NEW TECHNOLOGIES, NEW HEADACHES

New technologies developed for building web applications have made it possible to create more interactive, responsive, and integrated experiences for users. Although these new technologies have benefited end users, they have also made it harder for DAST tools to see and cover all areas of an application and its web services, causing headaches for security professionals. With DAST, the less you see, the more likely you are to miss a vulnerability. The Universal Translator provides Rapid7’s Dynamic Application Security Testing (DAST) solutions—InsightAppSec and AppSpider—with the flexibility that enables maximum test coverage for the web applications of today and tomorrow.

A bridge that leads to better application coverage

In the face of constantly evolving web technologies, our engineers have responded to the growing challenge of dynamically testing applications with the Universal Translator. The Universal Translator acts as a bridge between the two key functions of every DAST: discovery of the areas in an application where vulnerabilities can be exploited and attack through the testing of those areas with inputs that may expose security gaps. The Universal Translator increases flexibility by decoupling the discovery and attack engines so that all attackable inputs identified by the discovery engine are translated and normalized into a common universal format that is then understood by the attack engine; this makes it possible for the same set of attacks to be applied to multiple input and data format types. Still waiting on a “so what?” Long story short, this departure from just your standard crawling expands your application area coverage and enables Rapid7 DAST engineers to quickly add support for future web technologies and emerging attack types.

The Universal Translator in InsightAppSec and AppSpider

Providing better support for scanning modern web applications
Cover modern apps with more than just crawling
DAST tools don’t require source code to security test an application because they are able to crawl a running application and simulate attacks as a hacker would to test for the presence of vulnerabilities. Crawling alone works for older web technologies like HTML and Javascript, but simply isn’t enough to cover modern apps and their APIs.

Rapid7’s DAST solutions—InsightAppSec and AppSpider—maximize coverage with the following technologies, in addition to crawling:

- Automated testing scripts (e.g. Selenium)
- API definitions (e.g. Swagger)
- Macros (i.e. recorded interactions with an application)
- Traffic recordings (e.g. proxy server logs, Burp Suite logs)

The Universal Translator consumes information from these sources and the output from the crawler to normalize the data into a common format that can then be security tested with over 90 attack modules. Maximizing test coverage of modern applications requires more than traditional web crawling, and the Universal Translator equips you with the ultimate utility belt.

Be prepared for what comes next
As new web technologies and new formats for exchanging data across the web become available, the Universal Translator dramatically reduces the time and effort required by Rapid7 support to mobilize. Our engineers can add discovery support for new web technologies without having to alter the existing attack engine or attack modules, meaning you aren’t left with a sudden and unsolvable lack of visibility into your application security risk.

New attack modules released by Rapid7 or custom attacks created by users can also take advantage of the data processed by the discovery engine and the Universal Translator; the discovery and attack functions of Rapid7’s DAST solutions will continuously improve as the Universal Translator is utilized. Our take? The Universal Translator is the next evolution of modern, comprehensive app scanning.