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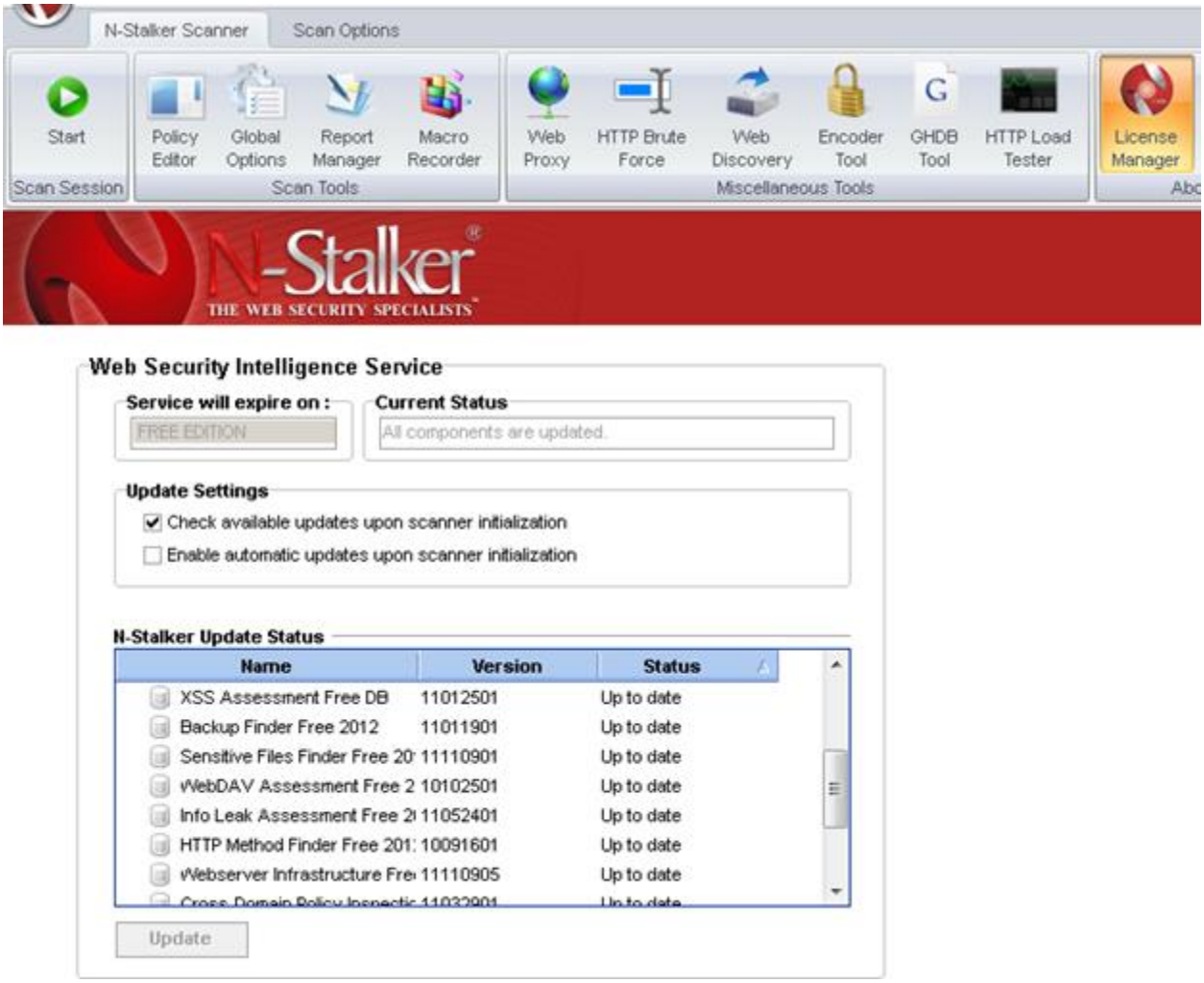
Ex. No : 10 Date:27/10/2020	Exploring N-Stalker, a Vulnerability Assessment Tool

EXPLORING N-STALKER:

- N-Stalker Web Application Security Scanner is a Web security assessment tool.
- It incorporates with a well-known N-Stealth HTTP Security Scanner and 35,000 Web attack signature database.
- This tool also comes in both free and paid version.
- Before scanning the target, go to "License Manager" tab, perform the update.
- Once update, you will note the status as up to date.
- You need to download and install N-Stalker from www.nstalker.com.

1. Start N-Stalker from a Windows computer. The program is installed under Start ⇨ Programs ⇨ N-Stalker ⇨ N-Stalker Free Edition.
2. Enter a host address or a range of addresses to scan.
3. Click Start Scan.
4. After the scan completes, the N-Stalker Report Manager will prompt
5. you to select a format for the resulting report as choose Generate HTML.
6. Review the HTML report for vulnerabilities.



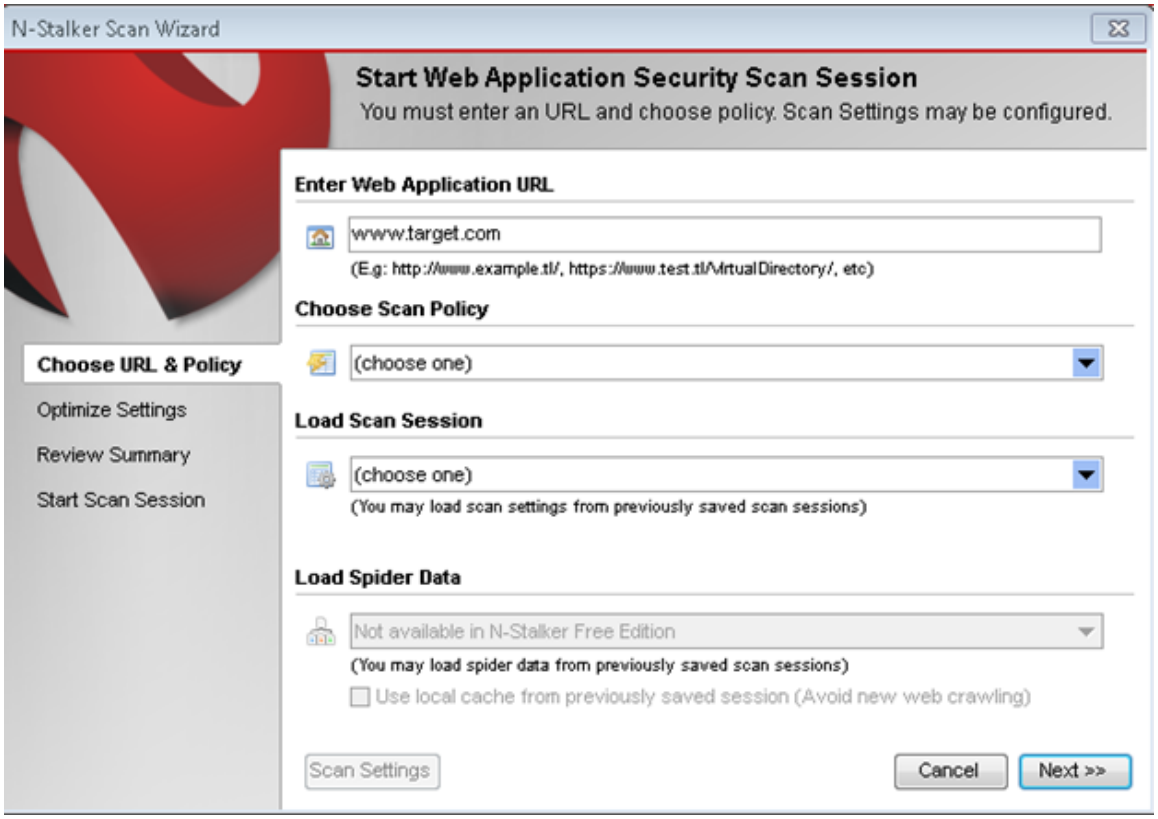
Now goto “Scan Session”, enter the target URL.

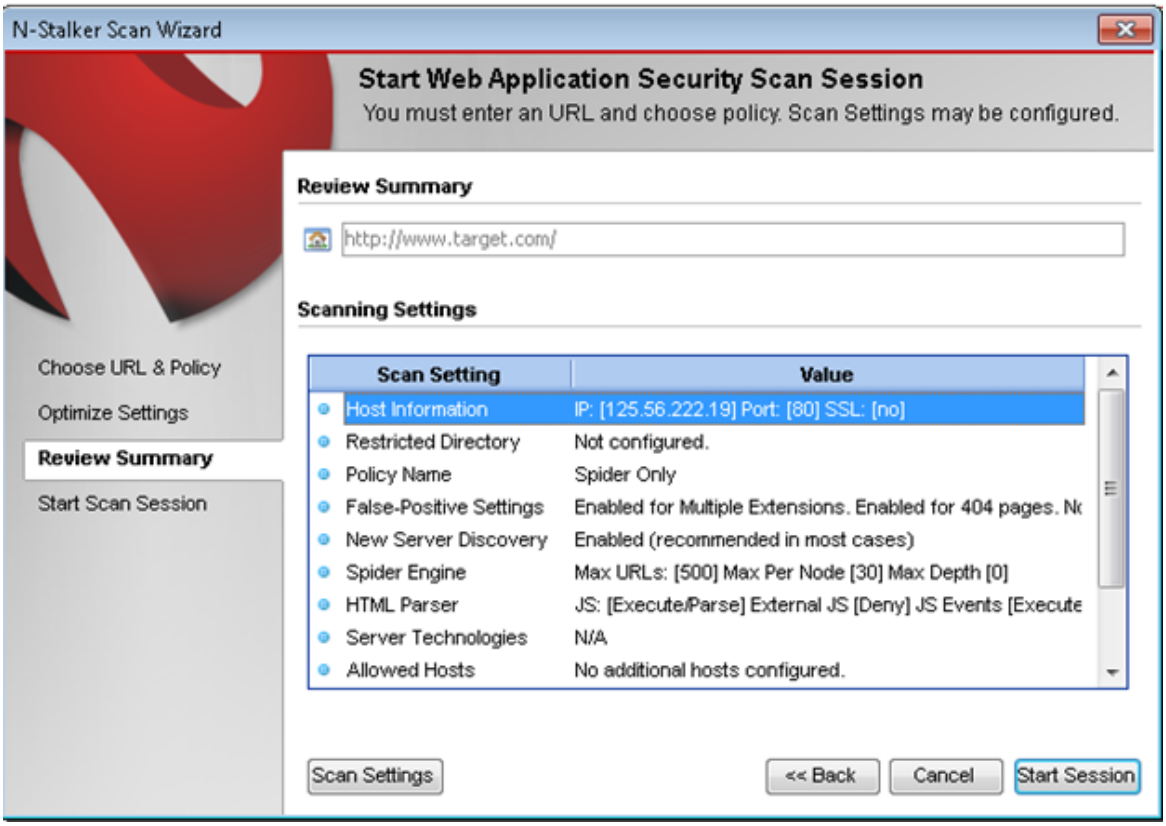
In scan policy, you can select from the four options,

- Manual test which will crawl the website and will be waiting for manual attacks.
- full xss assessment
- owasp policy
- Web server infrastructure analysis.

Once, the option has been selected, next step is “Optimize settings” which will crawl the whole website for further analysis.

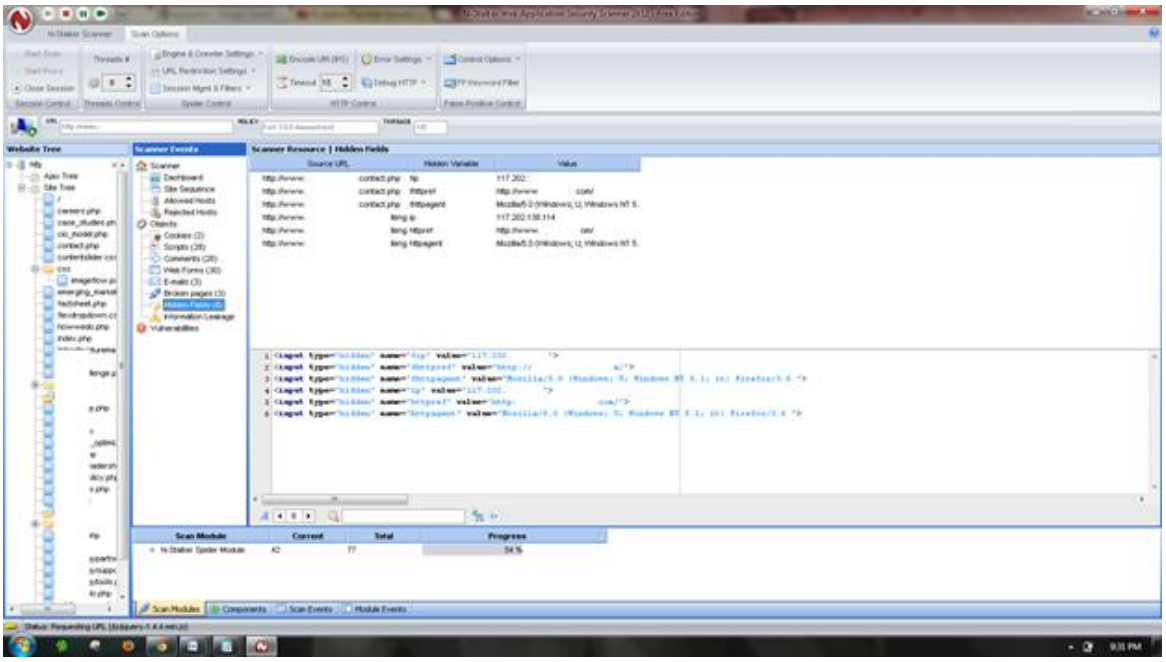
In review option, you can get all the information like host information, technologies used, policy name, etc.


N-Stalker Scan Wizard
Start Web Application Security Scan Session
You must enter an URL and choose policy. Scan Settings may be configured.
Enter Web Application URL
www.target.com
(E.g: http://www.example.tl/, https://www.test.tl/VirtualDirectory/, etc)
Choose Scan Policy
(choose one)
Load Scan Session
(choose one)
(You may load scan settings from previously saved scan sessions)
Load Spider Data
Not available in N-Stalker Free Edition
(You may load spider data from previously saved scan sessions)
Use local cache from previously saved session (Avoid new web crawling)
Choose URL & Policy
Optimize Settings
Review Summary
Start Scan Session
Scan Settings
Cancel
Next >>

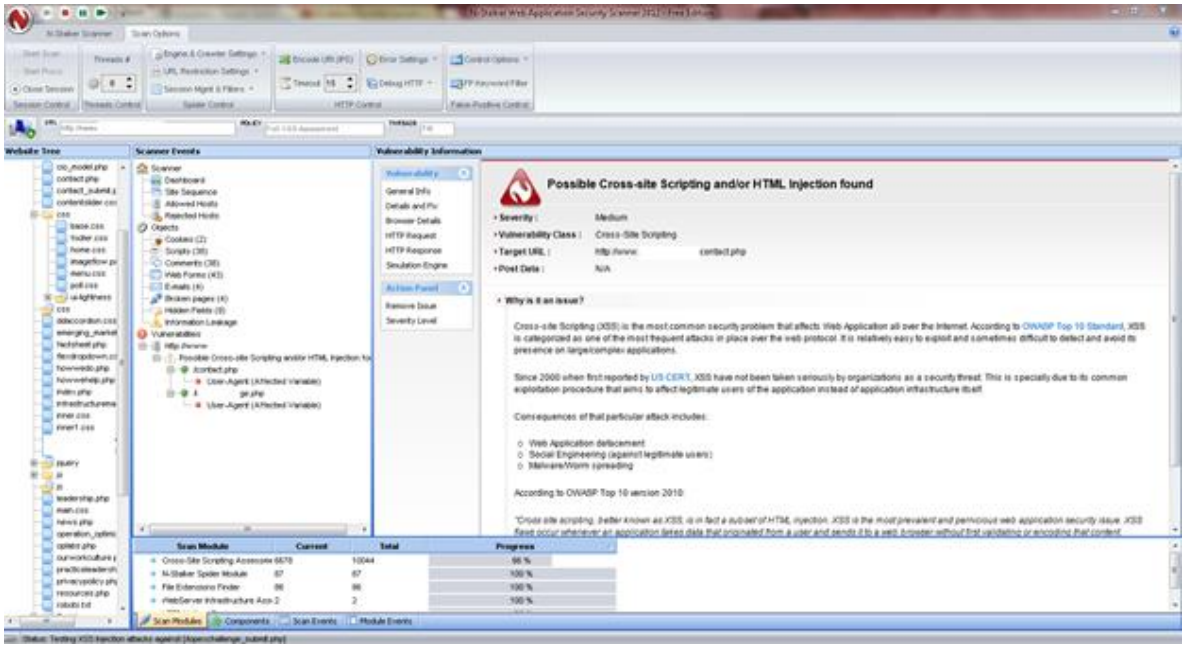

N-Stalker Scan Wizard
Start Web Application Security Scan Session
You must enter an URL and choose policy. Scan Settings may be configured.
Review Summary
http://www.target.com/
Scanning Settings
Scan Setting
Value
Host Information
IP: [125.56.222.19] Port: [80] SSL: [no]
Restricted Directory
Not configured.
Policy Name
Spider Only
False-Positive Settings
Enabled for Multiple Extensions. Enabled for 404 pages. Nc
New Server Discovery
Enabled (recommended in most cases)
Spider Engine
Max URLs: [500] Max Per Node [30] Max Depth [0]
HTML Parser
JS: [Execute/Parse] External JS [Deny] JS Events [Execute
Server Technologies
N/A
Allowed Hosts
No additional hosts configured.
Choose URL & Policy
Optimize Settings
Review Summary
Start Scan Session
Scan Settings
<< Back
Cancel
Start Session

Once done, start the session and start the scan.

The scanner will crawl the whole website and will show the scripts, broken pages, hidden fields, information leakage, web forms related information which helps to analyze further.



Once the scan is completed, the NStalker scanner will show details like severity level, vulnerability class, why is it an issue, the fix for the issue and the URL which is vulnerable to the particular vulnerability?


Possible Cross-site Scripting and/or HTML Injection found
Severity : Medium
Vulnerability Class : Cross-Site Scripting
Target URL : http://www. contact.php
Post Data : N/A
Why is it an issue?
Cross-site Scripting (XSS) is the most common security problem that affects Web Application all over the Internet. According to OWASP Top 10 Standard, XSS is categorized as one of the most frequent attacks in place over the web protocol. It is relatively easy to exploit and sometimes difficult to detect and avoid its presence on large/complex applications.
Since 2000 when first reported by US-CERT, XSS have not been taken seriously by organizations as a security threat. This is specially due to its common exploitation procedure that aims to affect legitimate users of the application instead of application infrastructure itself.
Consequences of that particular attack includes:
Web Application defacement
Social Engineering (against legitimate users)
Malware/Worm spreading
According to OWASP Top 10 version 2010:
"Cross site scripting, better known as XSS, is in fact a subset of HTML injection. XSS is the most prevalent and pernicious web application security issue. XSS flaws occur whenever an application takes data that originated from a user and sends it to a web browser without first validating or encoding that content.
Website Tree
Scanner Events
Vulnerability Information
Scan Module
Current
Total
Progress
Scan Modules
Components
Scan Events
Module Events