

## strongSwan - Feature #454

### Curl plugin can't fetch certificate revocation list with spaces in url

21.11.2013 12:53 - Andrey T

<b>Status:</b>	Closed	<b>Start date:</b>	21.11.2013
<b>Priority:</b>	Low	<b>Due date:</b>	
<b>Assignee:</b>	Tobias Brunner	<b>Estimated time:</b>	0.00 hour
<b>Category:</b>	configuration		
<b>Target version:</b>	5.1.2		
<b>Resolution:</b>	Fixed		
<b>Description</b>			
If certificate revocation list http uri contains non alfa-numeric symbols, curl plugin can't fetch it. Web server will response with 400 (bad request) Non alfa-numeric symbols must be url encoded before pass url to curl_easy_setopt  For example: <a href="http://some.host/some list.crl">http://some.host/some list.crl</a> will not be retrived.			

#### Associated revisions

##### Revision 72a92d4f - 23.01.2014 10:19 - Tobias Brunner

curl: Replace spaces in URIs with %20

cURL requires the URIs to be URL-encoded. Apparently, some CAs encode CRL URIs with spaces in them.

Fixes #454.

#### History

##### #1 - 21.11.2013 16:49 - Tobias Brunner

- Category changed from libstrongswan to configuration
- Status changed from New to Feedback
- Assignee set to Tobias Brunner

If certificate revocation list http uri contains non alfa-numeric symbols, curl plugin can't fetch it. Web server will response with 400 (bad request)  
Non alfa-numeric symbols must be url encoded before pass url to curl\_easy\_setopt

While it's true that the documentation says that CURLOPT\_URL expects an URL-encoded string, only parts of it can really be URL-encoded. If we simply URL-encoded the complete URI characters such as :, / or ? would be replaced with %3a, %2f and %3f, respectively, which obviously wouldn't work.

While we could add some special treatment just for spaces, I rather think you should encode the URI properly in your certificates, or the *crluri* option of your [ca sections](#).

[RFC 5280](#) actually says:

..values in the uniformResourceIdentifier field must contain a valid URI as specified in [RFC3986].

And as Appendix A in [RFC 3986](#) shows, spaces are no valid characters in URIs. Therefore, to properly encode CRL URIs in the *cRLDistributionPoints* extensions of your certificates (or in [ipsec.conf](#)) you have to replace those spaces with %20.

##### #2 - 21.11.2013 17:53 - Andrey T

If we simply URL-encoded the complete URI characters such as :, / or ? would be replaced with %3a, %2f and %3f, respectively, which obviously wouldn't work.

Yes, it is not working. Discovered this when I tried to fix it by myself.)

I rather think you should encode the URI properly in your certificates, or the `curluri` option of your `ca` sections.

For me, encode url in the certificates - not an option. CA is not mine. CA that cause problem, is microsoft certificate authority, it allow such things, and people use this without thinking. `curluri` option also will not work. Because `crl` itself contains link to delta `crl`, which also contains spaces.

**#3 - 22.11.2013 10:50 - Tobias Brunner**

- *Tracker changed from Issue to Feature*
- *Status changed from Feedback to Resolved*
- *Target version set to 5.1.2*
- *Resolution set to Fixed*

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I see. I pushed a couple of patches to the `curluri-spaces` branch of our Git repository that URL-encode spaces in URIs before sending them to cURL. I also noticed that the [libsoup](#) based fetcher can handle spaces in URIs. Thus a workaround for current releases is to use the `soup` plugin instead of the `curl` plugin.

**#4 - 22.11.2013 11:17 - Andrey T**

Thanks for your help, Tobias.

**#5 - 23.01.2014 10:22 - Tobias Brunner**

- *Status changed from Resolved to Closed*