

# National Cyber Security Strategy

## Canada

### Skills

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#### Definitions of Data:

n/a

#### Main Focus of Document:

Provides Canada's vision and strategy for the digital era with respect to cyber security

#### Target Beneficiaries or Sectors:

n/a

#### Key Elements:

Having regard to the fact that new digital developments are emerging every day, the Government being aware of malicious cyber threats set its strategy to deal with this. The government and partners will work together across 3 themes to ensure security. Those are: (1) Security and resilience - put together enhanced cyber security capabilities; (2) Cyber Innovation - support advanced research to foster digital innovation; and (3) Leadership and Collaboration - the government in close collaboration with Canada's provinces and territories as well as the private sector will take a leadership role to advance cyber security measures and, together with allies, will work in collaboration to shape the international cyber security environment in Canada's favour.

Some notable details include: Secure and Resilient Canadian Systems Through collaborative action with partners and enhanced cyber security capabilities, the government seeks to better protect Canadians from cybercrime, respond to evolving threats, and defend critical government and private sector systems.

The Government of Canada will maintain and improve cyber security across all federal departments and agencies to protect the privacy of Canadians' information held by the federal government and the confidentiality, integrity, and availability of critical services for Canadians. The Government of Canada will enhance law enforcement capacity to respond to cybercrime. It will support coordination across law enforcement agencies and with federal, provincial, territorial, and international partners. The Government will enhance cybercrime investigative capacity and make it easier for Canadians to report cybercrime. Small and medium organizations often lack the knowledge and resources to implement cyber security regimes, even if doing so would offer a competitive advantage. The Government of Canada will help support these organizations — making cyber security more accessible. In response to cyber threats of increasing sophistication, the Government of Canada will consider how its advanced cyber capabilities could be applied to defend critical networks in Canada and deter foreign cyber threat actors.

As the cyber security environment continues to evolve, there is a constant need for reliable and up-to-date information. Canadian statistics and research in the area of cyber security will provide a more accurate view of the cyber issues the nation faces in a global context. This information can be used by academics, researchers, and policy makers to understand trends, manage risk, inform future investments, and adjust course when appropriate.

An Innovative and Adaptive Cyber Ecosystem By supporting advanced research, fostering digital innovation, and developing cyber skills and knowledge, the federal government will position Canada as a global leader in cyber security. The Government of Canada will work with partners to drive investment and foster cyber research and development. The Government will focus on emerging areas of Canadian excellence, such as quantum computing and blockchain technologies. The federal government is already making progress in this regard, with Budget 2017 announcing the creation of a Pan-Canadian Artificial Intelligence Strategy for research and talent. The Government of Canada will explore new ideas for making businesses and Canadians of all ages and backgrounds more cyber secure. The federal government has already committed investments to improve digital skills, such as coding education for kids. Working together across governments, academia, and the private sector is necessary to address the cyber skills gap. Taking action now will allow Canada to build the labour force of the future, one that will help to support Canadian cyber security and that will contribute to Canada's future prosperity. The Government of Canada is taking on a leadership role in cyber security to help organizations and Canadians recognize the value of cyber security and to support efforts to raise the baseline of cyber security in Canada. It will complement these domestic efforts by working with international partners and allies, seeking to reduce the threat to Canada from cybercriminals and also from state actors and their proxies that may seek to harm us. Moreover, the federal government is aiming for national cyber security excellence. Reaching this target will involve enhancing and growing cyber security capabilities in government and industry. It will entail supporting Canada's leading edge research and development, as well as the range of organizations and businesses that do not have strong cyber security measures in place. Private sector leaders will have a central role to play, as a collaborative effort is needed to ensure that all Canadians are as equipped as possible to prevent and respond to cyber threats. Blockchain technology allows for the creation of online ledgers or records. Often associated with virtual currencies, there are many possible applications of blockchain. It could be used to provide public services like issuing passports, creating records of contracts or legal documents, and processing payments for services rendered. The technology improves

efficiency by reducing processing time for activities and reduces the risk of fraud and compromise, as no one party can modify, delete or append any records. The Government of Canada recognizes the potential of blockchain for secure service delivery and for wider economic and societal benefits. Ensuring the smart application of blockchain technologies in Canada will require a collaborative approach and a collective effort.

Artificial Intelligence Blockchain Data privacy Data processing Digital skills Innovation Private sector Quantum computing

**Policy/regulation mirrored:**

n/a

**Countries:**