

Expanses Internet Operations Management

One of the biggest challenges organizations face is an incomplete and inaccurate understanding of which Internet Assets they own or are attributed to them. Current tools and processes fail to achieve accurate, continuous discovery across the organization's attack surface, leaving significant visibility gaps. These visibility gaps lead to risks and exposures that can hurt an organization at an unrecoverable scale.

By leveraging the Expanses Internet Operations Platform to continuously discover all of their Internet assets, organizations globally reduce risks and critical exposures within their infrastructure.

Why Internet Operations Management

Companies have focused on managing their internal IT assets with reliable success over the past decade or so. Much of this success comes from increasingly proficient tools, processes and technology. There are some deficient areas, such as manually updated Configuration Management Databases (CMDBs), that make additional progress difficult, but most companies are satisfied with governing and securing their internal systems.

However, as companies begin to supplement their digital transformation with Internet-based services, publicly exposed IT assets become much more of a security and governance problem. Internet Assets cannot be managed and secured effectively with existing tools and processes due to a number of reasons:

- Not all Internet Assets are provisioned and managed by central IT
- Cloud-based assets can be ephemeral and self-administered
- Cloud service providers do not standardize or consolidate access and usage data
- Hybrid digital infrastructure and data shared among strategic partners
- Mergers and acquisitions can force IT consolidation haphazardly
- New forms of networks, such as IoT and 5G private networks, increase overall network complexity

As a result, companies often miss a significant percentage of unknown unknowns. Even the world's most sophisticated IT and security departments can have Internet Assets go undetected for years due to factors mentioned above.

Therefore, companies need a new way to discover, attribute and manage their Internet assets at a global scale. This is Internet Operations Management centered around an automatically updated system of record.

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Internet Operations Management Requires a System of Record
Digital transformation has made a mess of enterprise IT and resulted in large, ever-changing Internet attack surfaces. Whether it's a device, service, system, domain, IP range, or cloud instance, keeping track of everything you own — your Internet Assets — is critical.

Without an accurate System of Record of every Internet Asset, you are open to risks that can disrupt your business operations or expose sensitive data. Modern businesses move faster than IT teams can keep up, as we've witnessed (painfully) with manually updated CMDBs. Internet Assets exacerbate this problem, making it imperative that the System of Record for Internet Assets is updated automatically and in near real time to support operational use cases.

Internet Operations Management Solutions

Internet Operations Management underpins three primary solutions: attack surface reduction, cloud governance, and IT hygiene. Each solution focuses on a significant set of requirements employed in contemporary IT strategies, and all center on an automated system of record for Internet Assets.

Attack Surface Reduction

Reducing one's attack surface has long been an objective of any responsible security operations center. However, you can only secure your known assets at any given time. Therefore, the more comprehensive, accurate, and timely a system of record can be, the more valuable and actionable the alerts become, contributing to prioritization and mean time to remediation. Expanse not only discovers all of your Internet Assets — it also provides enough intelligence to determine which exposures are critical or just routine.

Cloud Governance

Cloud adoption has given great flexibility and empowerment to end users and business units, but has made centrally mandated governance and security extremely difficult. Two reasons are self-procurement and ephemeral assets. Essentially, anyone with a corporate credit card can become an IT administrator without central IT ever knowing. Companies have also begun to employ multi-cloud strategies, exacerbating issues arising from poor governance, as usage data or reporting are not standardized across cloud service providers. Expanse takes an outside-in approach to monitoring by scanning IP addresses across on-prem and cloud, and then enriching and mapping that dataset with resource types, known organizations, and other datasets referenced and clustered together.

IT Hygiene

Every company needs to know its IT assets, either for internal cost management purposes or for external audits conducted by strategic partners or regulatory bodies. Existing asset management solutions do a good job of discovering assets behind the firewall, but public-facing assets are a different matter. Without outside-in scanning, it's easy to miss forgotten, orphaned, or third-party managed IT assets...and thus, it's easy to fail an audit! Expanse augments existing asset inventories by becoming the single source of truth for Internet Assets, ensuring that all Internet Assets are accounted for, including certificates, domains, IP addresses, resource types, or cloud resources.



Ready to Learn More?

To learn more about Expanse and Internet Operations Management, go to [Expanse.co](https://expanse.co).

