



Canadian Intellectual Property Office

Modernizing our Patent IT System: API and WIPO Standards

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Purpose

- ❑ Present CIPO's digital modernization of the Patent System
- ❑ Highlight use of API and WIPO Standards

CIPO IT Modernization Journey

- ❑ The Patent and Trademark legacy systems were launched late 1990s and face long-term rust out and replacement systems are needed
 - Modernization of legacy systems are known to be costly, difficult and risky
 - Canadian Intellectual Property Office (CIPO) clients are primarily international and expect a modern experience that compares with other IP Offices
- ❑ CIPO has tried to modernize its patent legacy systems three times in the last 20 years and through these efforts learned important lessons that informed its IT modernization initiative
- ❑ The IT Modernization initiative (ITM) is a CIPO-wide effort that will leverage new technologies to modernize, harmonize, and integrate IP services across various CIPO lines of business (patents, trademarks, copyrights and industrial designs)
- ❑ The active build phase of the new modern Patent system (Next Generation Patents) started in May 2021 and leveraged technology firms and business lines engaged to drive digital transformation

Next Generation Patents

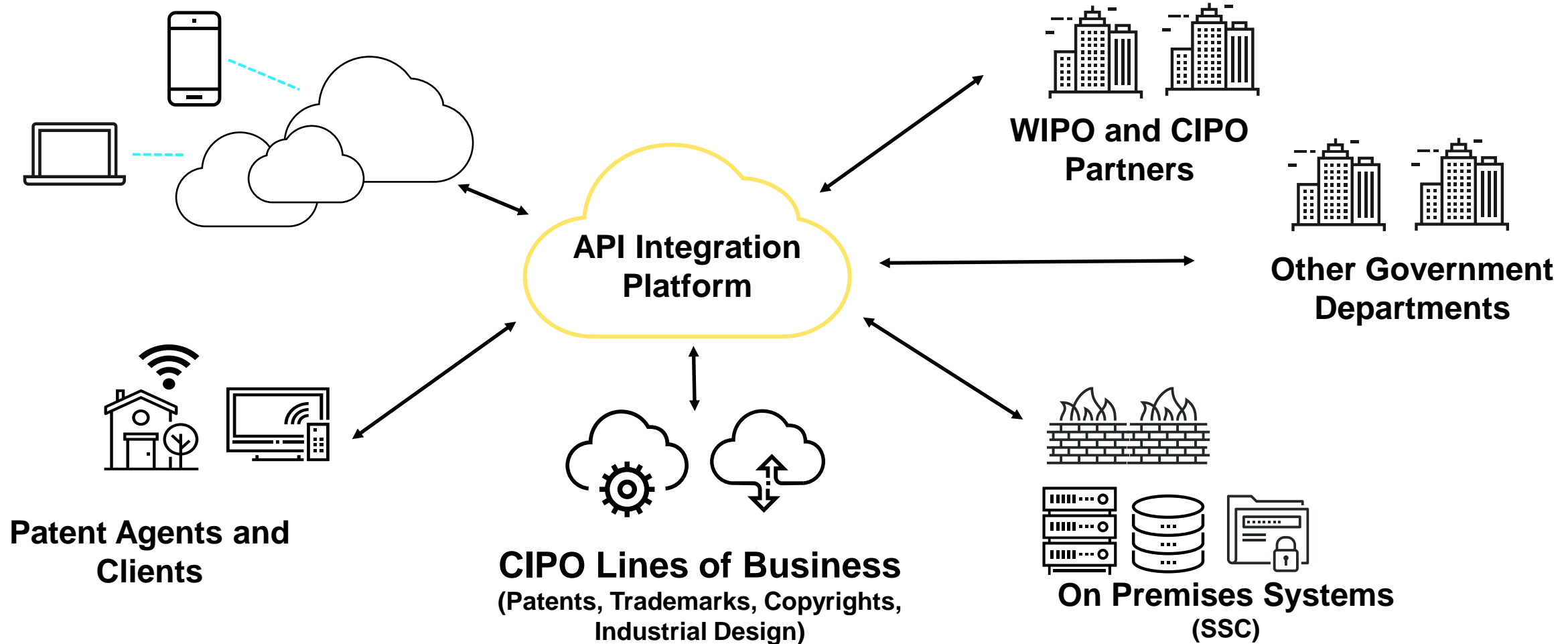
- To improve services and processes through operational excellence and a modern client experience, CIPO led an initiative called **Next Generation Patents (NGP)** to modernize:
 - The client-facing patents e-services via a centralized portal – **MyCIPO Patents**
 - The internal IP Rights Management System – **Back-office System**
 - The internal Integrated Financial Management System

Modernization Approach

- ❑ Our client-facing patents e-services use Salesforce Cloud as the user interface
 - ❑ The e-services are developed on the AWS cloud via a RedHat stack of Java integration enablers to call WIPO's PCT APIs
 - ❑ Java is also used to parse the WIPO PCT Pamphlet XML packages and to store data in the back-office system
- ❑ Our internal IP Rights Management System uses EUIPO Software Package (SP) as the technology for the back-office system
 - ❑ The back-office system is also developed on the AWS cloud
 - ❑ EUIPO Software Package (SP) is a java developed software with Drools Rules and Activiti BPMN workflows

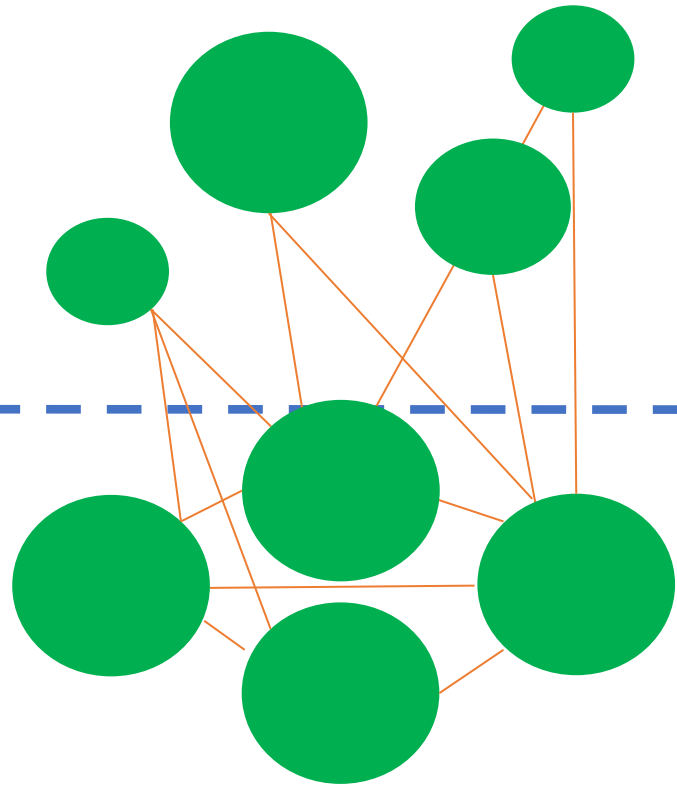
NGP and Application Programming Interface Vision

Modernize CIPO IP systems and transform the digital experience supported by business solutions hosted in the cloud



NGP and Application Programming Interface

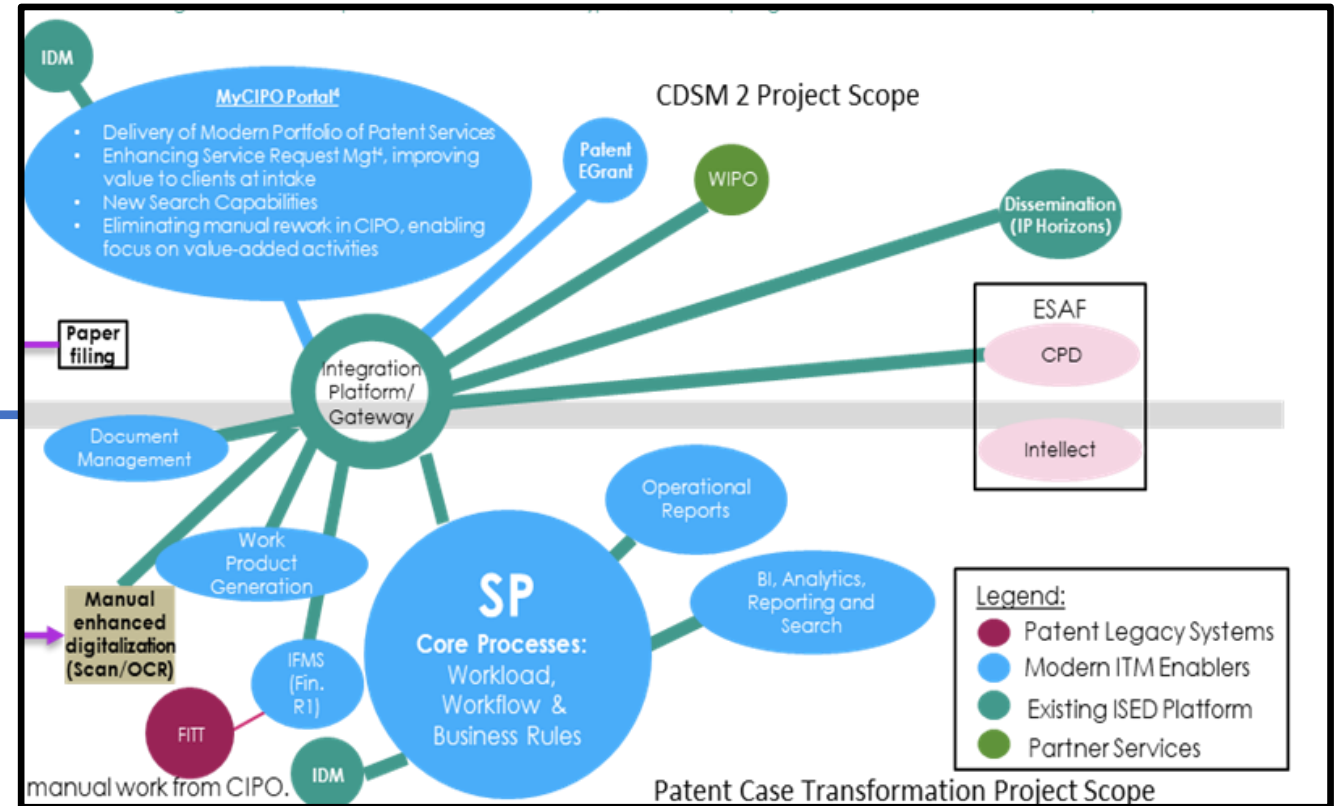
Legacy System



NGP

Front-Office

Back-Office



NGP and WIPO Standards

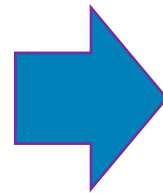
- ❑ Our front-office AWS integration layer calls Service Request Transactions to our back-office system via WIPO ST.96 XML payloads
- ❑ CIPO specific service request transactions were developed following ST.96 using Patent Publication as a base for Patent components plus follow Madrid and Hague transaction XML schema design patterns
- ❑ WIPO Standard ST.27 (Patent Legal Status) was embraced as the foundation for recording patent events in the new back-office system

The Modernization – Front Office (Client View)

1997 to July 2024

General Correspondence Form Legacy Client System

The screenshot shows a web form titled "General Correspondence - Patents". On the left is a vertical navigation menu with options: "Load a saved General Correspondence", "Information" (highlighted), "Attachments", "Comments", "Fees", "Online help", and "Problem Report". The main content area is titled "Information" and includes a "Privacy Notice" link. A yellow warning banner states "Fields marked with an asterisk (*) are mandatory." Below this are two sections: "Application/Patent information" and "Sender". The "Application/Patent information" section contains fields for "Application or Patent Number" (with a hint "999999 or PCTA9999999999"), "*Title of Invention (required)" (Maximum of 250 characters), and "Applicant or Inventor Name" (Maximum of 150 characters). The "Sender" section contains fields for "*First Name (required)" (Maximum of 30 characters), "Initial" (Maximum of 30 characters), "*Last Name (required)" (Maximum of 30 characters), and "Name of Corporation or Firm" (Maximum of 30 characters).



July 2024 Onwards

MyCIPO Patents Modern Online Client Portal

The screenshot shows the MyCIPO Patents Modern Online Client Portal. At the top, it features the Government of Canada logo and the text "Government of Canada" and "Gouvernement du Canada". There are links for "Disclaimer" and "Français". A "MENU" dropdown is visible. Below the menu, there is a "Home" link and a user status indicator "Signed in as jared.wilson.gowlings" with buttons for "Admin page", "Access my profile", and "Sign out". The main heading is "MyCIPO Patents" with links for "Help" and "Problem report". The page is divided into four main service tiles: "New application" (with sub-links for National entry, Regular, and Divisional applications), "Submission on existing application(s) or patent(s)" (with sub-links for Single and Multiple applications/patents), "Pay maintenance fees" (with a sub-link for Pay maintenance fees), and "Search files and correspondence" (with sub-links for Search application or patent information and Search applications or patents).

The Modernization – Back Office (Employee View)

1997 to July 2024

TechSource Legacy Patent Employee System

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PA52  Add Upd Del Admin_req Accept_Clm Restore Deny_Rest Remove_Clm

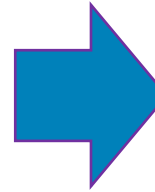
TECHSOURCE PATENT ADMINISTRATION          2021/03/03
Priority Date Maintenance                   16:06:53

Type selection code (/) to select a record for update, then press ENTER.

P/A No. . . . . 3026598_ Current State : Compliant_ Susp. Status: Good Stand
Requested Date. _____ Country . . . <F4>
Priority Date . _____ Priority Number . _____
Priority Status : _____
Electronic Library: <F6>
Supporting Docs . _ (N/R/C) Translated . _ (N/R/C) Certified Trans _ (N/R/C)
MORE:

Sel Date      Country      Status Priority Number
20160607 United States of America 03 62/346,818
20161216 United States of America 03 62/435,531

LOB493-I: Successfully displayed.
F1=HLP F2=FLDR F3=Exit F5=RFSH F7=Prev F8=Next F9=Request Docs F12=CNCL
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July 2024 Onwards

Software Package Modern Patent Employee System

IP Next Generation

Dashboard > Main Task List

Main Task List

All Tasks My Tasks

Completed Tasks

Field Operator Value Apply Search Select Table Configuration Configure Table Actions

P/A Number	Process	Task	Jng Date	Status	User	Task Comments	PCT Indicator	Select
9004554	Verify Filing Requirements	Validate Description	2023/08/21 18:56:02	2023/01/10	Initial Submission		0 Yes	<input type="checkbox"/>
9004553	Verify Filing Requirements	Validate Description	2023/08/21 18:48:38	2020/05/22	Initial Submission		0 Yes	<input type="checkbox"/>
9004544	Perform Examination	GT Examiner's Report SCock	2023/08/21 15:12:44	2023/01/31	Initial Submission		0 Yes	<input type="checkbox"/>
9004527	Verify Agent Requirements	BP-4295: Check against agent requirements	2023/08/18 19:38:12	2022/02/18	Entered National Phase		0 Yes	<input type="checkbox"/>
9004527	Verify Priority Information	BP-4287 Generate priority deficiency letter	2023/08/18 19:38:33	2022/02/18	Initial Submission		0 Yes	<input type="checkbox"/>
9004508	Classify Application	Check classification	2023/08/21 18:58:19	2023/08/18	Application Compliant		1 Yes	<input type="checkbox"/>
9004508	Verify Request for	BP-4367 Send letter to applicant	2023/08/18	2023/08/18	Application		0 Yes	<input type="checkbox"/>

Conclusions

- ❑ CIPO successfully soft launched the Next Generation Patent system in July 2024
- ❑ CIPO leveraged APIs and several WIPO standards to develop a new and modern patent system (e.g. ST.26, ST.27, ST.90 and ST.96)
- ❑ Use of WIPO standards positioned CIPO to move forward with little to no “discussions” leading to saved time and effort and greater alignment with WIPO
- ❑ As a next step, CIPO will turn its focus to modernizing the legacy Trademarks systems