

## -Dokumentation



**Zentrum für Informatik ZFI AG**

**Updating Database Administration Skills to  
Microsoft SQL Server 2005 (SUA9) - IT  
Ausbildung nach Mass**

<http://www.zfi.ch/SUA9>

Weitere Infos finden Sie unter [www.zfi.ch](http://www.zfi.ch) oder via Adresse:

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<b>Titel</b>	<b>Updating Database Administration Skills to Microsoft SQL Server 2005</b>
<b>Untertitel</b>	<b>Updating Your Database Administration Skills to Microsoft SQL Server 2005</b>
<b>Einleitung</b>	
<b>Ihr Nutzen</b>	
<b>Voraussetzungen</b>	<p>Before attending this course, students must have:</p> <ul style="list-style-type: none"> <li>- MCDBA certification or equivalent knowledge.</li> <li>- Administration experience with Microsoft SQL Server 2000 or Microsoft SQL Server 7.0.</li> <li>- Knowledge of SQL Server 2000/7.0: <ul style="list-style-type: none"> <li>- Database and server architecture.</li> <li>- Installation and configuration.</li> <li>- Database security.</li> <li>- Database recovery (backup and restore).</li> </ul> </li> <li>- SQL Server technologies used for database availability such as log shipping and clustering.</li> <li>- Job automation.</li> <li>- Database and server monitoring.</li> <li>- Troubleshooting.</li> <li>- Replication.</li> </ul> <p>In addition, it is recommended, but not required, that students have completed:</p> <ul style="list-style-type: none"> <li>- Course 2072,</li> </ul>
<b>Teilnehmerkreis</b>	
<b>Unterlagen</b>	The student kit includes a comprehensive workbook and other necessary materials for this class.
<b>Folgekurse</b>	
<b>Inhalt</b>	<p><b>Module 1: Overview of SQL Server 2005 Architecture</b>  This module introduces students to the various components and services that comprise SQL Server. Database administrators are often required to manage multiple aspects of the database server - not just the relational database engine, so an awareness of the components and functionality available in SQL Server 2005 is essential in order to prepare database administrators for SQL Server 2005 deployments and management.</p> <p><b>Lessons</b></p> <ul style="list-style-type: none"> <li>- Overview of SQL Server 2005</li> <li>- System Enhancements for Administrators</li> </ul> <p>After completing this module, students will be able to:</p> <ul style="list-style-type: none"> <li>- Describe the components of SQL Server 2005.</li> <li>- Describe new and enhanced features for administrators in SQL Server 2005.</li> </ul> <p><b>Module 2: Installing SQL Server 2005</b>  This module explains how to plan for a SQL Server 2005 installation, install SQL Server 2005 and maintain a SQL Server 2005 installation.</p> <p><b>Lessons</b></p> <ul style="list-style-type: none"> <li>- Preparing to Install SQL Server 2005</li> </ul>

- Performing a SQL Server 2005 Installation
- Maintaining a SQL Server 2005 Installation

#### Lab 2: Installing SQL Server 2005

- Installing a SQL Server Instance.

After completing this module, students will be able to:

- Plan a SQL Server 2005 installation.
- Install SQL Server 2005.
- Maintain a SQL Server 2005 installation.

#### Module 3: SQL Server 2005 Administrative Tools

This module explains what built-in administration tools and utilities are available in Microsoft SQL Server 2005 and how they can be used to help database administrators be successful in managing a SQL Server 2005 solution.

##### Lessons

- Using SQL Server Management Studio
- Using SQL Server Computer Manager
- Using the sqlcmd Utility
- Using the SQL Management Objects

#### Lab 3: Administering SQL Server 2005

- Creating the Personnel database.
- Populating the Personnel database.
- Backing Up the Personnel Database.

After completing this module, students will be able to:

- Choose the appropriate tool or utility to perform an administrative task.
- Use SQL Server Management Studio to manage databases.
- Use SQL Server Computer Manager to manage a server.
- Use the sqlcmd utility to execute Transact-SQL from the command prompt.
- Use SQL Management Objects to script common administrative tasks.

#### Module 4: Monitoring SQL Server 2005

This module discusses the various tools and techniques you can use to monitor Microsoft SQL Server 2005.

##### Lessons

- Using SQL Profiler
- Using DDL Triggers
- Using Event Notifications
- Using Metadata Views

#### Lab 4: Monitoring SQL Server 2005

- Using Profiler
- Creating DDL Triggers
- Creating Event Notifications

After completing this module, students will be able to:

- Use SQL Profiler to monitor SQL Server 2005.
- Use DDL triggers to respond to DDL events.
- Use event notifications to respond to database events.
- Query SQL Server metadata.

#### Module 5: Maintaining Databases and Indexes

This module explains the tools and utilities in Microsoft SQL Server 2005 that can help you implement database maintenance plans, manage database indexes, and tune databases.

##### Lessons

- Managing Indexes
- Using the Database Tuning Advisor

#### Lab 5: Maintaining a Database

- Defining Indexes
- Tuning a Database

After completing this module, students will be able to:

- Maintain indexes in a SQL Server 2005 database.
- Use the Database Tuning Advisor to assist with database design.
- Maintain SQL Server 2005 databases.

#### Module 6: Securing SQL Server 2005

This module explains the changes and enhancements to the Microsoft SQL Server security model in SQL Server 2005.

##### Lessons

- SQL Server 2005 Security Overview
- Managing SQL Server 2005 Security
- Managing Permissions
- Managing Certificates

#### Lab 6: Securing a SQL Server 2005 Database

- Managing securables
- Managing principals
- Managing Permissions
- Dropping a User that Created Objects.

After completing this module, students will be able to:

- Describe the security architecture of SQL Server 2005.
- Manage securables and principals.
- Manage permissions.
- Use certificates in SQL Server 2005.

#### Module 7: Disaster Recovery

This module you will learn about the enhanced backup and restore functionality in Microsoft SQL Server 2005.

##### Lessons

- Disaster Recovery in SQL Server 2005
- Using Database Snapshots
- Backup and Restore Operations

#### Lab 7: Managing Disaster Recovery

- Creating a Database Snapshot
- Backing up a Database

After completing this module, students will be able to:

- Describe common disaster recovery enhancements in SQL Server 2005.
- Use database snapshots.
- Perform backup and restore operations.

#### Module 8: Data Availability in SQL Server 2005

This module teaches you how to take advantage of the high availability features found in SQL Server 2005

##### Lessons

- Introduction to Data Availability
- Introduction to Database Mirroring
- Configuring Database Mirroring

#### Lab 8: Maintaining Availability

- Preparing the Principal and Mirror Server
- Establishing a Mirroring Session

- Establishing a Witness Server
- Executing Transactions
- Simulating Principal Server Failure
- Restarting the Failed Server
- Terminating the Mirror Session

After completing this module, students will be able to:

- Describe the data availability technologies included in SQL Server 2005.
- Describe the concepts of database mirroring.
- Configure database mirroring.

#### Module 9: SQL Server 2005 Replication

This module explains the new and enhanced replication features in SQL Server 2005

##### Lessons

- Overview of Replication Enhancements
- New Types of Replication
- Configuring Replication

After completing this module, students will be able to:

- Describe the enhancements to replication functionality in SQL Server 2005.
- Describe the new types of replication available in SQL Server 2005.
- Configure replication using SQL Server 2005.

#### Beitrag

Der Teilnehmerbeitrag versteht sich rein netto. Das ZFI ist (gemäss MwSt-Gesetz) nicht Mehrwertsteuerpflichtig und erhebt somit keine MwSt. Bei länger als einen Monat dauernden Lehrgängen ist die Zahlung des Teilnehmerbeitrages in mehreren Raten möglich (pro rata temporis).