 Good=0 Friend=0 Surbl=0 Catch=0 r=0 ip=127.0.0.1
X-IP-Stats: Incoming Last 0, First 0, in=1, out=0, spam=0 ip=127.0.0.1
Status: U
X-UIDL: 5
```

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## References

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