

# LawNet: The Singapore Legal Research Experience

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## **Introduction**

In Singapore today, technology drives many of the legal processes in Singapore. Court documents are filed electronically using the Electronic Filing System<sup>1</sup>. Company and business filings to the Companies and Businesses Registry are also done electronically using BizFile<sup>2</sup>. Likewise for trademark and patent filings<sup>3</sup>. Thus it comes as no surprise that the average Singapore lawyer today is comfortable with IT. He (or she) carries out searches against these registers and does his (or her) legal research online. And they do so using LawNet.

LawNet (<http://www.lawnet.com.sg>) is the premier legal information provider in Singapore. It is managed by the LawNet Management Committee ("LMC") of the Singapore Academy of Law<sup>4</sup>. LMC comprises members of the Judiciary, the Attorney-General's Chambers, the Info-Comms Development Authority<sup>5</sup>, participating government agencies and the legal profession. The work of LMC is supported by a Secretariat that handles the day-to-day activities of LawNet.

Today, LawNet offers services that members of the legal community take for granted and, indeed, will find it difficult to practice law without. The pace of legal business in Singapore, especially litigation, is much faster now than twenty years ago when LawNet was born. Lawyers and judges need legal information and they need it now. LawNet, with its constant enhancement, is able to meet those needs.

## **The History**

LawNet's genesis back in 1989 was from the Singapore Statutes Database at the Attorney-General's Chambers. The vision was to move the

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<sup>1</sup> Information can be found at <http://info.efs.com.sg>

<sup>2</sup> Information can be found at <http://www.bizfile.gov.sg>

<sup>3</sup> Information can be found at <http://www.ipos.gov.sg>

<sup>4</sup> Information on the Singapore Academy of Law is found at <http://www.sal.org.sg>

<sup>5</sup> IDA is the Singapore government CIO and the agency that concerns the development of the IT industry.

Singapore legal profession into the information technology age. LawNet was to be a one stop service that is the single window into the various laws and legal information required for the legal profession in Singapore.

These included repositories of legal information from the Registry of Companies & Businesses, the Intellectual Property Office, the Land Office, the Courts as well as the Attorney-General's Chambers. The vision was unique at that time as few government agencies were prepared to share information with the private sector.

### *The Approach*

In the pre-Internet age, the approach was innovative: LawNet was to coordinate the computer networks of various government agencies and to make them all available through a single gateway accessible via a dial-up modem – a 'dot.com' and a 'portal' before such words became fashionable.

The individual agencies then have no need to develop their own expensive computer systems to make their content available to users online and users have no need to sign up to each of the various agencies. Instead users just have to sign up to LawNet who will act as the central clearing house for connectivity to access all the government agencies.

After a short incubation period, LawNet was launched in July 1990. In those early days, LawNet's pricing model was based on computer time used and the quantity of data retrieved. As an example, to access the Statutes database, the charges were S\$0.50 per minute plus S\$0.10 for every block of 512 characters transferred. This model was not popular. While many law firms had a LawNet account, usage was very low as everyone was 'keeping an eye on the meter'.

### *The Internet Age*

In 1998, LawNet launched a new module called Legal Workbench. Legal Workbench carries the Versioned Legislation Database ("VLDB"), a point-in-time database of statutes and subsidiary legislation, as well as a database of Singapore judgments from the courts. At the same time two bold decisions were made: firstly, to migrate LawNet to the Internet and, secondly, to change the pricing model to a buffet-style pricing – unlimited

access for a fixed flat fee based on the number of lawyers in a law firm. Both moves proved popular: LawNet saw a take-up rate of 50% in the next year and 70% in the following year.

## **The Product**

LawNet comprises of several modules: covering legal research; due diligence and land title searches; intellectual property searches; and the 'lawyer-facing side' of the Judiciary's electronic filing system. A brief description of the modules follows:

### *Due Diligence*

The due diligence module allows a user to search for information about an individual or business entity across multiple databases of the Supreme Court, the Subordinate Courts and the Accounting and Corporate Regulatory Authority (ACRA), the regulatory authority for business entities.

### *Practitioners' Toolkit*

The Practitioners' Toolkit is a module that allows users to research and access up-to-date decisions on taxation of bills of costs, assessment of damages and sentences passed. While such decisions do not usually have precedent value, they are necessary for litigation practitioners in their daily work.

### *InteReq*

The Integrated Legal Requisition System or InteReq makes the conveyancing process more efficient. Users can prepare and send legal requisitions to eight different government agencies via a single web-page. These requisitions are necessary to ensure that there are no statutory charges or other encumbrances over the property. Replies to legal requisitions are also received electronically.

### *PSS-INLIS*

The Public Search Service - Integrated Land Information Service or PSS-INLIS provides access to a comprehensive list of property related information. A user can search the database to find owners of properties,

whether the property is encumbered or if caveats are lodged against the property.

### *Intellectual Property*

The Intellectual Property Module links to the trade mark, patents and registered designs databases provided by the Intellectual Property Office of Singapore. Users are able to search these databases and retrieve comprehensive and integrated intellectual property (IP) information.

### *Singapore Law Watch*

Singapore Law Watch is a free daily legal news service for the law community in Singapore and abroad. Legal editors monitor more than 40 news and other sources to compile a daily newsfeed. Users can access the service via RSS, email or from the Singapore Law Watch website. Many law firms embed the RSS within the firm's intranet to ensure that their lawyers are up-to-date about what is happening in the legal scene.

### **Legal Workbench**

The cornerstone of LawNet is the Legal Workbench. It is an online legal research tool and provides access to the updated laws of the Republic of Singapore, the Singapore Parliamentary Debates, decisions of various courts and tribunals, including previously hard to obtain unreported judgments and historical decisions under the Heritage Law Reports. English cases were added in 2007 and were followed by Indian, Australian and New Zealand cases in 2009. This year we are adding Hong Kong cases to our databases. A summary of content on Legal Workbench follows:

- **Singapore Case Law**  
Contains the Singapore Law Reports from 2010, Singapore Law Reports (Reissue) (1965 - 2009), unreported Judgments, Tribunal/Board Decisions of Singapore and the Heritage Law Reports.
- **Malaysia Case Law**  
Contains the Malayan Law Journal (MLJ) from 1932.

- **English Case Law**  
Contains the complete archive of judgments of the Law Reports and the Weekly Law Reports from 1865 onwards, as provided directly by the Incorporated Council of Law Reporting for England and Wales.
- **Indian Case Law**  
Contains the Indian Supreme Court Cases (SCC) from 1969.
- **Australian and New Zealand Legal Materials**  
The content is from AustLII and is available for searching and accessing directly within Legal Workbench. AustLII's databases include cases, legislation and selected secondary materials from all the Australian jurisdictions as well as New Zealand.
- **Reference Material**  
A stable of secondary legal materials, including Singapore and Malaysia's leading academic legal journals, legal updates from leading Singapore and Malaysian law firms, and a variety of textbooks such as Court Practice Manuals for Civil Procedure and Sentencing Practice in the Subordinate Courts of Singapore.
- **Singapore Legislation**  
Provided by the Attorney-General's Chambers of Singapore, the Legal Workbench hosts Singapore's only versioned legislation database, which captures all versions of statutes and subsidiary legislation after 1 January 1997.
- **Singapore Parliamentary Reports**  
The Singapore Parliament Reports System makes available in full-text format the official reports of debates, ie the Hansard, in the Legislative Assembly of the Colony and later the State of Singapore, and the present Parliament of Singapore, as well as sessional and select committee reports, from 1955.
- **Singapore Treaties**  
The Singapore Treaties Database contains records of treaties to which Singapore is a party, including exchanges of letters, memoranda of understanding, and other agreements regarded as treaties under international law. Key treaties are available in full-text format.

## **The Technology**

LawNet faces two key challenges: the ever increasing expectation of our users and the spiralling cost needed to support the increasing content and functionalities demanded by users. LawNet addresses these challenges by leveraging on technology.

LawNet is built around several components:

- **The Content Management System (CMS):** As earlier described, LawNet has a large collection of content coming from various content providers. These content must be stored and organised in a structured manner to facilitate easier retrieval and re-use. The CMS allows LawNet to do this. It also allows the Secretariat to easily create new classes of content from new content providers and to upload new content from existing content providers. The flexibility of our customised CMS allows LawNet to quickly create new services required by our users. As an example, the Singapore Law Watch service was created using newsfeed scripts that pull the required content from the CMS rather than having to develop an entire new application.
- **The Search Engine:** Once the content is stored and organised in the CMS, users must have a flexible way from retrieving and accessing the content. Further, for some content provider, instead of having their content uploaded into the CMS, rather have LawNet access their content from their own servers. The search engine used by LawNet can index content in the CMS as well as federate the search results from content that resides in other servers. All this will be done transparent to the user who will not have to worry where the content is coming from.
- **Single Source Publishing:** As more and more content comes to LawNet for uploading, there is a need to streamline the workflow processes to make it more efficient. Thus in 2009, LawNet together with Academy Publishing (the print publishing arm of the Singapore Academy of Law) implemented a Single Source Publishing project. Content coming to

LawNet is converted into XML<sup>6</sup> using automated conversion tools. Academy Publishing and LawNet will then use the XML version of the content for their own publishing needs, doing away with duplication of effort. Content in XML allows for the easy and automated creation of pin-point hyperlinks into other XML content. As an example, if Case A has a reference to a specific paragraph in Case B, the user, by clicking on the reference in Case A will be brought to that paragraph in Case B. The use of XML also protects our content from obsolescence as technology evolves since it is accepted as the data standard for text rich content.

- Automated Spiders<sup>7</sup>: If the content sits on other content providers' servers, LawNet makes use of automated spiders to parse the content to detect case or legislation citations. The spiders then automatically create hyperlinks to other content on LawNet when displaying the parsed content to LawNet users.

These components, working together, automate many of the processes that the LawNet secretariat will otherwise have to do manually. With the correct use of technology, LawNet has been able to keep its operating costs low.

### **LawNet Today**

LawNet is very conscious of the need to remain relevant to our users. We achieved this by constantly seeking feedback from users on how to improve our services. Through such feedback, LawNet has expanded with new content delivered to our users with new functionalities. Rich hyperlinking between the content makes accessing information convenient for our users.

LawNet has grown to be comparable to global commercial information providers, but yet is able to maintain its affordability. A single lawyer firm only has to pay S\$63 per month to access the service while large firms of

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<sup>6</sup> XML or eXtensible Markup Language is a machine readable code used for the publication of content.

<sup>7</sup> Spiders are short programming codes that browse content in a methodical, automated manner to identify patterns within the content.

300 lawyers pay a little over S\$9 per lawyer per month. This subscription model, and LawNet's effort to keep costs down, allows LawNet to be financially self-sustaining. It also allows the legal profession to have 24/7 unlimited access to indispensable legal information - thereby raising the standard of legal work in Singapore.

The wide variety of legal databases, the unlimited 24/7 access, the rich hyperlinking between content and the very affordable pricing has resulted in over 90% of lawyers in Singapore and all legal service officers, judicial officers and judges having a LawNet id. The two Law Schools in Singapore have complementary bulk access for all their law students and faculty members. Many in-house counsel and foreign law firms in Singapore are also subscribers of LawNet.

The LawNet model, where government legal content is provided to the legal community at affordable subscription rates, is unique. The subscription paid by LawNet users is then used to sustain and enhance LawNet which in turn benefit not only the lawyers but also Judges who use LawNet in their own daily work.