

# **Privacy Considerations: an Overview** Naomi Lefkovitz, Senior Privacy Policy Advisor, **Information Technology Lab, NIST**

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#### **Relationship Between Cybersecurity and Privacy Risk**

#### Cybersecurity Risks

associated with cybersecurity incidents arising from loss of confidentiality, integrity, or availability

#### **Privacy Risks**

cyber

security-

related

privacy

events

associated with privacy events arising from data processing **Data:** A representation of information, including digital and non-digital formats

**Privacy Event:** The occurrence or potential occurrence of problematic data actions

**Data Processing:** The collective set of data actions (i.e., the complete data life cycle, including, but not limited to collection, retention, logging, generation, transformation, use, disclosure, sharing, transmission, and disposal)

**Privacy Risk:** The likelihood that individuals will experience problems resulting from data processing, and the impact should they occur

### **Privacy Framework Profile Extract**

	NIST Privacy Framew	vork Core	Capabilities/Policies
GOVERN-P (GV-P): Develop and implement the organizational governance structure to enable an ongoing understanding of the organization's	Y-P):Policies, Processes, and Proceduresyelop andand Proceduresyelop and(GV.PO-P):anizationalThe policies, processes, and procedures toyernanceprocedures toyernancemanage and monitor theyoingmonitor theyoingorganization'syerstandingregulatory, legal, risk, environmental,	<b>GV.PO-P1:</b> Organizational privacy values and policies (e.g., conditions on data processing such as data uses or retention periods, individuals' prerogatives with respect to data processing) are established and communicated.	<ul> <li>Privacy policies, processes, and procedures governing the data processing are clearly articulated. At a minimum:</li> <li>Individuals use of the tool is voluntary (opt-in).</li> <li>Data processing is minimized (including collection, retention, and disclosure of specific data elements) to the degree necessary to enable individuals to determine if they have been in physical proximity with an infected individual and to receive information about response measures.</li> <li>Retention periods are established for all collected data.</li> <li>De-identified, aggregate data may be used for epidemiological purposes.</li> <li>No other data uses are permitted.</li> </ul>
risk		GV.PO-P2 - GV.PO-P4:	
management priorities that are informed by privacy risk.requirements are understood and inform the management of privacy risk.	inform the management of	<b>GV.PO-P5:</b> Legal, regulatory, and contractual requirements regarding privacy are understood and managed.	The tool functions in a manner that complies with any applicable privacy and security legal, regulatory, or contractual requirements.

## Privacy Framework Profile Extract (con't)

NIST Privacy Framework Core			Capabilities/Policies			
CONTROL-P (CT-P): Develop and	Disassociated Processing (CT.DP- P):	<b>CT.DP-P1:</b> Data are processed to limit observability and	State of the art technology to limit the observability and linkability of the data processing with individuals is implemented.			
implement appropriate activities to enable organizations or individuals to manage data with sufficient	Data processing solutions increase disassociability consistent with the organization's risk strategy to protect individuals' privacy and enable	linkability (e.g., data actions take place on local devices, privacy- preserving cryptography).	o Individuals' data are stored on their local devices unless contraindicated by the risk assessment conducted under the Risk Assessment Category (Identify Function).			
granularity to manage privacy risks.		<b>CT.DP-P2:</b> Data are processed to limit the identification of individuals (e.g., de- identification privacy techniques, tokenization).	State of the art technology to limit the identification of individual users is implemented. o User-initiated queries are used for infection proximity alerts, rather than system-generated notifications. o Data used for epidemiological purposes are aggregated and de-identified with provably strong confidence			

## Understanding Tradeoffs



#### **Technology Solution**







Websites

**NIST Privacy Framework**: https://www.nist.gov/privacyframework

NIST Privacy Risk Assessment Methodology: https://www.nist.gov/itl/applied-cybersecurity/privacyengineering/resources