

Interana upgrades customers to Ubuntu 18.04 LTS with a secure, controlled rollout across public clouds

About Interana

- Analytics software provider founded in 2013 by the team that built Facebook's analytics platform
- Interana's analytics solution enables users to run advanced big data queries on raw customer data, and delivers answers in seconds
- Customers include Microsoft, Comcast, and Salesforce

Highlights

- Interana relies on Ubuntu as the foundation for its flagship analytics platform
- ESM eliminates security concerns while Interana migrates its customers from Ubuntu 14.04 LTS to 18.04 LTS
- ESM is enabling a staggered Ubuntu 18.04 LTS rollout that coincides with upgrades to the new Interana V4 release



By deploying its leading-edge, Ubuntu-based platform directly in customers' public cloud environments, Interana empowers users with some of the fastest, most sophisticated product analytics capabilities on the market.

However, this level of integration makes major software upgrades a challenge, since Interana must schedule large-scale data migrations with each client. As Ubuntu 14.04 LTS reached end-of-life, Interana chose Extended Security Maintenance (ESM) so that it could maintain the security of its solutions without having to rush operating system updates before customers were ready. Instead, ESM is enabling the company to perform a controlled rollout of Ubuntu 18.04 LTS at the same time as it upgrades customers to the new Interana V4 platform release.

- Interana supports the two largest business intelligence vendors in the world, Microsoft and Salesforce, as well as other industry leaders including Comcast, Sonos, Uber, Bleacher Report and more.
- The Interana platform helped the Bleacher Report reduce time to insights by 95% from weeks to just minutes.

Challenge

Ever since Interana was founded in 2013, it has used Ubuntu Server as the foundation for its full stack analytics solution. The Interana platform is deployed wherever customers store their data – typically public clouds including AWS, Microsoft Azure and Google Cloud Platform – so that it can ingest data directly and deliver answers in seconds. And each Interana cluster runs on Ubuntu.

Zivago Lee, Director of DevOps Engineering at Interana, explains: "We use Ubuntu primarily because of its ease of use. It's intuitive, and it's very familiar to most people, which helps with attracting talent and onboarding. I've personally used Ubuntu since way back when it started, so I fit right in when I joined the team last year."

"Ubuntu also makes it straightforward to build application packages for our stack, and it's great from a software availability perspective: we can access the latest version of Ansible just by adding in a repository; we've been able to generate our own custom Python environment; and having PPAs available is pretty crucial."

Interana was initially built using Ubuntu 14.04 LTS, and the company is steadily upgrading all of its customers' deployments to Ubuntu 18.04 LTS. LivePatch is one feature that has been of particular benefit to Interana as it helps them apply critical security patches, without a system restart, and is able to reduce downtime and keep their infrastructure secure. But when Ubuntu 14.04 was reaching the end of its 5-year Long Term Support (LTS) window, Interana's upgrade schedule came under pressure.

Zivago continues: "As a managed service provider handling large amounts of customer data – some of it sensitive – it's our duty to ensure that we keep security as tight as possible. Running an unsupported operating system was out of the question, but upgrading all our customers at once would have put considerable strain on our time and resources. Since we're going up two LTS versions, we're not just doing a disk upgrade, but a full new build of the cluster – so we need to schedule with each client to migrate their data."

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Zivago Lee, Director of DevOps Engineering, Interana

Solution

Rushing to upgrade from Ubuntu 14.04 before it reached end-oflife would have been a major inconvenience for both Interana and its customers. The company started searching for another option, and it discovered ESM.

Delivered by Canonical as part of the Ubuntu Advantage for Infrastructure commercial support package, ESM extends official support for Ubuntu LTS releases by an additional three years beyond the standard, five-year period. With ESM, Interana continues to receive fixes for high and critical common vulnerabilities and exposures (CVEs) on its Ubuntu 14.04 deployments, ensuring customers' installations remain secure.

"ESM literally saved our lives," comments Zivago. "It's allowing us to upgrade from 14.04 LTS at our own pace. It's taken the pressure off, and it also means we can tackle the Ubuntu upgrades at the same time as we roll out the new version of our platform – Interana V4."

Interana V4 further improves the ease-of-use of the analytics platform, adds artificial intelligence capabilities, and empowers customers with the new Behavioral Analytics Query Language (BAQL). A game-changer for many clients, BAQL makes it possible for data scientists and other technical users to write SQL-like queries directly onto their data.

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Zivago Lee, Director of DevOps Engineering, Interana

Results

With ESM eliminating security concerns, Interana has been able to stick to its original strategy of steadily upgrading each of its customers – and soon, all Interana installations will be running on Ubuntu 18.04.

"Everything works great with Ubuntu," concludes Zivago. "Support for public cloud deployments is excellent, and we encounter very few issues in general. It's something we will definitely continue to use moving forward – especially now that we know about ESM. Hopefully we won't need the extended support too often in the future, but it's good to know that it's there in the back pocket."

While operating system security was Interana's main driver in choosing ESM, the benefits of the service do not stop there. As part of ESM, Canonical also tracks CVEs and delivers security fixes for a wide range of other applications. For example, Interana will be able to take advantage of extended patching for both Nginx and Prometheus – two key components of its stack – with fixes provided in 24 hours or less.

If you are an Ubuntu 18.04 LTS user, consider your options: https://ubuntu.com/blog/18-04-end-of-standard-support

