



Knight's
**Microsoft®
Business Intelligence**



24-Hour Trainer

*Leveraging Microsoft SQL Server® Integration, Analysis,
and Reporting Services with Excel and SharePoint*

Brian Knight, Devin Knight, Adam Jorgensen, Patrick LeBlanc, Mike Davis

KNIGHT'S MICROSOFT® BUSINESS INTELLIGENCE 24-HOUR TRAINER

INTRODUCTION	xxv
▶ SECTION I DATA WAREHOUSING AND BUSINESS INTELLIGENCE	
LESSON 1 Why Business Intelligence?	3
LESSON 2 Dimensional Modeling	9
LESSON 3 Fact Table Modeling	17
▶ SECTION II SQL SERVER INTEGRATION SERVICES	
LESSON 4 Understanding SSIS	23
LESSON 5 Using the Control Flow	35
LESSON 6 Using the Data Flow	45
LESSON 7 Solving Common SSIS Scenarios	59
LESSON 8 Loading Dimensions	69
LESSON 9 Loading a Fact Table	79
LESSON 10 Deploying SSIS Packages	87
▶ SECTION III SQL SERVER ANALYSIS SERVICES	
LESSON 11 Understanding SSAS	97
LESSON 12 Configuring a Data Source and Data Source View	105
LESSON 13 Using the Cube Wizard	115
LESSON 14 Editing Your Dimension	121
LESSON 15 Editing Your Cube	129
LESSON 16 Adding New Dimensions and Measure Groups	137
LESSON 17 Using MDX	147
LESSON 18 Creating Calculations	155
LESSON 19 Data Mining	163
LESSON 20 Administering the SSAS Instance	175

► **SECTION IV SQL SERVER REPORTING SERVICES**

LESSON 21	Understanding SSRS	189
LESSON 22	Using Report Wizard	199
LESSON 23	Building a Matrix Report	207
LESSON 24	Parameterizing Your Reports	215
LESSON 25	Building Reports on Your Cube	223
LESSON 26	Using Maps in Your Report	229
LESSON 27	Building a Dashboard	239
LESSON 28	Deploying and Administering SSRS	247
LESSON 29	New Reporting Services Visualizations — Sparklines, Data Bars, and Indicators	263
LESSON 30	Using Report Builder	273

► **SECTION V CONTAINERS**

LESSON 31	Reporting against a Cube with Excel	285
LESSON 32	Loading Data into a PowerPivot Workbook	295
LESSON 33	Creating a PowerPivot Report	303
LESSON 34	Data Mining in Excel	313

► **SECTION VI SHAREPOINT**

LESSON 35	Understanding SharePoint for Business Intelligence	331
LESSON 36	Deploying and Using Reporting Services in SharePoint 2010 ...	335
LESSON 37	Building PerformancePoint Dashboards in SharePoint 2010 ...	343
LESSON 38	Deploying and Using Excel Services	353
LESSON 39	Deploying and Using PowerPivot in SharePoint	361
LESSON 40	Managing SharePoint Business Intelligence	371
APPENDIX	What's on the DVD?	375
INDEX	381

Knight's Microsoft® Business Intelligence 24-Hour Trainer

Knight's Microsoft® Business Intelligence 24-Hour Trainer

**LEVERAGING MICROSOFT SQL SERVER® INTEGRATION,
ANALYSIS, AND REPORTING SERVICES
WITH EXCEL® AND SHAREPOINT®**

Brian Knight, Devin Knight, Adam Jorgensen, Patrick LeBlanc, Mike Davis



WILEY

Wiley Publishing, Inc.

Knight's Microsoft® Business Intelligence 24-Hour Trainer: Leveraging Microsoft SQL Server® Integration, Analysis, and Reporting Services with Excel® and SharePoint®

Published by
Wiley Publishing, Inc.
10475 Crosspoint Boulevard
Indianapolis, IN 46256
www.wiley.com

Copyright © 2010 by Wiley Publishing, Inc., Indianapolis, Indiana

Published simultaneously in Canada

ISBN: 978-0-470-88963-3

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Limit of Liability/Disclaimer of Warranty: The publisher and the author make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation warranties of fitness for a particular purpose. No warranty may be created or extended by sales or promotional materials. The advice and strategies contained herein may not be suitable for every situation. This work is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services. If professional assistance is required, the services of a competent professional person should be sought. Neither the publisher nor the author shall be liable for damages arising herefrom. The fact that an organization or Web site is referred to in this work as a citation and/or a potential source of further information does not mean that the author or the publisher endorses the information the organization or Web site may provide or recommendations it may make. Further, readers should be aware that Internet Web sites listed in this work may have changed or disappeared between when this work was written and when it is read.

For general information on our other products and services please contact our Customer Care Department within the United States at (877) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Library of Congress Control Number: 2010932417

Trademarks: Wiley, the Wiley logo, Wrox, the Wrox logo, Wrox Programmer to Programmer, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates, in the United States and other countries, and may not be used without written permission. Microsoft, Excel, SharePoint, and SQL Server are registered trademarks of Microsoft Corporation. All other trademarks are the property of their respective owners. Wiley Publishing, Inc. is not associated with any product or vendor mentioned in this book.

To my best friend and wife, Jennifer

— BRIAN KNIGHT

Psalm 115:1

— DEVIN KNIGHT

*To my Lord and Savior, my amazing family, my
beautiful love Cristina, and my special Lady Bird*

— ADAM JORGENSEN

*To my wife Karlyn, who encourages and motivates
me to attain any goal.*

— PATRICK LEBLANC

*To my wife Jessy; without her strength I would not
have accomplished so much.*

— MIKE DAVIS

