



## Documenting Software Architectures: Views and Beyond (2nd Edition)

By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford

Download now

Read Online →

**Documenting Software Architectures: Views and Beyond (2nd Edition)** By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford

*“This new edition is brighter, shinier, more complete, more pragmatic, more focused than the previous one, and I wouldn’t have thought it possible to improve on the original. As the field of software architecture has grown over these past decades, there is much more to be said, much more that we know, and much more that we can reflect upon of what’s worked and what hasn’t—and the authors here do all that, and more.”*

—From the Foreword by Grady Booch, IBM Fellow

Software architecture—the conceptual glue that holds every phase of a project together for its many stakeholders—is widely recognized as a critical element in modern software development. Practitioners have increasingly discovered that close attention to a software system’s architecture pays valuable dividends. Without an architecture that is appropriate for the problem being solved, a project will stumble along or, most likely, fail. Even with a superb architecture, if that architecture is not well understood or well communicated the project is unlikely to succeed.

*Documenting Software Architectures, Second Edition*, provides the most complete and current guidance, independent of language or notation, on how to capture an architecture in a commonly understandable form. Drawing on their extensive experience, the authors first help you decide what information to document, and then, with guidelines and examples (in various notations, including UML), show you how to express an architecture so that others can successfully build, use, and maintain a system from it. The book features rules for sound documentation, the goals and strategies of documentation, architectural views and styles, documentation for software interfaces and software behavior, and templates for capturing and organizing information to generate a coherent package. New and improved in this second edition:

- Coverage of architectural styles such as service-oriented architectures, multi-tier architectures, and data models

- Guidance for documentation in an Agile development environment
- Deeper treatment of documentation of rationale, reflecting best industrial practices
- Improved templates, reflecting years of use and feedback, and more documentation layout options
- A new, comprehensive example (available online), featuring documentation of a Web-based service-oriented system
- Reference guides for three important architecture documentation languages: UML, AADL, and SysML

 [Download Documenting Software Architectures: Views and Beyo ...pdf](#)

 [Read Online Documenting Software Architectures: Views and Be ...pdf](#)

# Documenting Software Architectures: Views and Beyond (2nd Edition)

*By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford*

**Documenting Software Architectures: Views and Beyond (2nd Edition)** By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford

*“This new edition is brighter, shinier, more complete, more pragmatic, more focused than the previous one, and I wouldn’t have thought it possible to improve on the original. As the field of software architecture has grown over these past decades, there is much more to be said, much more that we know, and much more that we can reflect upon of what’s worked and what hasn’t—and the authors here do all that, and more.”*

—From the Foreword by Grady Booch, IBM Fellow

Software architecture—the conceptual glue that holds every phase of a project together for its many stakeholders—is widely recognized as a critical element in modern software development. Practitioners have increasingly discovered that close attention to a software system’s architecture pays valuable dividends. Without an architecture that is appropriate for the problem being solved, a project will stumble along or, most likely, fail. Even with a superb architecture, if that architecture is not well understood or well communicated the project is unlikely to succeed.

*Documenting Software Architectures, Second Edition*, provides the most complete and current guidance, independent of language or notation, on how to capture an architecture in a commonly understandable form. Drawing on their extensive experience, the authors first help you decide what information to document, and then, with guidelines and examples (in various notations, including UML), show you how to express an architecture so that others can successfully build, use, and maintain a system from it. The book features rules for sound documentation, the goals and strategies of documentation, architectural views and styles, documentation for software interfaces and software behavior, and templates for capturing and organizing information to generate a coherent package. New and improved in this second edition:

- Coverage of architectural styles such as service-oriented architectures, multi-tier architectures, and data models
- Guidance for documentation in an Agile development environment
- Deeper treatment of documentation of rationale, reflecting best industrial practices
- Improved templates, reflecting years of use and feedback, and more documentation layout options
- A new, comprehensive example (available online), featuring documentation of a Web-based service-oriented system
- Reference guides for three important architecture documentation languages: UML, AADL, and SySML

**Documenting Software Architectures: Views and Beyond (2nd Edition)** By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith

## Stafford Bibliography

- Sales Rank: #187950 in Books
- Published on: 2010-10-15
- Original language: English
- Number of items: 1
- Dimensions: 9.30" h x 1.40" w x 6.60" l, 2.15 pounds
- Binding: Hardcover
- 592 pages

 [Download Documenting Software Architectures: Views and Beyo ...pdf](#)

 [Read Online Documenting Software Architectures: Views and Be ...pdf](#)

**Download and Read Free Online Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford**

---

## **Editorial Review**

From the Back Cover

"This new edition is brighter, shinier, more complete, more pragmatic, more focused than the previous one, and I wouldn't have thought it possible to improve on the original. As the field of software architecture has grown over these past decades, there is much more to be said, much more that we know, and much more that we can reflect upon of what's worked and what hasn't-and the authors here do all that, and more." -From the Foreword by Grady Booch, IBM Fellow Software architecture-the conceptual glue that holds every phase of a project together for its many stakeholders-is widely recognized as a critical element in modern software development. Practitioners have increasingly discovered that close attention to a software system's architecture pays valuable dividends. Without an architecture that is appropriate for the problem being solved, a project will stumble along or, most likely, fail. Even with a superb architecture, if that architecture is not well understood or well communicated the project is unlikely to succeed. "Documenting Software Architectures, Second Edition, " provides the most complete and current guidance, independent of language or notation, on how to capture an architecture in a commonly understandable form. Drawing on their extensive experience, the authors first help you decide what information to document, and then, with guidelines and examples (in various notations, including UML), show you how to express an architecture so that others can successfully build, use, and maintain a system from it. The book features rules for sound documentation, the goals and strategies of documentation, architectural views and styles, documentation for software interfaces and software behavior, and templates for capturing and organizing information to generate a coherent package. New and improved in this second edition: Coverage of architectural styles such as service-oriented architectures, multi-tier architectures, and data models Guidance for documentation in an Agile development environment Deeper treatment of documentation of rationale, reflecting best industrial practices Improved templates, reflecting years of use and feedback, and more documentation layout options A new, comprehensive example (available online), featuring documentation of a Web-based service-oriented system Reference guides for three important architecture documentation languages: UML, AADL, and SySML

About the Author

**Paul Clements** is a Senior Member of the Technical Staff at the Carnegie Mellon Software Engineering Institute (SEI), where he has worked since 1994 leading or coleading projects in software product-line engineering and software architecture documentation and analysis. Besides this one, Clements is the coauthor of two other practitioner-oriented books about software architecture: *Software Architecture in Practice* (Addison-Wesley, 1998; Second Edition 2003) and *Evaluating Software Architectures: Methods and Case Studies* (Addison-Wesley, 2001). He also cowrote *Software Product Lines: Practices and Patterns* (Addison-Wesley, 2001) and was coauthor and editor of *Constructing Superior Software* (Sams, 1999). In addition, Clements has authored dozens of papers in software engineering, reflecting his longstanding interest in the design and specification of challenging software systems. In 2005 and 2006 he spent a year as a visiting faculty member at the Indian Institute of Technology in Mumbai. He received a Ph.D. in computer sciences from the University of Texas at Austin in 1994. He is a founding member of the IFIP Working Group on Software Architecture (WG2.10).

**Felix Bachmann** is a Senior Member of the Technical Staff at the SEI, working in the Architecture Centric Engineering Initiative. He is coauthor of the Attribute-Driven Design Method, a contributor to and instructor for the ATAM Evaluator Training course, and a contributor to the book *Software Architecture in Practice, Second Edition*. Before joining the SEI, he was a software engineer at Robert Bosch GmbH in corporate

research, where he worked with software development departments to address the issues of software engineering in small and large embedded systems.

**Len Bass** is a Senior Member of the Technical Staff at the SEI. He has coauthored two award-winning books in software architecture as well as several other books and numerous papers in a wide variety of areas of computer science and software engineering. He has been a keynote speaker or a distinguished lecturer on six continents. He is currently working on applying the concepts of ultra-large-scale systems to the smart grid. He has been involved in the development of numerous different production or research software systems, ranging from operating systems to database management systems to automotive systems. He is a member of the IFIP Working Group on Software Architecture (WG2.10).

**David Garlan** is a Professor of Computer Science and Director of Software Engineering Professional Programs in the School of Computer Science at Carnegie Mellon University (CMU). He received his Ph.D. from CMU in 1987 and worked as a software architect in industry between 1987 and 1990. His interests include software architecture, self-adaptive systems, formal methods, and cyber-physical systems. He is considered to be one of the founders of the field of software architecture and, in particular, formal representation and analysis of architectural designs. In 2005 he received a Stevens Award Citation for fundamental contributions to the development and understanding of software architecture as a discipline in software engineering.

**James Ivers** is a Senior Member of the Technical Staff at the SEI, where he works in the areas of software architecture and program analysis. He received a Master of Software Engineering from CMU in 1996 and has worked for and with a variety of development organizations, from start-up to multinational corporations. He has written numerous papers, contributed to the development of an international standard for distributed simulations, and has recently been working in a public-private collaboration to draft security recommendations for the smart grid.

**Reed Little** is a Senior Member of the Technical Staff at the SEI. He applies more than 35 years of experience in computer simulation, software architecture, software product lines, man-machine interface, artificial intelligence, and programming language design to various aspects of applied research and hands-on customer assistance for large (more than three million lines of code) software systems.

**Paulo Merson** has more than 20 years of software development experience. He works for the SEI in the areas of software architecture, service-oriented architecture, and aspect-oriented software development. He is also a practicing software architect in industry. One of his assignments at the SEI is to teach a two-day course in “Documenting Software Architectures” for industry and government practitioners. His speaking experience also includes tutorials at various conferences, such as SD Best Practices, Dr. Dobb’s Architecture & Design World, and JavaOne. Prior to joining the SEI, he was a Java EE consultant. Paulo holds a B.Sc. in Computer Science from University of Brasilia, and a Master of Software Engineering from CMU.

**Robert Nord** is a Senior Member of the Technical Staff in the Research, Technology, and System Solutions Program at the SEI, where he works to develop and communicate effective methods and practices for software architecture. He is coauthor of the practitioner-oriented book *Applied Software Architecture* (Addison-Wesley, 2000) and lectures on architecture-centric approaches. He is a member of the IFIP Working Group on Software Architecture (WG2.10).

**Judith Stafford** is a Senior Lecturer at Tufts University and a Visiting Scientist at the SEI. Before joining the faculty at Tufts University, she was a Senior Member of the Technical Staff at the SEI in the Product Lines Systems Program, working in the Software Architecture Technologies Initiative. She has authored several book chapters on the topic of software architecture analysis, software architecture support for software component composition, and software architecture documentation. Stafford has been an organizer

and program committee member for several conferences and workshops, and a guest editor on several leading software engineering journal special issues. She received her Ph.D. and M.S. degrees in Computer Science from the University of Colorado at Boulder. She is a member of the IEEE Computer Society, ACM SIGSOFT and SIGPLAN, and the IFIP Working Group on Software Architecture (WG2.10).

## **Users Review**

### **From reader reviews:**

#### **Greg Wilson:**

Spent a free a chance to be fun activity to try and do! A lot of people spent their leisure time with their family, or their very own friends. Usually they carrying out activity like watching television, gonna beach, or picnic within the park. They actually doing ditto every week. Do you feel it? Will you something different to fill your personal free time/ holiday? Might be reading a book may be option to fill your no cost time/ holiday. The first thing that you ask may be what kinds of publication that you should read. If you want to consider look for book, may be the guide untitled Documenting Software Architectures: Views and Beyond (2nd Edition) can be excellent book to read. May be it is usually best activity to you.

#### **Delores Moretti:**

A lot of people always spent their free time to vacation or even go to the outside with them family or their friend. Did you know? Many a lot of people spent they free time just watching TV, or even playing video games all day long. If you need to try to find a new activity this is look different you can read a new book. It is really fun in your case. If you enjoy the book that you simply read you can spent the whole day to reading a publication. The book Documenting Software Architectures: Views and Beyond (2nd Edition) it is rather good to read. There are a lot of people who recommended this book. We were holding enjoying reading this book. In the event you did not have enough space to develop this book you can buy the actual e-book. You can m0ore easily to read this book from the smart phone. The price is not to cover but this book offers high quality.

#### **David Smith:**

Do you have something that you enjoy such as book? The e-book lovers usually prefer to opt for book like comic, small story and the biggest some may be novel. Now, why not attempting Documenting Software Architectures: Views and Beyond (2nd Edition) that give your fun preference will be satisfied by simply reading this book. Reading habit all over the world can be said as the oppportunity for people to know world much better then how they react when it comes to the world. It can't be stated constantly that reading habit only for the geeky man but for all of you who wants to always be success person. So , for every you who want to start studying as your good habit, you could pick Documenting Software Architectures: Views and Beyond (2nd Edition) become your own personal starter.

#### **Tom Rivera:**

In this particular era which is the greater particular person or who has ability to do something more are more important than other. Do you want to become among it? It is just simple solution to have that. What you should do is just spending your time little but quite enough to get a look at some books. One of the books in

the top collection in your reading list will be Documenting Software Architectures: Views and Beyond (2nd Edition). This book that is certainly qualified as The Hungry Hillside can get you closer in turning into precious person. By looking upwards and review this book you can get many advantages.

**Download and Read Online Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford #OAMBP4J5CYE**

## **Read Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford for online ebook**

Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford Free PDF download, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford books to read online.

## **Online Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford ebook PDF download**

**Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford Doc**

**Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford Mobipocket**

**Documenting Software Architectures: Views and Beyond (2nd Edition) By Paul Clements, Felix Bachmann, Len Bass, David Garlan, James Ivers, Reed Little, Paulo Merson, Robert Nord, Judith Stafford EPub**