If seeding fails, Passenger refuses to start

When running the installer, I got the following error:

```
/Stage[main]/Foreman_proxy::Register/Foreman_smartproxy[centos7-foreman-nightly.wisse.example.com]: Could not evaluate: Proxy centos7-foreman-nightly.wisse.example.com cannot be retrieved: unknown error (response 500)
```

After looking for the error in `/var/log/foreman/production.log`, I couldn't find anything. A closer look showed me the following in `/var/log/httpd/error_log`:

```
[ 2020-02-05 10:39:03.8030 21530/7f0770143700 Pool2/Implementation.cpp:287]: Could not spawn process for application /usr/share/foreman: An error occurred while starting up the preloader.
  Error ID: 91ebc548
  Error details saved to: /tmp/passenger-error-vJ3j47.html
  Message from application: Unable to update template Kickstart default PXEGrub: This template is locked. Please clone it to a new template to customize. (RuntimeError)
    /usr/share/foreman/lib/seed_helper.rb:129:in `import_raw_template'
    /usr/share/foreman/lib/seed_helper.rb:138:in `block in import_templates'
    /usr/share/foreman/lib/seed_helper.rb:137:in `each'
    /usr/share/foreman/lib/seed_helper.rb:137:in `import_templates'
    /usr/share/foreman/db/seeds.d/070-provisioning_templates.rb:9:in `block in <top (required)>'
    /opt/theforeman/tfm/root/usr/share/gems/gems/audited-4.9.0/lib/audited/auditor.rb:376:in `without_auditing'
    /usr/share/foreman/db/seeds.d/070-provisioning_templates.rb:2:in `<top (required)>'
    /opt/theforeman/tfm/root/usr/share/gems/gems/activestorage-5.2.1/lib/active_storage/dependencies.rb:281:in `load'
    /opt/theforeman/tfm/root/usr/share/gems/gems/activestorage-5.2.1/lib/active_storage/dependencies.rb:281:in `block in load'
    /opt/theforeman/tfm/root/usr/share/gems/gems/activestorage-5.2.1/lib/active_storage/dependencies.rb:253:in `load_dependency'
    /opt/theforeman/tfm/root/usr/share/gems/gems/activestorage-5.2.1/lib/active_storage/dependencies.rb:281:in `load'
    /usr/share/foreman/app/services/foreman_seeder.rb:39:in `block (2 levels) in execute'
    /usr/share/foreman/app/models/concerns/foreman/thread_session.rb:108:in `as'
    /usr/share/foreman/app/models/concerns/foreman/thread_session.rb:114:in `as_anonymous_admin'
    /usr/share/foreman/app/services/foreman_seeder.rb:38:in `block in execute'
    /usr/share/foreman/app/services/foreman_seeder.rb:32:in `each'
    /usr/share/foreman/app/services/foreman_seeder.rb:32:in `execute'
    /usr/share/foreman/config/initializers/seeds.rb:8:in `block (2 levels) in <top (required)>'
    /opt/theforeman/tfm/root/usr/share/gems/gems/activestorage-5.2.1/lib/active_support/lazy_load_hooks.rb:62:in `with_execution_control'
```
This is a bad user experience because before we rarely if ever got users to look in that file but I'm not sure where we should fix this (Foreman, Installer, Packaging) so I created the issue in Foreman for now.

Related issues:
Related to Foreman - Feature #28519: Allow storing if db:seed is required with...

Associated revisions
Revision 3c6b140f - 02/24/2020 01:11 PM - Tomer Brisker
Fixes #28838, #28931 - Safer seeding on initialization

05/09/2020
Make sure that migrations have run before attempting to run seeds, to ensure we don't get into a weird state of the database if the app is started before the db has been migrated. Also, catch and log errors during seeding to prevent passenger from failing to start if an error occurs.

History

#1 - 02/05/2020 12:21 PM - Eric Helms
Looking at the code, this is the result of a 'raise' with nothing catching it which is fine. However, I could this being more obvious if we add logger statements before the raise to ensure it appears in the production log?

#2 - 02/05/2020 12:40 PM - Ewoud Kohl van Wijngaarden
Another thing you see is that both dynflow workers get in a restart loop because systemd doesn't figure out it'll never work. On Katello it'll be 3 processes meaning you get 300% CPU usage.

I've now worked around this by changing the seeding script to ignore it, but as a normal user I wouldn't know how to solve this.

#3 - 02/05/2020 12:47 PM - Ewoud Kohl van Wijngaarden
- Related to Feature #28519: Allow storing if db:seed is required within the DB. added

#4 - 02/06/2020 01:23 PM - Tomer Brisker
- Target version set to 2.0.0

#5 - 02/06/2020 01:26 PM - Tomer Brisker
- Category set to Rake tasks

Would it make sense to have a generic catch in the initializer to catch any seed errors that aren't properly handled? maybe show a ui notification with the message and telling users they need to manually rerun the seed?

#6 - 02/23/2020 01:52 PM - The Foreman Bot
- Assignee set to Tomer Brisker
- Status changed from New to Ready For Testing
- Pull request https://github.com/theforeman/foreman/pull/7459 added

#7 - 02/24/2020 01:11 PM - The Foreman Bot
- Fixed in Releases 2.1.0 added

#8 - 02/24/2020 02:01 PM - Tomer Brisker
- Status changed from Ready For Testing to Closed

Applied in changeset 3c6b140f6ff0e2104280b6ceec8aa860b5da164.

#9 - 02/26/2020 08:44 AM - Tomer Brisker
- Fixed in Releases 2.0.0 added
- Fixed in Releases deleted (2.1.0)

#10 - 03/05/2020 12:14 PM - Tomer Brisker
- Category changed from Rake tasks to DB migrations