

Model-Driven Software Engineering with UML 2 Seminar

— Reaping Advantages while Avoiding Pitfalls —

Learn from an industry expert how your Systems Engineering team can transform its human-intensive, code-centric process into an automated, model-driven process.

Although flowcharts and visual diagrams have been an important part of software development since its inception, during the two last decades software developers have significantly increased their use of *model-driven* technologies to **evolve a new discipline of Model-Driven Software Engineering (MDSE)**. MDSE differs from traditional software development, which is sometimes characterized as *code-centric*, in that **MDSE emphasizes a central system model that captures system requirements as well as the architecture and design decisions** that fulfill them. In addition to serving as a knowledge repository for systems engineering work artifacts, design/implementation views of the system model can also be used to partially or fully automate code generation in a target implementation language (e.g., Java, C#, Ruby). Consequently, MDSE *drives* software development by supporting a traceable audit trail from system requirements through the code that implements them.

One of the key technology enablers behind MDSE is the Unified Modeling Language (UML), which was first standardized by the Object Management Group as UML 1.1 in 1997. Since that time the software industry has adopted UML as its **primary modeling language for specifying software-intensive systems** in a wide variety of domains, ranging from finance and healthcare to aerospace and telecommunications. With the UML 2.x major revision the UML has evolved into an **architecture description language that can precisely specify enterprise architecture blueprints and facilitate automated code generation**.

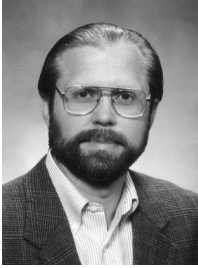
This seminar provides a **solid introduction to the basic concepts, principles, and best practices associated with Model-Driven Software Engineering using UML 2**. The presentation style is pragmatic and interactive, with practical systems engineering examples punctuated by frequent Q&A sessions.

WHAT WILL YOU LEARN?

- The cost/benefit tradeoffs for transitioning from traditional document-based systems engineering to Model-Driven Software Engineering (MDSE)
- **An architecture-centric MDSE approach with the Unified Modeling Language (UML) 2.x that**
 - synergistically combines language, tool, process, and framework technologies
 - applies rigorous visual modeling techniques and best practices to improve the quality, reliability, and efficiency of business and technology processes
- How UML 2.x can specify large, complex processes and enterprise architectures throughout the System Development Life Cycle
- How enterprise architecture frameworks can manage the complexity of large, complex models
- How modeling tools can automate Verification & Validation (V&V), run simulations, and generate code
- How MDSE processes can reduce errors and increase productivity
- Best, Common, and Worst MDSE Practices
- How to plan your transition to a MDSE approach
- How to learn more about MDSE and UML modeling

Seminar prerequisites and logistical information are described on the following page.

SEMINAR AUTHOR & INSTRUCTOR



Cris Kobryn is the CEO and Founder of PivotPoint Technology Corporation, a company that specializes in Model-Based Engineering Solutions™ for tough business and engineering problems. He is an internationally recognized expert in visual modeling and Model-Based Engineering, and has successfully applied these technologies to diverse industries ranging from aerospace-defense and communications to financial services and manufacturing. Cris chaired large international teams of vendors and users to specify the Unified Modeling Language (UML) 1.x and 2.0 standards for software engineering, and the Systems Modeling Language (SysML) 1.0 standard or systems engineering. In recognition of Cris's contributions to the UML the Object Management Group (OMG) presented him with its Distinguished Service Award, and in acknowledgement of his contributions to the SysML the International Council on Systems Engineering (INCOSE) presented him with its Outstanding Service Award.

WHO SHOULD PARTICIPATE: Software architects/engineers/developers, system engineers, system architects, project managers, executive leaders, and others who want to learn about the cost/benefit tradeoffs of adopting Model-Driven Software Engineering technologies.

PREREQUISITES: None.

FLEXIBLE DURATION: All of our seminars are available in half-day (3 hours with break) and full-day (3 hours AM + lunch break + 3 hours PM) lengths.

FLEXIBLE VENUES: All of our seminars are available onsite (at a Client training facility), offsite (at a PivotPoint training facility), and via webconference.

FOLLOW-UP TRAINING/CONSULTING SERVICES: All of our seminars can be followed up with workshop training and consulting services that will keep your Model-Based Engineering project on track. Please check out the Training and Consulting services page on our web (www.PTCorp.com), or contact us to discuss details.

SCHEDULING AND COST: Seminars must be reserved in advance by Purchase Order or prepayment. We generally require at least 4 weeks lead time for scheduling seminars, but longer lead time is desirable to reserve your preferred training dates. Seminar cost depends upon seminar duration (half-day or full-day), venue choice (onsite, offsite, webconference), and number of students.

FURTHER INFORMATION & PRICE QUOTES: Please visit our web site at www.PTCorp.com, email us at seminars@PTCorp.com, or call us at +1-760-728-9747 to discuss seminar details and receive a price quote.