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Thread: [Translate this code from C# to Java](#)

Nemo2478 - June 5, 2020, 3:36 pm

Hello everybody,

I want to decrypt and read h hashlinks with Java.

There is a C# code available that does just this:

<https://github.com/AresChat/cb0t/blob/master/cb0t/Misc/Hashlink.cs>

The process begins with the DecodeHashlink() method.

This includes the following methods and classes:

Class DecryptedHashlink (see link above)

Method d67() (see link above)

Method Decompress() (<https://github.com/AresChat/cb0t/blob/master/cb0t/Misc/Zip.cs>)

Class HashlinkReader (<https://github.com/AresChat/cb0t/blob/master/cb0t/Misc/HashlinkReader.cs>)

How can I translate all of this to Java?

Best regards and thank you very much

Untold - June 5, 2020, 10:30 pm

Well simple really, learn Java and translate it. :D Best of luck

Nemo2478 - June 6, 2020, 3:31 pm

I have been doing a lot with Java lately. But you can not know everything or do everything alone. Sometimes you need help. That's why I created this post to ask for help.

Here's what I've done so far:

Class DecryptedHashlink in C#:

Code class DecryptedHashlink

```
{
    public String Name { get; set; }
    public IPAddress IP { get; set; }
    public ushort Port { get; set; }
}
```

Translation to Java:

Code class DecryptedHashlink

```
{
    private String name;
    private InetAddress ip;
    private Byte port;

    public String getName(){
        return name;
    }
}
```

```

public void setName(String newName){
this.name = newName;
}

```

```

public InetAddress getIP(){
return ip;
}
public void setIP(InetAddress newIP){
this.ip = newIP;
}

```

```

public Byte getPort(){
return port;
}
public void setPort(Byte newPort){
this.port = newPort;
}
}

```

Method DecodeHashlink in C#:

```

Code public static DecryptedHashlink DecodeHashlink(String hashlink)
{
    DecryptedHashlink room = new DecryptedHashlink();

    try
    {
        if (hashlink.ToUpper().StartsWith("CHATROOM:")) // not encrypted
        {
            hashlink = hashlink.Substring(9);
            int split = hashlink.IndexOf(":");
            room.IP = IPAddress.Parse(hashlink.Substring(0, split));
            hashlink = hashlink.Substring(split + 1);
            split = hashlink.IndexOf("|");
            room.Port = ushort.Parse(hashlink.Substring(0, split));
            room.Name = hashlink.Substring(split + 1);
            return room;
        }
        else // encrypted
        {
            byte[] buf = Convert.FromBase64String(hashlink);
            buf = d67(buf, 28435); //I could translate up to here
            buf = Zip.Decompress(buf);

            HashlinkReader reader = new HashlinkReader(buf);
            reader.SkipBytes(32);
            room.IP = reader;
            room.Port = reader;
            reader.SkipBytes(4);
            room.Name = reader;

            return room;
        }
    }
    catch // badly formed hashlink

```

```

    {
        return null;
    }
}

```

}I translate it to Java so:

```

Code public static DecryptedHashlink DecodeHashlink(String hashlink){
    DecryptedHashlink room = new DecryptedHashlink();

```

```

try
{
    if (hashlink.toUpperCase().startsWith("CHATROOM:")) // not encrypted
    {
        hashlink = hashlink.substring(9);
        int split = hashlink.indexOf(":");
        try {
            room.setIP(InetAddress.getByName((hashlink.substring(0, split))));
        }
        catch (Exception ex) {

        }
        hashlink = hashlink.substring(split + 1);
        split = hashlink.indexOf("|");
        room.setPort(convertStringToByte(hashlink.substring(0, split)));
        room.setName(hashlink.substring(split + 1));
        return room;
    }
    else // encrypted
    {
        byte[] buf = DatatypeConverter.parseBase64Binary(hashlink);
        buf = d67(buf, 28435); //I could translate up to here
        buf = Zip.Decompress(buf);

        HashlinkReader reader = new HashlinkReader(buf);
        reader.SkipBytes(32);
        room.IP = reader;
        room.Port = reader;
        reader.SkipBytes(4);
        room.Name = reader;

        return room;
    }
}
}
}

```

```

public static byte convertStringToByte(String str)

```

```

{

```

```

    // Convert string to byte

```

```

    // using parseByte() method

```

```
return Byte.parseByte(str);
```

```
}
```

Method d67 in C#:

```
Code private static byte[] d67(byte[] data, int b)
```

```
{
    byte[] buffer = new byte[data.Length];
    Array.Copy(data, buffer, data.Length);

    for (int i = 0; i < data.Length; i++)
    {
        buffer[i] = (byte)(data[i] ^ b >> 8 & 255);
        b = (b + data[i]) * 23219 + 36126 & 65535;
    }
    return buffer;
}
```

}Translation to Java:

```
Code private static byte[] d67(byte[] data, int b)
```

```
{
    byte[] buffer = new byte[data.length];
    System.arraycopy(data, 0, buffer, 0, data.length);

    for (int i = 0; i < data.length; i++)
    {
        buffer[i] = (byte)(data[i] ^ b >> 8 & 255);
        b = (b + data[i]) * 23219 + 36126 & 65535;
    }
    return buffer;
}
```

And now I have problems with the method Decompress from Class Zip:

```
Code public static byte[] Decompress(byte[] data)
```

```
{
    try
    {
        byte[] r = null;

        using (MemoryStream ms = new MemoryStream(data))
        using (Stream s = newInflaterInputStream(ms))
        {
            List<byte> list = new List<byte>();
            int count = 0;
            byte[] b = new byte[8192];

            while ((count = s.Read(b, 0, 8192)) > 0)
                list.AddRange(b.Take(count));

            r = list.ToArray();
            list.Clear();
            list = null;
        }

        return r;
    }
    catch { }
```

```
return new byte[] { };
```

}Specially with this part from code:

Code using (MemoryStream ms = new MemoryStream(data))

using (Stream s = new InflaterInputStream(ms))Having only JDK 7, how can I translate it to Java?

Does a try have to be written within another try?

And what is the equivalent of MemoryStream, Stream and InflaterInputStream?

Regards and thanks

HFDone - June 7, 2020, 2:08 am

<https://www.programcreek.com/java-api-examples/java.util.zip.InflaterInputStream>