

Process flow for Send Payment Link To OBPP

1. Generate token

For token generation Exchange will issue user id and password generated from eSettle system which will be used for user authentication.

Steps for Postman Execution:

- API URL: <https://uat-rfqepay.bseindia.com/token>
- Method: Post
- In Body, selecting X-www-form-urlencoded
- Add Key and corresponding values:

Key	Value
Username	WP8ukJHG8RIEwkSHPW0fUS/+g+QBnBK7lhE5l+P/Qg8=
password	/+mq6qKi1QSBdN8LgFme8BI+wCTEsFG8mGDP9Y73+fM=
grant_type	password

- Username and password are encrypted using SHA256 Algorithm.
- Code for Encryption:

```
public string ComputeSHA256hash(string text)
{
    byte[] hashValue;
    byte[] EncrtyptText = Encoding.Unicode.GetBytes(text);

    SHA256Managed SHA256 = new SHA256Managed();
    hashValue = SHA256.ComputeHash(EncrtyptText);

    SHA256.Clear();
    SHA256.Dispose();

    return Convert.ToBase64String(hashValue);
}
```

- Sample output:

```
{
  "access_token": "An0_vpVEVDbDwolftflxRSYLAOQk0gc7ZOgl9IV4tur4i2kX0wyob6KK66VdrD1MPiK
  Q5szJKIAlyby_TtQf2Z1H98mlshgkk6IMnTf1a_Aw2bbPddUn35Hsy5MJVP85A15kdvMoJyHHBOhPrO
  2eg05ylqYfs6KiBXhTyUgE90M4w-
  PikRwDbD3aBb3COseUeOjUSIOBfA_qwKJ8NbZbcAmeCvXU4Bck8PQkA9z1OG-
  EA4oTheov7prXiPrlyOFFlhdPabiGinbHFRxOfq9XYaxalRZ1gH5gO74RMwnMiKfbAGp7buNSH9mVoS
  UZFKlxb",
  "token_type": "bearer",
  "expires_in": 86399
}
```

Token will be valid for 24 hours.

2. Receive request from OBPP for sending Payment Link

Steps for Postman Execution:

- API URL: <https://uat-rfqepay.bseindia.com/api/SendPaymentLink>
- Method: Post
- In Authorization, select Bearer Token and add token generated at first step in Token field in Postman.
- In Body, selecting raw JSON (application/json)
- Add encrypted JSON request.
- Sample JSON request before encryption

```
{
  "TradeDate":"10/11/2022",
  "OrderNo":"202102180424746"
}
```

- Sample encrypted JSON request

```
agpusnYwiji8/VgwwAQ6xmzuHPY/hJRGyP8p8jC26E2yuFFriZWxvvaikG2rU0YhjtO0qEv6isJ
vRTw2UxM3Vrll/j4yA70V5NtcY15S4knA1EQWtB0civWAcJFdwqywXb987FJf3dfG6zKrpDzlg
==
```



- Sample output

```
{
  "success": true,
  "error_Mesg": "Success",
  "error_Code": ""
  "payment_link": " http://qa.payph.in/3mfasd/3xsvgdy"
}
```

For Encryption:

- Encryption Algorithm – AES Algorithm
- Encryption Key – "017345ZA28ABAAEFGHIJKLMNOZZRSTUVWX67"
- Code for Encryption:

```
public string encrypt(string encryptString)
{
    string EncryptionKey = "017345ZA28ABAAEFGHIJKLMNOZZRSTUVWX67";
    byte[] clearBytes = Encoding.Unicode.GetBytes(encryptString);
    using (Aes encryptor = Aes.Create())
    {
        Rfc2898DeriveBytes pdb = new Rfc2898DeriveBytes(EnKey, new byte[] {
            0x49, 0x76, 0x61, 0x6e, 0x20, 0x4d, 0x65, 0x64, 0x76, 0x65, 0x64, 0x65, 0x76
        }, 100000, System.Security.Cryptography.HashAlgorithmName.SHA256);
        encryptor.Key = pdb.GetBytes(32);
        encryptor.IV = pdb.GetBytes(16);
        using (MemoryStream ms = new MemoryStream())
        {
            using (CryptoStream cs = new CryptoStream(ms, encryptor.CreateEncryptor(), CryptoStreamMode.Write))
            {
                cs.Write(clearBytes, 0, clearBytes.Length);
                cs.Close();
            }
            encryptString = Convert.ToBase64String(ms.ToArray());
            encryptString = encryptString.Replace("/", "-");
        }
    }
    return encryptString;
}
```

NOTE: All the date columns: if blank than pass default value as "01/01/1900"



Revision 1.1

Change in API URL

Revision 1.2

Change in API URL

Revision 1.3

Change in API URL

Added below mentioned line in encryption method

```
encryptString = encryptString.Replace("//", "-");
```

Revision 1.4

Removed below mentioned line from encryption method

```
encryptor.Mode = CipherMode.CFB;
```