

# Introduction to Rational Rose CSCI 577a Fall 2001

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# Who Am I?



- Director, Software Engineering Certificate Program
- 19 years industrial teaching & consulting on object-oriented methods, software engineering, & programming languages
- Consultant on definition of Architecture Design Language (ADL) for real-time, safety-critical systems
  - Based on Unified Modeling Language (“UML”) and Honeywell’s MetaH
  - To be proposed as standard of Society of Automotive Engineers (SAE)
- Created Colbert Object-Oriented Software Development method (“OOSD”)
  - Noted for strength in real-time software development
    - NASA Langley Research Center used for software engineering process manual
- MBASE developer
- Founded Absolute Software Co., Inc. in 1986

# Goal of Presentation

- Get you started using Rational Rose for 577a project
  - Diagrams needed for OCD & SSRD
  - Other diagrams will be discussed during lectures on
    - System Analysis
    - System Design
- Introduction to the 577a
  - Rose Template
  - SoDA Template

# Assumption

- You are familiar with Unified Modeling Language (UML)
  - Either
    - Read *Introduction to UML* \*\*\*
      - Posted to 577a website ~ 2 weeks ago
    - Read *OMG Unified Modeling Language Specification, v1.3, June 1999*
    - Read a book on UML
    - Been trained in UML
    - Used UML on work project

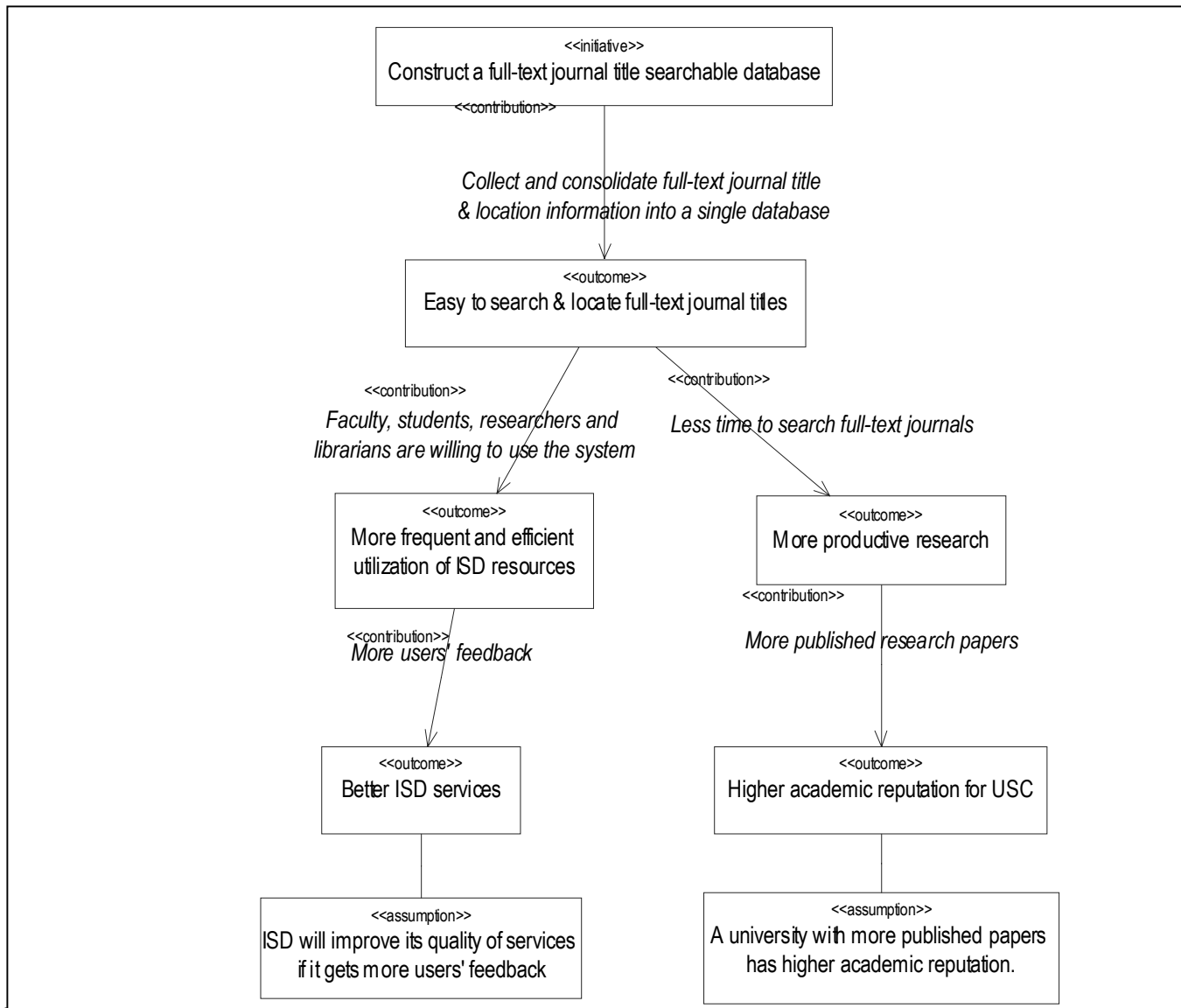
# Access To Rational Rose & SoDA

- Available at student lab except SAL
- We'll provide a CD
  - On-site: Pick Monday in class
  - Off-site: DEN will send
- Can download full version from Rational
  - 15-day trial license
  - Send TA request for license info via E-mail

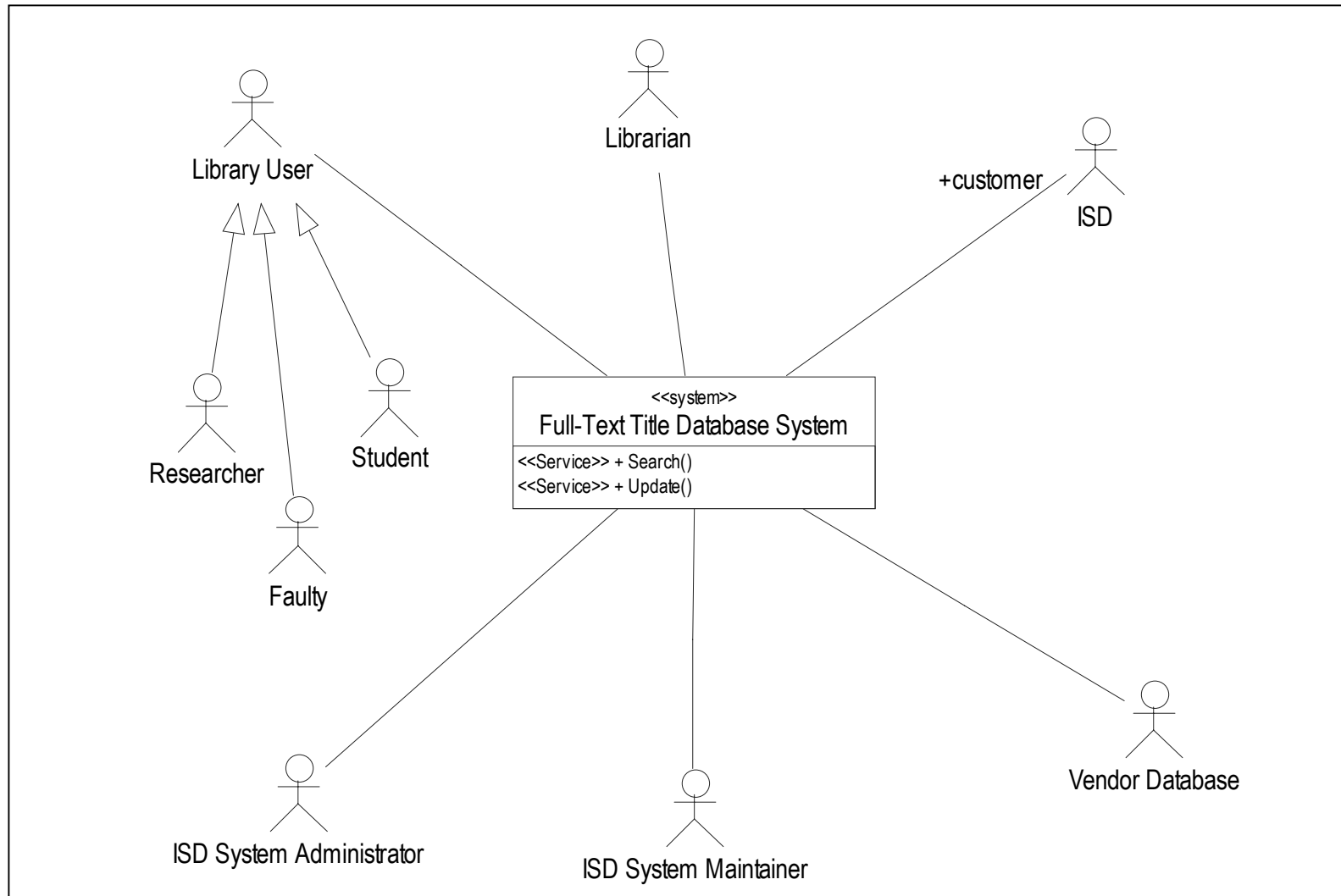
# The Rest of this Presentation is a Live Demo

See Webcast on DEN Site &  
Snapshots on 577a Site

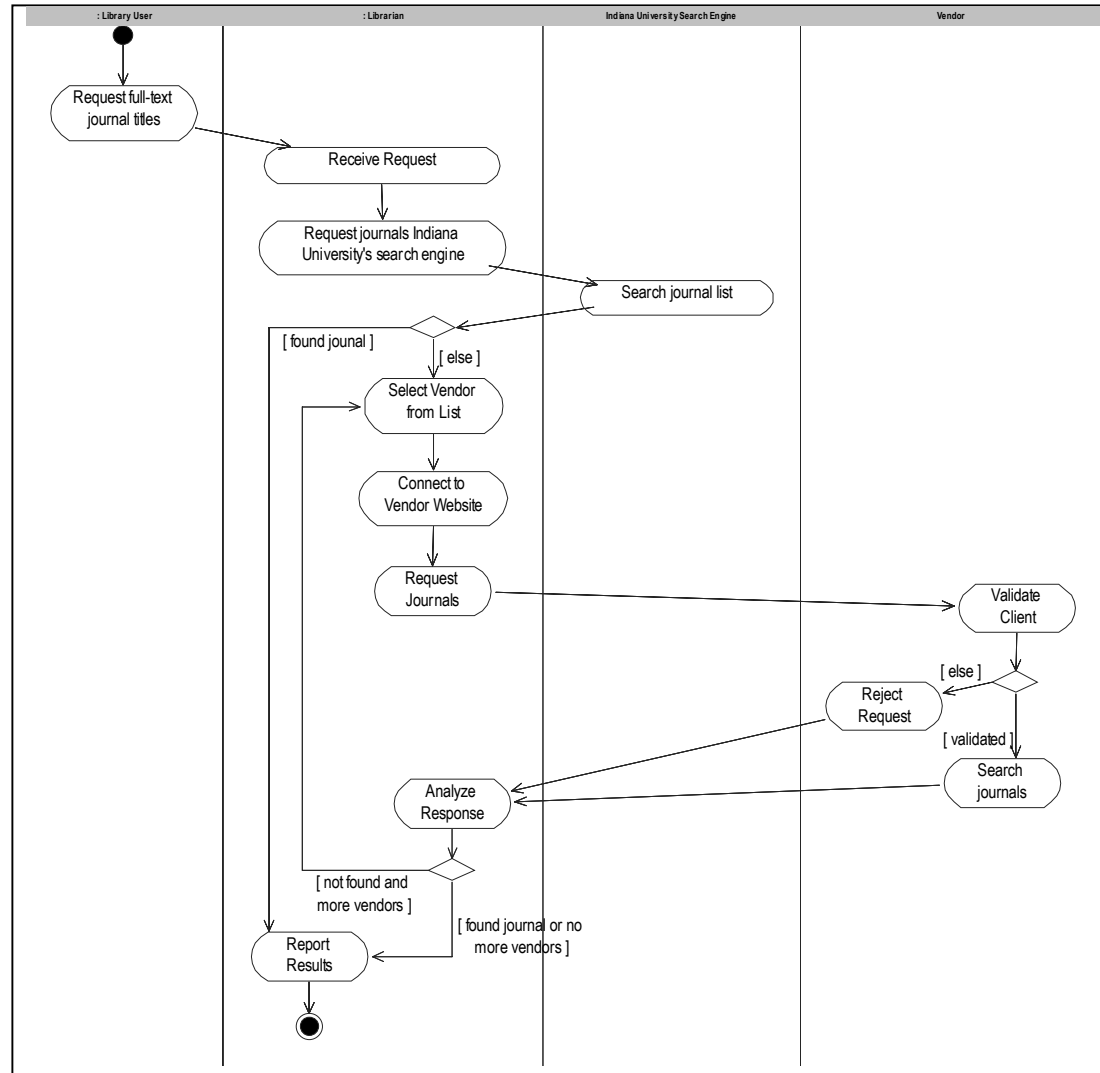
# Example: 2.1.2 Results Chain



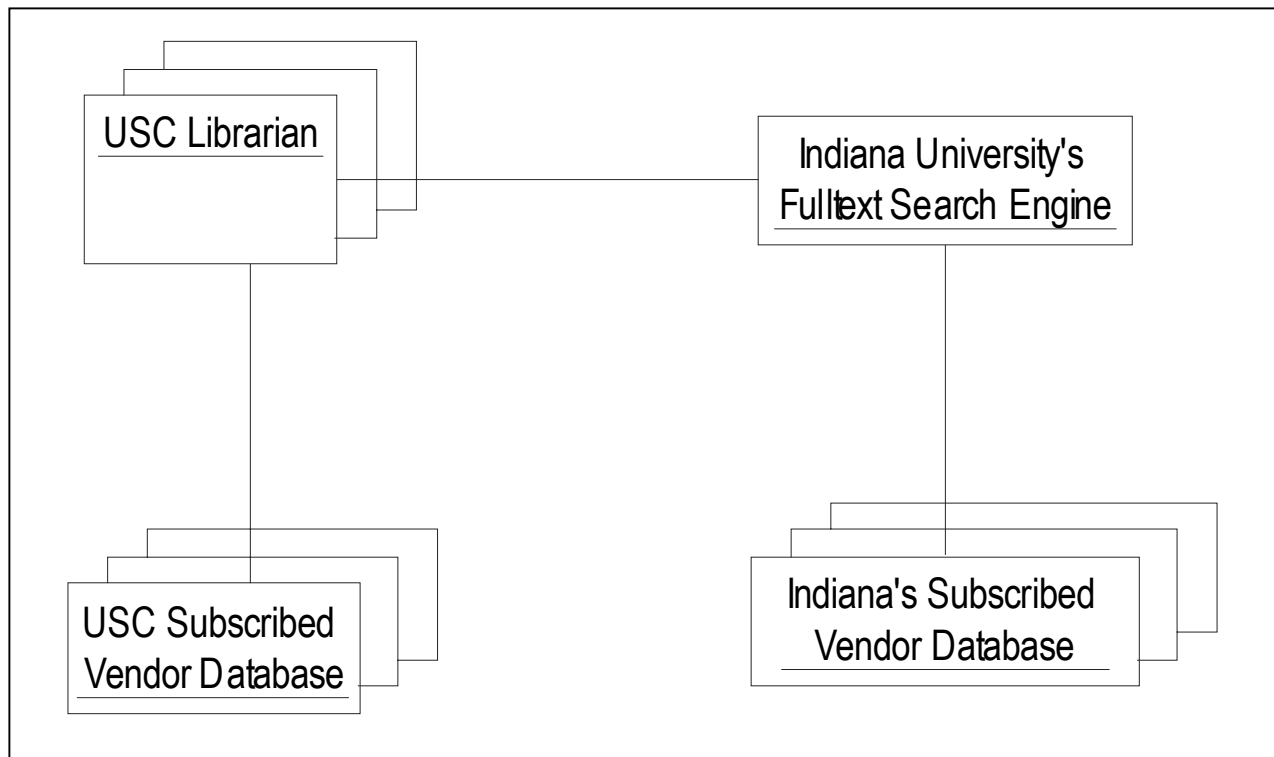
# Example: 2.3 System Boundary and Environment



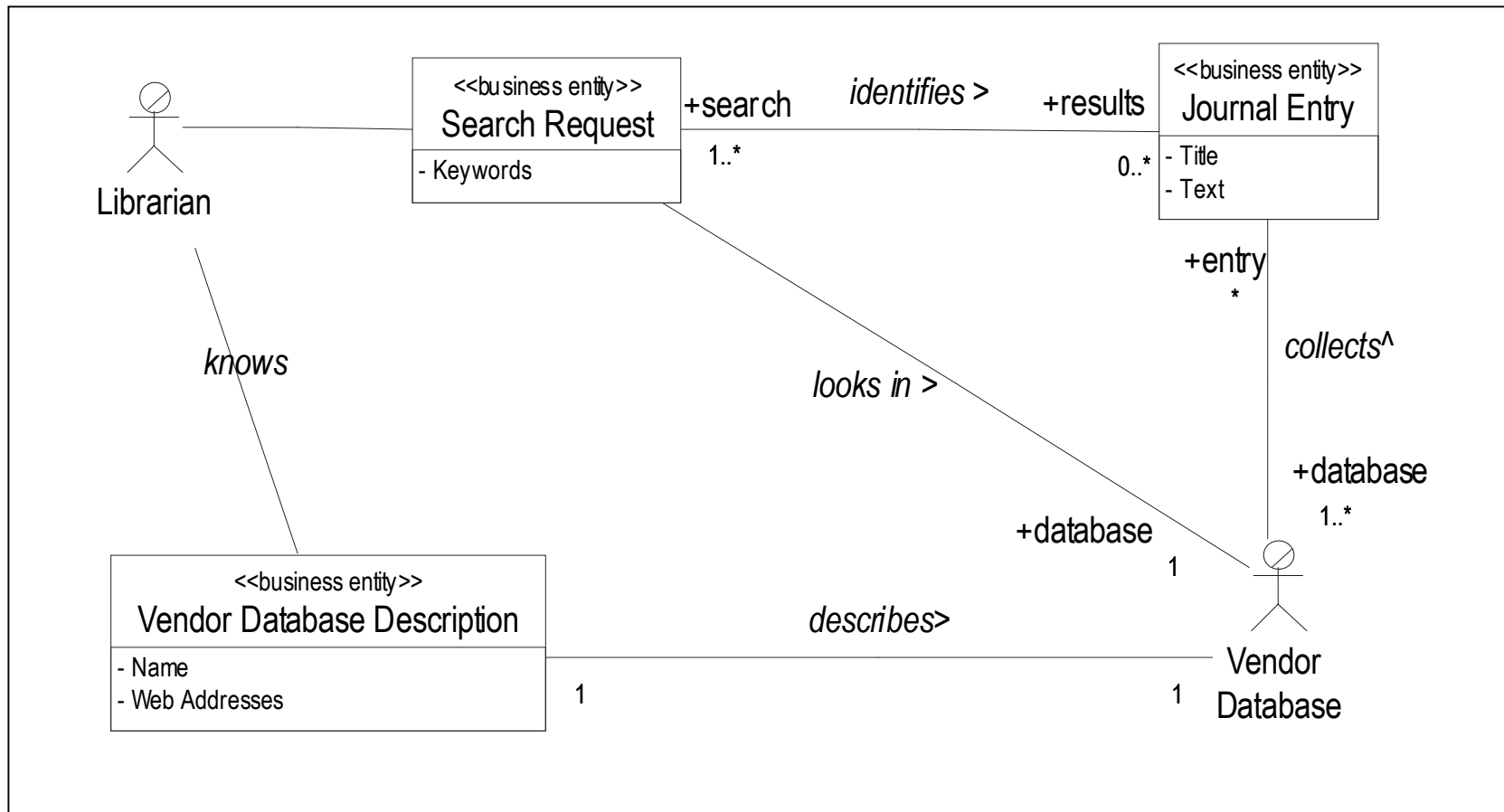
# Example: OCD 3.3 [Existing] Organization Activity Model



# Example: OCD 3.4 Current System



# Example: OCD 3.5 [Existing] Entity Model



# Recommended Reading

- Rational Rose tutorial
- *Guidelines for Model-Based (System) Architecting and Software Engineering (MBASE) v2.3.2*, Center for Software Engineering, University of Southern California.
- OMG (1999). *OMG Unified Modeling Language Specification*, 1.3 ed., Object Management Group: Framingham, MA. ([www.omg.org](http://www.omg.org))
- Booch, G., J. Rumbaugh, et al. (1999). *The Unified Modeling Language User Guide*, Object Technology Series, R. Booch, Jacobson ed., Addison Wesley Longman, Inc.: Reading, MA.
  - Describes UML 1.0 or 1.1 (not clear)
- Rumbaugh, J., Jacobson, I., et al. (1999). *The Unified Modeling Language Reference Manual*, Object Technology Series, R. Booch, Jacobson ed., Addison Wesley Longman, Inc.: Reading, MA.
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