RSBC Hub Future – Notable Dates and Events

David Agahchen – April 30, 2021

The following highlight dates and events relevant to the start and development of the RSI Hub solution concept.

2010

**Q1** – Office of the Superintendent of Motor Vehicle (OSMV) initiated the Core Operating System (COS) project after selecting the delivery vendor (CGI) and the core technology stack (Microsoft Dynamics and the xRM suite) to address major service silo, data quality, and data access related issues.

2012

**November** – OSMV cancelled the COS project with a review and restart strategy.

2014

**May** – OSMV renamed to RoadSafetyBC with Sam McLeod as the same ADM.

2015

**March** – Document Processing System (DPS) work started to PoC the solution and architecture principles identified in the COS restart strategy, as well as to make use of the document processing component of COS.

**October** – Road Safety Initiative Business Case work started (spanning 18 months, ending March 2017), based on the successful and rapid demonstration of DPS implementation.

**December** – Premier announced that the Ministry of Justice will be re-split into the Ministry of Attorney General (Honourable Suzanne Anton continue serving as Attorney General) and the Ministry of Public Safety and Solicitor General (Honourable Mike Morris to be the new Solicitor General and Minister for Public Safety.)

2017

**March** – Road Safety Initiative Business Case (phased approach) submitted and approved by Treasury Board. The business case included solution and working architecture principles based on the COS review recommendations:

* RSI governance
  + Centralized accountability through RSI
  + Regular accounting, reporting and reaffirming
* RSI solution principles
  + Start small and grow in time
  + Decouple eTicketing and Payments
  + Minimize impact on enforcement systems of record (ICBC)
  + Design for disconnection
* RSI architecture principles - working
  + Balance discipline and agility to enable us to respond to evolution over time of the opportunity landscape, readiness of different stakeholders, and availability of solution components
  + Start development of any new capability with a minimum-viable-product subset solution
  + Always develop a proof-of-concept (PoC) when introducing a new solution building block (technology) or substantive architecture change, at least one phase before committing to build and delivery of concrete business functionality
  + Always stay well within the intended functionality of COTS products
  + Separate user interface (service design) features from everything else, using interfaces and APIs
  + Design resilient solutions by decomposing the problem space, through separation-of-concerns, information hiding and minimizing interactions, and then build resilience into the main interactions between decoupled subdomains

**April** – RSI Phase 1 launched (with Alex MacLennan as the executive director) to develop a Hub-based, multi-phase, eTicketing solution.

2018

**March** – RSI MVP eTicketing with online payment functionality (Phase 1) implemented and Pilot started. Joint support agreements established between ICBC, PRIMECorp, CAS/PayBC, ISB, and RSI. The RSI Hub and the MVP eTicketing application was designed as a service-oriented architecture (SOA). They were implemented on the webMethods enterprise service bus (ESB) and business process management (BPM) technology stack.

**October** – Multi-count eTicketing with online payment functionality implemented and Pilot continued.

**November** – Court Services Branch Integration sub-project kicked off to onboard CSB as an integrated partner. Phase 1: to enable electronic transmission of violation ticket dispute and dispute status update data packages from ICBC to CSB JUSTIN system.

2019

**March** – Ticket dispute and dispute status update eTicketing solution implemented as the first RSI Hub business service (dispute) deployed on OpenShift 3. RSI Hub technical name renamed from Violations Processing Hub, or VPH (running on webMethods) to Justice Hub eTicketing, or JH-ETK (running on OpenShift). This rename, as well as related technical and architectural changes, laid the foundation for the ability to support multiple applications on the Hub using event-driven, service-oriented architectural principles (aka SOA 2.0).

**October** – RSI Hub and eTicketing application fully re-platformed to OpenShift 3 with three eTicketing services: issuance, payment, and dispute. Hub / eTicketing releases aligned with sprint cadence for ease of change coordination and planning.

**November** – Dispute findings notification functionality developed between CSB and eTicketing, with explicit application logic in JUSTIN and in eTicketing to hard disable the functionality until green light received from CSB to transmit and processing this information. ICBC not engaged until green light received from CSB.

2020

**March** – eTicketing to BI integration implemented with introduction of the eTicketing eventing service and the near real-time, event publishing functionality. eTicketing to TSMIT application (RCMP) integration implemented with introduction of the eTicketing event sourcing functionality through the same eventing service. RCMP onboarded as an eTicketing integrated partner. Engaged with OCIO as OpenShift-based Zero Trust Early Access member.

**June** – MVP full self-testing functionality (issuance, payment, access audit) implemented with introduction of the eTicketing mock service. The mock service allows the Hub and the eTicketing application to be integration tested without involving partner systems. The self-testing functionality was integrated into the Hub and eTicketing deployment pipeline.

**July** – The Hub and the eTicketing application upgraded with the ability to automatically deploy changes into a shadow environment for staging, prior to activating the newly deployed instance (blue-green deployment strategy.) This minimizes partner system impacts associated with deploying Hub changes.

**October** – The Hub and the eTicketing application upgraded with the ability to deploy as a highly available application and a business platform, based on the OCIO OpenShift Platform team’s [Resiliency Guidelines](https://developer.gov.bc.ca/Resiliency-Guidelines).

**November** – The Hub ‘system-of-systems’ MVP dashboard implemented, providing the ability for the Hub and Digital Innovation team to access Hub-related resources without first going through the eTicketing support console.

**December** – RSI Hub initial OpenShift 4 migration PoC completed. The eTicketing support console is made Internet-accessible (with two-factor authentication) to reduce administration and support overhead.

2021

**February** – RSI Hub OpenShift 4 migration completed with first Splunk-based eTicketing issuance data visualization (Sankey diagram). This leverages the corporate logging capability enabled by ISB for improved eTicketing support and operations.

**March** – The data enrichment service (geocoder) integrated into the eTicketing application. The eTicketing application is now consisted of six modularized business services: issuance, payment, dispute, eventing, geocoder, and mock. The Hub ‘system-of-systems’ application dashboard implemented (eTicketing), with at-a-glance IT monitoring capability. Splunk-based eTicketing data visualization expanded to include payment information for improved eTicketing support and operations.

**April** – The RSI Hub core mandate accomplished (implement a Hub-based eTicketing solution). Hub-related scaling decisions needed to address growing integration and access requests, as well as The Hub’s role in RoadSafetyBC and Justice Sector’s Digital Strategy.