



Employment and
Social Development Canada

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Jurisprudence MVP

Architectural Analysis and Production Roadmap

September 2025

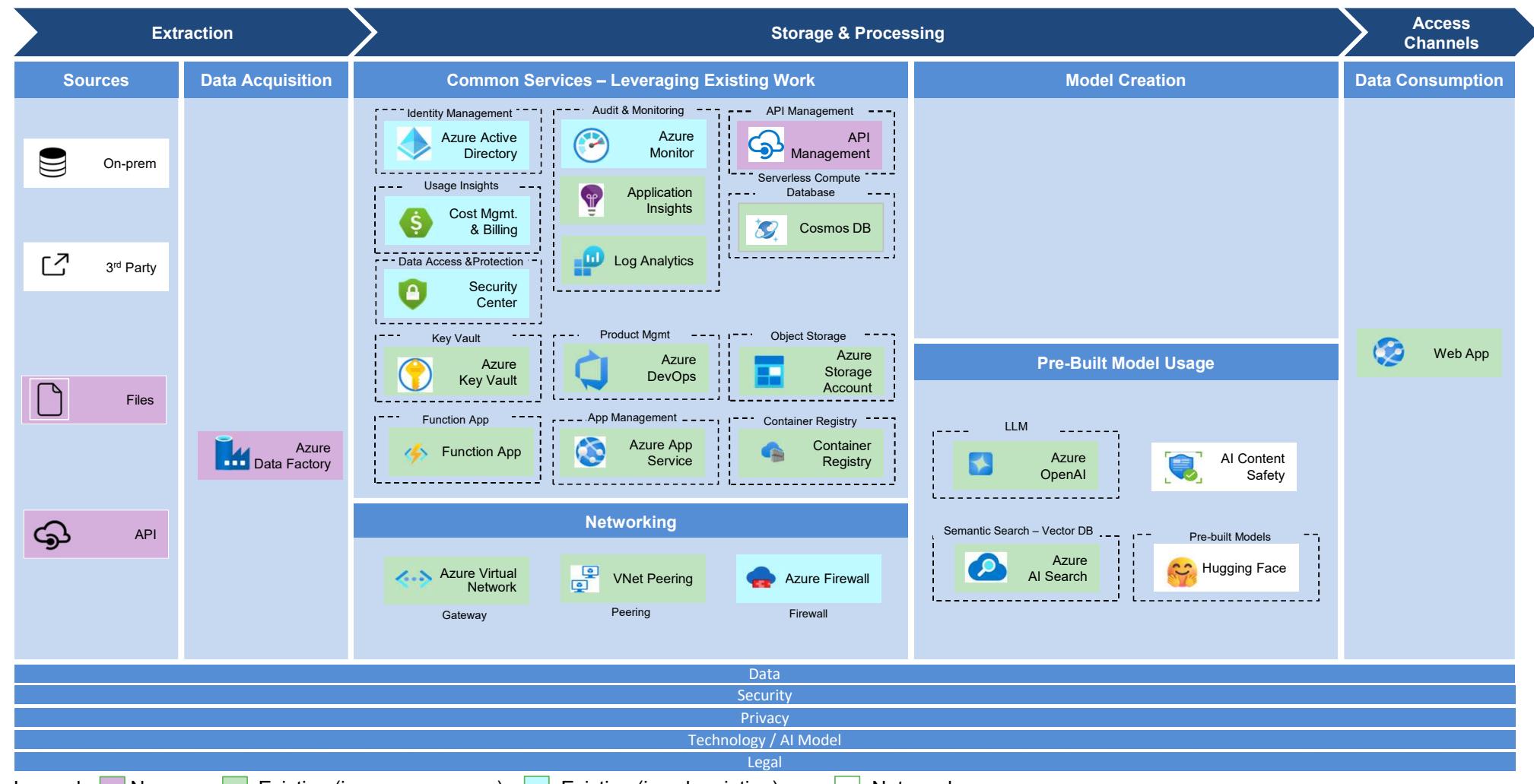
Agenda

1. Overview
2. Architectural Analysis
 1. Architecture Conceptual Diagram
 2. Analysis
3. Fit/Gap Analysis
4. Code Merge Strategy
5. Production Roadmap
6. Recommendations



Architectural Analysis - Conceptual Tech Stack (Jurisprudence vs. EVA)

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Legend New

Existing (in resource group)

Existing (in subscription)

Not used

Architectural Analysis - Conceptual Tech Stack (Jurisprudence vs. EVA) - continued

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After completing an analysis of the EVA Domain Assistant architectural components, the following observations were noted:

- A Jurisprudence specific resource group created with all of the components highlighted in green, which contains most of the Azure services that are necessary for the Jurisprudence solution
 - App specific: Azure App Services, Azure Functions, Azure Storage Account, Cosmos DB, Azure Open AI Service, Azure AI Search, Application Insights, Log Analytics
 - Networking: Azure Virtual Network (VNet), VNet Peering
- Additionally, within the subscription, the following components highlighted in light blue are present:
 - Infra/Networking: Azure Active Directory, Azure Key Vault, Azure Monitor, Azure Security Center, Azure Firewall
- For Jurisprudence, the following components will be leveraged by the JP development team as additions:
 - Azure Data Factory (data pipeline, ingestion, data management)
 - API Management (APIM) – using AI CoE's centralized solution for API management, Jurisprudence will route traffic from the UI/UX to the corresponding OpenAI service and Azure AI Search components



Fit/Gap Analysis – Scope Confirmation

After initial analysis of the EVA domain assistant architecture and app components, a high level fit/gap analysis has been performed to ensure that there is agreement on the scope that will be covered within the agreed upon budget for Jurisprudence

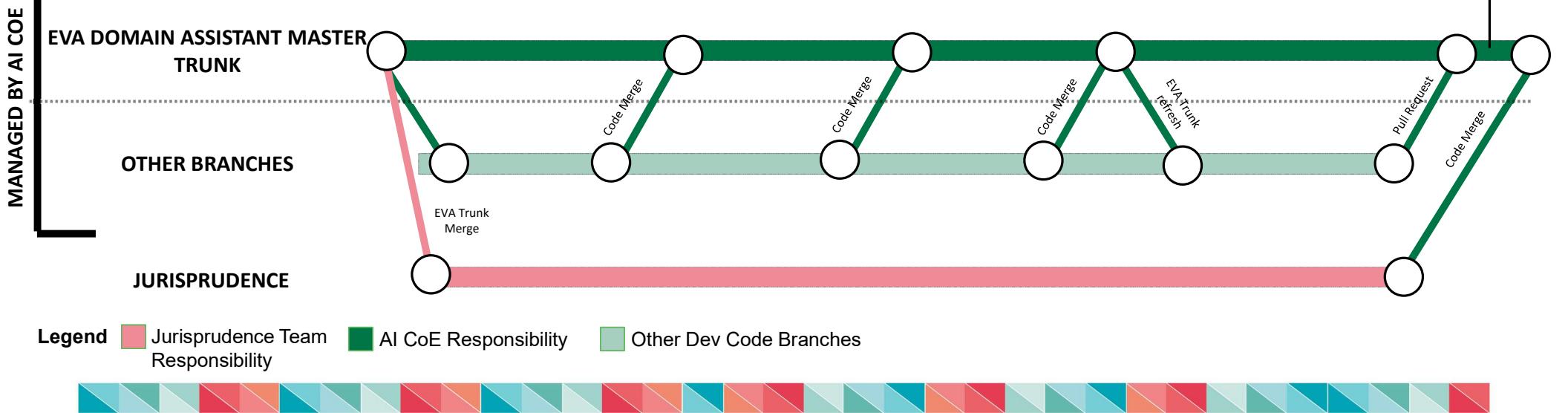
	Description	In EVA	Covered in JP Budget Scope	Jurisprudence Scope in Budget
Architecture Components (existing)	<ul style="list-style-type: none"> Most of the Jurisprudence solution components are provided in the JP specific resource group in the EVA domain assistant environment 	Yes	<ul style="list-style-type: none"> Yes – however, Accenture's recommendation is to have a demarcated OpenAI Service instance for Jurisprudence 	
Architecture Components (new)	<ul style="list-style-type: none"> Jurisprudence requires: <i>Azure Data Factory (for data pipeline) / Data sources for Jurisprudence data</i> APIM 	No	<ul style="list-style-type: none"> Yes* – assuming that the AI CoE team will be responsible for standing up APIM and Jurisprudence will leverage the APIM instance (recommended) 	
Front End / UI	<ul style="list-style-type: none"> EVA Domain assistant uses Azure App Services; Jurisprudence will use the same EVA currently undergoing accessibility/French approvals 	Yes	<ul style="list-style-type: none"> Yes* – assuming that Jurisprudence can leverage accessibility features, French features as well as the approvals 	
Data Pipeline	<ul style="list-style-type: none"> EVA domain assistant does not have a data pipeline that can be leveraged for Jurisprudence, which need to be built Sources and quantity of data for JP has been identified 	No	<ul style="list-style-type: none"> Yes – regardless of whether the pipeline will retrieve data from multiple sources or a single source (data lake) 	
Chat History and Feedback Management	<ul style="list-style-type: none"> EVA DA has chat history, but not FM Jurisprudence will implement minimal viable product features, using existing CosmosDB to store chat history/feedback 	Partial	<ul style="list-style-type: none"> Yes – minimal viable product will be developed. For chat history, previous chat conversations will be stored per user in CosmosDB. For feedback management, user feedback will be captured and stored per user in CosmosDB 	
Initial Code Merge with EVA	<ul style="list-style-type: none"> EVA domain assistant code base will be provided to Jurisprudence team and an initial code merge will be completed as a baseline 	Yes	<ul style="list-style-type: none"> Yes – a one-time code merge with the EVA domain assistant code will be performed prior to development for Jurisprudence 	
DevOps Branch / Merge	<ul style="list-style-type: none"> EVA architecture has DevOps main trunk – with feature tagging to be implemented Jurisprudence to be developed in code branch 	Yes	<ul style="list-style-type: none"> Yes* – Once Jurisprudence team is completed with code (including testing) and all features are tagged correctly, AI CoE team will be responsible for code merge into EVA 	 Jurisprudence Scope in Budget <ul style="list-style-type: none"> SOW approach - ABRG components used for APIM, UI/UX, Chat History and Feedback Management SOW approach has deviated to use the EVA DA arch/code as the baseline to merge into; ABRG components can no longer be used, new build effort required Most scope items can be completed within original budget, even with the deviation <p>* To stay within budget:</p> <ul style="list-style-type: none"> APIM - assumption AI CoE will standup APIM, JP will leverage UI/UX – include EVA DA accessibility and French E2E in JP solution One-time code merge at start, separate DevOps code branch for JP; AI CoE responsible for merge at completion of JP If above assumptions are not valid, then mentioned features not viable within budget

Jurisprudence DevOps Code Branching/Merge

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- The Jurisprudence team will create a code branch from the main EVA Domain Assistant. This will involve a merging of the existing Jurisprudence PoC code and EVA Domain Assistant. Once completed, the team will continue all further development in the Jurisprudence specific branch.
- While the AI CoE can continue to have other branches and perform code merges, Jurisprudence will operate independently until the completion of the project. After knowledge transition and handover of the Jurisprudence codebase, the AI CoE team will merge the branch back into the EVA Domain Assistant main code base.

Merge Review (AI CoE Responsible) for Incorporating Jurisprudence into Eva Main Trunk



Production Roadmap

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- Security: Controls, encryption, networking, firewall, pen-testing, cybersecurity readiness
- Finance: forecasting for monthly costs, egress/ingress, compute and AI services costs
- Privacy: PII information, encryption for data in transit/in-rest, storage controls, access controls
- Architecture: ESDC standards, aligning with architectural vision, Azure component use, scalability of architecture
- Infrastructure: Infrastructure as a code, DevOps and Infra pipelines
- Technology: Approvals for technology tools, SA&A completed for all components part of the solution
- DADM AI: AI governance approvals
- Hardening: Completing checklist of measures to ensure production environment is hardened and ready to be tested – operational, security, performance (concurrency, compute, load balancing), scalability of solution
- Production Ready: agreements from all stakeholders and towers, all gates and tower signoffs, go/no-go decision



Recommendations

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Development Recommendations:

- ESDC AI CoE to build a centralized or common APIM solution that Jurisprudence and other AI initiatives can leverage within the same environment/infrastructure
- Standardized UI accessibility code/modules that can be leveraged across multiple AI initiatives

Production Readiness Recommendations:

- Production readiness recommendations will be catalogued and summarized throughout the lifecycle of development for the Jurisprudence MVP – with a final list of recommendations provided at project closure for production readiness
- For example, recommendations on scalability, concurrency and other non-functional requirements will be provided to better prepare ESDC and AI CoE to move the Jurisprudence solution to Production

