

Smart Proxy - Refactor #10324

Performance issues with Foreman Proxy Puppet CA plugin and large CA inventories

04/29/2015 04:03 PM - Jon McKenzie

Status:	Closed	
Priority:	Normal	
Assignee:	Jon McKenzie	
Category:	Puppet	
Target version:	1.8.1	
Difficulty:		Fixed in Releases:
Triaged:		Found in Releases:
Bugzilla link:		Red Hat JIRA:
Pull request:	https://github.com/theforeman/smart-proxy/pull/283	
Description		
<p>Proxy::PuppetCa.list (https://github.com/theforeman/smart-proxy/blob/develop/modules/puppetca/puppetca_main.rb#L69) takes an extremely long period of time to complete when the CA inventory list is relatively large and there have been a relatively large number of revoked certificates.</p> <p>The source of this issue is in Proxy::PuppetCa#ca_inventory, which performs a very slow $O(n^2)$ operation to build up a hash of certificate data and whether each certificate has been revoked. In particular, the Proxy::PuppetCa#ca_inventory iterates through every certificate in the inventory and then looks up that certificate's serial in the array returned by Proxy::PuppetCa#revoked_serials. When both the inventory and the list of revoked clients is large, this operation is extremely slow.</p> <p>The downstream effect of this issue is that trying to interact with the Puppet CA via Foreman simply times out (the read_timeout on the RestClient request is only 60 seconds, the Proxy::PuppetCa.list operation in our environment takes approximately 80s).</p> <p>Perhaps a way to make this faster this would be to just return a valueless Hash from Proxy::PuppetCa#revoked_serials so that the serial lookup is $\sim O(1)$.</p> <p>Just to give you some numbers to work with, we have approximately 10900 certificates in our inventory and about 8900 of them are revoked.</p>		

Associated revisions

Revision 0a83088c - 05/05/2015 08:56 AM - Jon McKenzie

Fixes #10324 - Improves certificate serial lookup in Puppet CA module

Use a set instead of an array to improve lookup performance when the number of revoked certificates is large.

History

#1 - 04/30/2015 03:34 AM - Dominic Cleal

- Category set to Puppet

#2 - 05/04/2015 08:52 PM - The Foreman Bot

- Status changed from New to Ready For Testing

- Pull request <https://github.com/theforeman/smart-proxy/pull/283> added

- Pull request deleted ()

#3 - 05/05/2015 09:01 AM - Jon McKenzie

- Status changed from Ready For Testing to Closed

- % Done changed from 0 to 100

Applied in changeset [0a83088cf447fc4f67d1c68fd375adea7fb0a709](#).

#4 - 05/05/2015 09:06 AM - Dominic Cleal

- Assignee set to Jon McKenzie
- translation missing: en.field_release set to 50