

# Plausible Deniability for ISP Log and Browser Suggestion Obfuscation with a Phrase Extractor on Potentially Open Text

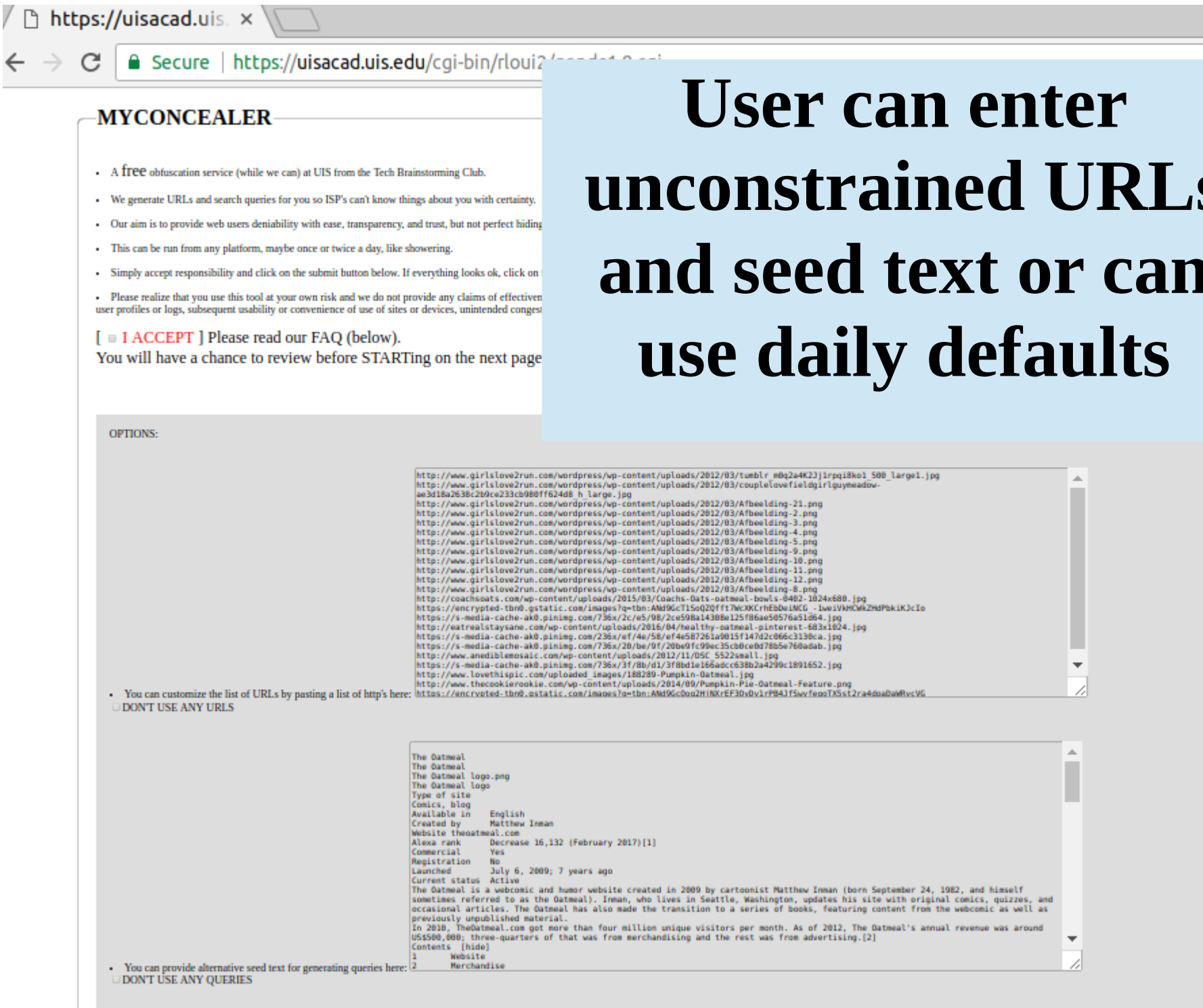
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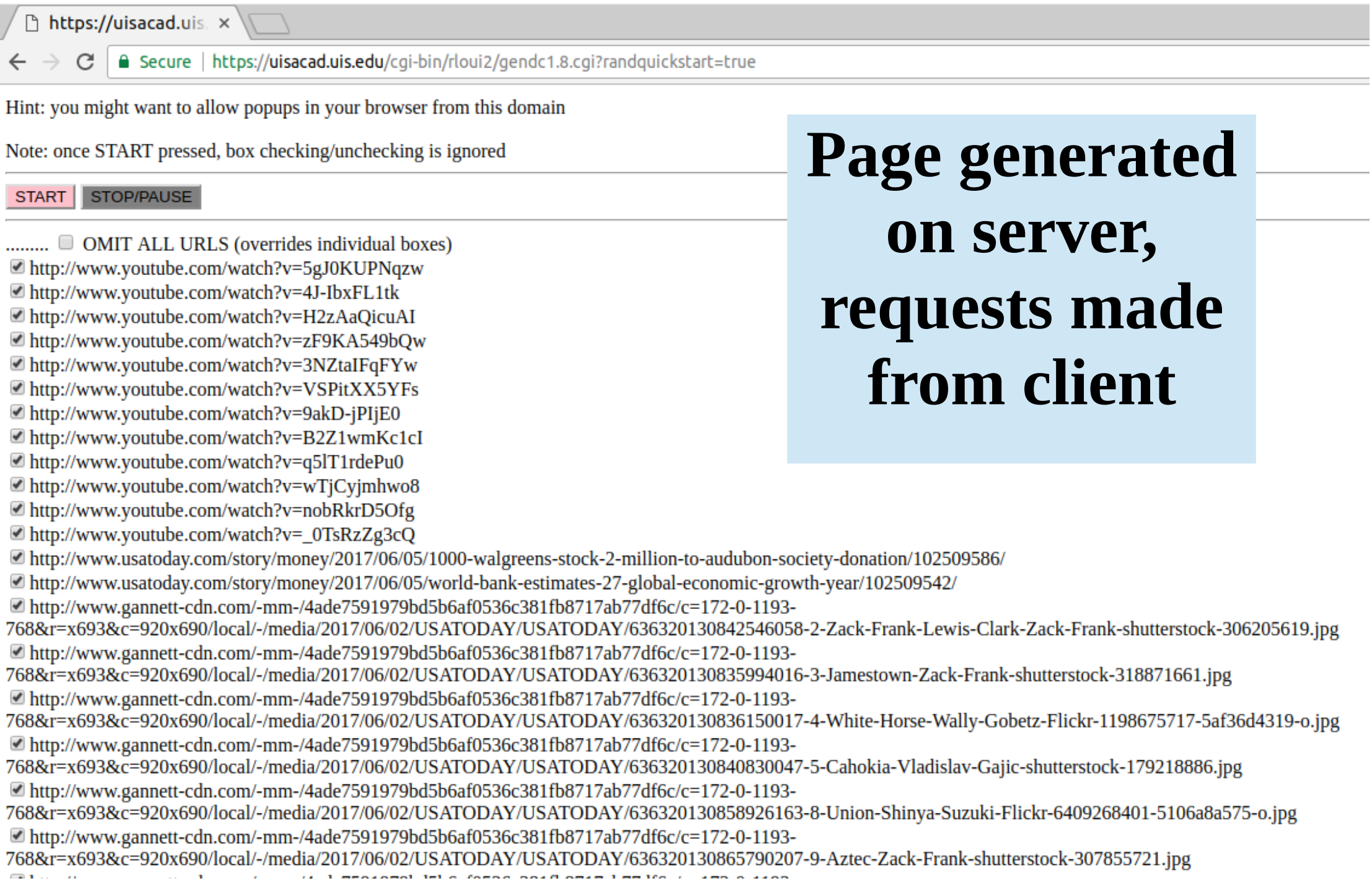
Problem: ISPs can see & sell your requests if you don't use a VPN (does your device always VPN? Do you trust VPN?)  
& browser suggestions can reveal your history (users need more *deniability*: “that wasn't me!”)

History: TRACKMENOT 1.0 (NYU) Obfuscation aimed at frustrating ad profiling  
TRACKMENOT 2.0 browser extension and ADNAUSEUM ad clicking too aggressive, wrongly aimed

- FIX:
1. Put more effort into AI and user content modeling (clustering terms, search *dialogue grammar*)
  2. Permit seed text from user, including history-sharing, so potentially ANY URLs are *non-attributable*
  3. Reduce signal to 50-75% so profiling & assistance still helpful, but improved *privacy is in the probability* not the concealment



User can enter  
unconstrained URLs  
and seed text or can  
use daily defaults



Page generated  
on server,  
requests made  
from client

- ..... ☐ OMIT ALL QUERIES (overrides individual boxes)
- ☒ audiophile values
  - ☒ production process
  - ☒ musical performance
  - ☒ best-regarded recording
  - ☒ recording and playback
  - ☒ playback+systems
  - ☒ playback equipment
  - ☒ high-end components include turntables playback equipment
  - ☒ digital-to-analog converters playback equipment
  - ☒ equalization devices
  - ☒ preamplifiers and amplifiers
  - ☒ solid-state and vacuum
  - ☒ electrostatic speakers equipment
  - ☒ playback components
  - ☒ design variety equipment
  - ☒ system+typically+consists
  - ☒ source components equipment
  - ☒ amplification components equipment
  - ☒ signal cables equipment
  - ☒ variety of accessories
  - ☒ including equipment
  - ☒ control vibration
  - ☒ record cleaners
  - ☒ anti-static devices
  - ☒ phonograph needle cleaners
  - ☒ reverberation reducing devices
  - ☒ devices and materials
  - ☒ draperies and carpets
  - ☒ absorb higher frequencies

These terms cluster  
well because extracted  
from coherent text

Based on a  
grammar for  
sessions: timing,  
typos, themes