



IMF2 (Internet Mapping Framework 2.0)

Powered by Geocortex REST-based technology

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Overview

The Internet Mapping Framework 2.0 (IMF2) is a comprehensive packaged framework of development tools, software components and features integrated tightly together to deliver outstanding web-based mapping applications. Developed for the BC Government's Ministry of Labour, Citizens' Services and Open Government, IMF2 provides everything required for a department's web mapping application implementation.

IMF2 is unique because it bridges the gap between pure "out-of-the-box" software and a custom application development. It allows applications to be easily configured through visual administration tools, which significantly reduces the need to resort to programming, allowing non-developers to build and manage applications. IMF2 is designed with Spatial Data Infrastructure (SDI) adherence in mind, and includes metadata, a schema, adherence to standards and a comprehensible framework. The SDI approach alleviates the pain points associated with building multiple, separate applications, and accommodates for the inevitability of technology change. IMF2 offers a better, more modern way for web-GIS consumers to interact with applications, and

the SDI compliance addresses how these applications are designed, built and maintained.

Developed by Latitude Geographics in conjunction with its Geocortex Essentials REST technology offering, the IMF2 provide BC Government users with cutting edge functionality, features and new capabilities on an ongoing and sustainable basis.

Why use IMF2?

Quite simply, the use of IMFs allows you to attain your GIS objectives faster and for significantly less cost and risk than custom development:

- Citizen end-users benefit from an effective, intuitive web-mapping experience that allows them to quickly and efficiently achieve their goals.
- Supports multiple devices (including desktop, tablets, and smartphones) and collaboration and map sharing through popular services (including Facebook, Twitter, Google+ and email).

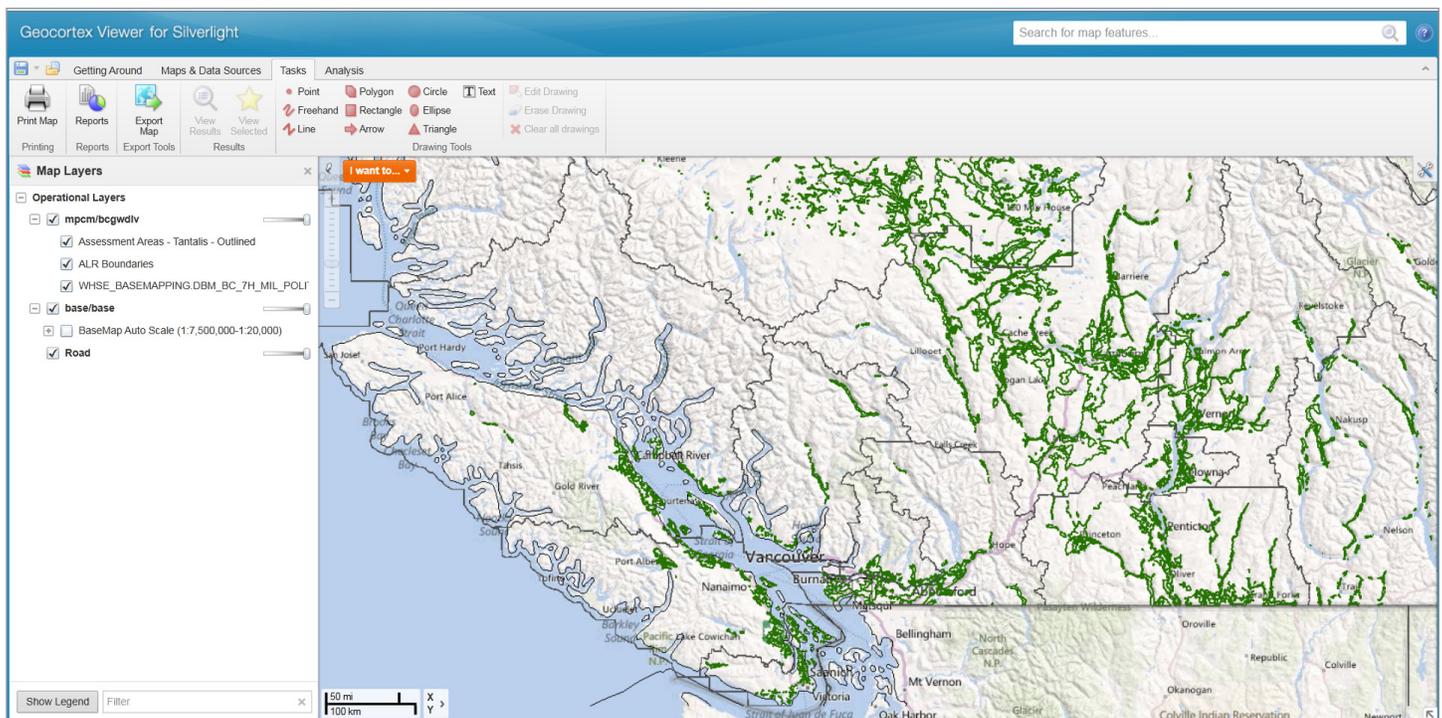


Figure 1: Viewer for Silverlight: Select BC Map Layers

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- DataBC can work with you to leverage the SDI platform and IMF2 to create powerful, feature-rich end-user experiences. New sites can be rapidly created.
- Authors can connect to a variety of data sources, internal or external to the BC Government. IMF2 applications can consume content from the BCGW (BC Geographic Warehouse), an authoritative source for government information.
- Government managers achieve quantifiable success for the web mapping component of their programs, by leveraging IMF2's capabilities to deliver rapid results.
- IT specialists can dig deeply into the IMF2 platform, core elements, and developer tools to extend and enhance applications.
- Projects can be delivered faster and with less risk by focusing on high-value effort.

IMF2 Core Components

IMF2 components offer a core of your web-mapping application: printing, reporting, data linking, enhanced security, and search features:

Workflow

Many business processes involving GIS operations can be modeled, streamlined, and automated via workflows. Business analysts can model and automate everyday GIS-related business processes by creating simple, step-by-step interactions within the IMF2 tools. With IMF2, Workflow allows you to extract greater value from your geospatial data and make it truly work for you and your users.

Forms

Developed in conjunction with Workflow, Forms provide a simple way to create dialogs that prompt end-users for input through web or mobile applications. The form designer provided within IMF2 allows you to add input items such as text boxes, auto-complete entries, date pickers and drop-downs, then associate validation rules and the control of forms layout.

Security

IMF2 includes advanced security features which provide you with the ability to grant or deny access to web map layers. Layer level security is provided through support of the BC Government's IDIR/BCeID security infrastructure. You can choose the security that's right for your department and for users inside and outside government.

Printing and Reporting

You can invoke normal or large format, high-resolution template-based printing and reporting with IMF2. Template-based printing allows you to create printable maps using customized and out-of-the box layouts, and template-based reporting enables you to easily generate commonly used reports. Each template defines a standard layout for reporting on the layer's features, attributes, linked and computed data. By saving your department valuable employee time, you will be able to do more with your budgets and resources.

Search

Use IMF2 to customize your searches by creating your own search forms and query tasks. Search, display and report on data collected through server.

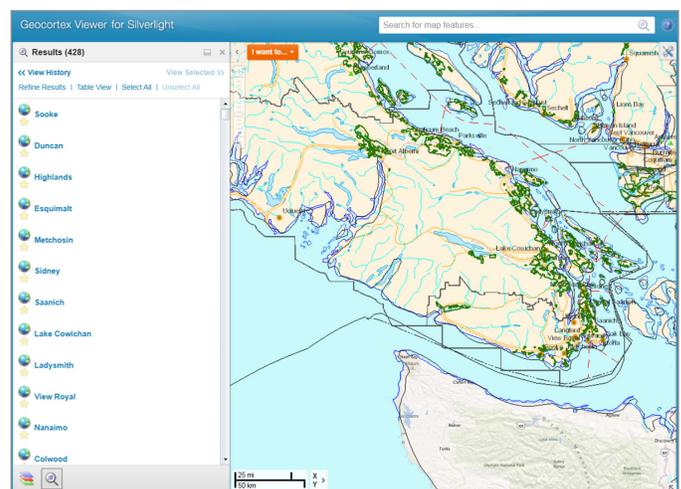


Figure 2: Search Results

Layer List and Data Linking

The Layer List in IMF2 Viewers provides layer organization and collapsible categorization. You can control map service transparency, layer visibility control, view a dynamic legend (reflects currently visible layers), and filter/find layers with text input. Having such a wide range of controls will enable you to have greater control over your layers, and in turn, over what data that is accessible to your end users. With IMF2, you can dynamically connect applications to BCGW authoritative content, and spatial and non-spatial databases, files, or web services internal or external to the BC Government. You can then embed this data in reports, searches, and forms, extending the reach and capability of your applications.

Viewers

The map viewers available within IMF2 provide advanced Web mapping capabilities for departments seeking to deploy feature-rich, user-centric web and mobile applications. IMF2 provides map viewers in a number of different technologies, including Flash, Microsoft Silverlight, Javascript and HTML5, and the framework is developed so that maps can be deployed to new technologies and new platform quickly and easily with minimal effort. The viewers are fully integrated with other IMF2 components and are highly configurable.



Software Requirements

IMF2 relies on third party software. There are multiple components necessary in order to install and run the framework:

Windows Operating System

IMF2 is built using Microsoft .NET technologies. As such, it may only be deployed on Microsoft Windows operating systems. The following Windows operating systems are supported:

- Windows Server 2003
- Windows Server 2008
- Windows XP
- Windows Vista
- Window 7 and Window 8

Supported Devices:

- Desktop Browsers** Internet Explorer, Mozilla Firefox, Google Chrome, Apple Safari & Opera
- Apple iOS** Safari for iOS on Apple iPad, iPhone and iPod Touch
- Android** Default browser for Google Android 2.x, 3.x and 4.x
- Blackberry** Default browser for BlackBerry PlayBook

Microsoft IIS

IMF2 requires Microsoft Internet Information Services (IIS). Install the appropriate version of IIS for the operating system you are running.

For more information on using IMF2 within your ministry or department, please contact: datamaps@gov.bc.ca