

# EXTRANET API

## User manual for API registration

### Key Points:

1. Members have to first register for API on Member Portal

Production URL: (<https://ims.connect2nsccl.com/MemberPortal>)

*Note: If the member has 10 users under him, then all the 10 users have to perform the steps mentioned in the user manual for self-user generation / maintenance for Extranet API in Production*

2. Password has to be encrypted with secret key. Secret key will be received in mail after successful registration.

### PART A: REGISTRATION FOR API

1. Details of member registration are as under:

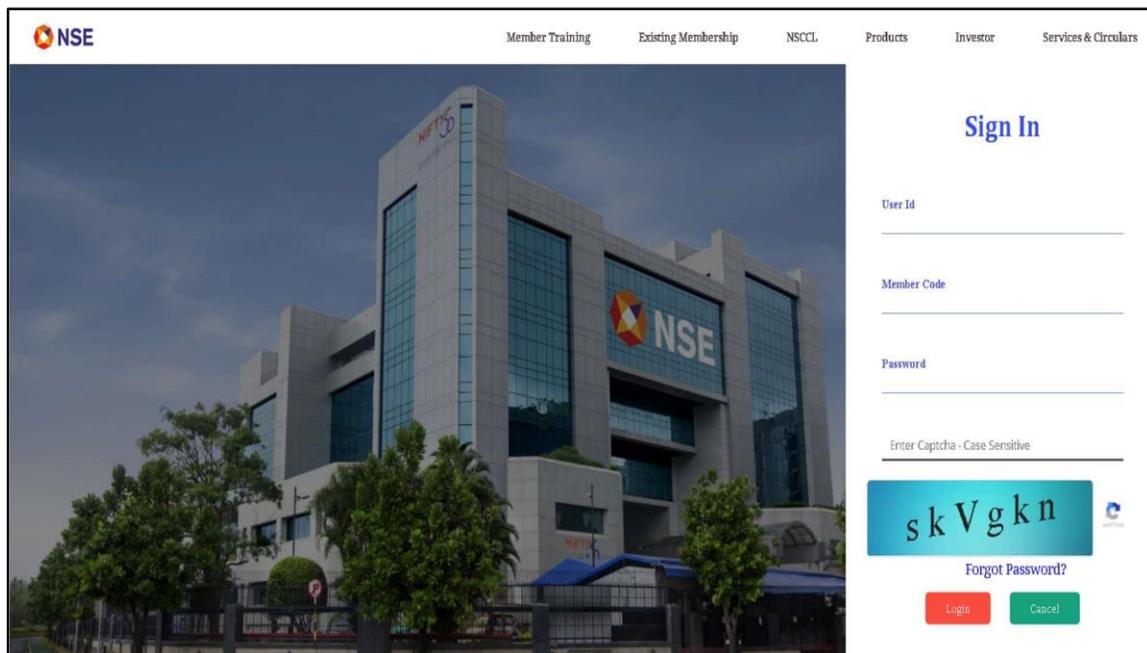
URL: <https://ims.connect2nsccl.com/MemberPortal>

User Id: Member User ID

Member Code: 5 digit Member Code

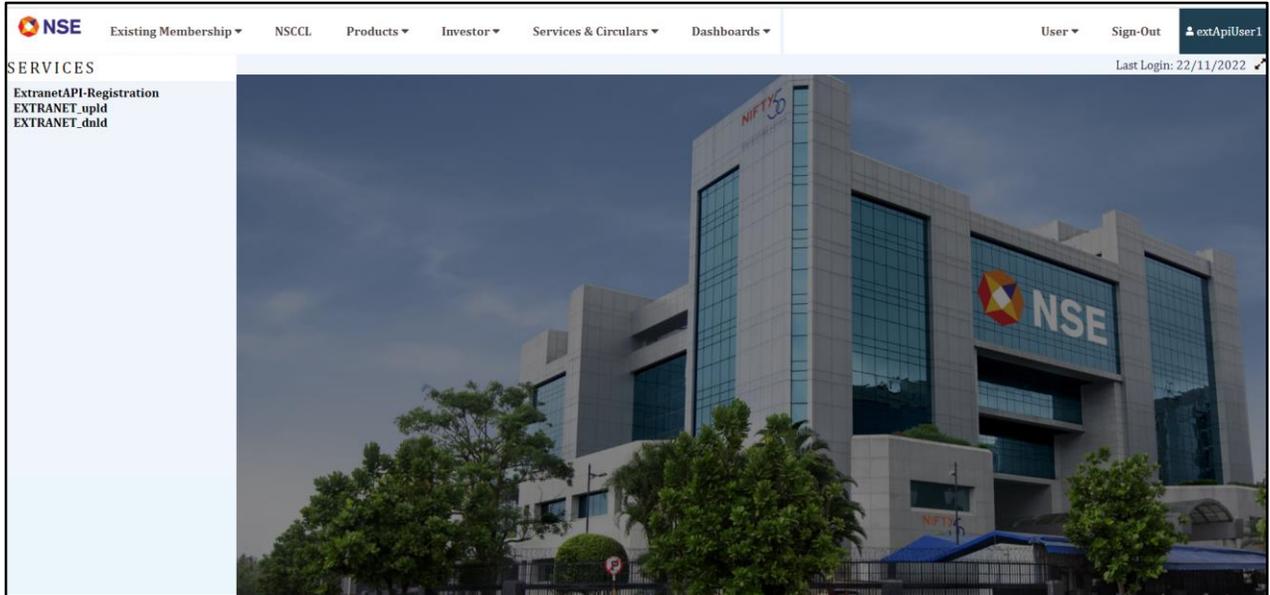
Password: Member Password

If first time login, members will have to change the password and re-login with new password. For first time login on member portal, OTP will be sent on registered mobile number or email id. Once correct OTP is entered user will be logged in successfully.



The screenshot displays the NSE Member Portal's sign-in interface. At the top, the NSE logo is on the left, and navigation links for 'Member Training', 'Existing Membership', 'NSCCL', 'Products', 'Investor', and 'Services & Circulars' are on the right. The main visual is a large photograph of the NSE building. To the right of the image is a white sign-in form with the following elements: a blue 'Sign In' heading, three input fields labeled 'User Id', 'Member Code', and 'Password', a captcha field with the text 'skVgkn' and the instruction 'Enter Captcha - Case Sensitive', a blue link for 'Forgot Password?', and two buttons: a red 'Login' button and a green 'Cancel' button.

- After successfully login, on left hand corner click on “ExtranetAPI-Registration” tab and proceed for API registration.



- After clicking the “Extranet API-Registration” button the member will have to submit the following information in Registration form.

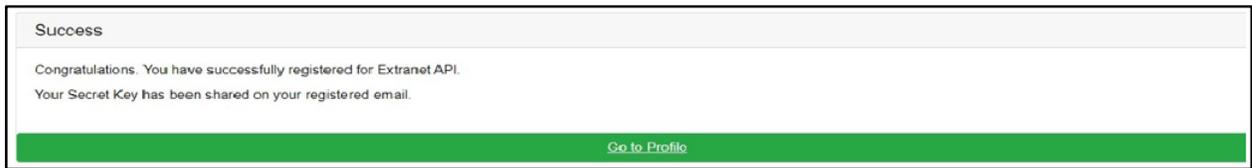
Sr. No.	Field	Validation points
1	Login Id	It will be auto-populated and will be same as the Member User ID
2	Member’s Email Id	Member’s Email Id and should be a valid email id.
3	Member’s Mobile No.	Mobile number Character (10) and should start with 9, 8 or 7 only.
4	Password	Characters (12) (At least one capital character, one small character, one numeric and one special character from @,#,\$,%^,&*,=)
5	Confirm Password	Should be same as the Password

The screenshot shows the 'Register Api' form on the NSE website. The form is titled 'Register Api' and contains the following fields:

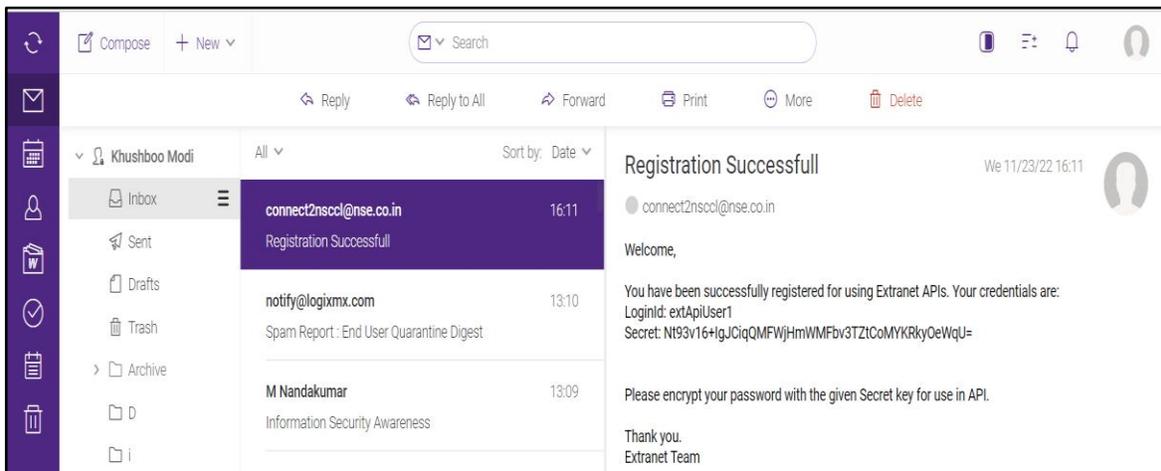
- Login ID\***: A text box containing 'extApiUser1'.
- Member's Email Id\***: A text box containing 'i.e - example@mail.com'.
- Member's Mobile No.\***: A text box containing 'Mobile No.'.
- Password\***: A text box containing 'Password'.
- Confirm Password\***: A text box containing 'Confirm Password'.

At the bottom of the form, there is a green 'Register' button. The background of the page shows the NSE website navigation and a sidebar with the 'ExtranetAPI-Registration' option selected.

After providing inputs for the information sought, click on “Register” button. If all details provided are valid then Registration will be successful and user will be directed to a page confirming the registration.

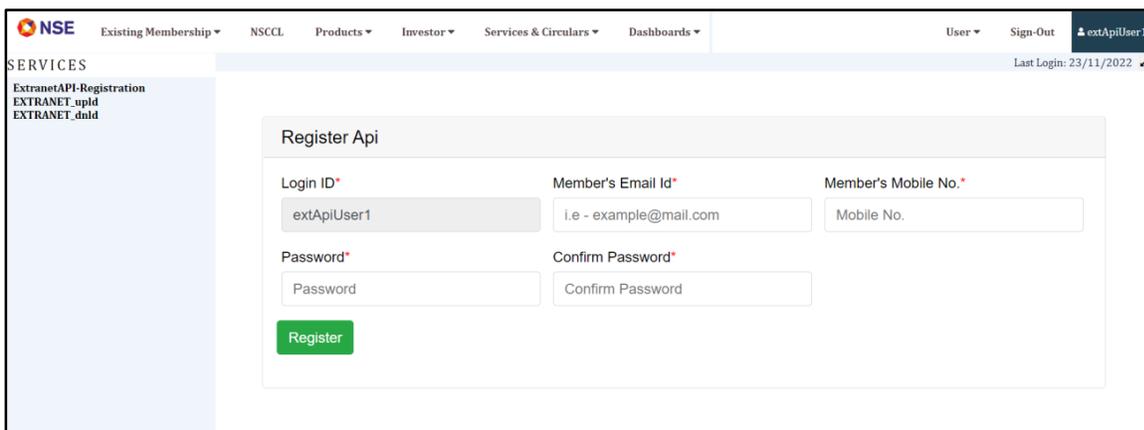


Also, after successful registration, member will receive an e-mail, on the e-mail address provided by Member while registration, which contains Login Id, Password, and Secret key.



4. In case the user is not registered then on clicking the “ExtranetAPI-Registration” button system will direct the user to the Registration page

ExtranetAPI-Registration → Register Api



Once a member is registered the Member can view the profile by clicking “ExtranetAPI-Registration” button, which will redirect the member to the Profile page.

ExtranetAPI-Registration → Edit Profile

### Edit Profile

<b>Member Code</b>	<b>Login ID</b>	<b>Member's Email Id*</b>	<b>Member's Mobile No.*</b>
<input type="text" value="08081"/>	<input type="text" value="extApiUser1"/>	<input type="text" value="sringe@nseit.com"/>	<input type="text" value="9894561230"/>

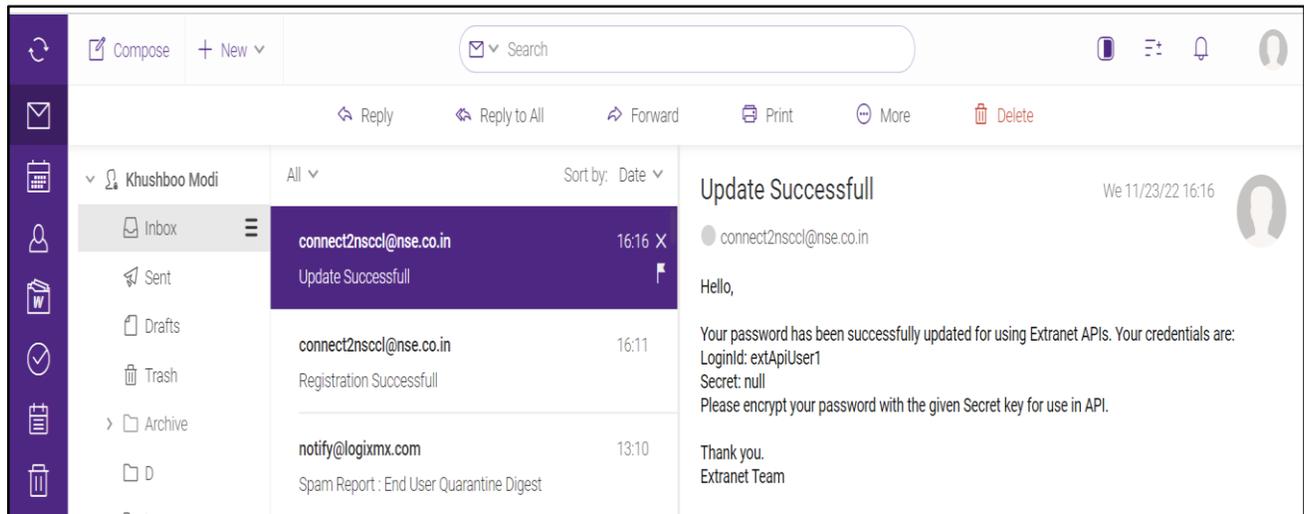
**Key**

### Change Password

<b>Password*</b>	<b>Confirm Password*</b>
<input type="password" value="Password"/>	<input type="password" value="Confirm Password"/>

5. User can reset the Password, by entering the new Password and Confirm Password and clicking on Submit button.

If password reset then an email will go to the user intimating him that his password has been reset.



6. User can update the Member's Email id and Member's Mobile no and click on Submit. On successfully editing the email id and mobile no system will display message as 'Update Successful'.

7. User has to encrypt its raw password by using secret key. This encrypted password needs to be used while calling login API. Java and .Net Code Snippet of AES encryption is added at the end of the document.

## PART B: API End Points

1. Login:  
<https://www.connect2nse.com/extranet-api/login/{version}>  
e.g.: <https://www.connect2nse.com/extranet-api/login/1.0>
2. Logout  
<https://www.connect2nse.com/extranet-api/logout/{version}>  
e.g.: <https://www.connect2nse.com/extranet-api/logout/1.0>
3. Get Member Files/Folders  
<https://www.connect2nse.com/extranet-api/member/content/{version}>  
e.g.: <https://www.connect2nse.com/extranet-api/member/content/1.0>
4. Download File  
<https://www.connect2nse.com/extranet-api/member/file/download/{version}>  
e.g.: <https://www.connect2nse.com/extranet-api/member/file/download/1.0>
5. Get Common File/Folders  
<https://www.connect2nse.com/extranet-api/common/content/{version}>  
e.g.: <https://www.connect2nse.com/extranet-api/common/content/1.0>
6. Download Common File  
<https://www.connect2nse.com/extranet-api/common/file/download/{version}>  
e.g.: <https://www.connect2nse.com/extranet-api/common/file/download/1.0>

## 8. AES Code Snippet [Java] public class CodeSnippet

```
{
public static void main(String[] args) throws UnsupportedOperationException,
NoSuchAlgorithmException, NoSuchPaddingException, InvalidKeyException,
IllegalBlockSizeException, BadPaddingException
{
    //Plain Text Password
    String password = "Nseitjan@123";

    //sample key is - "XBaNb0xmK2TNRIfcHA3F306Oi14HW AeYmtUd0qRheTc="
    String key = "XBaNb0xmK2TNRIfcHA3F306Oi14HW AeYmtUd0qRheTc=";
    //Key is converted to byte array
    byte[] keyByteArray = new Base64().decode(key.getBytes("UTF-8"));

    //SecretKeySpec is used to construct a SecretKey from a byte array
    SecretKeySpec secretKeySpec = new SecretKeySpec(keyByteArray, "AES");
    Cipher cipher = Cipher.getInstance("aes/ecb/pkcs5padding");
    cipher.init(Cipher.ENCRYPT_MODE, secretKeySpec);

    //pass plain text that is to be encrypt
    String encrypt = (new Base64()).encodeAsString(cipher.doFinal(password.getBytes()));

    //actual key in base64 format
    System.out.println("encrypted string:" +
encrypt); }
}
```

9. AES Code Snippet [.Net] using System; using System.Security.Cryptography; using System.Text;

```
namespace AES256{ class
Program{ private static string
getString(byte[] b)
{
return Encoding.UTF8.GetString(b);
}
static void Main(string[] args){
byte[] data = Encoding.UTF8.GetBytes("NseitJan@201");
byte[]a = Convert.FromBase64String("AAECAwQFBgcICQoLDA0ODw==");
Console.WriteLine("Key : {0}",
getString(a)); byte[] enc = Encrypt(data, a);
string result =
Convert.ToBase64String(enc);
Console.WriteLine("Encrypted text",
result); byte[] dec = Decrypt(enc, a);
Console.WriteLine("Encrypted : {0}", getString(enc));
Console.WriteLine("Decrypted : {0}", getString(dec));
// Console.ReadKey();
} public static byte[] Encrypt(byte[] data, byte[]
key){ using (RijndaelManaged csp = new
RijndaelManaged())
{ csp.KeySize = 256;
csp.BlockSize = 128; csp.Key =
key; csp.Padding =
PaddingMode.PKCS7; csp.Mode =
CipherMode.ECB;
CryptoTransform encrypter = csp.CreateEncryptor();
return encrypter.TransformFinalBlock(data, 0,
data.Length);
} } private static byte[] Decrypt(byte[] data, byte[]
key){ using (RijndaelManaged csp = new
RijndaelManaged())
{ csp.KeySize = 256;
csp.BlockSize=128; csp.Key =
key; csp.Padding =
PaddingMode.PKCS7; csp.Mode =
CipherMode.ECB;
CryptoTransform decrypter = csp.CreateDecryptor();
return decrypter.TransformFinalBlock(data, 0,
data.Length);
}
}
}
}
```

Technology Used:

Language: - java version "11.0.12" 2021-07-20 LTS