

Https redirection issue

Problem

This issue occurs when the customer IP is not registered so it's URL is redirected to landing page.

Let me explain with www.bbc.co.uk

1. http redirection scenario.

When the request URL <http://www.bbc.co.uk>, it is redirected to landing page successfully.

- The IP address solved by dnsmasq service for the www.bbc.co.uk domain is 77.75.124.147.
- So this URL request <http://www.bbc.co.uk> goes to 77.75.124.147:80.
- And this request is redirected to port 85 by the rule:

```
-A PREROUTING -p tcp -m tcp --dport 80 -m set ! --match-set SmartDNS_Customers src -j DNAT --to-destination :85
```

- On the port 85, Access_Synchronizer called as ipsync is running.

It is run by the the following steps:

```
AWS.Config.Set.Server_Port (Config_HTTP, 85);
```

```
AWS.Config.Set.Server_Name (Config_HTTP, "proxy.channelhopper.tv");
```

```
AWS.Server.Start (Web_Server_HTTP, Access_Synchronizer.Unfixed.Service_HTTP'Access, Config_HTTP);
```

In Access_Synchronizer.Main.adb

- This Server receives the customer's request by the following:

```
function Service_Unwanted (Request : Status.Data) return Response.Data is begin
```

```
return Response.URL (Strings.Unbounded.To_String (Config.Landing_Page) & "?From_URL=" & URL.Encode (URL.URL (Status.URI (Request))));
```

```
end Service_Unwanted;
```

In Access_Synchronizer.Root.adb

- Finally, by the above steps, customer's request URL is redirected to landing page:

https://channelhopper.tv/ucp/reg-network.php?From_URL=http%3A%2F%2Fwww.bbc.co.uk&Include_Cookie=True

2. https redirection scenario.

https redirection is almost same as the http redirection.

- URL request `https://www.bbc.co.uk` goes to `77.75.124.147:443`.
- And this request is redirected to port 450 by the rule:
`-A PREROUTING -p tcp -m tcp --dport 443 -m set ! --match-set SmartDNS_Customers src -j DNAT --to-destination :450`
- On the port 450, `Access_Synchronizer` is running.

Exactly, `Access_Synchronizer` is listening on both port 85 and 450, 85 for http and 450 for https.

```
Config_HTTP, Config_HTTPS : AWS.Config.Object;
```

```
Web_Server_HTTP, Web_Server_HTTPS : AWS.Server.HTTP;
```

```
SSL : Net.SSL.Config;
```

```
AWS.Config.Set.Server_Name (Config_HTTPS, "proxy.channelhopper.tv");
```

```
AWS.Config.Set.Server_Port (Config_HTTPS, 450);
```

```
AWS.Config.Set.Security (Config_HTTPS, True);
```

```
Net.SSL.Initialize
```

```
(SSL,
```

```
  Certificate_Filename => "/opt/SmartDNS/Access_Synchronizer/cert/Access_Synchronizer.crt",
```

```
  Key_Filename      => "/opt/SmartDNS/Access_Synchronizer/cert/Access_Synchronizer.key",
```

```
  Security_Mode     => Net.SSL.TLSv1_2
```

```
);
```

```
Server.Set_SSL_Config (Web_Server_HTTPS, SSL);
```

```
AWS.Server.Start (Web_Server_HTTPS, Access_Synchronizer.Unfixed.Service_HTTPS'Access, Config_HTTPS);
```

Please focus on the red colored lines.

Now we can know where the issue comes from....

The https redirection warning issue comes out from the between of user's browser and `Access_Synchronizer`'s listening port 450 which uses ssl certificate you get from Comodo.

We can find out the cert status using this URL:

<https://www.digicert.com/help>

by inputting the `proxy.channelhopper.tv` since we configured the service name as that by:

```
AWS.Config.Set.Server_Name (Config_HTTPS, "proxy.channelhopper.tv");
```

Result shows this cert is for `*.dnstest.channelhopper.tv` domain.

Now is this helpful for your understand?