Improvements in meta-spdxscanner through FOSSology

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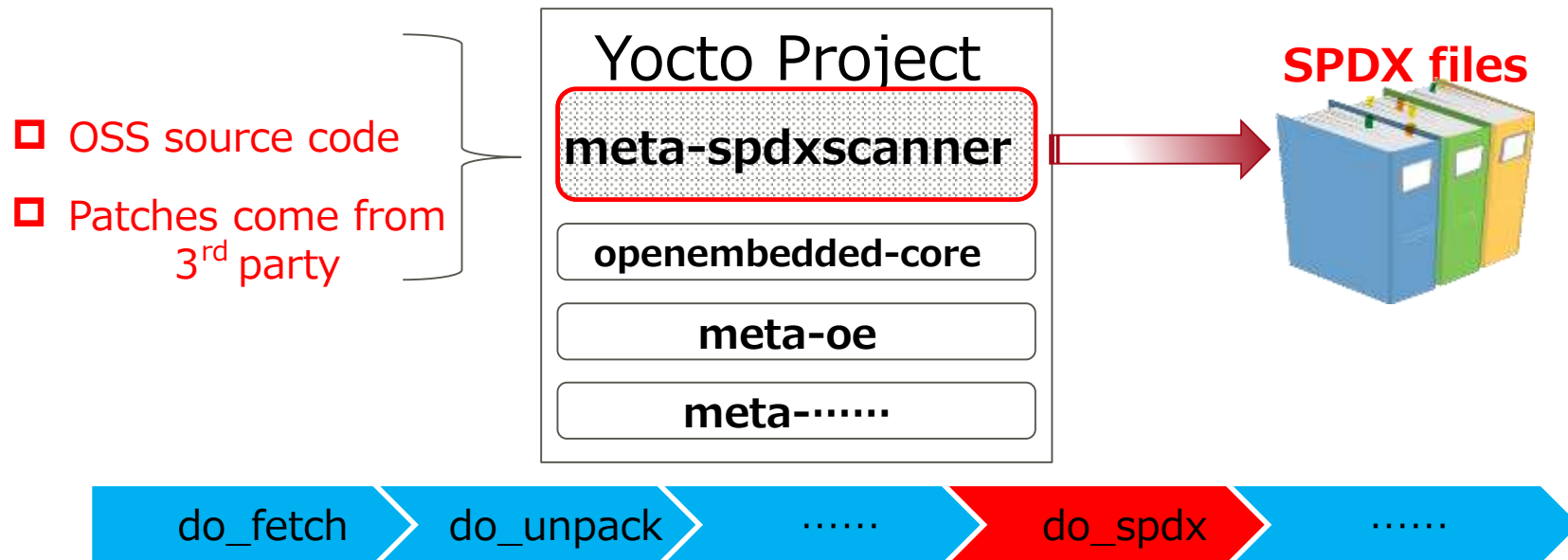
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whoami

- ✓ I have contributed to the following communities
  - Linux Kernel
  - U-Boot   Mainly platform community
  - Yocto Project

- ✓ Developer of In-house Embedded Linux Distribution for Fujitsu Limited

- ✓ Our Distribution is built with Yocto Project

- ✓ My team-member is maintainer of meta-spdxscanner (Ms. Lei Maohui)

- ✓ Our Distribution is used for 80+ products.
  - IVI
  - Server System Controller
  - Storage System
  - Network equipment
  etc

Simple Introduction of meta-spdxscanner

✓ Yocto Layer of source code License scanner

□ OSS source code

□ Patches come from 3rd party

Yocto Project

meta-spdxscanner

openembedded-core

meta-oe

meta-……

SPDX files

do_fetch ＞ do_unpack ＞ …… ＞ do_spdx ＞ ……

✓ Default output: SPDX format (is best format)

(considering OpenChain Project)

✓ Default scanner: DoSOCSv2
Fossology 3.x doesn't support CUI (at this point), so it could not be used with Yocto Project

Comparing Outputs by DoSOCSv2, FOSSology FUJITSU

Ideal SPDX file

SPDXVersion: SPDX-2.1
DataLicense: CC0-1.0

FileName: bzip2-1.0.6/LICENSE
SPDXID: SPDXRef-item1699540
FileChecksum: SHA1:
1c0c6888759a63c32bca7eb63353af
2cd9bd5d9e
FileChecksum: MD5:
ddeb76cd34e791893c0f539fdab879
bb
LicenseConcluded: LicenseRef-bzip2-
1.0.6
LicenseInfoInFile: LicenseRef-bzip2-
1.0.6
FileCopyrightText: <text> copyright
(C) 1996-2010 Julian R Seward. All
rights reserved.
copyright notice, this list of
conditions and the following
disclaimer. </text>
： （snip)
LicenseID: LicenseRef-bzip2-1.0.6
LicenseName: bzip2 and libbzip2
License v1.0.6
ExtractedText: <text> This program,
"bzip2", the associated library
"libbzip2", and all documentation,
are copyright (C) 1996-2010 Julian
R Seward. All rights reserved.
： （snip)

DoSOCSv2 （0.16.1)

SPDXVersion: SPDX-2.0
DataLicense: CC0-1.0

FileName: ./LICENSE
SPDXID: SPDXRef-file-LICENSE-49
7310aaf0
FileType: OTHER
FileChecksum: SHA256:
4919cfb14a73cd64fcef67b107613970cf165
9a09aa675dba31314f373bc7204
LicenseConcluded: NOASSERTION
LicenseInfoInFile: LicenseRef-BSD-style
LicenseComments: <text></text>
FileCopyrightText: NOASSERTION
FileComment: <text></text>
FileNotice: <text></text>
： （snip)

SPDX 2.0 2.1: Mandatory item
・LicenseConcluded: no output
・LicenseInfoInFile: mistake
・FileCopyrightText: no output

**insufficient SPDX output
By DoSOCSv2**

FOSSology （3.3.0)

SPDXVersion: SPDX-2.1
DataLicense: CC0-1.0

FileName: bzip2-1.0.6/LICENSE
SPDXID: SPDXRef-item1699540
FileChecksum: SHA1:
1c0c6888759a63c32bca7eb63353af2cd9b
d5d9e
FileChecksum: MD5:
ddeb76cd34e791893c0f539fdab879bb
LicenseConcluded: LicenseRef-bzip2-1.0.6
LicenseInfoInFile: LicenseRef-bzip2-1.0.6
FileCopyrightText: <text> copyright (C)
1996-2010 Julian R Seward. All rights
reserved.
copyright notice, this list of conditions and
the following disclaimer. </text>
： （snip)
LicenseID: LicenseRef-bzip2-1.0.6
LicenseName: bzip2 and libbzip2 License
v1.0.6
ExtractedText: <text> This program,
"bzip2", the associated library "libbzip2",
and all documentation, are copyright (C)
1996-2010 Julian R Seward. All rights
reserved.
binary forms, with or without modification,
are permitted provided that the following
： （snip)

**Ideal SPDX output
By FOSSology**

FOSSology available for YP soon !

fossdriver is intended to enable control of a FOSSology server from Python programs.

※ Quoted from fossdriver's readme

- ✓ We are making available to use fossdriver in meta-spdxscanner
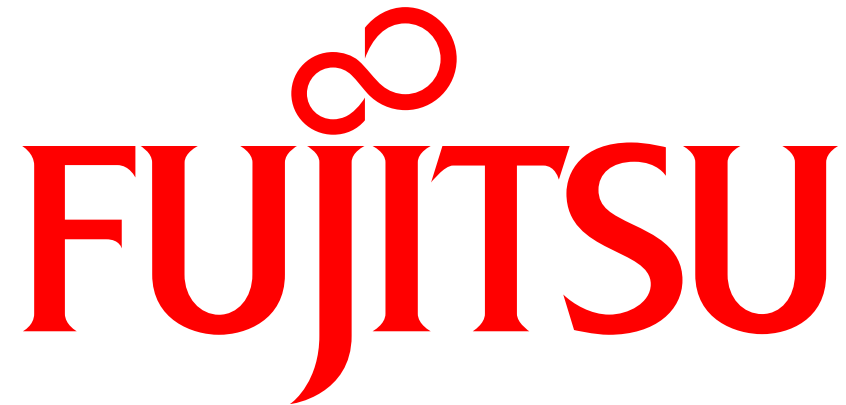- ✓ So you can soon use FOSSology from Yocto Project
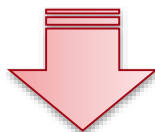
You are available to use high precision SPDX file !

- ✓ **Let's use improved meta-spdxscanner and SPDX file**
- ✓ **Please give me feedback on meta-spdxscanner and SPDX topics.**

Future Work

✓For maintenaince reason, we want send REST API calls FOSSology server to generate SPDX files

Let's improve SPDX file precision together

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