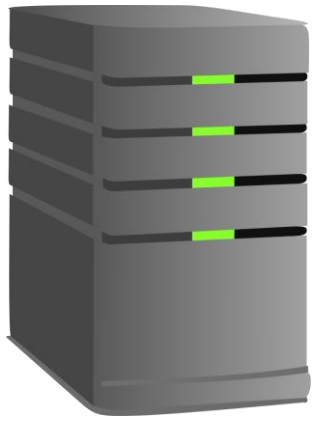


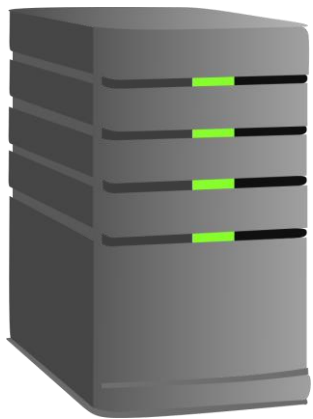
Data exposure

Fredrik Hesse

#6

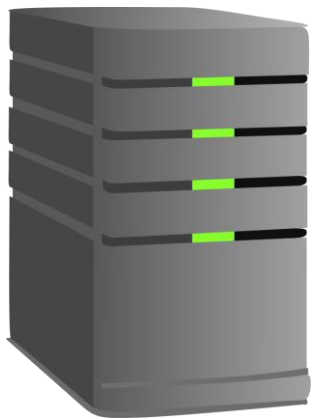
Accidentally publishing data
Thinking data wont be published





Files on the server

```
[user@linuxdev www]$ ls -la
total 12
drwxrwx---  3 user user 4096 Nov 21 16:32 .
drwxrwx--- 18 user user 4096 Nov 21 16:32 ..
drwxrwx---  2 user user 4096 Nov 21 16:32 .git
drwxrwx---  2 user user 4096 Nov 21 16:32 js
drwxrwx---  2 user user 4096 Nov 21 16:32 content
-r--r----- 1 user user 1036 Nov 21 16:32 index.html
```



Files on the server

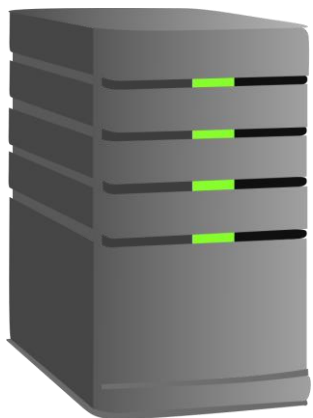
```
[user@linuxdev www]$ ls -la
total 12
drwxrwx---  3 user user 4096 Nov 21 16:32 .
drwxrwx--- 18 user user 4096 Nov 21 16:32 ..
drwxrwx---  2 user user 4096 Nov 21 16:32 .git
drwxrwx---  2 user user 4096 Nov 21 16:32 js
drwxrwx---  2 user user 4096 Nov 21 16:32 content
-r--r----- 1 user user 1036 Nov 21 16:32 index.html
```



Files on the server



Network



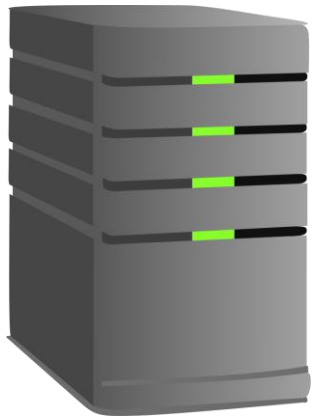
Files on the server



Network

No.	Time	Source	Destination	Protocol	Length	Expert Info	Severity
604	1.189043000	192.168.2.2	gsb2.wac.v2cdn.net	HTTP	327	Chat	
650	1.223782000	data.flurry.com	192.168.2.2	HTTP	215	Chat	
657	1.224908000	gsb2.wac.v2cdn.net	192.168.2.2	HTTP	425	Chat	
663	1.231537000	192.168.2.2	a299.c.akamai.net	HTTP	328	Chat	
869	1.311974000	a299.c.akamai.net	192.168.2.2	HTTP	1431	Chat	
883	1.503102000	192.168.2.2	gsb2.wac.v2cdn.net	HTTP	347	Chat	
975	1.529221000	gsb2.wac.v2cdn.net	192.168.2.2	HTTP	1201	Chat	
993	1.553772000	192.168.2.2	gsb2.wac.v2cdn.net	HTTP	347	Chat	
1046	1.569992000	gsb2.wac.v2cdn.net	192.168.2.2	HTTP	591	Chat	
1106	27.000000000	192.168.2.2	www.tumblr.com	HTTP	214	Chat	
1112	27.319994000	www.tumblr.com	192.168.2.2	HTTP	532	Chat	
1123	27.484770000	192.168.2.2	api.tumblr.com	HTTP	807	Chat	
1125	27.743450000	api.tumblr.com	192.168.2.2	HTTP	737	Chat	
1137	28.046640000	192.168.2.2	api.tumblr.com	HTTP	295	Chat	
1139	28.054110000	192.168.2.2	api.tumblr.com	HTTP	295	Chat	
1141	28.194011000	api.tumblr.com	192.168.2.2	HTTP	459	Chat	

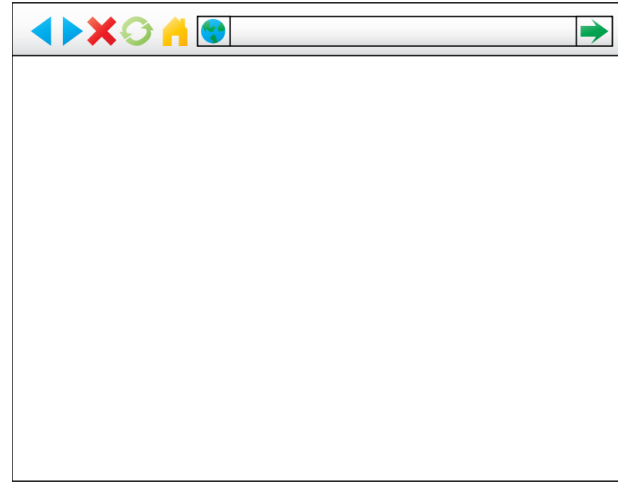
```
Host: www.tumblr.com\r\nAccept-Language: en-gb\r\nX-Identifier-Date: 1373623121\r\nUser-Agent: THTumblrSDK\r\nX-Identifier: 1FBB0545-CD8B-4DB1-A358-B947F47A070A-164-0000000238F41EAA\r\nAccept: */*\r\nX-Version: iPhone/3.4/137\r\nContent-Type: application/x-www-form-urlencoded\r\nConnection: keep-alive\r\n[truncated] Authorization: OAuth oauth_timestamp="1373623148.000000", oauth_nonce="CEP85958-2C91-408D-B65B-CD8F27CB380A-164-00000002601FA215", oauth_version="1.0", oauth_consumer_key="9rn1oBFWjFv1xDOHfAk29F1QAILTfynnhtQxGooXPALRnC6x_auth_mode=client_auth&oauth_password=Shark2013&oauth_username=ooetest19854@gmail.com\r\n\r\n[Full request URI: http://www.tumblr.com/oauth/access_token]\r\nLine-based text data: application/x-www-form-urlencoded\r\napi_key=9rn1oBFWjFv1xDOHfAk29F1QAILTfynnhtQxGooXPALRnC6x_auth_mode=client_auth&oauth_password=Shark2013&oauth_username=ooetest19854@gmail.com
```

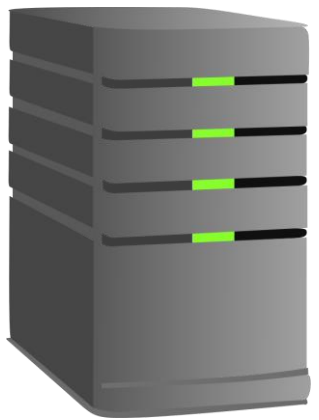


Files on the server



Network

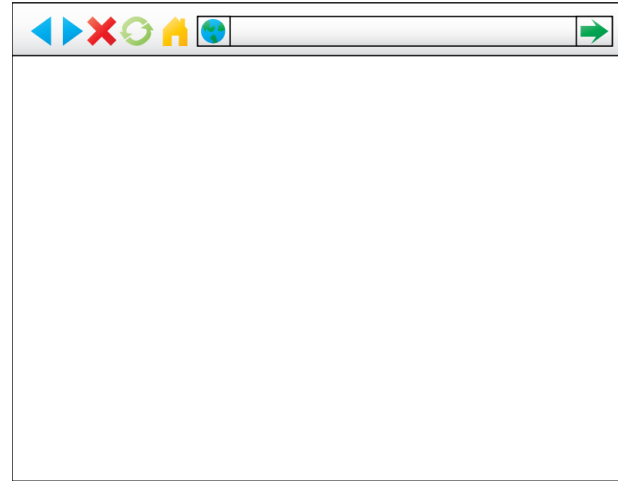




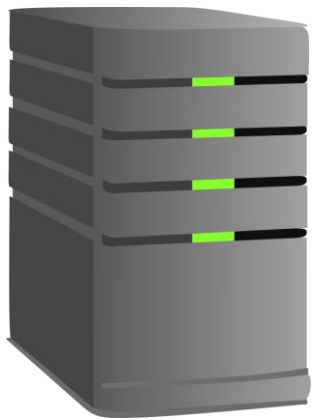
Files on the server



Network



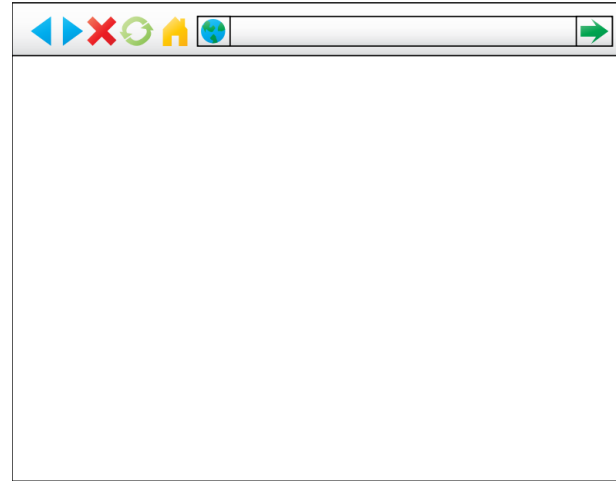
Http headers
Cookies



Files on the server

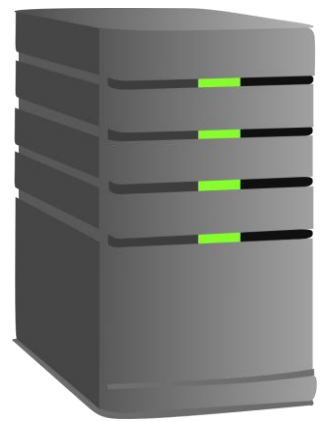


Network



Http headers
Cookies

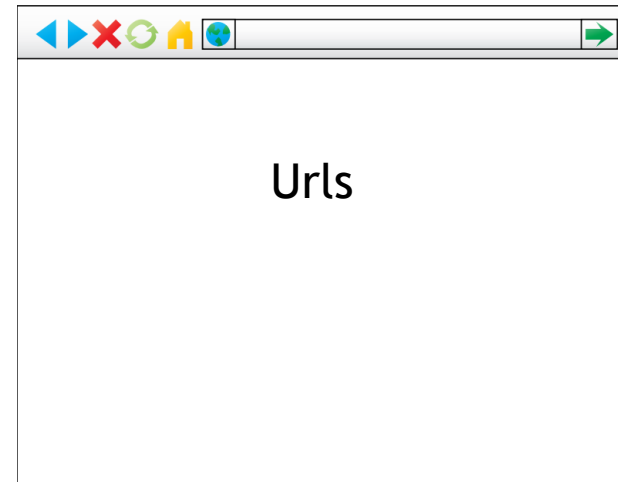
```
Response Headers
  X-Usergroup: Admins
  X-Session: 14758f1afd44c09b7992073ccf00b43d
Cookies
  UserRole: Admin
```



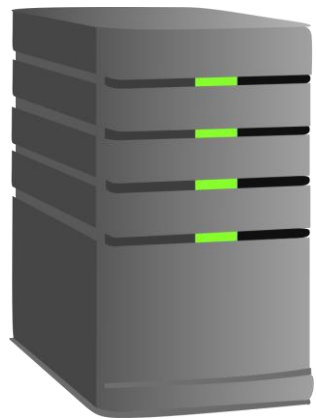
Files on the server



Network



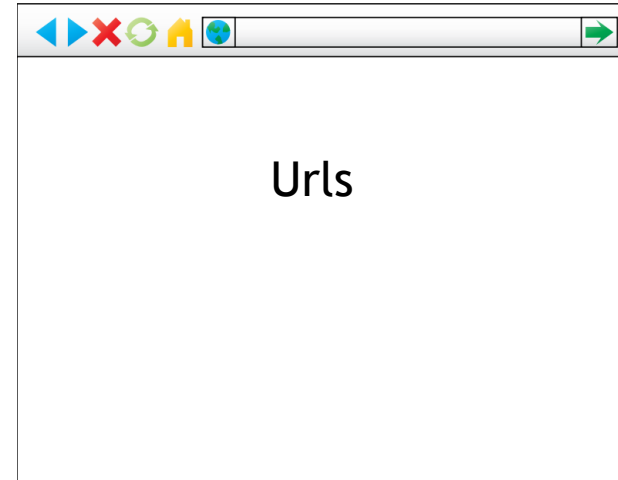
Http headers
Cookies



Files on the server

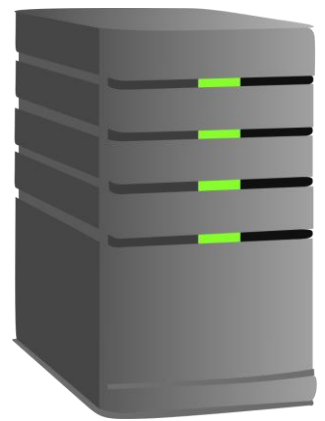


Network



Http headers
Cookies

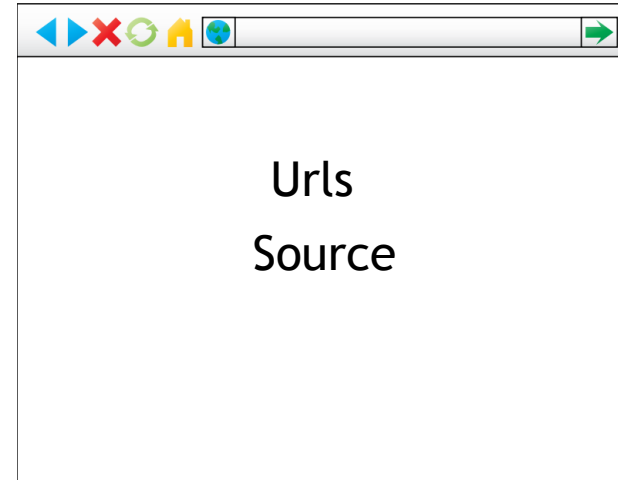
```
http://www.example.com?step=1&session=14758f1afd44c09b7992073ccf00b43d  
http://www.example.com/14758f1afd44c09b7992073ccf00b43d/index.html
```



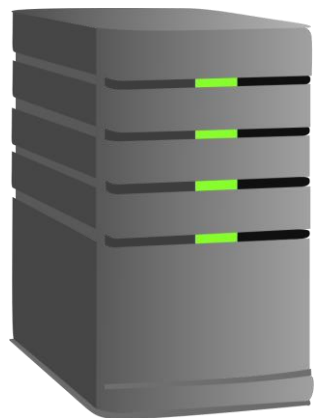
Files on the server



Network



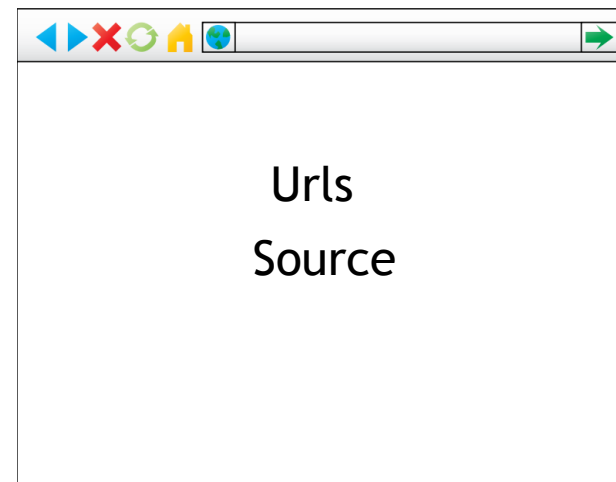
Http headers
Cookies



Files on the server

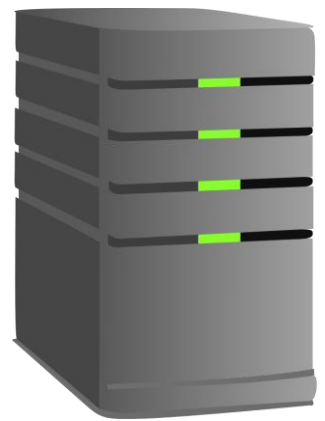


Network



Http headers
Cookies

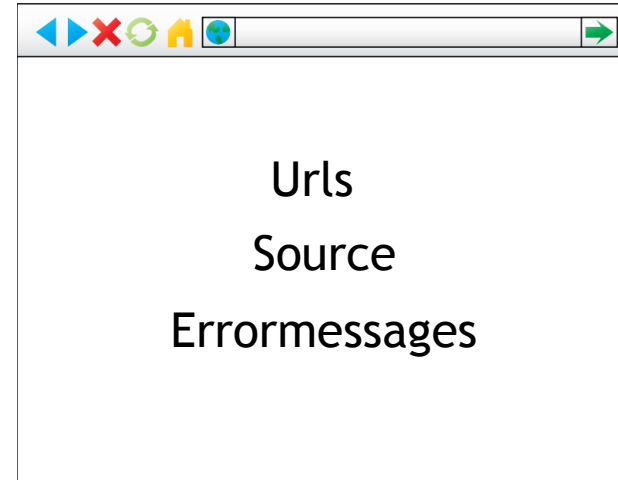
```
<input type="hidden" name="__EVENTTARGET" id="__EVENTTARGET" value="" />  
<input type="hidden" name="__EVENTARGUMENT" id="__EVENTARGUMENT" value="" />  
<input type="hidden" name="__VIEWSTATE" id="__VIEWSTATE" value="/wEPDwULLTEyMzE0Mjg3NjgPZB  
YEZg9kFgwCBA8PFgleB1Zpc2libGVozGQCBQ8PFglfAGhkZAIGDw8WAh8AaGQWAgIBDw8WAh4EVGv4dAU  
PMDc3MSAtIDE0IDE1IDE2ZGQCBw8PFglfAGhkZAIIDw8WAh8AaGRkAgoPDxYCHwBoZBYEAgEPDxYCHwBoZ  
BYCAgEPDxYCHwEFBDEwMDBkZAIDDw8WAh8AaGQWAgIBDw8WAh8BBQlzMGRkAgEPDxYCHwEFFzwhLS0g  
U2lzc2lziHZlcnNpb24gLS0+ZGRkj6kdnfLuJSOWJIP6KsrotYg0+85G0/SQFeKZF0W2Uz4=" />
```



Files on the server



Network

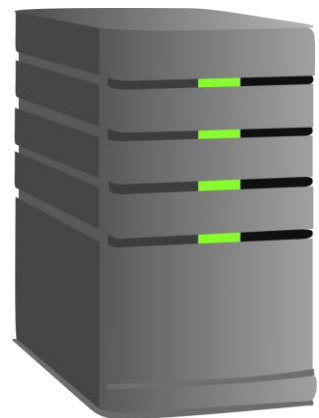


Http headers
Cookies



Urls
Source
Error messages

Http headers



Files on the server

Server Error in '/' Application.

A network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was not accessible. Verify that the instance name is correct and that SQL Server is configured to allow remote connections. (provider: Named Pipes Provider, error: 40 - Could not open a connection to SQL Server)

Description: An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

Exception Details: System.Data.SqlClient.SqlException: A network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was not accessible. Verify that the instance name is correct and that SQL Server is configured to allow remote connections. (provider: Named Pipes Provider, error: 40 - Could not open a connection to SQL Server)

Source Error:

```

Line 14:         using (var conn = new SqlConnection("Server=db.internal.com;Database=mydatabase;User Id=appdbuser;Password=supersecretpassword"))
Line 15:         {
Line 16:             conn.Open();
Line 17:         }
Line 18:     }

```

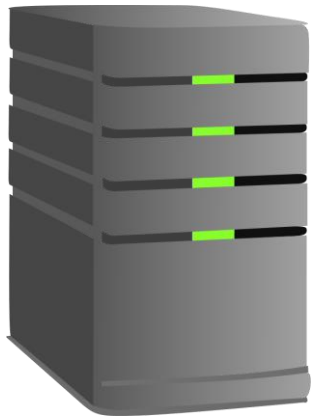
Source File: c:\Users\Fredrik\Documents\Visual Studio 2012\Projects\WebApplication3\WebApplication3\Default.aspx.cs **Line:** 16

Stack Trace:

```

[SqlException (0x80131904): A network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was
System.Data.SqlClient.SqlInternalConnection.OnError(SqlException exception, Boolean breakConnection) +4890587
System.Data.SqlClient.TdsParser.ThrowExceptionAndWarning(TdsParserStateObject stateObj) +194
System.Data.SqlClient.TdsParser.Connect(ServerInfo serverInfo, SqlInternalConnectionTds connHandler, Boolean ignoreSniOpenTimeout, Int64 timerExpire, Boolean
System.Data.SqlClient.SqlInternalConnectionTds.AttemptOneLogin(ServerInfo serverInfo, String newPassword, Boolean ignoreSniOpenTimeout, Int64 timerExpire, Sc
System.Data.SqlClient.SqlInternalConnectionTds.LoginNoFailover(String host, String newPassword, Boolean redirectedUserInstance, SqlConnection owningObject, S
System.Data.SqlClient.SqlInternalConnectionTds.OpenLoginEnlist(SqlConnection owningObject, SqlConnectionString connectionOptions, String newPassword, Boolean
System.Data.SqlClient.SqlInternalConnectionTds..ctor(DbConnectionPoolIdentity identity, SqlConnectionString connectionOptions, Object providerInfo, String ne
System.Data.SqlClient.SqlConnectionFactory.CreateConnection(DbConnectionOptions options, Object poolGroupProviderInfo, DbConnectionPool pool, DbConnection ov
System.Data.ProviderBase.DbConnectionFactory.CreatePooledConnection(DbConnection owningConnection, DbConnectionPool pool, DbConnectionOptions options) +31
System.Data.ProviderBase.DbConnectionPool.CreateObject(DbConnection owningObject) +431
System.Data.ProviderBase.DbConnectionPool.UserCreateRequest(DbConnection owningObject) +66

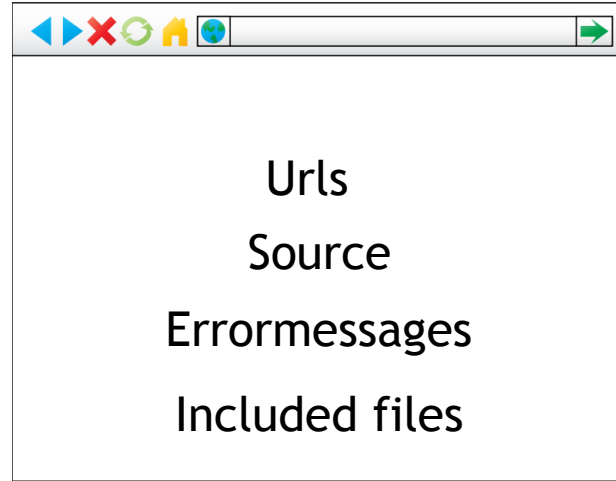
```

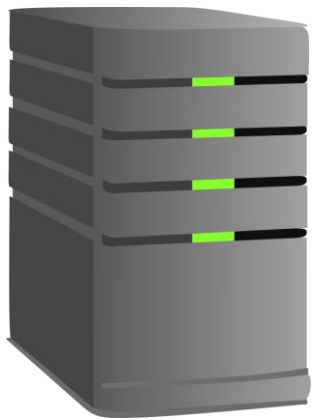
Files on the server



Network



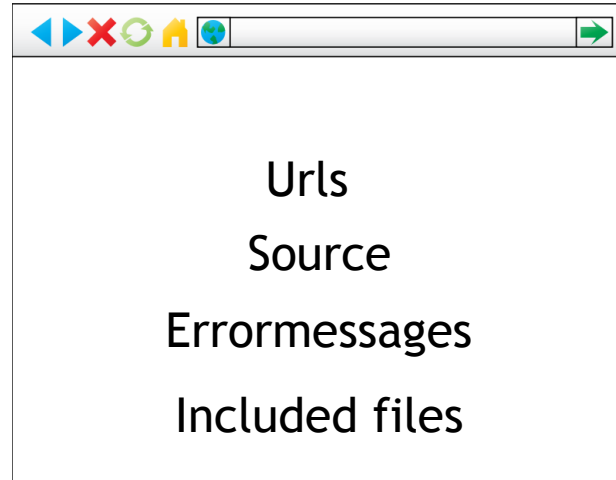
Http headers
Cookies



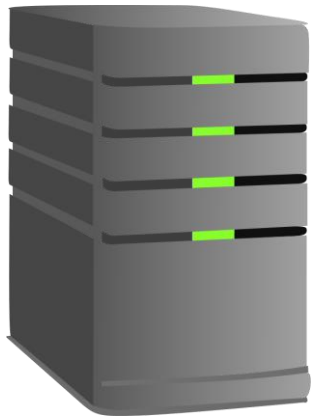
Files on the server



Network



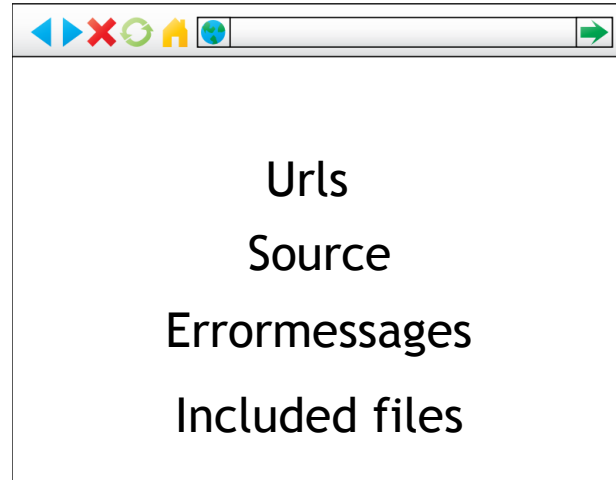
Http headers
Cookies
Flash/html5 storage
Browser cache



Files on the server



Network



Http headers
Cookies
Flash/html5 storage
Browser cache

▶ Know your application

- ▶ Know your application
- ▶ Check your server

- ▶ Know your application
- ▶ Check your server
- ▶ Consider everything published

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