TOMOYO

What is TOMOYO?

TOMOYO is a name-based MAC extension (LSM module) for the Linux kernel.

LiveCD-based tutorials are available at

http://tomoyo.sourceforge.jp/1.8/ubuntu12.04-live.html http://tomoyo.sourceforge.jp/1.8/centos6-live.html

Though these tutorials use non-LSM version of TOMOYO, they are useful for you to know what TOMOYO is.

How to enable TOMOYO?

Build the kernel with CONFIG SECURITY TOMOYO=y and pass security=tomoyo on kernel's command line.

Please see http://tomoyo.osdn.jp/2.5/ for details.

Where is documentation?

User <-> Kernel interface documentation is available at https://tomoyo.osdn.jp/2.5/policy-specification/index.html .

Materials we prepared for seminars and symposiums are available at https://osdn.jp/projects/tomoyo/docs/? category id=532&language id=1. Below lists are chosen from three aspects.

What is TOMOYO?

TOMOYO Linux Overview

https://osdn.jp/projects/tomoyo/docs/lca2009-takeda.pdf

TOMOYO Linux: pragmatic and manageable security for Linux

https://osdn.jp/projects/tomoyo/docs/freedomhectaipei-tomoyo.pdf

TOMOYO Linux: A Practical Method to Understand and Protect Your Own Linux Box

https://osdn.jp/projects/tomoyo/docs/PacSec2007-en-no-demo.pdf

What can TOMOYO do?

Deep inside TOMOYO Linux

https://osdn.jp/projects/tomoyo/docs/lca2009-kumaneko.pdf

The role of "pathname based access control" in security.

https://osdn.jp/projects/tomoyo/docs/lfj2008-bof.pdf

History of TOMOYO?

Realities of Mainlining

https://osdn.jp/projects/tomoyo/docs/lfj2008.pdf

What is future plan?

We believe that inode based security and name based security are complementary and both should be used together. But unfortunately, so far, we cannot enable multiple LSM modules at the same time. We feel sorry that you have to give up SELinux/SMACK/AppArmor etc. when you want to use TOMOYO.

We hope that LSM becomes stackable in future. Meanwhile, you can use non-LSM version of TOMOYO, available at http://tomoyo.osdn.jp/1.8/. LSM version of TOMOYO is a subset of non-LSM version of TOMOYO. We are planning to port non-LSM version's functionalities to LSM versions.