After UMN Debacle, Patatt Aims To Provide Cryptographic Attestation For Patches

Linux kernel developer Konstantin Ryabitsev has been working on Patatt as a cryptographic-based patch attestation system. While started a while ago, there is renewed interest in such patch attestation following the University of Minnesota "hypocrite commit" debacle.

Patatt allows for optionally adding end-to-end cryptographic attestation to patches and its design is based on the DKIM email signature standard. Patatt can be used for signing code patches in workflows involving email patch submission, such as is the case for the Linux kernel development.
I started working for 9elements in October 2020 and my first assignment was to get Intel CBnT working on the OCP Deltalake using coreboot firmware. Intel Converged Bootguard and TXT is a hardware assisted method to set up a root of trust. In this blog post I will discuss some of the changes needed in coreboot to get this working. Setting CBnT up properly was definitely a challenge, but the work did not stop there. So while Intel CBnT provides a method to verify or measure the initial start-up code, it is not enough. You want to trust the code you run from start, the reset vector, to end, typically a bootloader. CBnT only takes care of the start. You have to make sure that each software component trusts the assets it uses and the next program it loads. This concept is called a chain of trust. Now in 2021 I have an assignment that involves supporting the older Intel Bootguard technology. Since Bootguard is very similar to CBnT, I'll also touch on that.

Bootlin ?Buildroot system development? course updated to Buildroot 2021.02

Bootlin has been offering for several years a Buildroot system development course, which allows engineers interested in learning and understanding the Buildroot embedded Linux build system to get up to speed very quickly.

In preparation for our public Buildroot system development course next week, we updated our training materials, both slides and labs to Buildroot 2021.02, which is the latest stable Buildroot release as of today, and is also a Long Term Support release.

Linux 5.14 To Feature Enhanced Support For MikroTik 10G/25G NIC - Phoronix

The Linux 5.14 kernel this summer will feature improved support for a new MikroTik 10G/25G NIC.

This network card works with the Linux kernel's existing Atheros at11c network driver in the Linux kernel but for the 5.14 cycle is being extended to better support the capabilities of this MikroTik NIC. Details on this NIC though are light with it seemingly not launched yet.

Two pull requests so far have made it into "net-next" ahead of the Linux 5.14 cycle for improving this MikroTik 10G/25G NIC. First up is the initial support so the MikroTik NIC with the at11c driver can enjoy a higher link speed, RX checksum offload, improved TX performance, and other improvements.