



[SIGN IN](#) [SIGN UP](#)

Select Language ▾

Inside Java 2 platform security architecture, API design, and implementation

Author: [Li Gong](#) [Sun Microsystems, Inc.](#) 1999 Book

Publ cation: [Bibliometrics](#)

· Book

Inside Java 2 platform secur ty arch tecture, API design, and implementation

Addison-Wesley Longman Publishing Co., Inc. Boston, MA, USA ©1999

ISBN: 0-201-31000-7

Citation Count: 100
Downloads (cumulative): n/a
Downloads (12 Months): n/a
Downloads (6 Weeks): n/a

Tools and Resources

- [Save to Binder](#)
- [Export Formats:](#)
 - [BibTeX](#) [EndNote](#) [ACM Ref](#)



Share:

[Author Tags](#) ▾

[Contact Us](#) | Switch to [tabbed view](#)

[Abstract](#) | [Authors](#) | [References](#) | [Cited By](#) | [Index Terms](#) | [Publication](#) | [Reviews](#) | [Comments](#)

↑ **ABSTRACT**

An abstract is not available.

↑ **AUTHORS**



[Li Gong](#)
No contact information provided yet.

Bibliometrics: publication history

Publication years	1989-2011
Publication count	63
Citation Count	1,066
Available for download	14
Downloads (6 Weeks)	125
Downloads (12 Months)	927
Downloads (cumulative)	38,856
Average downloads per article	2,775.43
Average citations per article	16.92

[View colleagues](#) of Li Gong

↑ **REFERENCES**

References are not available

↑ **CITED BY**

100 Citat ons

[Li Gong, Why Cross-Platform Secur ty, IEEE Internet Computing, v.7 n.3, p.96, May 2003](#)

[John W. Holford, William J. Caelli, Anthony W. Rhodes, Using self-defending objects to develop security aware appl cat ons in Java™, Proceedings of the 27th Australasian conference on Computer science, p.341-349, January 01, 2004, Dunedin, New Zealand](#)


[Jan Jürjens, Model-Based Run-Time Checking of Secur ty Permissions Using Guarded Objects, Runtime Verification: 8th International Workshop, RV 2008, Budapest, Hungary, March 30, 2008, Selected Papers, Springer-Verlag, Berlin, Heidelberg, 2008](#)

[Jan Jürjens, Foundat ons for Designing Secure Architectures, Electronic Notes in Theoretical Computer Science \(ENTCS\), 142, p.31-46, January, 2006](#)

[Li Gong, A Software Architecture for Open Serv ce Gateways, IEEE Internet Computing, v.5 n.1, p.64-70, January 2001](#)

[Marcel Winandy, Armin B. Cremers, Hanno Langweg, Adrian Spalka, Protecting Java component integr ty against Trojan Horse programs, Integr ty and internal control in information systems V, Kluwer Academ c Publishers, Norwell, MA, 2003](#)

[Xavier Leroy, Bytecode verificat on on Java smart cards, Software—Pract ce & Experience, v.32 n.4, p.319-340, 10 April 2002](#)

- [Sye Loong Keoh , Emil Lupu, An efficient access control model for mobile ad-hoc commun ties, Proceedings of the Second international conference on Security in Pervasive Computing, April 06-08, 2005, Boppard, Germany](#)
-  [R. Sekar , C. R. Ramakrishnan , I. V. Ramakrishnan , S. A. Smolka, Model-Carrying Code \(MCC\): a new paradigm for mobile-code security, Proceedings of the 2001 workshop on New secur ty paradigms, September 10-13, 2001, Cloudcroft, New Mexico](#)
- [Denis Caromel , Fabrice Huet , Julien Vayssière, A Simple Secur ty-Aware MOP for Java, Proceedings of the Third International Conference on Metalevel Architectures and Separation of Crosscutting Concerns, p.118-125, September 25-28, 2001](#)
- [Alessandra Toninelli , Rebecca Montanari , Lalana Kagal , Ora Lassila, A semant c context-aware access control framework for secure collaborations in pervasive computing environments, Proceedings of the 5th international conference on The Semantic Web, November 05-09, 2006, Athens, GA](#)
- [Gautam Pant , Filippo Menczer, MySpiders: Evolve Your Own Intelligent Web Crawlers, Autonomous Agents and Multi-Agent Systems, v.5 n.2, p.221-229, June 2002](#)
- [Flemming Nielson , René Rydhof Hansen , Hanne Riis Nielson, Abstract interpretation of mobile ambients, Science of Computer Programming, v.47 n.2-3, p.145-175, May 2003](#)
- [Srijith K. Nair , Patrick N. D. Simpson , Bruno Crispo , Andrew S. Tanenbaum, A Virtual Machine Based Information Flow Control System for Policy Enforcement, Electronic Notes in Theoretical Computer Science \(ENTCS\), v.197 n.1, p.3-16, February, 2008](#)
- [Dav d A. Naumann, Verifying a secure informat on flow analyzer, Proceedings of the 18th internat onal conference on Theorem Proving in Higher Order Log cs, August 22-25, 2005, Oxford, UK](#)
-  [Gleb Naumovich , Paolina Centonze, Static analysis of role-based access control in J2EE applicat ons, ACM SIGSOFT Software Engineering Notes, v.29 n.5, September 2004](#)
- [Dav d Bettencourt Da Cruz , Bernhard Rumpe , Guido Wimmel, Retrofitting security into a web-based information system, Proceedings of the 2003 international conference on Web engineering, July 14-18, 2003, Oviedo, Spain](#)
- [Xavier Leroy, On-Card Bytecode Verif cation for Java Card, Proceedings of the International Conference on Research in Smart Cards: Smart Card Programming and Security, p.150-164, September 19-21, 2001](#)
-  [V. N. Venkatakrishnan , Ram Peri , R. Sekar, Empowering mobile code using expressive security policies, Proceedings of the 2002 workshop on New security paradigms, September 23-26, 2002, Virginia Beach, Virginia](#)
- [Youqang Song , Brett D. Fleisch, Utilizing Binary Rewriting for Improving End-Host Security, IEEE Transactions on Parallel and Distributed Systems, v.18 n.12, p.1687-1699, December 2007](#)
- [Grzegorz Czajkowski , Stephen Hahn , Glenn Skinner , Pete Soper , Ciarán Bryce, A resource management interface for the Java™ platform, Sun Microsystems, Inc., Mountain View, CA, 2003](#)
- [Ciarán Bryce , Nathan Dimmock , Karl Krukow , Jean-Marc Seigneur , Vinny Cahill , Waleed Wagealla, Towards an evaluation methodology for computat onal trust systems, Proceedings of the Third international conference on Trust Management, May 23-26, 2005, Paris, France](#)
- [Xavier Leroy, Java Bytecode Verification: An Overview, Proceedings of the 13th International Conference on Computer A ded Verif cation, p.265-285, July 18-22, 2001](#)
- [Antero Taivalsaari , Tommi Mikkonen , Dan Ingalls , Krzysztof Palacz, Web browser as an application platform: the lively Kernel experience, Sun Microsystems, Inc., Mountain View, CA, 2008](#)
- [Jan Jürjens, Encapsulating Rules of Prudent Security Engineering, Revised Papers from the 9th International Workshop on Security Protocols, p.95-101, April 25-27, 2001](#)
-  [Steve Muir , Larry Peterson , Marc Fluczynski , Justin Cappos , John Hartman, Privileged operations in the PlanetLab virtualised environment, ACM SIGOPS Operating Systems Review, v.40 n.1, January 2006](#)
-  [Michele Bugliesi , Giuseppe Castagna, Secure safe ambients, ACM SIGPLAN Notices, v.36 n.3, p.222-235, March 2001](#)
-  [Tomoyuki Higuchi , Atsushi Ohori, A static type system for JVM access control, ACM SIGPLAN Notices, v.38 n.9, p.227-237, September 2003](#)
-  [Gleb Naumovich, A conservative algor thm for computing the flow of permissions in Java programs, ACM SIGSOFT Software Engineering Notes, v.27 n.4, July 2002](#)
-  [Ciarán Bryce , Chrislain Razafimahefa, An approach to safe object sharing, ACM SIGPLAN Notices, v.35 n.10, p.367-381, Oct. 2000](#)
- [D. M. Chess , C. Palmer , S. R. Wh te, Security in an autonomic computing environment, IBM Systems Journal, v.42 n.1, p.107-118, January 2003](#)
- [Massimo Bartoletti , Gabriele Costa , Roberto Zunino, Jalapa: Securing Java with Local Policies, Electron c Notes in Theoret cal Computer Science \(ENTCS\), v.253 n.5, p.145-151, December, 2009](#)

- [Anindya Banerjee , David A. Naumann, History-based access control and secure information flow, Proceedings of the 2004 international conference on Construction and Analysis of Safe, Secure, and Interoperable Smart Devices, p.27-48, March 10-14, 2004, Marseille, France](#)
- [Sotiris Ioannidis , Steven M. Bellovin, Building a Secure Web Browser, Proceedings of the FREENIX Track: 2001 USENIX Annual Technical Conference, p.127-134, June 25-30, 2001](#)
-  [Grzegorz Czajkowski , Laurent Daynès, Multitasking without compromise: a virtual machine evolution, ACM SIGPLAN Notices, v.47 n.4a, April 2012](#)
- [Antero Taivalsaari, Mashware: the future of web applications, Sun Microsystems, Inc., Mountain View, CA, 2009](#)
- [Enrique Valdez , Moti Yung, DISSECT: DIStribution for SECurTy Tool, Proceedings of the 4th International Conference on Information Security, p.125-143, October 01-03, 2001](#)
-  [Grzegorz Czajkowski , Laurent Daynès, Multitasking without compromise: a virtual machine evolution, ACM SIGPLAN Notices, v.36 n.11, p.125-138, 11/01/2001](#)
- [Antonio Corradi , Rebecca Montanari , Daniela Tibaldi, Context-Based Access Control for Ubiquitous Service Provisioning, Proceedings of the 28th Annual International Computer Software and Applications Conference, p.444-451, September 28-30, 2004](#)
- [Dieter Gollmann, Mergers and Principals, Revised Papers from the 8th International Workshop on Security Protocols, p.5-13, April 03-05, 2000](#)
- [Thomas Gschwind, Type based adaptation: an adaptation approach for dynamic distributed systems, Proceedings of the 3rd international conference on Software engineering and middleware, May 20-21, 2002, Orlando, FL, USA](#)
-  [Hiroaki Inoue , Junji Sakai , Sunao Torii , Masato Eda, FIDES: An advanced chip multiprocessor platform for secure next generation mobile terminals, ACM Transactions on Embedded Computing Systems \(TECS\), v.8 n.1, p.1-16, December 2008](#)
-  [Krzysztof Palacz , Jan Vitek , Grzegorz Czajkowski , Laurent Daynès, Incommunicado: efficient communication for isolates, ACM SIGPLAN Notices, v.37 n.11, November 2002](#)
-  [Cédric Fournet , Andrew D. Gordon, Stack inspection: theory and variants, ACM SIGPLAN Notices, v.37 n.1, p.307-318, Jan. 2002](#)
-  [John Clements , Matthias Felleisen, A tail-recursive machine with stack inspection, ACM Transactions on Programming Languages and Systems \(TOPLAS\), v.26 n.6, p.1029-1052, November 2004](#)
-  [Anindya Banerjee , David A. Naumann, Representation independence, confinement and access control \[extended abstract\], ACM SIGPLAN Notices, v.37 n.1, p.166-177, Jan. 2002](#)
-  [Patrick Eugster, Uniform proxies for Java, ACM SIGPLAN Notices, v.41 n.10, October 2006](#)
- [Massimo Bartoletti , Pierpaolo Degano , Gian Luigi Ferrari , Roberto Zunino, Types and Effects for resource usage analysis, Proceedings of the 10th International conference on Foundations of software science and computational structures, March 24-April 01, 2007, Braga, Portugal](#)
-  [Zhenyu Qian , Allen Goldberg , Alessandro Coglio, A formal specification of Java class loading, ACM SIGPLAN Notices, v.35 n.10, p.325-336, Oct. 2000](#)
-  [Michael S. Ware , Christopher J. Fox, Securing Java code: heuristics and an evaluation of static analysis tools, Proceedings of the 2008 workshop on Static analysis, p.12-21, June 12-12, 2008, Tucson, Arizona](#)
- [Paolo Bellavista , Antonio Corradi , Rebecca Montanari , Cesare Stefanelli, Dynamic Binding in Mobile Applications: A Middleware Approach, IEEE Internet Computing, v.7 n.2, p.34-42, March 2003](#)
- [Sabrina De Capitani di Vimercati , Stefano Paraboschi , Pierangela Samarati, Access control: principles and solutions, Software—Practice & Experience, v.33 n.5, p.397-421, 25 April 2003](#)
- [Massimo Bartoletti , Pierpaolo Degano , Gian Luigi Ferrari, Program Transformations under Dynamic Security Policies, Electronic Notes in Theoretical Computer Science \(ENTCS\), 99, p.49-86, August, 2004](#)
- [Denis Caromel , Julien Vayssière, Reflections on MOPs, Components, and Java Security, Proceedings of the 15th European Conference on Object-Oriented Programming, p.256-274, June 18-22, 2001](#)
-  [Peter Cappello , Dimitrios Mourloukos, A scalable, robust network for parallel computing, Proceedings of the 2001 joint ACM-ISCOPE conference on Java Grande, p.78-86, June 2001, Palo Alto, California, USA](#)
- [Jason Crampton , Michael Huth, A framework for the modular specification and orchestration of authorization policies, Proceedings of the 15th Nordic conference on Information Security Technology for Applications, October 27-29, 2010, Espoo, Finland](#)
-  [Sotiris Ioannidis , Steven M. Bellovin , Jonathan M. Smith, Sub-operating systems: a new approach to application security, Proceedings of the 10th workshop on ACM SIGOPS European workshop, July 01-01, 2002, Saint-Emilion, France](#)

- ◆ [Ajay Chander , David Espinosa , Nayeem Islam , Peter Lee , George C. Necula, Enforcing resource bounds via static verification of dynamic checks, ACM Transactions on Programming Languages and Systems \(TOPLAS\), v.29 n.5, p.28-es, August 2007](#)
- ◆ [Cédric Fournet , Andrew D. Gordon, Stack inspection: Theory and variants, ACM Transactions on Programming Languages and Systems \(TOPLAS\), v.25 n.3, p.360-399, May 2003](#)
- [Flemming Nielson , Hanne Riis Nielson , René Rydhof Hansen, Validating firewalls using flow logics, Theoretical Computer Science, v.283 n.2, p.381-418, June 14, 2002](#)
- [P. Parrend , S. Frenot, Security benchmarks of OSGi platforms: toward Hardened OSGi, Software—Practice & Experience, v.39 n.5, p.471-499, April 2009](#)
- [Antonio Corradi , Naranker Dulay , Rebecca Montanari , Cesare Stefanelli, Policy-Driven Management of Agent Systems, Proceedings of the International Workshop on Policies for Distributed Systems and Networks, p.214-229, January 29-31, 2001](#)
- [Paolo Bellavista , Antonio Corradi , Rebecca Montanari , Cesare Stefanelli, Security in Programmable Network Infrastructures: The Integration of Network and Application Solutions, Proceedings of the Second International Working Conference on Active Networks, p.262-276, October 16-18, 2000, Tokyo, Japan](#)
- [Laurent Daynès , Grzegorz Czajkowski, Lightweight flexible isolation for language-based extensible systems, Proceedings of the 28th international conference on Very Large Data Bases, p.718-729, August 20-23, 2002, Hong Kong, China](#)
- [Serge Chaumette , Asier Ugarte, A formal model of the java multi-threading system and its validation on a known problem, Proceedings of the 15th International Parallel & Distributed Processing Symposium, p.148, April 23-27, 2001](#)
- ◆ [Larry Koved , Marco Pistoia , Aaron Kershenbaum, Access rights analysis for Java, ACM SIGPLAN Notices, v.37 n.11, November 2002](#)
- [Ajay Chander , David Espinosa , Nayeem Islam , Peter Lee , George Necula, Enforcing resource bounds via static verification of dynamic checks, Proceedings of the 14th European conference on Programming Languages and Systems, p.311-325, April 04-08, 2005, Edinburgh, UK](#)
- ◆ [Úlfar Erlingsson , John MacCormick, Ad hoc extensibility and access control, ACM SIGOPS Operating Systems Review, v.40 n.3, July 2006](#)
- ◆ [Jagun Kwon , Andy Wellings , Steve King, Ravenscar-Java: a high integrity profile for real-time Java, Proceedings of the 2002 joint ACM-ISCOPE conference on Java Grande, p.131-140, November 03-05, 2002, Seattle, Washington, USA](#)
- ◆ [Hiroaki Inoue , Junji Sakai , Masato Eda, Processor virtualization for secure mobile terminals, ACM Transactions on Design Automation of Electronic Systems \(TODAES\), v.13 n.3, p.1-23, July 2008](#)
- [Peter Cappello , Dimitrios Mourloukos, CX: A scalable, robust network for parallel computing, Scientific Programming, v.10 n.2, p.159-171, April 2002](#)
- [Sunil Soman , Chandra Krintz , Giovanni Vigna, Detecting malicious java code using virtual machine auditing, Proceedings of the 12th conference on USENIX Security Symposium, p.11-11, August 04-08, 2003, Washington, DC](#)
- [Xavier Leroy, Computer security from a programming language and static analysis perspective, Proceedings of the 12th European conference on Programming, April 07-11, 2003, Warsaw, Poland](#)
- [Gian Luigi Ferrari , Carlo Montangero , Laura Semini , Simone Semprini, Mobile Agents Coordination in MobadtI, Proceedings of the 4th International Conference on Coordination Languages and Models, p.232-248, September 11-13, 2000](#)
- ◆ [Dan S. Wallach , Andrew W. Appel , Edward W. Felten, SAFKASI: a security mechanism for language-based systems, ACM Transactions on Software Engineering and Methodology \(TOSEM\), v.9 n.4, p.341-378, Oct. 2000](#)
- [Mon-Yen Luo , Chu-Sing Yang, System support for scalable, reliable and highly manageable web hosting service, Proceedings of the 3rd conference on USENIX Symposium on Internet Technologies and Systems, p.18-18, March 26-28, 2001, San Francisco, California](#)
- ◆ [W. Keith Edwards , Mark W. Newman , Jana Z. Sedivy , Trevor F. Smith, Experiences with recombinant computing: Exploring ad hoc interoperability in evolving digital networks, ACM Transactions on Computer-Human Interaction \(TOCHI\), v.16 n.1, p.1-44, April 2009](#)
- [Xavier Leroy, Java Bytecode Verification: Algorithms and Formalizations, Journal of Automated Reasoning, v.30 n.3-4, p.235-269, 2003](#)
- [Lorenzo Bettini, Data Privacy in Tuple Space Based Mobile Agent Systems, Electronic Notes in Theoretical Computer Science \(ENTCS\), v.128 n.5, p.3-16, May, 2005](#)
- ◆ [Jagun Kwon , Andy Wellings , Steve King, Assessment of the Java programming language for use in high integrity systems, ACM SIGPLAN Notices, v.38 n.4, April 2003](#)
- ◆ [Emin Gün Sirer , Robert Grimm , Arthur J. Gregory , Brian N. Bershad, Design and implementation of a distributed virtual machine for networked computers, ACM SIGOPS Operating Systems Review, v.33 n.5, p.202-216, Dec. 1999](#)
- [Xiaoqi Lu , Scott F. Smith, A microkernel virtual machine: building security with clear interfaces, Proceedings of the 2006 workshop on Programming languages and analysis for security, June 10-10, 2006, Ottawa, Ontario, Canada](#)



[Anindya Banerjee , David A. Naumann, Stack-based access control and secure information flow, Journal of Functional Programming, v.15 n.2, p.131-177, March 2005](#)

[Jeung-Bo Cho , Min-Soo Jung, A very small bytecode-verifier based on PCC algorithm for smart card, Proceedings of the 2nd international conference on Human society@internet, June 18-20, 2003, Seoul, Korea](#)

[Algis Rudys , Dan S. Wallach, Enforcing Java run-time properties using bytecode rewriting, Proceedings of the 2002 Next-NSF-JSPS international conference on Software security: theories and systems, November 08-10, 2002, Tokyo, Japan](#)

[Jeung-Bo Cho , Min-Soo Jung , Sung-Ik Jun, An efficient small sized on-card verifier for java card, Proceedings of the 2003 international conference on Computational science and its applications: Part III, May 18-21, 2003, Montreal, Canada](#)

[Fabio Martinelli , Paolo Mori, Enhancing Java security with history based access control, Foundations of security analysis and design IV, Springer-Verlag, Berlin, Heidelberg, 2007](#)

[Dieter Gollmann, Security in Distributed Applications, Advances in Software Engineering: Lipari Summer School 2007, Lipari Island, Italy, July 8-21, 2007, Revised Tutorial Lectures, Springer-Verlag, Berlin, Heidelberg, 2008](#)

[Tian Zhao , Jens Palsberg , Jan Vitek, Type-based confinement, Journal of Functional Programming, v.16 n.1, p.83-128, January 2006](#)



[Algis Rudys , Dan S. Wallach, Termination in language-based systems, ACM Transactions on Information and System Security \(TISSEC\), v.5 n.2, p.138-168, May 2002](#)



[Robert Grimm , Brian N. Bershad, Separating access control policy, enforcement, and functionality in extensible systems, ACM Transactions on Computer Systems \(TOCS\), v.19 n.1, p.36-70, Feb. 2001](#)

[Marko Hassinen , Konstantin Hyppönen , Elena Trichina, Utilizing national public-key infrastructure in mobile payment systems, Electronic Commerce Research and Applications, v.7 n.2, p.214-231, Summer 2008](#)

[Lorenzo Bettini , Rocco De Nicola , Rosario Pugliese, KLAVA: a Java package for distributed and mobile applications, Software—Practice & Experience, v.32 n.14, p.1365-1394, 25 November 2002](#)

[David W. Prce , Algis Rudys , Dan S. Wallach, Garbage Collector Memory Accounting in Language-Based Systems, Proceedings of the 2003 IEEE Symposium on Security and Privacy, p.263, May 11-14, 2003](#)

[Denis Caromel , Julien Vayssière, A security framework for reflective Java applications, Software—Practice & Experience, v.33 n.9, p.821-846, 25 July 2003](#)

[Piero A. Bonatti , Daniel Olmedilla, Rule-based policy representation and reasoning for the semantic web, Proceedings of the Third international summer school conference on Reasoning Web, September 03-07, 2007, Dresden, Germany](#)



[Anindya Banerjee , David A. Naumann, Ownership confinement ensures representation independence for object-oriented programs, Journal of the ACM \(JACM\), v.52 n.6, p.894-960, November 2005](#)



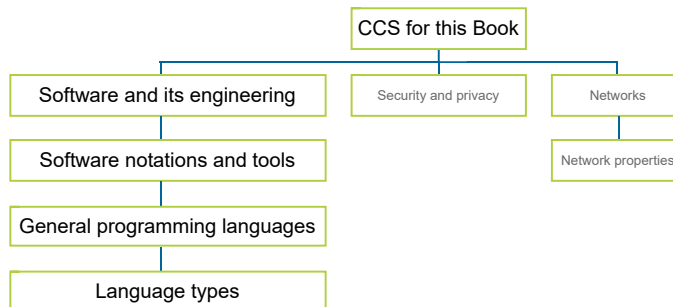
[Robert Grimm , Janet Davis , Eric Lemar , Adam Macbeth , Steven Swanson , Thomas Anderson , Brian Bershad , Gaetano Borriello , Steven Gribble , David Wetherall, System support for pervasive applications, ACM Transactions on Computer Systems \(TOCS\), v.22 n.4, p.421-486, November 2004](#)

[William R. Bush, Software, regulation, and domain specificity, Information and Software Technology, v.49 n.1, p.44-54, January, 2007](#)

[Bogdan C. Popescu , Bruno Crispo , Andrew S. Tanenbaum , Arno Bakker, Design and implementation of a secure wide-area object middleware, Computer Networks: The International Journal of Computer and Telecommunications Networking, v.51 n.10, p.2484-2513, July, 2007](#)

↑ INDEX TERMS

The ACM Computing Classification System (CCS rev.2012)



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.