



What Is Moving Target Defense?

A proactive security theory, brought from the military to industrial networks.

Suppose you want to hide a treasure. Would you rather:

1. Build a castle around it, or
2. Put it in a submarine and move it around under the sea?

In the physical world, we stopped building castles a long time ago. They can't move, and attackers can stare at them for months to figure out how to attack. Submarines that move around underwater do a much better job of protecting important treasures.

So why, in 2020, do we still build castles around cyber assets? Why don't we build a moving cyber-submarine?

Because it was expensive. The military started building cyber-submarines a couple years ago. They called them "Moving Target Defense networks." But, because of the work involved, each Moving Target Defense network took millions of dollars to maintain—far too expensive for anyone else.

That's where Dispel came in. We developed a new, automated way of building Moving Target Defense networks. We removed the need for manpower, which significantly reduced cost. Essentially, we made self-building, self-driving, self-repairing "cyber-submarines" for cyber-treasures. It sounds ridiculous in our metaphor, but that's what we're building every day in cyberspace.

Now, we're using this technology to protect the biggest cyber-treasures: our nation's industrial networks. Our customers wanted remote access to their networks, but were worried about cybersecurity. We turned our "cyber-submarines" into a remote access product, designed specifically for industrial security needs. Today, Dispel protects industrial networks with Moving Target Defense and enables remote access for their teams, at a cost that local utilities can actually afford.

With Dispel, you'll be able to deploy an entire Moving Target Defense network with just two clicks. You'll be able to protect your critical infrastructure and speed up remote access at the same time. That way, even if hundreds of users access your systems from all over the world, your network's location will be untraceable, and your critical infrastructure will be safe from cyberattacks.



Praise for Moving Target Defense

“The likelihood of a successful attack against a known vulnerability **decreases proportionally** with the time between rotations.”

Moving Target Defense, published by Cyber Operations, Analysis, and Research, Argonne National Laboratory, accessed December 2019

“MTD reduces impacts of zero-day vulnerabilities and **increases the resilience** of the protected application.”

Moving Target Defense, published by Cyber Operations, Analysis, and Research, Argonne National Laboratory, accessed December 2019



“Moving Target Defense enables us to create, analyze, evaluate, and deploy mechanisms and strategies that are diverse and that continually shift and change over time to increase complexity and cost for attackers, **limit the exposure of vulnerabilities and opportunities for attack**, and increase system resiliency.”

Trustworthy Cyberspace: Strategic Plan for the Federal Cybersecurity Research and Development Program published by the Executive Office of the President, National Science and Technology Council, December 2011

Attacker success probability is **5x lower** on a Moving Target Defense Network than on a static network (like a VPN).

Army Research Laboratory, University of Canterbury, and Gwangju Institute of Science and Technology: <https://arxiv.org/pdf/1807.09343.pdf>

“MTD can lead to making the adversary’s intelligence gained from previous monitoring no longer useful and accordingly results in **poor attack decisions**.”

Army research takes proactive approach to defending computer systems, Dr. Jin-Hee Cho published by the U.S. Army Research Laboratory, ARL Public Affairs, September 2018



Moving Target Defense **effectively thwarts about 99% network reconnaissance** of hosts and services.

Army Research Laboratory, University of Canterbury, and Gwangju Institute of Science and Technology: <https://arxiv.org/pdf/1807.09343.pdf>

Your systems should work, and your network should be protected with the strongest security possible. With Dispel, protect your network with Moving Target Defense.

Ask us questions or get your demo at <https://dispel.io>