Smart Proxy - Bug #27218

Foreman-proxy parses /etc/ipa/default.conf incorrectly which results in ERROR -- : Unknown realm my-realm-server.example.com even when all config files are OK

07/03/2019 06:20 AM - Adam Ruzicka

Status:	Closed		
Priority:	Normal		
Assignee:			
Category:			
Target version:			
Difficulty:		**Fixed in Releases:**	1.24.0
Triaged:	No	**Found in Releases:**	
Bugzilla link:	1726380	**Red Hat JIRA:**	
Pull request:	https://github.com/theforeman/smart-proxy/pull/665		

Description

Cloned from https://bugzilla.redhat.com/show_bug.cgi?id=1726380

Description of problem:
Foreman-proxy parses the /etc/ipa/default.conf file incorrectly: it will consider *any* line containing the string 'realm' as a realm name definition. The last line in this file containing 'realm' will then be used as realm definition, most often resulting in this error on /var/log/foreman-proxy/proxy.log:

ERROR -- : Unknown realm EXAMPLE.COM

Example of an /etc/ipa/default.conf file that will trigger this error:
~~~
[global]
basedn = dc=example,dc=com
domain = example.com
server = realm.foo.example.com
host = sat64a.foo.example.com
xmlrpc_uri = https://realm.foo.example.com/ipa/xml
enable_ra = True
realm = EXAMPLE.COM

  1. nice comment: this used to be realm = MY.OLD.DOMAIN.ORG
     ~~~

This file above will result in foreman-proxy considering the realm name to be MY.OLD.DOMAIN.ORG.

This is a result of poor config file parsing -- not really parsing but fetching values with the help of regexes -- in /usr/share/foreman-proxy/modules/realm_freeipa/ipa_config_parser.rb:
~~
38

39   def do_parse(io)

40   parsed_uri, realm_name = nil

41

```
43    if line =~ /xmlrpc_uri/
44        uri = line.split("=")[1].strip
45        parsed_uri = URI.parse(uri)
46        logger.debug "freeipa: uri is #{uri}"
47      elsif line =~ /realm/
48        realm_name = line.split("=")[1].strip
49        logger.debug "freeipa: realm #{realm_name}"
50      end
51    end
~~~
```

Lines 47 and 48 will regex-match any line containing the string 'realm', even if the matching string is one of these below:

thisisrealmagic =
not my realm =

Then, the realm name is extracted by getting the "right-hand" value of the same line.

An actual real-life example hitting this issue is when the IPA/IdM server name in /etc/ipa/default.conf contains the string realm, e.g.:
~~
[global]

basedn = dc=demo1,dc=freeipa,dc=org

realm = DEMO1.FREEIPA.ORG

domain = demo1.freeipa.org

server = realm-server.demo1.freeipa.org

```
xmlrpc_uri = https://ipa.demo1.freeipa.org/ipa/xml
enable_ra = True
~~
```

Since the line with the `server` directive contains the string 'realm', it will match the regex and foreman-proxy will consider the right-hand side of this line as the realm name. Then /var/log/foreman-proxy/proxy.log would read the realm name twice:

~~

DEBUG -- : freeipa: uri is https://ipa.demo1.freeipa.org/ipa/xml

DEBUG -- : freeipa: realm DEMO1.FREEIPA.ORG

DEBUG -- : freeipa: realm realm-server.demo1.freeipa.org

~~

The latter one would overwrite the realm variable and would thus cause foreman-proxy to fail when adding a new host to the IPA/IdM domain, with:

~~

ERROR -- : Unknown realm realm-server.demo1.freeipa.org

~~

Version-Release number of selected component (if applicable):
All currently released Satellite versions as of today contain this bug, as well as the upstream smart-proxy at
https://github.com/theforeman/smart-proxy/blob/develop/modules/realm_freeipa/ipa_config_parser.rb.

How reproducible:
Every time if /etc/ipa/default.conf meets the required criteria.

Steps to Reproduce:
1. Set up foreman-proxy to communicate with IPA/IdM server realm-server.example.com for realm purposes.
2. Create a new host and set it up as a realm member.

Actual results:
Foreman-proxy will fail to add the host to the realm, stating it does not know the realm-server.example.com realm.

Expected results:
Foreman-proxy would add the host to the realm as set up by the 'realm' directive in /etc/ipa/default.conf

Additional info:
Simply reordering lines in /etc/ipa/default.conf so the `realm =` line is at the bottom of the file allows one to workaround the issue by forcing ipa_config_parser.rb to process the correct realm last.

Associated revisions

Revision c5248af8 - 08/09/2019 12:34 PM - Pablo Hess

Fixes #27218: revamps regex for finding realm name

History

#1 - 07/03/2019 08:46 AM - Adam Ruzicka

- Subject changed from Foreman-proxy parses /etc/ipa/default.conf incorrectly which results in ERROR -- : Unknown realm my-realm-server.example.com even when all config files are OK
to Foreman-proxy parses /etc/ipa/default.conf incorrectly which results in ERROR -- : Unknown realm my-realm-server.example.com even when all config files are OK

- Assignee deleted (Lukas Zapletal)

- Pull request https://github.com/theforeman/smart-proxy/pull/665 added

#2 - 07/03/2019 08:47 AM - Adam Ruzicka

- Status changed from New to Ready For Testing

#3 - 08/09/2019 12:34 PM - The Foreman Bot

- Fixed in Releases 1.24.0 added

#4 - 08/09/2019 01:01 PM - Anonymous

- Status changed from Ready For Testing to Closed

Applied in changeset [c5248af8a482f244dc0dd31a464eeab2ac867e0a](#).