

How to Search in Netscape the Certificate of Other People Who Has Two Or More e-Cert With The Same Email Address

Importing the certificates of other people into Netscape is required if you want to send encrypted message to those people. The easiest way is to ask the recipient to send you a signed email first. After you receive the signed email, your Netscape will have the certificate of the recipient and also know the strength of encryption that the recipient can handle. Another means to get other people's certificate in Netscape is by the Search Directory function in the Netscape Security Info window (by clicking the padlock icon (Security) on the Navigation Tool Bar or by pull down menu under Communicator/Tools/SecurityInfo). When you click the "People" link on the left side, a "Search Directory" button will be displayed on the lower right side of the window. If you have created a directory entry for the Hongkong Post e-Cert Directory in your Netscape Address Book, you should be able to specify an email address in the next screen, after clicking the "Search Directory" button, for searching the required certificate of the target recipient. For details of adding the directory entry in your address book for Hongkong Post e-Cert Directory, please refer to the Hongkong Post e-Cert User Guide Section H Displaying certificate information of other people located at the URL: http://www.hongkongpost.gov.hk/5digital/user_guide/E-N-P2.html.

The above search and import function provided by Netscape has its limitation: only one certificate will be retrieved even though there are multiple certificates bearing the same email address in the directory. This would be a problem if you want to search a e-cert (Personal) but Netscape may return the e-Cert (Organisational) of the same email address. It is a software limitation. To get around this problem, a tricky technique may be used.

In defining the directory entry for Hongkong Post e-Cert Directory, you have to define the search root. The search root recommended in Hongkong Post e-Cert User Guide is C=HK. This will help limit the search to a sub-tree in the directory and avoid inefficient searching. However, in order to attain the said purpose, technique of using a more detailed search root is used. This is done by duplicating the directory entry of Hongkong Post e-Cert Directory but with more Distinguished Name (DN) information specified in the search root field. An example of it is by entering "OU=0000920170,O=Hongkong Post e-Cert (Personal),C=HK" in the search root field to limit the search to e-Cert (Personal) and SRN=0000920170.

In summary, there are 3 steps of user process for searching and importing a desired certificate of the target recipient :

Step 1: Search the certificate(s) of the target recipient using the Hongkong Post e-Cert Directory in your Netscape Address Book (Please refer to the Hongkong Post e-Cert User Guide Section H Displaying certificate information of other people located at the URL: http://www.hongkongpost.gov.hk/5digital/user_guide/E-N-P2.html) Examine the certificate content of each entry in the search result and write down the DN (e.g. O and OU fields) of the certificate you want.

Step 2: Specify a more detailed search root for the duplicated directory entry of Hongkong Post e-Cert Directory according to the DN of the certificate to be searched.

Step 3: Go back to the Security Info Windows of Netscape. Click the People link on the left side and then the “Search Directory” button on the lower right side of the window. Select the duplicated Hongkong Post e-Cert Directory with detailed search root and then type in the email address of the desired certificate. You should be able to import the correct certificate.

The followings are some examples on the values of the search root:

Scenario 1:

Chan Tai Man has applied 2 certificates (a e-Cert (Personal) and a e-Cert (Organisational)) using the same email address “chantaiman@hotmail.com”.

The contents of the subject field in the certificates of Chan Tai Man can be found by searching by name or by email address in the Address Book using Hongkong Post e-Cert Directory with search root “C=HK”:

Subject Field in the Certificate	Certificate 1	Certificate 2
CN	Chan Tai Man	Chan Tai Man
E	chantaiman@hotmail.com	chantaiman@hotmail.com
OU		IT Department
OU		ABC Company
OU		000000001234567800000000
OU	0000920170	0000939024
O	Hongkong Post e-Cert (Personal)	Hongkong Post e-Cert (Organisational)
C	HK	HK

With the above DN information obtained, the detailed search root for uniquely retrieving and importing the e-Cert (Personal) to Netscape is :

OU=0000920170,O=Hongkong Post e-Cert (Personal),C=HK

Scenario 2:

Chan Tai Man has a certificate of e-Cert (Organisational). As this certificate is going to be expired, he has just renewed his certificate, i.e. He now has 2 certificates and the certificate content of his renewal certificate is inherited from his first certificate.

The contents of the subject field in his certificates can be found by searching all Chan Tai Man's certificate in the Address Book using Hongkong Post e-Cert Directory with search root "C=HK":

<u>Subject Field in the Certificate</u>	<u>Certificate 1</u>	<u>Certificate 2</u>
CN	Chan Tai Man	Chan Tai man
E	chantaiman@abc.com	chantaiman@abc.com
OU	IT Department	IT Department
OU	ABC Company	ABC Company
OU	000000001234567800000000	000000001234567800000000:R01
OU	0000939024	0000939024
O	Hongkong Post e-Cert (Organisational)	Hongkong Post e-Cert (Organisational)
C	HK	HK

To obtain the latest certificate of Chan Tai Man i.e. certificate 2, the following value can be assigned to the search root field :

OU=000000001234567800000000:R01,OU=0000939024,O=Hongkong Post e-Cert (Organisational),C=HK