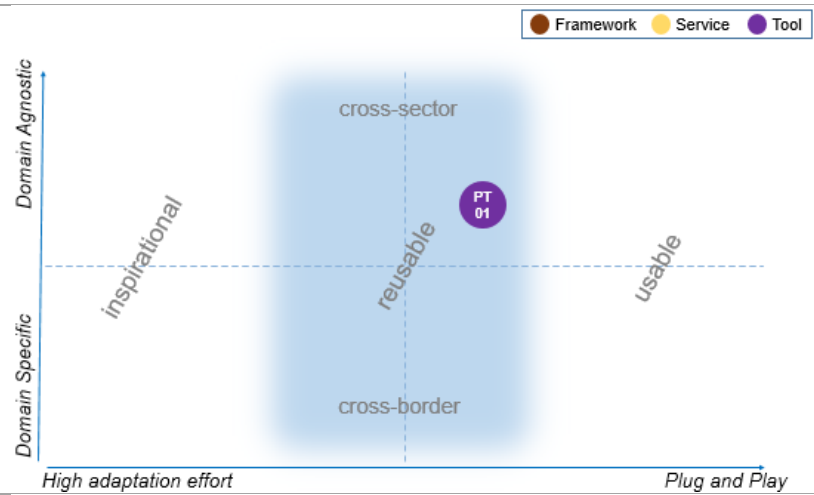


Public administration interoperability platform (iAP)	
Summary	
ID	PT01
Initiative	Portugal
Short description	<p>The Portuguese public administration interoperability platform (iAP) is a central, service-oriented platform that serves all the public administration levels. The iAP was created to deliver the public authorities with shared tools for sharing messages, interconnecting systems, providing federated identity mechanisms, secure authentication or payments. These tools are available via four independent macro-services: the integration platform, the authentication provider, the public administrations' payments platform and the SMS gateway for public administration.</p> <p>By implementing one single platform at central level, the iAP ensures that the public administration, via one connection, are linked among each other in a secure manner through one private network.</p> <p>The iAP also allows the availability of multichannel electronic services adapted to citizens and businesses' needs.</p> <p>The iAP project tackles all levels of interoperability: the legal, organisational, semantic and technical one.</p>
Owner	The Agency for Administrative Modernisation (AMA- Agência para a Modernização Administrativa)
Contact	Paulo Lobo (Paulo.lobo@ama.pt) André Vasconcelos (andre.vasconcelos@ama.pt)
Type	Tool
Sub-Type	Reference platform
Context	Cross-sector
Base Registry type	All
Operating model	<p>The operating model of the iAP would depend on which of the four services the user is aiming at using.</p> <p>For the integration platform, for example, currently there are two connection modes:</p> <ul style="list-style-type: none"> - a dedicated circuit, which is suitable for connections that require high volume of information/data and the assurance of service quality. It is a more costly version and the entity that will use this option would have to bear the costs; - VPN, where the information security is insured via encrypted channels and transmission of authentication packages. This mode also ensures the integrity and privacy of the data. This type of connection does not ensure the level of service due to its bandwidth. Compared to the dedicated circuit mode, the use of VPNs does not entail additional investments. The requirements for a VPN connection would be internet access, a public IP address and protocols support and features for the establishment of the VPN equipment. <p>The iAP guidelines provides further details regarding the operating models of the rest of the services:</p> <p>https://www.iap.gov.pt/Guia_Adesao_iAP_v3_0_2.pdf</p>
IPR	Public domain. The Agency for Administrative Modernisation is the owner of the solution, all rights reserved.
Status	Operational
Extended	
Functionalities	<p>The iAP provides four independent services:</p> <ul style="list-style-type: none"> - the integration platform; - the authentication provider; - the payment platform;

	<p>- the SMS gateway for public administrations.</p> <p>The integration platform is a technology platform at central level. It is service-oriented and based on standards, including open ones. The platform aims to provide public administrations with a shared tool that would allow the interconnection of the different systems and the delivery of multichannel electronic services.</p> <p>The authentication provider allows the electronic identification of a user.</p> <p>The public administration payments platform is the system that allows multiple payments methods for the different service channels, such as portals, websites and service counters.</p> <p>And the SMS gateway is the system that facilitates the sending and receiving of messages between the agencies of the public administration and the citizens via short numbers. This communication can be via newsletters, as notifications to subscribers, or transactional, allowing interaction between the user and the entity's information system.</p>
Design/Architecture	<p>The architecture of the Interoperability Platform was designed to ensure the maximum integration and interoperability between different institutions' systems.</p> <p>It includes the following functionalities:</p> <ul style="list-style-type: none"> - Interface Web for the administration and management of the platform; - Management of the Web Services interfaces and integration mechanisms performed through configurations executed by the users of organisations; - Conversion and transformation of formats between the model of regulatory entities and the model of the entities of the organisation and vice versa, for the execution of the services that were published in the Integration Platform; - Federation of identities, ensuring a conversion of known identifiers known by the Integration Platform to identifiers relevant to organisations, designated as sector identifiers, ensuring that no public system or entity know as different identities of citizens and companies; - Guarantee of the security in the exchange of the messages; - Monitoring mechanisms to control and manage the execution of services; - Messaging mechanisms for the management of messages of execution of electronic products.
Technologies	<p>Technical protocols that were put in place for iAP are the Simple Object Access Protocol, Web Services Description Language, Web Services Addressing, Web Services Reliable Messaging, Web Services Security and Web Services Security with Username Token Profile, together with the orchestration module uses Apache ODE.</p> <p>The integrated management of the platform is set in a single back-office.</p>
Specifications	<p>The technical specification used by the iAP platform are quite standard and commonly used in SOA-based architectures:</p>

	<table><tr><th>Designação</th><th>Descrição</th><th>Especificação</th></tr><tr><td>Hypertext Transfer Protocol</td><td>Protocolo de comunicação de suporte <i>Web</i></td><td>HTTP</td></tr><tr><td>Hypertext Transfer Protocol Secure</td><td>Protocolo de comunicação de suporte com <i>segurança Web</i></td><td>HTTPS</td></tr><tr><td>Simple Object Access Protocol</td><td>Estrutura das mensagens trocadas e dos mecanismos de tratamento <i>Web</i></td><td>SOAP</td></tr><tr><td>Web Services Description Language</td><td>Linguagem baseada em XML para a descrição de <i>WebServices</i></td><td>WSDL</td></tr><tr><td>Web Services Addressing</td><td>Especificação para a comunicação da informação de endereços entre <i>WebServices</i></td><td>WS-Addressing</td></tr><tr><td>Web Services Reliable Messaging</td><td>Protocolo para a garantia de entrega de mensagens na comunicação utilizando <i>WebServices</i></td><td>WS-RM</td></tr><tr><td>Web Services Security</td><td>Segurança de integridade e confidencialidade da comunicação <i>Web</i></td><td>WS-Security</td></tr><tr><td>Web Services Security with Username Token Profile</td><td>Segurança de autenticação da comunicação <i>Web</i></td><td>WS-Security Username Token Profile</td></tr><tr><td>Security Assertion Markup Language</td><td>Standards para a troca de autenticações e autorizações entre domínios de seguros</td><td>SAML 2.0</td></tr></table>	Designação	Descrição	Especificação	Hypertext Transfer Protocol	Protocolo de comunicação de suporte <i>Web</i>	HTTP	Hypertext Transfer Protocol Secure	Protocolo de comunicação de suporte com <i>segurança Web</i>	HTTPS	Simple Object Access Protocol	Estrutura das mensagens trocadas e dos mecanismos de tratamento <i>Web</i>	SOAP	Web Services Description Language	Linguagem baseada em XML para a descrição de <i>WebServices</i>	WSDL	Web Services Addressing	Especificação para a comunicação da informação de endereços entre <i>WebServices</i>	WS-Addressing	Web Services Reliable Messaging	Protocolo para a garantia de entrega de mensagens na comunicação utilizando <i>WebServices</i>	WS-RM	Web Services Security	Segurança de integridade e confidencialidade da comunicação <i>Web</i>	WS-Security	Web Services Security with Username Token Profile	Segurança de autenticação da comunicação <i>Web</i>	WS-Security Username Token Profile	Security Assertion Markup Language	Standards para a troca de autenticações e autorizações entre domínios de seguros	SAML 2.0
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Management	The Agency for Administrative Modernisation, AMA, is responsible for the development, maintenance and operation of the iAP. AMA is mainly using internal resources, although in order to assure the technical evolvement of the platform, the agency outsourced services to private entities. Therefore, the initial development of the project was a mixture between the AMA supplies and the collaboration of three private companies, which were Siemens, Microsoft and Accenture.																														
Governance	The general governance of the iAP project is under the Agency for Administrative Modernisation.																														
Sustainability	The iAP is a shared platform and therefore the sustainability model regarding the development and maintenance of the platform is also shared among the entities that use it. Sharing the project’s costs among the users of the platform allows for benefits such as the addition of constantly upgraded technology, insurance with the compliance of the SLAs agreed between public administration bodies or the introductions of new features based on user’s needs to the platform.																														
Documentation	iAP: https://www.iap.gov.pt/ The iAP guidelines: https://www.iap.gov.pt/Guia_Adesao_iAP_v3_0_2.pdf																														
ADMS	Not available/Not applicable.																														
Current Users	Public administration, businesses, citizens.																														
EIRA																															
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Building Block	Implementing Guideline; Interoperability Agreement; Data Model; Application service.																														
Reusability																															

Landscape



Criteria

