

# Australian Government Architecture Domain and Capability Model

The architecture groups government digital and ICT capabilities into an integrated set of domains

## Individual experience

|                                  |                                  |                   |                        |
|----------------------------------|----------------------------------|-------------------|------------------------|
| Complaints and issues resolution | Customer relationship management | Digital portal    | Government branding    |
| Identity management              | Personalisation                  | Virtual servicing | Web content management |

## Business experience

|                                  |                                  |                 |                   |
|----------------------------------|----------------------------------|-----------------|-------------------|
| Complaints and issues resolution | Customer relationship management | Digital portal  | eInvoicing        |
| Government branding              | Identity management              | Personalisation | Virtual servicing |
| Web content management           |                                  |                 |                   |

## Government service delivery

|                               |                   |                              |                              |                           |
|-------------------------------|-------------------|------------------------------|------------------------------|---------------------------|
| Business process and workflow | Business registry | Case management              | Compliance and investigation | Correspondence management |
| Debt management               | E-markets         | Eligibility and entitlements | Grant management             | Payments                  |
| Permissions                   |                   |                              |                              |                           |

## Integration and interoperability

|      |                                |                      |
|------|--------------------------------|----------------------|
| APIs | Orchestration and choreography | Secure data exchange |
|------|--------------------------------|----------------------|

## Data and analytics

|                         |                                 |                              |                        |                       |
|-------------------------|---------------------------------|------------------------------|------------------------|-----------------------|
| Advanced data analytics | Business intelligence analytics | Information asset management | Metadata and semantics | Operational analytics |
|-------------------------|---------------------------------|------------------------------|------------------------|-----------------------|

## Staff experience

|                         |                           |                    |
|-------------------------|---------------------------|--------------------|
| APS identity management | Collaboration and sharing | End user computing |
|-------------------------|---------------------------|--------------------|

## Business reference

|                     |                              |                      |                    |
|---------------------|------------------------------|----------------------|--------------------|
| Document management | Enterprise resource planning | Knowledge management | Records management |
|---------------------|------------------------------|----------------------|--------------------|

## Artificial intelligence (AI)

|               |               |                  |
|---------------|---------------|------------------|
| Deep learning | Generative AI | Machine learning |
|---------------|---------------|------------------|

## Technology reference

|                    |                       |               |                            |                      |
|--------------------|-----------------------|---------------|----------------------------|----------------------|
| Blockchain         | Cloud computing       | Digital twins | High performance computing | Hosting              |
| Internet of things | IT service management | Mainframe     | Quantum computing          | Software engineering |

## Cyber security

|                      |                            |                  |                    |
|----------------------|----------------------------|------------------|--------------------|
| Application security | Information asset security | Network security | Privacy protection |
|----------------------|----------------------------|------------------|--------------------|

## Governance

|                            |                                  |                          |                         |
|----------------------------|----------------------------------|--------------------------|-------------------------|
| APS digital and ICT skills | Benefits management              | Cloud FinOps             | Enterprise architecture |
| GovTech                    | Innovation and proof of concepts | Procurement and sourcing | WofG capability funding |

| Domain                                  | Description   |
|---|---|
| <b>Individual experience</b>            | The individual experience domain includes the capabilities required for the delivery of modern digital services to individuals, for example, through a single digital portal. Most capabilities are also common to the business experience domain.  |
| <b>Government service delivery</b>      | The government service delivery domain underpins the design, implementation, and management of government services provided to individuals, businesses and the Australian Public Service. It includes the enabling capabilities required for the seamless delivery of connected government services based on the user-centric delivery, continuous improvement, efficiency and accessibility. |
| <b>Data and analytics</b>               | The data and analytics domain encompasses the data capabilities and unified data management approach needed for effective cross-agency information sharing and generating insights. Analysis and drawing of key insights from high quality data to support and improve government policy, program, and operations.  |
| <b>Business reference</b>               | The business reference domain includes the capabilities required for agencies to operate core business and corporate functions that are common across government, including enterprise resource planning and workforce management.  |
| <b>Technology reference</b>             | The technology reference domain includes the capabilities required to deliver, run and manage the ICT that enables the delivery of digital services for government, including the use of cloud services and digital infrastructure.   |
| <b>Business experience</b>              | The business experience domain includes the capabilities required to deliver a modern digital experience to support businesses in seeking information from the government and meeting their obligations. Most capabilities are also common to the individual experience domain.   |
| <b>Integration and interoperability</b> | The integration and interoperability domain encompasses the capabilities for enabling interoperability, integration and orchestration necessary for managing information sharing across agencies. The aim is to deliver interconnected services throughout the government, enhancing policy, program, and operational efficiency.   |
| <b>Staff experience</b>                 | The staff experience domain is focused on capabilities required to enable a digitally empowered and well-connected workforce to increase staff productivity. By increasing collaboration across teams, insights, ideas and efficiencies can be realised across government.  |
| <b>Artificial intelligence (AI)</b>     | The artificial intelligence (AI) domain underpins entities' use of AI systems, in alignment with distinct AI technological capabilities.  |
| <b>Cyber security</b>                   | The cyber security domain includes the enabling cyber security capabilities required for the effective protection of systems and networks from information disclosure, theft or damage as well as disruption of government services and operations.   |
| <b>Governance</b>                       | The governance domain relates to the reuse of digital capabilities across government to support the efficient, effective, and consistent governance and oversight of digital investments and initiatives.   |
| <b>Agency specific</b>                  | The agency specific domain includes capabilities that are critical to delivering government outcomes which have limited reuse opportunities e.g. Nuclear Control Systems, River Level Telemetry.  |

| Domain                       | Capability   | Description   |
|------------------------------|--|---|
| <b>Individual experience</b> | Complaints and issues resolution   | Managing the collection of and effective resolution for complaints from individuals about government services and operations.   |
|                              | Customer relationship management   | Recording and managing all interactions with individuals to create a seamless experience across channels.   |
|                              | Digital portal   | A way to provide individuals access to multiple government services through a single entry point. It means that individuals only have to remember one location and one login, and can easily access and discover many relevant government services in a single place. |
|                              | Government branding  | Ensuring consistent Australian Government branding across digital services provided to individuals.   |
|                              | Identity management  | A set of processes to manage the identification and authentication of individual users of government digital services. It includes identity proofing, and login.  |
|                              | Personalisation  | Managing tailored experiences for individuals based on their credentials, preferences and needs.  |
|                              | Virtual servicing  | A set of policies, processes and technologies used to allow agencies to deliver services virtually to individuals, enabling more flexible and remote operations.  |
|                              | Web content management   | Hosting and publishing static web content for individuals to access government information.   |
| <b>Business experience</b>   | Complaints and issues resolution   | Managing the collection of and effective resolution for complaints from Australian businesses about government services and operations.   |
|                              | Customer relationship management   | Recording and managing all interactions with users to create a seamless experience across channels.   |
|                              | Digital portal   | Providing individuals with access to government services digitally (eg: through a web browser or mobile application).   |
|                              | e-Invoicing  | eInvoicing is the digital exchange of standardised invoice information between sellers' and buyers' accounting systems. It enables government to receive and process eInvoices from individuals, businesses and authorised representatives.                           |
|                              | Government branding  | Ensuring consistent Australian Government branding across digital services provided to businesses.  |
|                              | Identity management  | A set of processes to manage the identification and authentication of Australian businesses and their authorised representatives. It includes identity proofing, verification of ABN, and login.  |
|                              | Personalisation  | Managing tailored experiences for businesses based on their credentials, preferences and needs.   |
|                              | Virtual servicing  | A set of policies, processes and technologies used to deliver services to businesses virtually, enabling more flexible and remote operations.   |
| Web content management       | Hosting and publishing static web content for businesses to access government information. |   |

| Domain                                  | Capability                                | Description   |
|---|---|---|
| <b>Government service delivery</b>      | Business process and workflow             | Automated and standardised business processes and their integration into more complex systems of systems.   |
|   | Business registry                         | A register for all government information pertinent to a specific Australian business for the purposes or streamlined service delivery.   |
|   | Case management                           | Managing the workflow of steps in a process to their resolution to meet the needs of individuals or business. This may involve engagement, assessment, planning, implementation, coordination, monitoring and evaluation.   |
|   | Compliance and investigation              | Monitoring compliance with policies, directions, regulation and legislation, including investigation of fraud.  |
|   | Correspondence management                 | Managing the incoming and outgoing correspondence of an agency to individuals and businesses. Correspondence can include sending information via letters in the post, letters sent by email, letters made available in myGov Inbox, notifications sent by SMS or notifications that are pushed to government mobile applications. |
|   | Debt management                           | Managing and collecting debts owed to the government by individuals and businesses (including unpaid fees and overpayment of welfare and taxation benefits that must be repaid).  |
|   | E-markets                                 | Systems or platforms that digitally connect or link users to the provisioning of products or services. E-Markets involve the use of digital platforms, technologies, and services to avail products and services in a virtual marketplace.  |
|   | Eligibility and entitlements              | A set of systems and processes that evaluate and determine eligibility and entitlements for government services according to the specific circumstances of an individual or business.   |
|   | Grant management                          | Publishing, administering and managing government provided services and opportunities such as grants, tenders and auctions.   |
|   | Payments                                  | Managing government payments, it includes incoming and outgoing payments to individuals, businesses and authorised representatives.   |
| <b>Integration and interoperability</b> | Permissions                               | Determining eligibility for entitlements or otherwise granting credentials, permissions, authorities or status to users.  |
|   | Application Programming Interfaces (APIs) | A set of rules, protocols, and tools that allows different software applications to communicate with each other. An intermediary layer that allows the transfer of data between different systems, services, and libraries.   |
|   | Orchestration and choreography            | Providing automated configuration, management, and coordination of computer systems, applications, and services to allow for seamless delivery of end-to-end services to users.   |
| <b>Staff experience</b>                 | Secure data exchange                      | Providing secure data exchange between systems within an agency or between agencies and users.  |
|   | APS identity management                   | A set of processes to manage the identification and authentication of Australian Public Service staff to access government building, systems and information.   |
|   | Collaboration and sharing                 | A set of systems and processes that allow government agency staff to effectively share information and collaborate on shared work tasks. It includes systems that support collaboration and sharing such as email, calendar, instant messaging, video conferencing, document sharing, and automated forms.                        |
|   | End user computing                        | Supplying and managing staff productivity enablers including fixed and mobile devices, standard operating environments, staff communication and intranet, and remote access.  |

| Domain                              | Capability                                 | Description  |
|-------------------------------------|--|--|
| <b>Data and analytics</b>           | Advanced data analytics                    | The analysis of raw datasets using specialised computers and software.   |
|                                     | Business intelligence analytics            | Analysing business data to improve strategic understanding and inform decision making.   |
|                                     | Information asset management               | Processes and procedures used to create and manage information assets to effectively deliver information, insights, and services to the public at the right time in the right format. Information assets need to be efficiently managed from creation and should be appropriately destroyed once their value has ceased. |
|                                     | Metadata and semantics                     | Managing standardised descriptions of the metadata of data to enable understanding of context of the data for future use and to enable data to be shared within and between agencies more effectively.   |
|                                     | Operational analytics                      | Performing real time analysis of business operations to improve strategic outcomes.  |
| <b>Artificial intelligence (AI)</b> | Deep learning                              | Deep learning is an artificial intelligence (AI) approach that trains computers to handle data similarly to how humans do. These deep learning models can identify intricate patterns in images, text, audio, and other data types to yield precise insights and forecasts.  |
|                                     | Generative artificial intelligence (GenAI) | Generative artificial intelligence (GenAI) refers to algorithms that are capable of producing new content such as audio, code, images, text, simulations, and videos.  |
|                                     | Machine learning                           | Machine learning (ML) is a field within artificial intelligence (AI) and computer science dedicated to using data and algorithms to help AI mimic human learning, thereby enhancing its precision over time.   |
| <b>Business reference</b>           | Document management                        | The process of organising, storing, and tracking documents. The goal of document management is to make it easier for agencies to access, share, and collaborate on their documents.  |
|                                     | Enterprise resource planning               | Managing agency back-office services, including financial management, human resources, procurement services and reporting and travel and expense management.   |
|                                     | Knowledge management                       | Management of information and resources within an agency and between agencies to create knowledge.   |
|                                     | Records management                         | Managing records effectively throughout their lifecycle.   |
| <b>Cyber security</b>               | Application security                       | Securing digital and ICT applications from cyber threats.  |
|                                     | Information asset security                 | Securing data infrastructure and data at rest from cyber threats.  |
|                                     | Network security                           | Securing network infrastructure and data in motion from cyber threats.   |
|                                     | Privacy protection                         | A set of policies, processes and technologies used to regulate, store, and use personally identifiable information of individuals and businesses that is collected by government.  |

| Domain               | Capability                                  | Description   |
|----------------------|---|---|
| Technology reference | Blockchain                                  | Blockchain technology is a distributed ledger technology whereby a database is distributed across numerous users, and changes to the database are validated by consensus among the users. Blockchain technology can be widely applied to improve business processes, increase transparency, and drive the creation of new jobs and industries.  |
|                      | Cloud computing                             | Managing deployment of computing services into a shared pool of computing, network and storage resources accessed by multiple customers to reduce costs, improve quality of service, harness innovation and increase scalability. Cloud computing service models include Infrastructure as a Service, Platform as a Service, and Software as a Service. Cloud Services can be deployed as either Public or Private Cloud. |
|                      | Digital twins                               | Digital Twins are dynamic digital representations of real-world objects or systems.   |
|                      | High performance computing                  | High Performance Computing (HPC) refers to the practice of employing advanced computing techniques, typically utilising parallel processing and supercomputers, to solve complex problems that require significant computational power and data storage capabilities.   |
|                      | Hosting                                     | Facilities that host systems and data by providers to government. These providers may deliver a range of services to agencies, including cloud computing.   |
|                      | Internet of things                          | The network of physical objects that are able to connect to the Internet.   |
|                      | IT service management                       | Monitoring and managing the quality of IT products and services being delivered.  |
|                      | Mainframe                                   | A specific type of technology that allows for high levels of data processing with a high volume of input and output operations, including its storage and other attached systems across geographically dispersed networks.  |
|                      | Quantum computing                           | Storing and processing information by manipulating the behaviour of individual atoms, ions, electrons or photons.   |
|                      | Software engineering                        | Managing the development of software through its lifecycle.   |
| Governance           | APS digital and ICT skills                  | The advancement and management of APS digital and ICT skills that promote a whole of APS Digital Profession which can be used efficiently to address fluctuating capability and capacity constraints across government.   |
|                      | Benefits management                         | Principles to support agencies in adopting key tenets of good benefits management which will underpin government's ability to effectively assure digital implementation.  |
|                      | Cloud Financial Optimisation (Cloud FinOps) | Financial management processes and practices for cloud services. A strategic approach that aligns cloud spending with public sector objectives and accountability.  |
|                      | Enterprise architecture                     | A fundamental strategic planning discipline needed to design and deliver digital transformation in any complex organisation or sector, whether in government or industry.   |
|                      | GovTech                                     | GovTech involves collaboration between governments, industries, academia, and internal innovators or 'intrapreneurs' to co-create technology-driven solutions that address public sector challenges.  |
|                      | Innovation and proof of concepts            | Identifying and prioritising where digital and ICT technologies can fulfil or improve government capabilities through new research and proof of concept development to test viability before larger scaling and development is pursued.   |
|                      | Procurement and sourcing                    | A set of processes that government buyers undertake to find and buy digital products and services. This guidance replaces the Digital Sourcing Consider First and Fair Criteria policies.   |
|                      | WofG capability funding                     | Principles and templates to support the funding of digital and ICT capabilities that are provided across whole of government.   |