

Lasso - Bug #86076

Exporter les fonctions sur les méthodes de signature

24 janvier 2024 14:00 - Benjamin Dauvergne

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|------------------------|---------------------|----------------------|-----------------|
| Statut: | Résolu (à déployer) | Début: | 24 janvier 2024 |
| Priorité: | Normal | Echéance: | |
| Assigné à: | Benjamin Dauvergne | % réalisé: | 0% |
| Catégorie: | | Temps estimé: | 0:00 heure |
| Version cible: | | Planning: | Non |
| Patch proposed: | Non | | |

Description

Reported by Vita Batrla on mailing list :

Hello all,

I build Apache's mellon authentication module from the source code on a machine that is installed with latest lasso library built again from the source code. The result is failure. The web server is unable to load mod_auth_mellon.so binary due to missing symbol:

lasso_get_min_signature_method

The symbol is defined in lasso source code, but not exported. It's missing in liblasso.so binary.

Looking at history, the symbol lasso_get_min_signature_method was added by commit:

<https://dev.entrouvert.org/projects/lasso/repository/33/revisions/f9a3aca0cb31a412faae25dd9fdbbf3fb61cb62f>

However, the symbol was not made for export.

Then there are inline functions in the same header file:

```
lasso_allowed_signature_method()
lasso_ok_signature_method()
```

, both either directly or indirectly depend on lasso_set_min_signature_method().

The problem is that lasso_allowed_signature_method() is an inline function and directly calls lasso_get_min_signature_method(). Any consumer calling it will then require definition of lasso_get_min_signature_method() function, but since the symbol is local, it won't be resolved from liblasso.so library.

See:

<https://dev.entrouvert.org/projects/lasso/repository/33/revisions/main/entry/lasso/xml/xml.h>

The following patch resolves the problem (workaround):

```
diff --git a/lasso-2.8.2.orig/lasso/xml/xml.h b/lasso-2.8.2/lasso/xml/xml.h
-lasso-2.8.2.orig/lasso/xml/xml.h 2023-09-04 13:17:29.549728470 0200
++lasso-2.8.2/lasso/xml/xml.h 2023-09-04 13:18:46.282409575 +0200
@ -122,7 +122,7 @ LassoSignatureMethod lasso_get_default_s

void lasso_set_default_signature_method(LassoSignatureMethod meth);

-LassoSignatureMethod lasso_get_min_signature_method();
+LASSO_EXPORT LassoSignatureMethod lasso_get_min_signature_method();

void lasso_set_min_signature_method(LassoSignatureMethod meth);
```

With the above patch, the mod_auth_mellon.so loads fine, no unresolved symbol from liblasso.so. If I'm right there are three alternative approaches to

fix the problem:

- remove the inline keyword from lasso/xml/xml.h completely, move all function definitions to .c file
- define lasso_get_min_signature_method() in header file and make it inline
- make lasso_get_min_signature_method() exported symbol

each way from above has little bit different low level performance impact (number of call instructions in assembly language), but I'm unsure if the performance is the key question here.

Thanks,

Vita

Révisions associées

Révision 253e8abe - 24 janvier 2024 14:43 - Benjamin Dauvergne

xml: export lasso_get_min_signature method function (#86076)

Historique

#1 - 24 janvier 2024 14:01 - Benjamin Dauvergne

- Assigné à mis à Benjamin Dauvergne

#2 - 24 janvier 2024 14:02 - Robot Gitea

- Statut changé de Nouveau à Solution proposée

Benjamin Dauvergne (bdauvergne) a ouvert une pull request sur Gitea concernant cette demande :

- URL : <https://git.entrouvert.org/entrouvert/lasso/pulls/7>
- Titre : xml: export signature method functions (#86076)
- Modifications : <https://git.entrouvert.org/entrouvert/lasso/pulls/7/files>

#3 - 24 janvier 2024 14:57 - Robot Gitea

- Statut changé de Solution proposée à Résolu (à déployer)

Benjamin Dauvergne (bdauvergne) a mergé une pull request sur Gitea concernant cette demande :

- URL : <https://git.entrouvert.org/entrouvert/lasso/pulls/7>
- Titre : xml: export signature method functions (#86076)
- Modifications : <https://git.entrouvert.org/entrouvert/lasso/pulls/7/files>