

Proofpoint Dynamic Reputation

High-Performance Connection Management and Email Reputation

The Proofpoint Enterprise Protection™ Suite includes the industry's most powerful connection management features, powered by Proofpoint Dynamic Reputation.™ Proofpoint Dynamic Reputation is the only email reputation service that uses a combination of local data and global reputation—analyzed by powerful machine learning algorithms—to block connections from malicious IP addresses. Proofpoint Dynamic Reputation provides enterprises with an accurate, first line of defense against spam, directory harvest, denial-of-service and other email-borne attacks, while delivering substantial bandwidth savings. Proofpoint Dynamic Reputation provides additional spam protection against botnets, and reduces the sheer volume of connections hitting any type of Proofpoint deployment.

Proofpoint Enterprise Protection Suite Components

The following comprehensive protection components are offered through the Proofpoint Enterprise Protection Suite:

- **Proofpoint Dynamic Reputation**
Connection management for powerful spam protection
- **Proofpoint Email Firewall™**
Detects sensitive information in message content and subject line
- **Proofpoint Spam Detection™**
Detects and eliminates spam and phishing attacks in any language
- **Proofpoint Zero-Hour Anti-Virus™**
Protects enterprises against new viruses and malicious code moments after their release
- **Proofpoint Virus Protection™**
A wide variety of enterprise-class virus solutions

The power of Proofpoint Dynamic Reputation

Proofpoint Dynamic Reputation can reduce inbound connection volumes by 80% or more. Proofpoint maintains the industry's most accurate and up-to-date database of reputation for IP addresses sending email across the Internet. It's the only email reputation service that uses a combination of local, predictive behavioral data and globally observed reputation analyzed by powerful machine learning algorithms from Proofpoint MLX™—to block incoming connections from malicious IP addresses.

The local reputation extends reputation-based protection against malicious attacks that are targeting that organization's systems, even if that organization is the only one being attacked, and there is no global reputation data available yet for that IP. Once those IPs are identified, they are blocked or throttled locally, and are also submitted back to the global database. This feedback loop ensures that all Proofpoint customers benefit from each other with the use of local knowledge. Each minute, hundreds of data points for all IP addresses are parsed with advanced machine learning algorithms to generate a score that represents the sender's reputation. Proofpoint Dynamic Reputation then uses these scores, combined with local behavioral data, to make intelligent decisions about accepting, throttling or rejecting incoming email connections.

Proofpoint Dynamic Reputation

Feature	Benefit
Multi-layered protection with global reputation	Global reputation ensures defense against IP addresses known throughout the network, while local reputation ensures defense against IP addresses that are only targeting that organization.
Less than a one in one million false-positive rate	Blocks up to 80% of inbound SMTP connections with less than a one in one million false-positive rate.
One-minute refresh rate	A one-minute refresh rate ensures the fastest response to new botnets or spam IPs and rapid "self-healing" behavior once IP addresses return to non-malicious behavior.
Maximum accuracy	Hundreds of reputation-related attributes are analyzed for each connection, providing maximum accuracy.
Customization of policies	Rate control and traffic shaping policies can be easily customized based on an organization's unique needs.

Proofpoint Dynamic Reputation

Proofpoint Dynamic Reputation features

Unlike reactive, static reputation services that are forced to make critical trade-offs between connection shed rates, detection accuracy and response time, Proofpoint Dynamic Reputation delivers the highest performance in all three areas at once.

Rapid response times

Proofpoint collects information on millions of IP addresses, using data collected from Proofpoint honeypots and customer sites. Proofpoint MLX continually parses hundreds of data points for all IP addresses in real time to generate extremely timely, accurate network reputation scores. Scores are updated every minute, and Proofpoint Dynamic Reputation reacts to new spam sources, such as botnets, up to an order of magnitude faster than competing email reputation solutions. Unlike publicly available RBLs/DNSBLs, Proofpoint ensures the quality and integrity of the data available in its service.

Highest connection management and anti-spam accuracy

By processing hundreds of reputation-related attributes at the global level, Proofpoint Dynamic Reputation always has access to the most comprehensive, accurate assessment of IP address reputation. False positive rates are less than one in one million. Proofpoint Dynamic Reputation delivers maximum load shedding and advanced connection management in front of the Proofpoint MLX spam detection engine, which delivers 99% or higher accuracy against spam. Proofpoint MLX automatically evolves with new spamming techniques to accurately stop never-before seen attacks, making Proofpoint Dynamic Reputation highly effective over time.

Most accurate IP reputation

Proofpoint Dynamic Reputation analyzes a wide array of reputation related attributes, including:

- SPF (standard, best guess)
- Percentage of spam, virus, phishing and invalid recipients associated with IP
- URL and domain block lists
- DHCP addresses (zombies, botnets)
- Image history (fuzzy matching)
- Recipient list sizes

Proofpoint Dynamic Reputation is a natural email security solution component, shedding large amounts of mail traffic at the connection level. Combining local, predictive behavioral data and global reputation deliver maximum protection against malicious IP addresses. All Proofpoint Enterprise Protection deployments—whether SaaS or on-premises—benefit from this unique combination of local and global reputation analysis offered in Proofpoint Dynamic Reputation.

About Proofpoint

Proofpoint focuses exclusively on the art and science of cloud-based email security, eDiscovery and compliance solutions. Organizations around the world depend on Proofpoint's expertise, patented technologies and on-demand delivery system to protect against spam and viruses, safeguard privacy, encrypt sensitive information, and archive messages for easier management and discovery. Proofpoint's enterprise email solutions mitigate the challenges and amplify the benefits of enterprise messaging.

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