Open Source: The future of continued innovation

A growing appetite from organisations for innovation and the requirement for an alternative to traditional proprietary software are two serious driving factors in the growth of open source technology globally.

So says Quintin Brussow, Red Hat Development Lead at hybrid IT systems integrator and managed services provider, Datacentrix, who explains that while many businesses have moved onto an open hybrid cloud model within the past few years, as requirements escalated during the pandemic, we're still seeing huge open source adoption outside these specific challenges.

The growing importance of open source

Ninety-five percent of respondents in Red Hat's 'The State of Enterprise Open Source' report said that enterprise open source is important to their organisation's overall enterprise infrastructure because of the innovation and agility the model makes possible.

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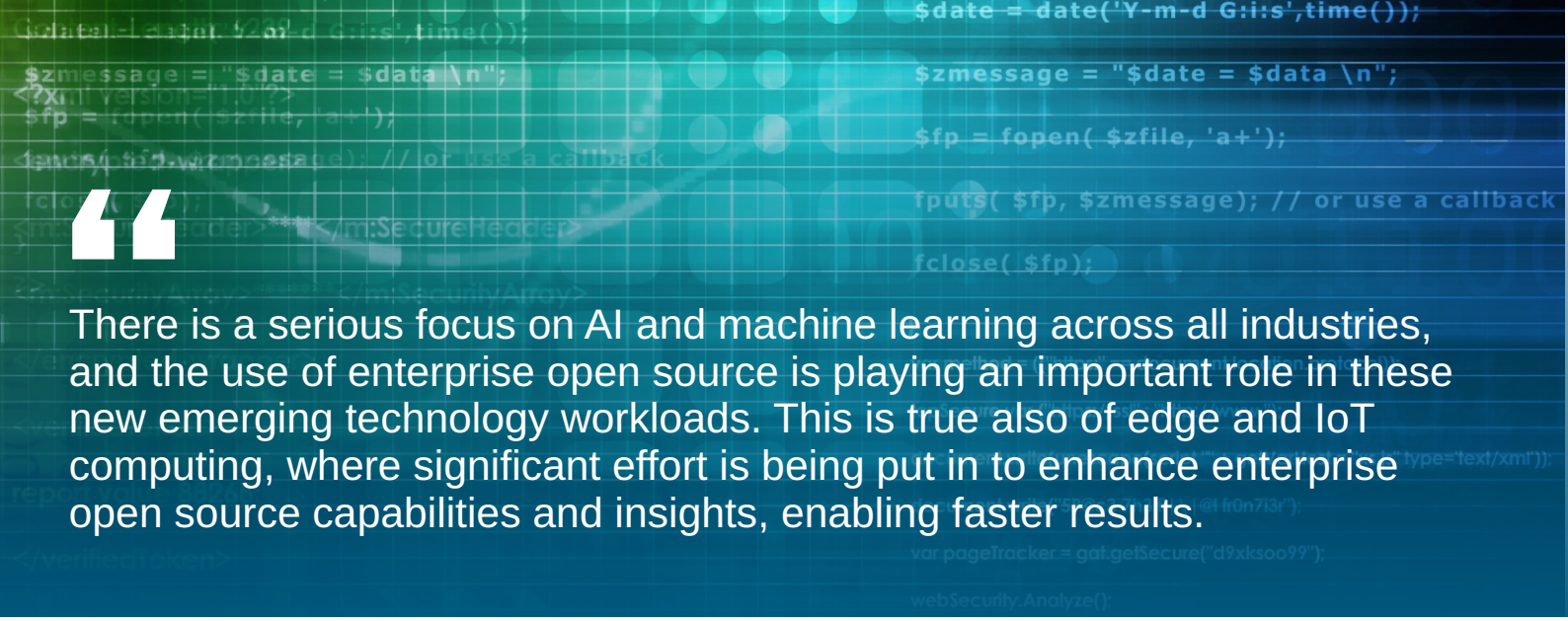
Linux can and does run everywhere, and many cloud computing and always-on services have been built using an open source model. It's safe to say that the majority of larger South African enterprises – like telcos, financial services organisations and insurance companies for example – are already running enterprise Linux either on premise or in the cloud.”

Furthermore, adds Brussow, there has been increasing adoption of a DevOps culture within South African business, and more local enterprises are investigating the use of containers and Kubernetes to deliver apps to market faster.



There is a serious focus on AI and machine learning across all industries, and the use of enterprise open source is playing an important role in these new emerging technology workloads. This is true also of edge and IoT computing, where significant effort is being put in to enhance enterprise open source capabilities and insights, enabling faster results.

This is in line with Red Hat's report, which states that 'Containers, Kubernetes for the associated container orchestration, and the vast number of complementary cloud-native open source projects may be the best examples of new categories of software. Seventy percent of IT leaders we surveyed work for organisations that use Kubernetes and almost a third plan to significantly increase their use of containers over the next 12 months.'

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"Here in particular, we're seeing containerisation being brought to the edge, something that would have seemed unimaginable even two years ago.

"Finally, open source solutions are being used for new and innovative ways to use data for operational reporting and advanced analytics, for example a data lake architecture."

Benefits of open source

According to Brussow, there are four main benefits to using open source today:

1. **Flexibility:** Developers are able to see how the code works and can make changes for their needs as required.
2. **Agility:** Every business requires agility and open source delivers just that, offering multiple ways to attack and solve a problem.
3. **Security:** While open source's community-based nature means that many people are contributing to the code, it also means that more people are inspecting it too, identifying vulnerabilities faster and pushing out more regular updates.
4. **Community:** Open source communities and contributors make a good case for the efficiencies of team collaboration. The code is available, and developers make suggestions. This type of approach cannot be matched by proprietary software companies, where there is a process for customisation requests that could take time to execute and will definitely have a cost attached.

"There are not many instances where open source can't be used. What is important to specify though - particularly it comes to mission-critical apps – is that businesses wanting to ensure that the right certifications, support and security measures are in place should make enterprise open source software best practice across the board. And this is where enterprise open source companies, like Red Hat and Cloudera, play an important role.

"The future for open-source software is undeniably bright – we could even say that it forms the backbone of today's technology infrastructure – and it will continue to change the face of technology," he concludes.

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