

Nokia Mobile VPN

How to configure Nokia
Mobile VPN for Cisco ASA with
PSK/xAuth authentication

NOKIA

Nokia for Business

Table of Contents

Introduction.....	3
Internal address pool configuration	4
Creating VPN policies	7
Creating a user for XAUTH authentication	11
Creating VPN client policy.....	13

Introduction

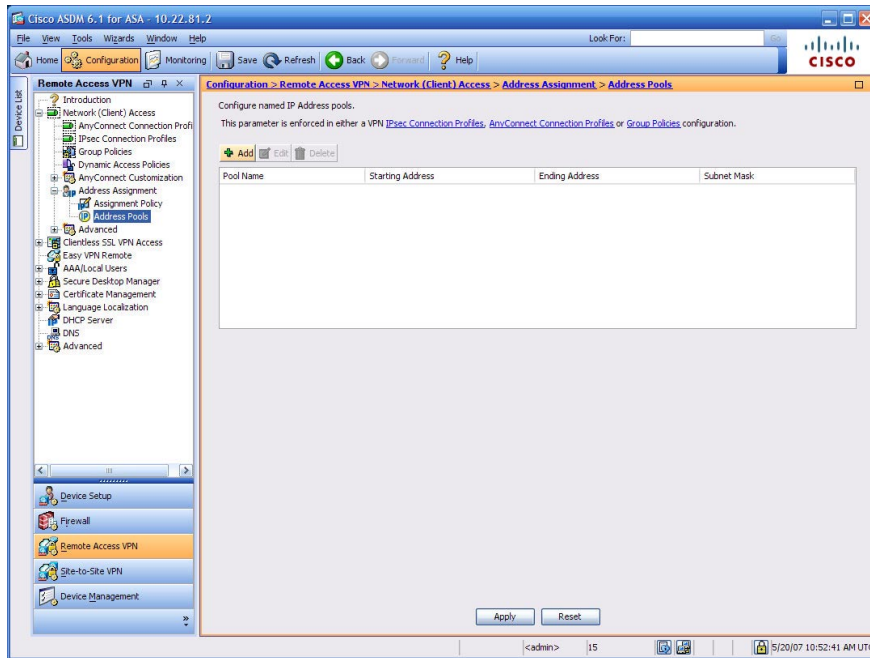
This document explains the configuration of Cisco ASA for use with Nokia Mobile VPN Client, with instructions for Pre-Shared Key (PSK) and XAUTH authentication. The user group is authenticated by the PSK and the actual user is then authenticated by XAUTH (user name/password combination).

It is assumed that the Cisco ASA basic configuration is in place. This covers any network-related configurations, such as inside and outside interface assignments, IP address configuration, hostname, domain, default routes and so on. This document uses Cisco ASA 5505 with software version 8.0(3). The configuration interface is Cisco ASDM (Adaptive Security Device Manager) version 6.1(1).

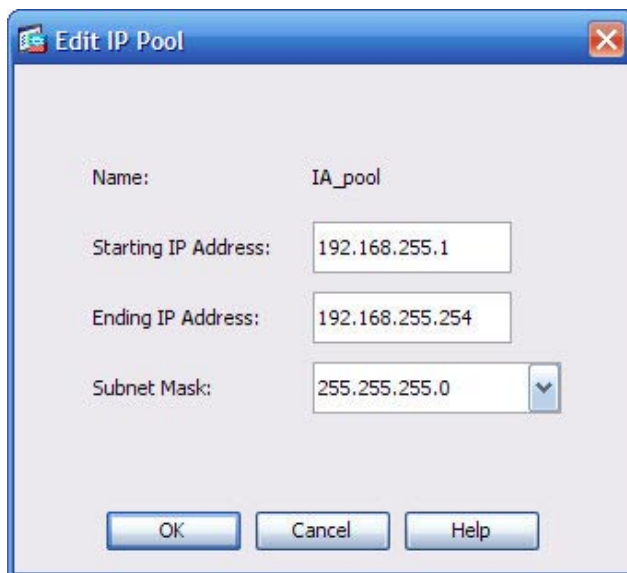


These software updates are available from www.cisco.com.

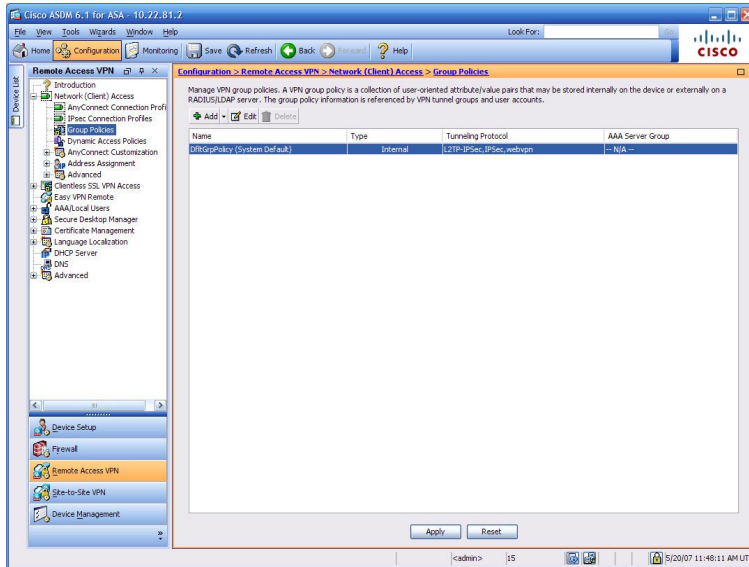
Internal address pool configuration



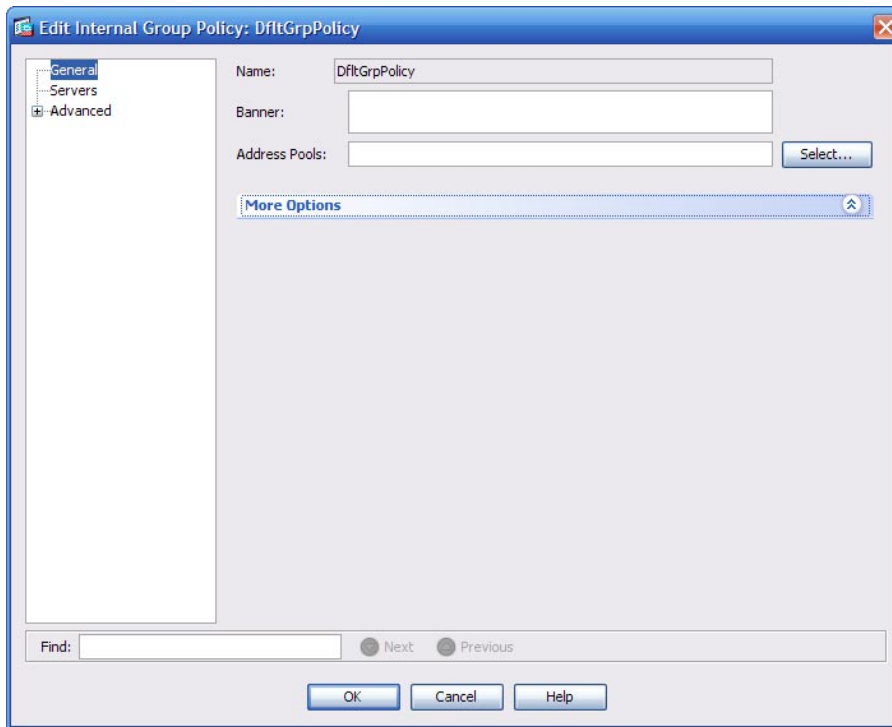
Navigate to Network (Client) Access -> Address Assignment -> Address Pools.
Click "Add" to create a new address pool to be used for internal address assignment.



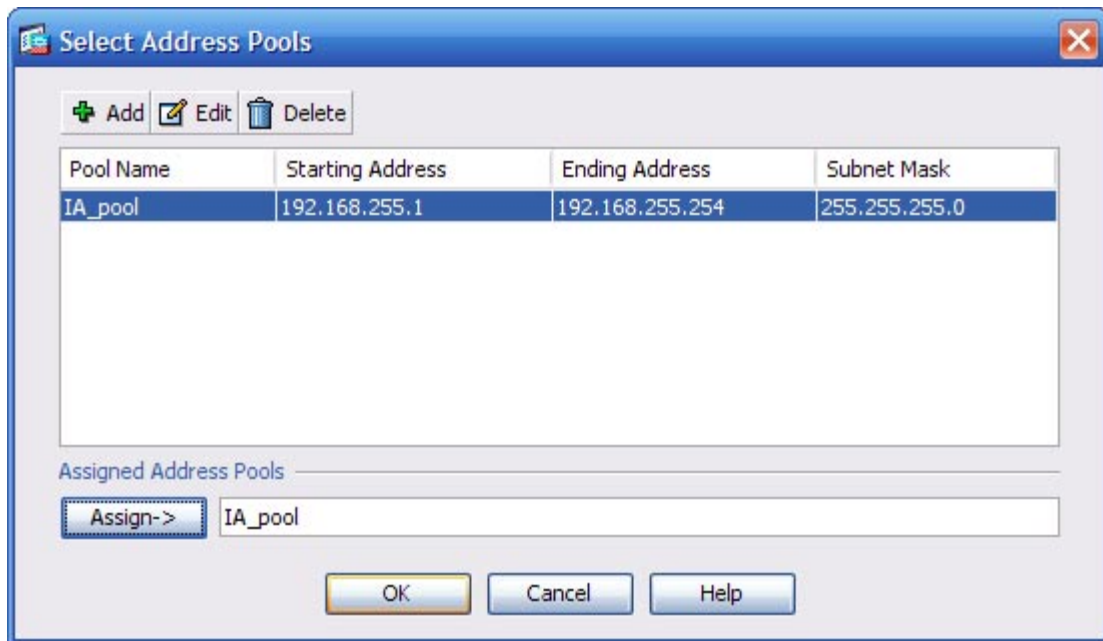
Enter a name for the pool, starting and ending IP addresses, and the subnet mask.
This address pool must not conflict with any other network object.
Be careful to not define the addresses from the same range as any of the gateway interfaces.
Click "OK" to close.



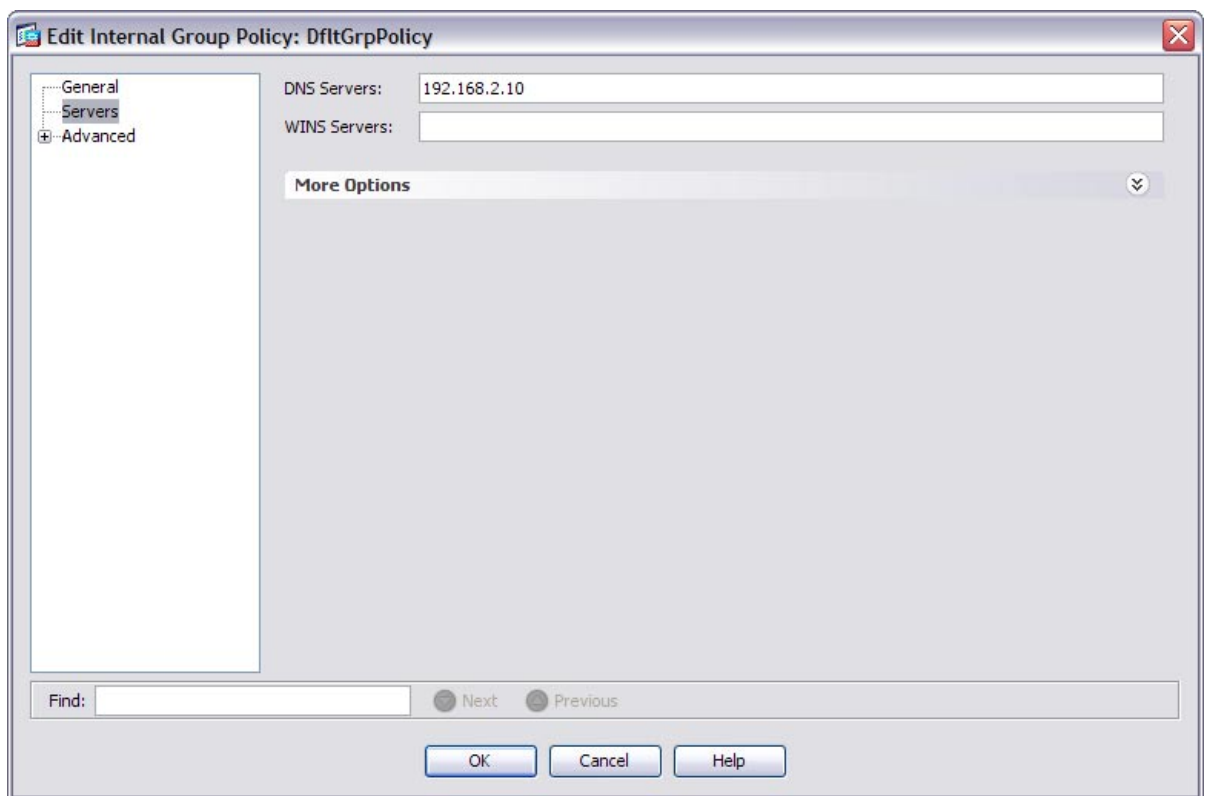
Navigate to Network (Client) Access -> Group Policies.
Highlight the DfltGrpPolicy (System Default) and click "Edit".



Click "Select" to assign the address pool.



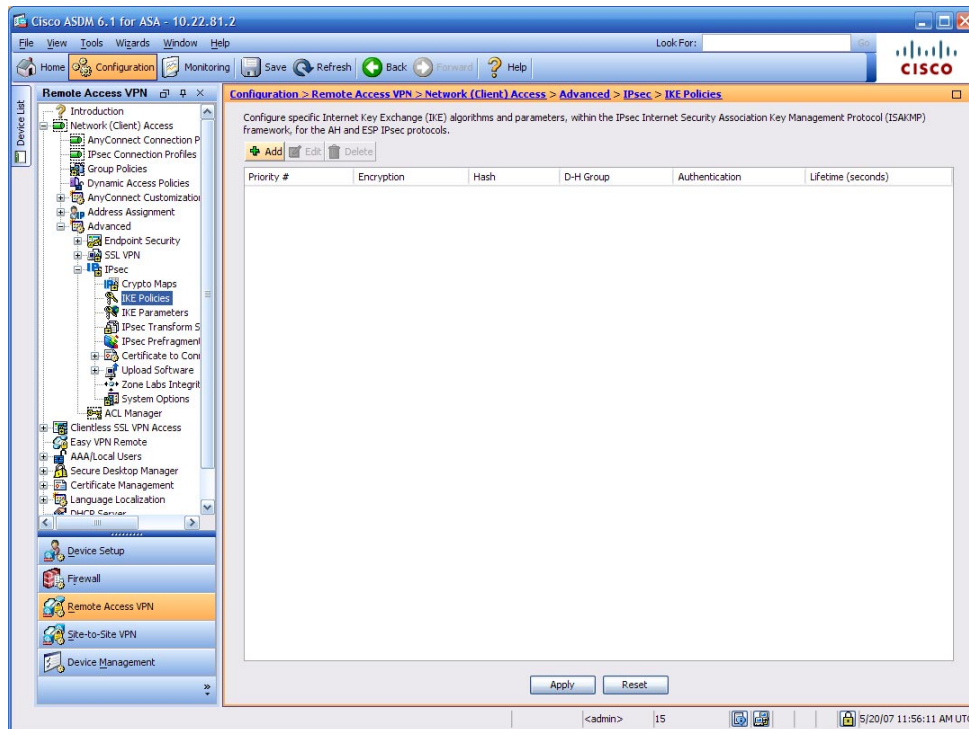
Select the previously defined IA_pool and click "Assign".
Click "OK".



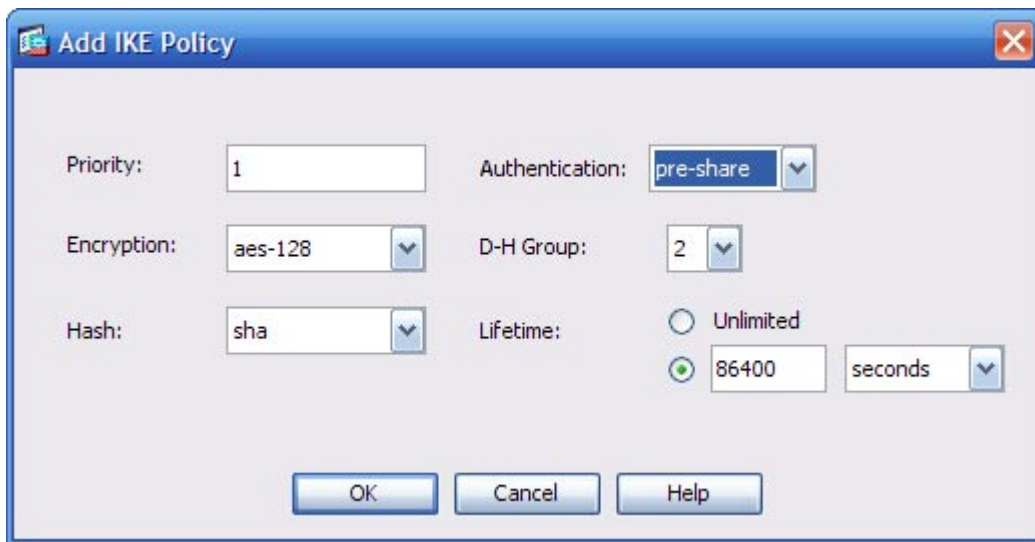
Navigate to "Servers".
Enter the DNS server address in the "DNS Servers" field. This will be handed out to client. It allows internal DNS resolutions.

Click OK to close the DfltGrpPolicy properties dialog.

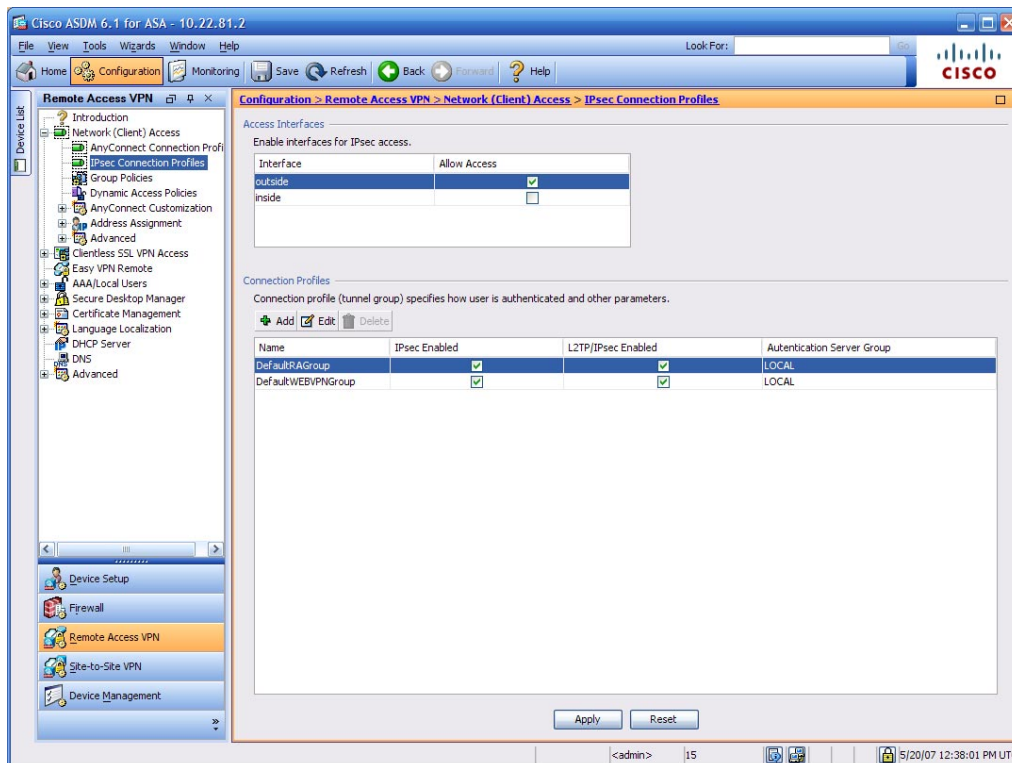
Creating VPN policies



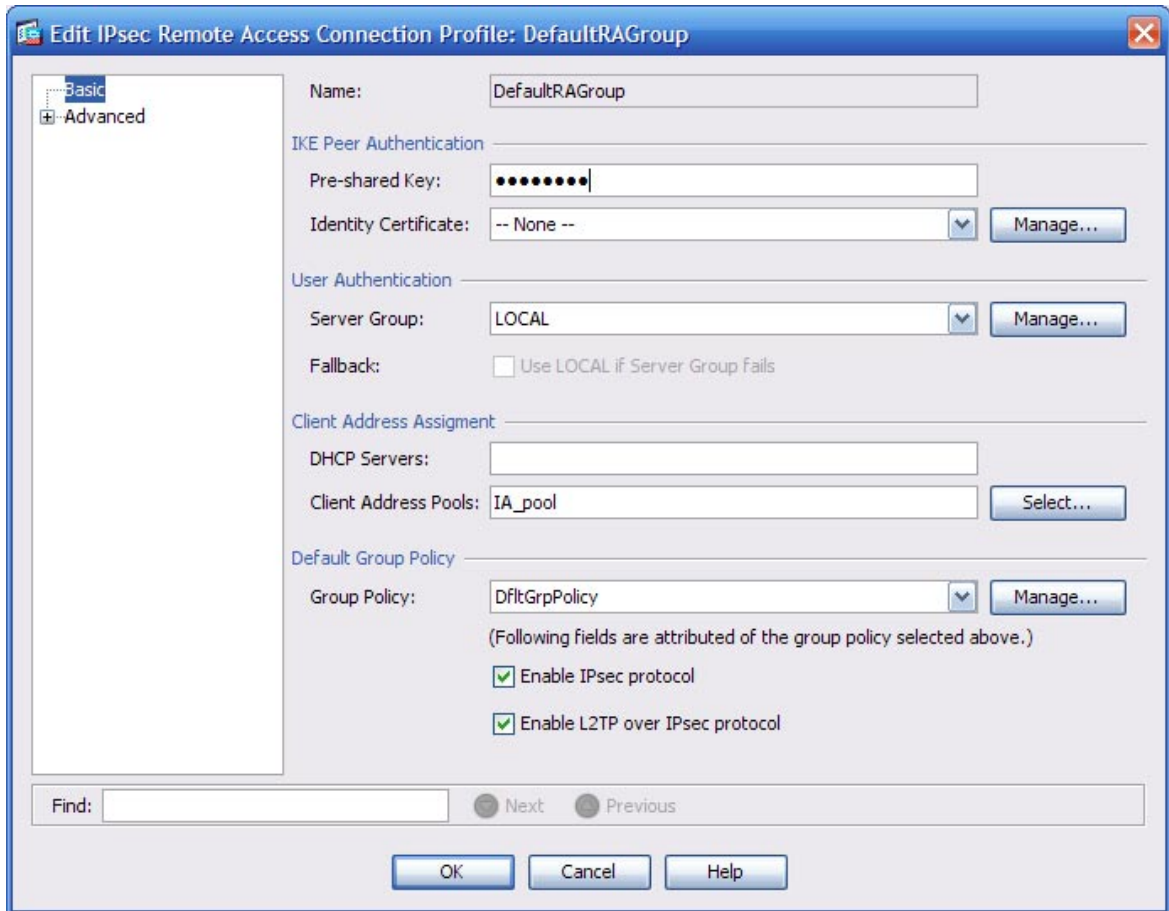
Navigate to Network (Client) Access -> Advanced -> IPsec -> IKE Policies.
Click "Add" to create a new IKE policy.



Enter the priority number for IKE policy.
 Encryption method default is "DES", which is not very secure. It is recommended that you change it to AES-128. Hash algorithm is SHA, authentication PRE-SHARE, and D-H Group is 2 (by default it is set to 1).
 Click "OK".



Navigate to Network (Client) Access -> IPsec Connection Profiles.
 Check outside interface to "Allow Access" for IPsec access.
 Highlight DefaultRAGroup and click "Edit".

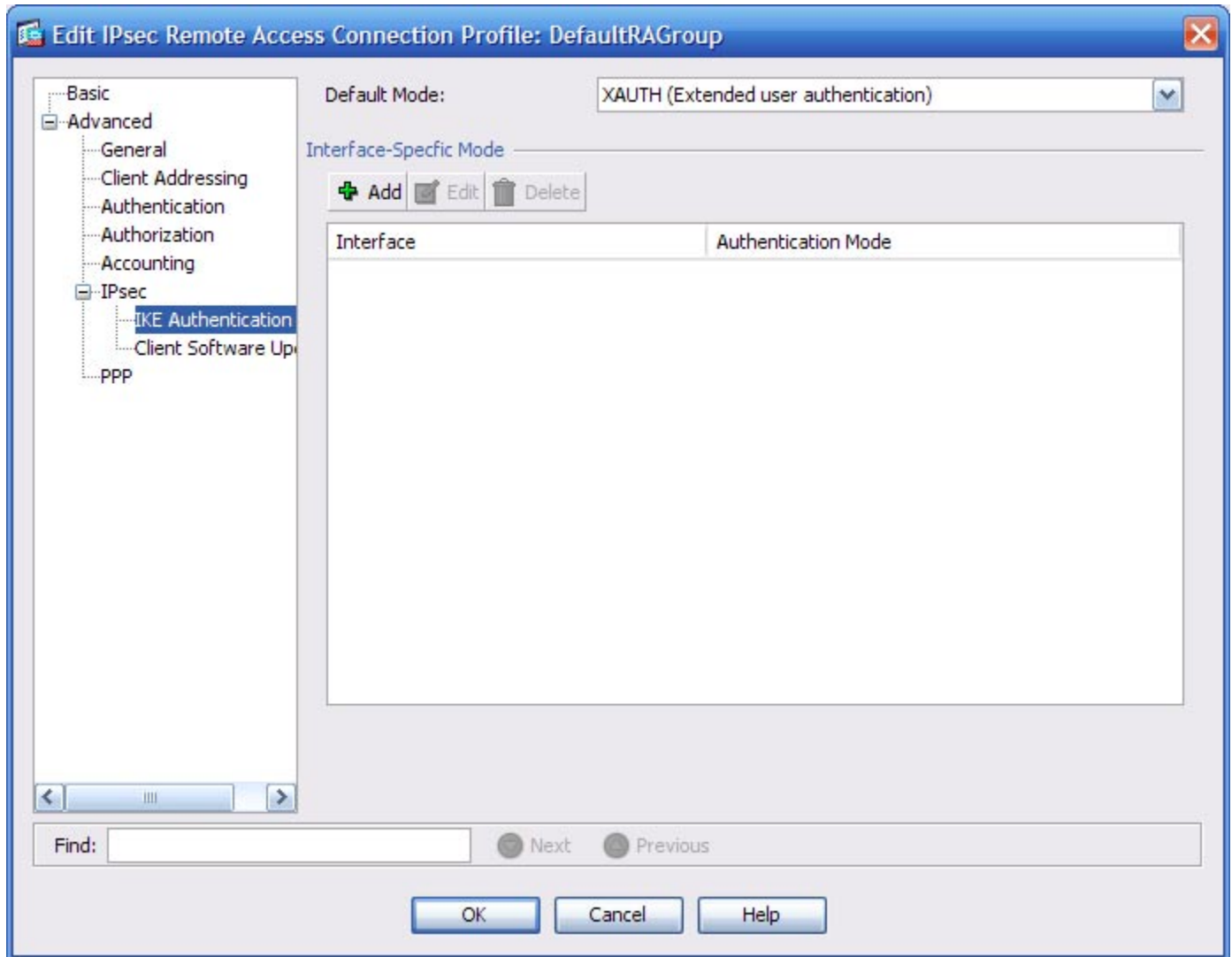


In the "IKE Peer Authentication" section, enter the "Pre-shared Key". This string can be anything, and it will be used as the password string for group authentication. It is recommended to configure this to be long enough with various alphanumeric characters (A-Z, 0-9) and possibly with special characters (!, %, &, #, etc).

In the Identity Certificate, select the device certificate requested in earlier steps.

In "Client Address Assignment" section, select the IA_pool created earlier for the "Client Address Pools" field.

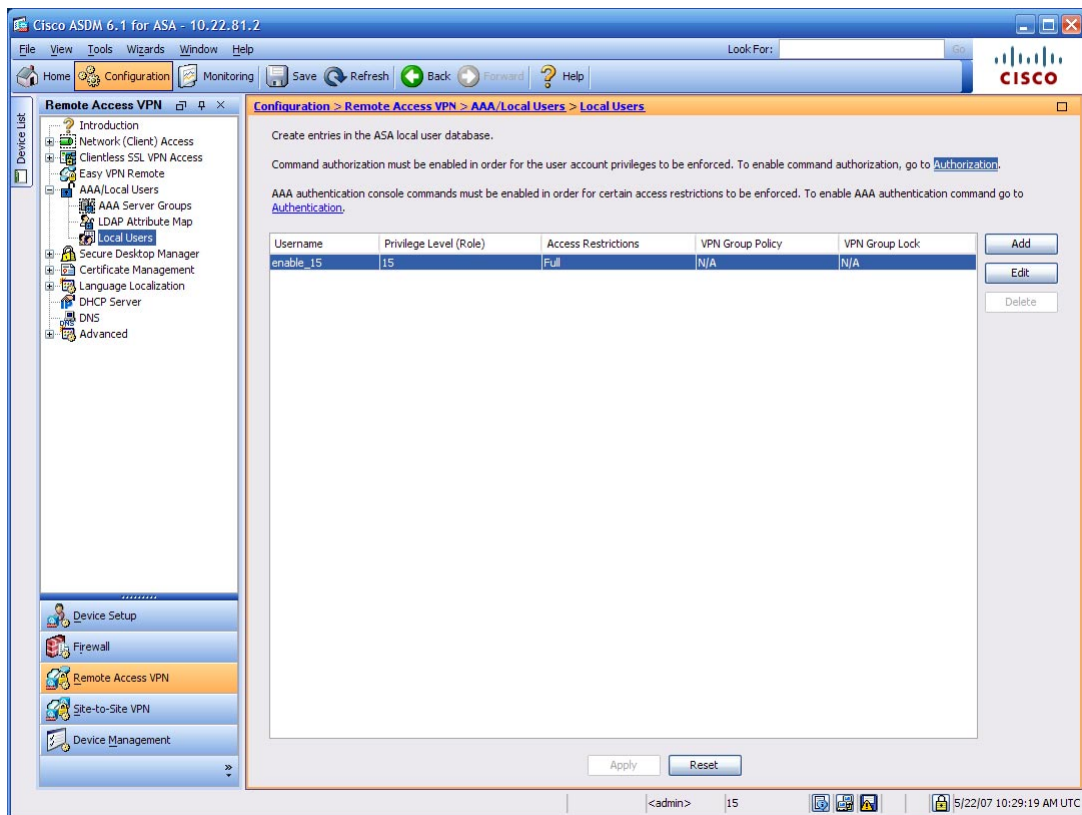
Navigate to Advanced -> IPsec -> IKE Authentication on the left window pane.



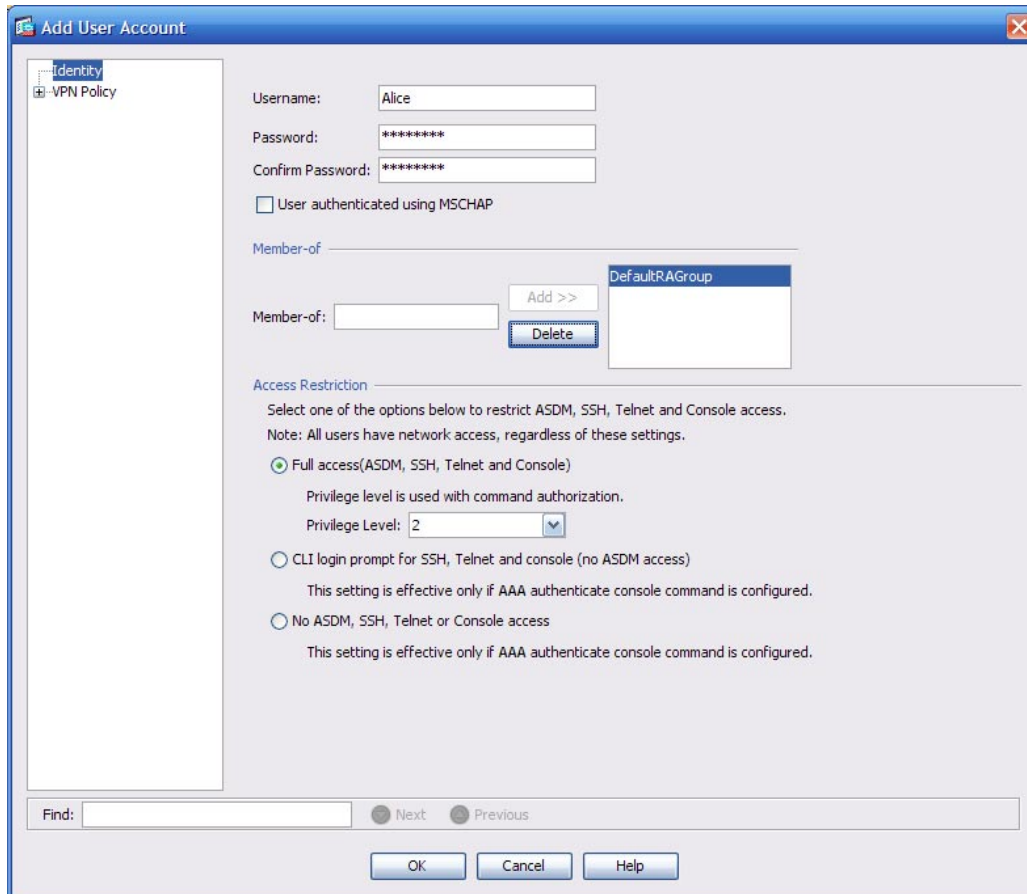
In the Default Mode pull-down menu, select "XAUTH (Extended user authentication)".

Click "OK".

Creating a user for XAUTH authentication



Navigate to AAA/Local Users -> Local Users.
Click "Add" to create a new user account.

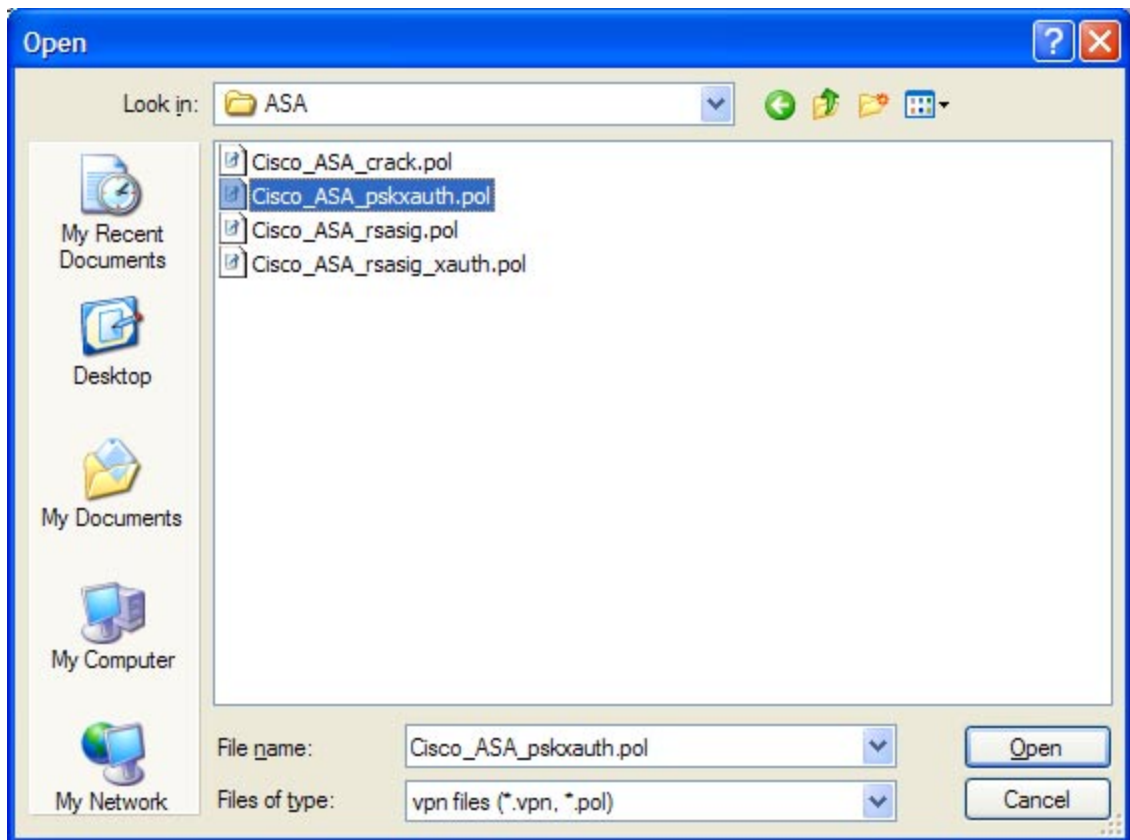


Enter the Username and Password. Then Confirm Password.
Add this user to belong to "DefaultRAGroup" under "Member-of" section.
Click "OK" to create the user. This user account will be used for client XAUTH authentication.

REMEMBER TO APPLY and SAVE THE CONFIGURATION TO THE GATEWAY!

Creating VPN client policy

Start Nokia VPN Client Policy Tool and press the Load Template button. Select the Cisco_ASA_crack.pol policy from the Cisco\ASA directory.



Add the correct VPN gateway address and group password (must be the same that was defined on GW side, page 9).

The screenshot shows the Nokia Mobile VPN Client Policy Tool interface. The 'General Information' section contains the following fields:

- Policy name: Cisco_ASA_pskxauth
- VPN gateway address: 192.168.1.1

The 'Preshared Key' section contains the following fields:

- Format: STRING_FORMAT
- Key: grouppassword

Other sections include 'Certificate Authority', 'User Certificate', and 'PKCS#12', each with various input fields and dropdown menus. A 'Generate VPN Policy' button is located at the bottom left.

To export the VPN policy, press the Generate VPN Policy button, and store Cisco_ASA_pskxauth.vpn to your PC. Consult the *Nokia Mobile VPN Client User's Guide*, Chapter 6.1, for details on how to install a given policy file to your device.

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