Table of Personally Identifiable Information (PII) in Likely "Cyber Threat Indicators"

Cyber Threat Indicator	Included Personally Identifiable Information (PII)	What the PII Could Enable
Network Captures (also includes the remaining categories)	Internet Protocol (IP) Address	● Estimating the user's location ● Identifying the user's online activity, including web browsing behavior ○ "These bits of individuals' online history may reveal their political inclinations, state of health, sexuality, religious sentiments and a range of other personal characteristics, preoccupations and individual interests"[i]
	Media Access Control (MAC) Address[ii]	● Identifying the user's physical movements (Example: retail stores track shoppers using their MAC addresses) ● Identifying the user's online activity (Example: hotspots record user MAC addresses)
	Hostname[iii]	● Identifying the user's online activity ○ By default, major operating systems include an individual user's name in the computer hostname
Webserver Logs	Browser User-Agent String[iv]	● Identifying the user's online activity ○ User-Agent strings contribute o unique and trackable browser "fingerprints"
	Cookies[vi]	● Identifying the user's online activity ○ Cookies can include an individual user's name or username, location, gender, interests, and more ● Accessing the user's online accounts without their permission (Example: "session cookie stealing" attacks)
	Requests and Responses	● Identifying the user's online activity (Examples: requested URLs often include a user's name or username; and response HTML often includes a user's name or username)
Emails[vii]	Headers	● Identifying the user's online activity and contacts ● Drawing inferences about the user's behavior based on email time and length patterns
	Subject Line	● Understanding the substance of the user's communications

	Content	● Reading the substance of the user's communications
Documents (e.g. DOC and PDF), Media Files (e.g. images and video)[viii]	Metadata	● Identifying the authors and editors of the content ● Associating particular revisions and saves with specific individuals, locations, devices, and device configurations ● Learning the locations of related files ● Learning who has viewed the file and when
	Content	● Viewing the substance of the document or media
Data Backup (Full, Differential, Incremental, and Delta [a.k.a. Database Dump])[ix]	Contents of database	● Contents and metadata associated with every file/item in database, and could include, but is not limited to, all of the information contained in users accounts, or Word, PDF, and image and video files

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[i] Tech. Analysis Branch, Office of the Privacy Comm'n of Canada, *What an IP Address Can Reveal About You* (2013), https://www.priv.gc.ca/information/research-recherche/2013/ip_201305_e.asp.
[ii] Definition of: MAC Address, Encyclopedia, PCMag, http://www.pcmag.com/encyclopedia/term/46422/mac-address (*last visited* Oct. 6, 2014); *see also* Simon Sharwood, *Snowden: Canadian spooks used free airport WiFi to track travellers*, The Register, Jan. 31, 2014, http://www.theregister.co.uk/2014/01/31/snowden_canadian_spooks_used_free_airport_wifi_to_track_travellers/.
[iii] Definition of: Hostname, Encyclopedia, PCMag, http://www.pcmag.com/encyclopedia/term/44378/hostname (*last visited* Oct. 6, 2014).
[iv] Peter Eckersley, *A Primer on Information Theory and Privacy*, Electronic Frontier Found., Jan. 26, 2010, https://www.eff.org/deeplinks/2010/01/primer-information-theory-and-privacy.
[v] Peter Eckersley, *Browser Versions Carry 10.5 Bits of Identifying Information on Average*, Electronic Frontier Found., Jan. 27, 2010, https://www.eff.org/deeplinks/2010/01/tracking-by-user-agent.
[vi] Definition of: Cookie, Encyclopedia, PCMag, http://www.pcmag.com/encyclopedia/term/40334/cookie (*last visited* Oct. 6, 2014).
[vii] Definition of: E-mail Header, Encyclopedia, PCMag, http://www.pcmag.com/encyclopedia/term/42243/e-mail-header (*last visited* Oct. 6, 2014); *see also* Larry Pesce, *Document Metadata: The Silent Killer…*, SANS Inst. (March 2008) http://www.sans.org/reading-room/whitepapers/privacy/document-metadata-silent-killer-32974.
[viii] Id.
[ix] Definition of: backup types, PCMag, http://www.pcmag.com/encyclopedia/term/38377/backup-types (*last visited* Oct. 6, 2014).