Tutorial: Database Security

Instructor: Dr. William Wilson
Arca Systems, Inc.
wilson@arca.com

Topics: This tutorial provides an introduction to the issues involved in building, using and evaluating secure databases. It presents the security objectives a database management system (DBMS) typically is expected to enforce. The tutorial covers the relation of database security to the security provided by operating systems and applications. It considers architectures for allocating security responsibility between the DBMS and other system components. The security implications of database organization are also considered. The tutorial concludes with some example DBMSs and discusses their approach to security enforcement.

Biography: Dr. William Wilson is President of Arca Systems, Inc. an Exodus Communications Company. Dr. Wilson co-founded Arca Systems in 1988 and has served as its president since that time. He has over two decades experience in information security. Before founding Arca, he worked as the leader of the formal methods group at MITRE and then as General Manager of Sytek’s Data Security Division. In 1998 Arca Systems was acquired by Exodus Communications, a leading Internet Co-location company. Since that time Dr. Wilson has been leading Exodus’ security services business. Dr. Wilson received his B.A. from Princeton and his M.A. and Ph.D. in mathematics from Harvard.