CloudKinetics

Securing Cloud- Native Applications: Why CNAPP Is a Game-Changer in Cybersecurity

As more organizations embrace the cloud, securing cloud-native applications has become increasingly complex. Fragmented multi-vendor solutions attempt – and struggle – to shield an attack surface that's expansive, dynamic and vulnerable. The solution to this growing challenge could lie in cloud-native application protection platform or CNAPP.

CNAPP is a comprehensive solution that gives DevSecOps and DevOps teams unified automated security that oversees containers, workloads, compliance and more – the entire application lifecycle. It is being used by organizations to crank up security as well as visibility across hybrid and multi-cloud, and private and public cloud environments. But first, let's see why there's such a strong case for CNAPP and how it fares over traditional solutions.

Why traditional security solutions aren't always optimal

How did security end up being so complicated? Organizations have grown their cloud investments over time and added solutions and products in phases, organically. The accompanying security products layered over these have also been heterogeneous and operated in silos. The result? DevSecOps is fashioned sometimes from as many as 10 different tools each working in isolation!

Add to that the fact that cloud environments often involve microservices, containerization

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> The most significant driver is the need to unify risk visibility across the entire hybrid application and across the entire application life cycle. This simply cannot be achieved using separate and siloed security and legacy application testing offerings.
>
> – 2023 Gartner® Market Guide for Cloud-Native Application Protection Platforms

or serverless architecture. A far cry from traditional IT environments. This is why traditional intrusion detection and firewalls just don't cut it when it comes to the distributed and dynamic cloud environments of today. These modes of security were designed to serve a fixed network perimeter like a data centre. Not the complex distributed cloud environments that are par for the course today.

Your Cloud Security & CNAPP

What is CNAPP? A cloud-native application protection platform offers a simplified security architecture to enable enterprises to reduce complexity and costs of security solutions that operate in silos. CNAPP lets a business benefit from a unified continuous security structure without any added investments by way of more manpower or investment in more tools.

Here are some features of CNAPP that make it the smart choice for enterprises that operate in the cloud.

▶ Is a combined cloud security solution

▶ Is purpose-built for cloud-native environments

▶ Is integrated with the app development life cycle

▶ Does not add additional complexity to the application

▶ Supports scanning and quick response to any misconfigurations
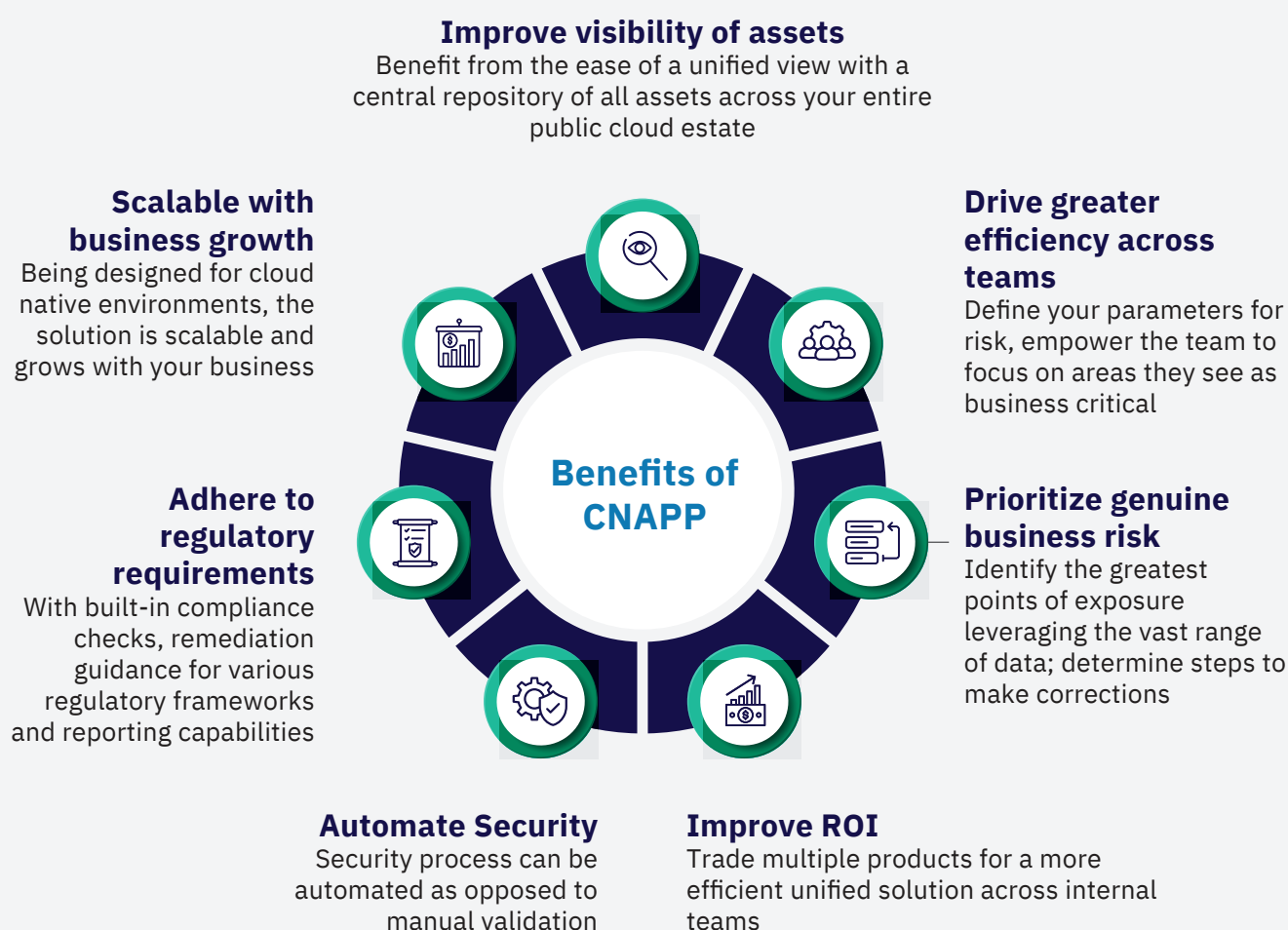
The compelling case for CNAPP

The global CNAPP market is set to grow at 19.9% (CAGR) between 2022 and 2027, to USD 19.3 billion,[1] driven by a growing risk of breaches and reported incidents of cyber threats, an increasing use of cloud solutions, a manpower crunch within the IT security teams in-house, as well as the potential vulnerability posed by an increasingly WFH/remote workforce.

[1]https://www.businesswire.com/news/home/20230119005633/en/Global-Cloud-native-Application-Protection-Platform-CNAPP-Market-Report-2022-Increased-Security-Breaches-and-Sophisticated-Cyberattacks-to-Drive-Growth---ResearchAndMarkets.com

CNAPP was built to protect cloud-based infrastructure and applications. The solution is agile, dynamic and scalable. Large existing cloud users like ISVs and SaaS companies have begun to see the benefits of CNAPP.

The issue of combined risk is something CNAPP is capable of dealing with. While security solutions like cloud infrastructure entitlement management (CIEM), cloud workload protection platform (CWPP) and cloud security posture management (CSPM) do offer data on vulnerability and risk they are unable to come together in a way that – as Gartner[2] puts it – connects the dots. CNAPP identifies the effective risk across the various layers that comprise cloud-native applications, helping prioritize risk and easing the burden on overstretched security and developer teams.

Improve visibility of assets
Benefit from the ease of a unified view with a central repository of all assets across your entire public cloud estate

Scalable with business growth
Being designed for cloud native environments, the solution is scalable and grows with your business

Drive greater efficiency across teams
Define your parameters for risk, empower the team to focus on areas they see as business critical

Benefits of CNAPP

Prioritize genuine business risk
Identify the greatest points of exposure leveraging the vast range of data; determine steps to make corrections

Adhere to regulatory requirements
With built-in compliance checks, remediation guidance for various regulatory frameworks and reporting capabilities

Automate Security
Security process can be automated as opposed to manual validation

Improve ROI
Trade multiple products for a more efficient unified solution across internal teams

How to choose a CNAPP solution

There is a palpable shift underway in the market, to consolidate cloud security solutions and benefit from the ease and visibility that a single CNAPP solution brings.

If you are considering CNAPP, here is a quick guide to choosing the right partner. The exercise will be most effective if those doing the selection are drawn from the various teams that will be involved with or impacted by the solution – namely, developers, development security, app security, cloud security, workload security and middleware security teams.

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> By 2025, 60% of enterprises will have consolidated cloud workload protection platform (CWPP) and cloud security posture management (CSPM) capabilities to a single vendor, up from 25% in 2022.
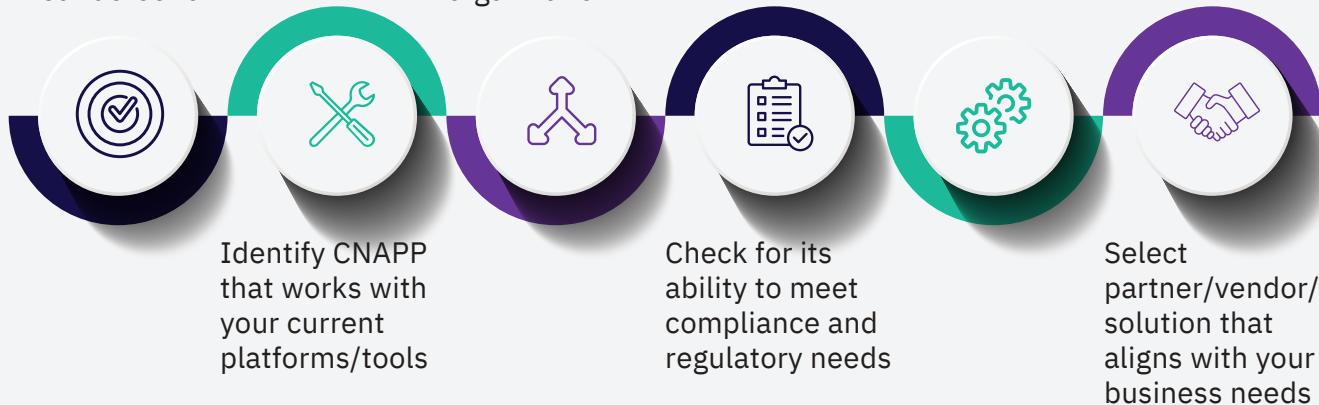>
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How to shortlist your CNAPP

Determine goals from CNAPP e.g. visibility + threat detection

Check for its ability to handle multiple use cases in your organization

Check for its ease of implementation

Identify CNAPP that works with your current platforms/tools

Check for its ability to meet compliance and regulatory needs

Select partner/vendor/solution that aligns with your business needs

Making a CNAPP decision for cloud security!

Cloud Security Posture Management (CSPM)

Data Security Posture Management (DSPM)

Cloud Workload Protection Platform (CWPP)

Key features your CNAPP solution should have

Cloud Detection and Response (CDR)

Cloud Infrastructure Entitlement Management (CIEM)

API Security

Kubernetes Security Posture Management (KSPM)

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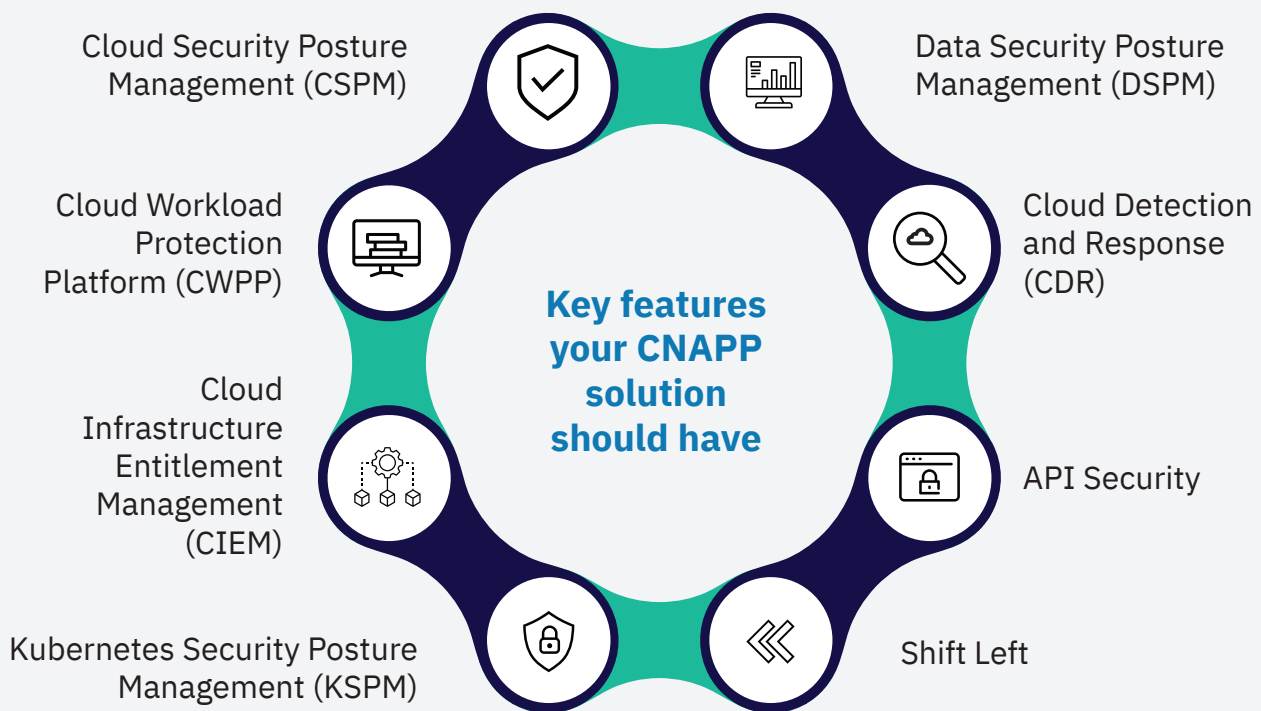
Finding a good partner for your CNAPP solution is critical and Cloud Kinetics has the expertise you need. Cloud Kinetics offers CNAPP in partnership with Plerion, an all-in-one Cloud Security Platform that supports workloads across AWS, Azure and GCP. If securing your entire cloud with an all-in-one cloud security platform is on your mind, we can help!

Cloud Kinetics is an award-winning, certified cloud transformation and managed services partner headquartered in Singapore and operating globally. We use cutting-edge platform-driven services to accelerate and secure our clients' digital and business transformation journeys. Get in touch with our cloud experts for a non-obligatory discussion at contactus@cloud-kinetics.com