

## How to BPC

In order to set up BPC's market pilot, you need to first know the stages of the software.

First, you have the **Certificate Stage**, then you have the **Access Point Stage**, then you have the **SMP Stage**

## Certificate Stage

Instructions for Creating a BPC Valid Certificate

1. Create a Valid CSR
  - a. You need to add a Scheme as well as an ID. Certain Schemes have different ID Syntax
  - b. DUNS::123456789
  - c. Run all of this through OpenSSL or the BPC website generator
  - d. [https://bpc.bdxhub.com/csr\\_generator.jsp](https://bpc.bdxhub.com/csr_generator.jsp)

## Example Certificate & Key Below

```
-----BEGIN CERTIFICATE REQUEST-----
MIICvzCCAaCAQAwEjELMAkGA1UEBhMCVVMxMzA5BjNVBAgTAkNBMRAwDgYDVQQL
EwdGcmVtb250MRgwFgYDVQQLew9QaG90b24gQ29tbWVvYyY2UxGDAWBgNVBAoT
D1Bo
b3RvbiBDb21tZXJjZTEYMBYGA1UEAxMPRFVOUzo6MTIzNDU2Nzg5MIBIjANBgkq
hkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEajjuNJ/CeS4ykCiyCLAYjj2VAZE1lxNLe
pV4bl+QNieH1PIZbqcBjnAhrpzCMlsm0ArYKB6Pp0s1CSndh1rhU47ICXSTwQjEv
JpJejucc/Q5laRd/OWWYRNGCqznnwn21cTPOO0pUMaGLVM6vNaHXmei66DzO/EF
OrpTbqOWATZGAjLNFvWSCj7aUTOKKJc+cy9FPp0ET6cOCqMfYpdDI9DgryY81yLH
//iThJOEAOpurRSQzu0iFGzy0s7JNZKjvFRk0tb8TB7rCxbKY7Q0SI55I3LJHB
bvXT2eSfbdJHCgaKneUhwBBxroB0iyCIGpuRcoEodn0oGmapmPTpSQIDAQABoAAw
DQYJKoZIhvcNAQELBQADggEBACB9ayHRdUeYIFnDCx1YKpdP61L9oupstZkKvR1/
q1kmpNnOgSSO6fMjcJTKZOu1cbon+S9n+KFRAZ95k+g3ZrSsMbwE+FxT/Aw87Jp
Uy3d1Lcf7XmTF235ZqcvkY6O+hdGop0KSMNiZ1Q3pg6i4DFIAreSCvIXR8QPobq
xr/ZFCQXPRw3yWizOPoSbShIN9I8RNPbBdqL9VS8I77+7njYpBnbQivTf8FaNO5Z
VNxTGgqz7Q2ernS/HaEsqZRLjQHh9R9SEo03ijNonrWDpSkTKULvQIKivNfytZaV
pc0+5nm2b0d28I2UB5Wgl0qqaq4iotwMct/V1p0YQdZJPE=
-----END CERTIFICATE REQUEST-----

-----BEGIN PRIVATE KEY-----
MIIEvQIBADANBgkqhkiG9w0BAQEFAASCBKcwggSjAgEAAoIBAQCOW40n8J5LjKQK
LIIsBiOPZUBkTUIjE0t6Ihshj5A2V4fu+1lupwEmcCGunMiyWybQCtgoHo+nSzUJK
d2HWuFTjU0JdJPBCMS8mkI6O5yr9DmVpF385ZzhE0YKrOevCSfbVxM847SIQxoYt
Uzq81odeZ6LroPM78QU6ulNuo5YDtkYCMs1+9ZIKPtpRM4qQlz5zL0U+vQRPpw4K
ox9I0Mj0OCvJzXlSt/+JOEk4QA4Cm6NFJDO7SIUbPLSzk1kqO8VGTs1vxMHus
LGNspjtdRjnmXcscKcFu9dPZ5J9I0kckKBoqd5SHAHEHGuHSLlgam5FygSh2fSga
ZqmY9OIJAgMBAACGgEAEIHx3nv2wx48VhrYPbYkiWWsXbwca0f/4yQzNfE5VlqX
5xhK/5OBZZUn1YJH9XfLTLWcoNMVWk2UBGVMSAdU1WHZ7oa8bKhLuxkHFjjrV9W
6aledBKBAaO+WK7BimVeYLBnQrQypvSfe/vECV1KWnnX258A7mvcEmy8I/blbWCr
AqG7ynko3uah5DmjZWFr1Wvzxszw6WcGi4TISgOgffsAYKwz8HXEHmSFm6AcmZL
N2OqQ/aQ2MQEVDfHrRkw6NURm9GVuNbkaXCMGZ7gKnhJUr/YW9GVOsTBLCMUUI
zZqHsbsAT9lcFCAQK8WVWkLaQqSjhE7gCt2np9hm8AQKBgQD064Rnm1PP5ZTscRGq
TLBPjj7SMR6AtvCRU+y/Bsm+UZV7au82H37Jv3wclFWmuEM36fb+dtstQlp8IGC
HEuV2xDxGxlgQalw6h2JLLYReJuG8hVimOjKMiovers/QUQLpSaQRVxr2/Y4K6IN
nhKBIAQMv2bo2o45gQx8wvj1iQKBgQCzUzDuRq4KTnXkvUIX5TmEo2AKMn+2JAeao
qxhc8YOWTp5FuBvJrdLKeG+pkuEXRhphwnt1mMRoPeZZqB46mcFKeEI5dQbpoVSo
T+3J0W7GynXYpBZdtQ6R4r566rG2+9TkcVcLhJYBBVtdr2UTQxVklcCbeRS3jB3Y
VAd5s8lwQKBgHilK9MRt1ygMvt5fC2zypH3ziTpYYadAaWz9NZKQ+OK/5L+nH0
5YM9vEmhr+jAzjLkuxqSS3+HwhHb0BC1Viml5zyRQwlm46hl/4lr4+qTPY9bAIVE
xYQEzigRrac+uns0qtbjm8IINjaMnkSZn6fvrVKMu9uq+8WnEfswhQ9pAoGAPBNp
SZsRkRZ/OMHpbEq096SfAt/fK53U4Vi68WuhUSJUzJlUvysreou9qZ1iW7U2GZpH
9mbDhclYKqKykb5aSBldygzyYoVgA8Iv0JU1aS1fEKBrN/Om9tsHrpXZO3ILQe
DMxvM+JRzTvfaNsE42DiAIO1zx/IEVY+3mg0QECgYEAwzInnjRXxowbjaV6i6PL
nVvQeWo0Q8+GHWSQmTUVz7DB8UCq6xt44SCWTOWZDkwu7LAm+dUaoz54BJGMEtx6
GcblQXeLkMmlHgmW0RsJubxtdat7q2dpd31RhypJ9TWXpLMI2WM7+7gZLz8vUCZ
hUL1V6qpoUsvk+CMJjatZlA=
-----END PRIVATE KEY-----
```

Once you create a request, you need to validate whether your CSR meets the BPC's requirements

Go to [https://bpc.bdxhub.com/csr\\_validator.jsp](https://bpc.bdxhub.com/csr_validator.jsp)

Then copy-paste your public key and CSR.

 IDENTIFIER

✔ **ALGORITHM**

 **KEY**

## CERTIFICATE

COUNTRY  
US

C=US,ST=CA,L=Fremont,OU=Photon Commerce,O=Photon Commerce,CN=DUNS::123456789

- ✔ Validated CSR format
- ✔ Identifier DUNS : 123456789 is valid
- ✔ Signature algorithm uses SHA256 with RSA encryption
- ✔ Key length is 2048 bits

```
-----BEGIN CERTIFICATE REQUEST-----
MIICvzCCAoaCAQAwEjELMAkGA1UEBhMCVWxhCzAJBgNVBAGTAkNBMR4wDgYDVQQH
EwdGcmVhbnRDb21250MRgwFgYDVQQLEwEaQGN0b2V0Q292bWV5Y2UxUGDAwGVBAG
NVBAQTD1B0b212XJYj2TEYDVYQGA1UEAwMFRFVUz06MTIzNDU2NzQ5MTI1ANBaka
```

1. Make sure you have a Java Run-time Environment installed, version 1.8 or later, as Holodeck B2B requires Java SE 8 or higher to run successfully.

2. Extract the downloaded zip file to a directory of your choice. Rename the extracted folder to holodeck-b2b-A (or anything you like), from now on referred to as «A».
3. You will need two Holodeck B2B instances to test an actual message transfer. Extract the zip for a second time and then rename the extracted folder holodeck-b2b-B, from now on referred to as «B».

#### Configure

4. . Change the port configuration. Because the configuration for both instances is the same, you need to change the configuration of one to be able to start them both.

To do this, edit the holodeckb2b.xml file in «B»/conf. In the file change the port number in the following element:

```
<transportReceiver name="http" class="org.holodeckb2b.core.axis2.HTTPListener">  
<parameter name="port">9090</parameter>
```

We recommend changing the port number to 9090 as this number is already included in the examples.

5. . Define the environment variable JAVA\_HOME to indicate where the Java run time is located.
6. Configure the message exchanges. The download package contains example P-Modes for the exchange of messages using both the One-Way/Push and One-Way/Pull message exchange patterns (MEPs) and different security settings. We will continue with a push message.

To enable a push from instance A (sender) to instance B (receiver), copy only the ex-pm-push-init.xml file from the examples directory to the «A»/repository/pmodes directory and copy the ex-pm-push-resp.xml file from the examples directory to the «B»/repository/pmodes directory.

#### Starting and stopping the server

7. To start the instance go to the bin directory of the instance and enter the command ./startServer.sh , use startServer.bat on the Windows platform.

The server will run in the foreground so you have to open two terminal sessions to start both instances.

8. To stop a running instance just press <CTRL>+<C>.

Leave both instances running to continue with exchanging a message.

#### Exchanging messages

To send a message from instance A to instance B:

9. Copy the contents of «A»/examples/msgs to «A»/data/msg\_out. The directory «A»/data/msg\_out is 'watched' by Holodeck B2B for MMD files that trigger message sending.
10. To trigger the send process rename ex-mmd-push.accepted to ex-mmd-push.mmd. If Holodeck B2B is running correctly you will see the extension change to 'processing' and then back to 'accepted' which indicates the message was successfully submitted and Holodeck B2B has started processing the message. Note that this does not imply

that the message was successfully sent to the other MSH, it only indicates the message will be processed by Holodeck B2B.

11. In «B»/data/msg\_in you will see two files that contain the received message: one with the extension mmd.xml containing the message meta-data and one starting with pl- which contains the payload data.

As this P-Mode also configures the use of receipts to acknowledge that messages are received you should also see a file in the «A»/data/msg\_in directory. This file contains the meta-data of the receipt signal

### **SMP Stage**

In order to test the SMP, you need a few things.

- Business Identifier for the end-user(s) that you want to receive documents for (can be the same that you're using for your AP but doesn't have to be). That's the Corner 4 in the 4-corner model.
  - Note: you can't use photon's business identifier, you need the receiver's business identifier
- Technical contact information for the AP (I assume you? In which case: your email).
- The URL where your AS4 service is running.
- Your public key certificate (signed by Jim). Not your private key - keep that to yourself.

More steps to follow