

CS 410: Web Security
A4/A7: Labs and Homework

WFP1: File include

- **Example #1**
 - Perform both a Local File Include (LFI) and a Remote File Include (RFI) attack on the site using /etc/passwd and <http://www.google.com>.
- **Example #2**
 - Site now appends “.php” to page parameter
 - Learn to use URL encoding of special characters
 - Recall the character that is often used to terminate strings
 - Use it to perform both an LFI and RFI attack

WFP1: XML

- **Example #1**
 - Use XML Entity tag to do an LFI attack on the site
 - You will need to URL encode the XML included

WFP1: Directory traversal

- **Example #1**
 - Use directory traversal on image icon to perform an LFI
- **Example #2**
 - Filter ensures that files begin with a specified directory prefix (/var/www..)
 - Bypass filter to perform an LFI
- **Example #3**
 - Filter ensures filename parameter ends with “.png”
 - Bypass filter to perform an LFI

WFP1: File upload

- **Example #1**
 - Upload a PHP file to obtain a directory listing

- **Example #2**
 - Filter now ensures no files ending with “.php” are allowed
 - Bypass the filter using alternate PHP filename extensions

WFP2: Authorization

- **Example #1**
 - Access subpages from the site while logged out
- **Example #2**
 - Granularity of user access is too coarse
 - Valid logins allow one to access profiles of other users
 - Access the profile of another account
- **Example #3**
 - Original page fixed
 - Find an alternate way to access profile of another account

Homework

- **Lessons: Failure to Restrict URL Access**
- **Lessons: Insecure Direct Object References**
- **Challenges: Failure to Restrict URL Access #1-3**
 - #3: Go to cheat directly since Injection not covered yet. Must inject UserList to get all accounts. Default URL will list a subset only
- **Challenges: Insecure Direct Object References #1-2, Bank**
 - Bank: Note mis-spelling of recieverAccountNumber