



## Course Syllabus

### Microsoft CRM 3.0 Customization

#### Key Data

**Course Number:** 8525

**Number of Days:** 3

**Available:** December 2005

**Languages:**

US English

**Format:**

Instructor-Led Training  
(lecture and labs)

**Student Materials:**

Student Courseware

**Certification Exam:**

This course helps prepare for the Microsoft CRM 3.0 Customization certification exam

**This course syllabus should be used to determine whether the course is appropriate for the students, based on their current skills and technical training needs.**

**Course content, prices, and availability are subject to change without notice.**

#### Introduction

This three-day instructor-led course provides students with the knowledge and skills to plan, develop, and apply Microsoft® CRM 3.0 Customizations. The course focuses on using Microsoft CRM 3.0 Customization tools and the Microsoft CRM 3.0 Client Programming Guide.

#### Audience

This course is intended for Microsoft CRM Implementation Consultants and System Administrators who understand how to use Microsoft CRM. Participants will be working with customizations developed in JScript and XML, but are not expected to be experienced programmers.

#### At Course Completion

After completing this course, students will be able to:

- Plan Customizations for a Microsoft CRM Implementation
- Apply Form Customizations using the Microsoft CRM Customization Tools
- Plan, create, and configure Custom Entities in Microsoft CRM
- Plan, create, configure, and maintain Workflow Rules and Sales Processes
- Understand how client-side scripts are used on Form and Field events in Microsoft CRM
- Use IFrame to integrate other applications
- Add custom menus, navigation items and buttons to Microsoft CRM
- Customize the Microsoft CRM Navigation Pane
- Recognize opportunities to extend Microsoft CRM
- Locate ISV solutions
- Create and Customize Microsoft CRM Reports using SQL Server 2000 Reporting Services

#### Prerequisites

Before attending this course, students must have working Knowledge of how to use Microsoft CRM 3.0.

It is recommended, but not required, that students have completed Microsoft CRM applications training. In addition, it is recommended, but not required, that students have experience working with:

- Relational Databases
- Web development, JavaScript (JScript), DHTML
- XML

#### Student Materials

The student kit includes a comprehensive workbook and other necessary materials for this class. A CD with sample code used in the course is also provided in the student kit.

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**For a referral to a Microsoft Certified Technical Education Center in your area, see the Microsoft Training and Certification Web site at <http://www.microsoft.com/traincert>. Call your local Microsoft Certified Technical Education Center for more information and to register for classes.**

## Additional Reading

To help you prepare for this class, review the following technologies:

- HTML
- XML
- JScript
- DHTML
- Transact SQL

## Chapter 1: Microsoft CRM Customization

This chapter explains concepts related to customizing Microsoft CRM and planning customizations for a CRM Implementation.

Lessons
<ul style="list-style-type: none"><li>▪ Microsoft CRM Design Focus</li><li>▪ Levels of Customization</li><li>▪ Microsoft CRM Customization Architecture</li><li>▪ Use of Supported Methods</li><li>▪ Available Customizations</li><li>▪ Customization Tactics</li><li>▪ Customization Method</li></ul>

After completing this chapter, students will be able to:

- Make appropriate choices about customization strategies.
- Recognize which levels customizations can be made and by whom.
- Understand how the Microsoft Architecture influences how and where you customize Microsoft CRM.
- Recognize the importance of using supported methods of customization.
- Recognize some of the ways that Microsoft CRM can be customized.
- Recognize different ways that you can apply customizations.
- Recognize some basic elements in an effective customization methodology.

## Chapter 2: Basic Customizations

This chapter explains how to use the Microsoft CRM Customization tools to perform basic customization tasks with Microsoft CRM.

Lessons
<ul style="list-style-type: none"><li>▪ Customization Concepts</li><li>▪ Basic Customization Capabilities</li><li>▪ Permissions Needed</li><li>▪ Customization Process</li><li>▪ Reusing Customizations</li><li>▪ Form Customization</li><li>▪ Customizing Attributes</li><li>▪ Previews</li><li>▪ View Customization</li><li>▪ Rename a Customizable Entity</li><li>▪ Changing System Messages</li><li>▪ Modify the on-line help</li></ul>

<b>Lab 2.1 – Form Customization</b>
<ul style="list-style-type: none"><li>▪ Modify Tabs</li><li>▪ Modify Sections</li><li>▪ Modify Fields</li></ul>
<b>Lab 2.2 – Form Customization</b>
<ul style="list-style-type: none"><li>▪ Case Form Customization</li></ul>
<b>Lab 2.3 – Create a Custom Attribute</b>
<ul style="list-style-type: none"><li>▪ Adding Attributes</li><li>▪ Modifying Attributes</li><li>▪ Deleting Attributes</li></ul>
<b>Lab 2.4 – Create and Modify Views</b>
<ul style="list-style-type: none"><li>▪ Create a View</li><li>▪ Configure a View</li><li>▪ Share A View</li></ul>
<b>Lab 2.5 – Changing the Name of an entity</b>
<ul style="list-style-type: none"><li>▪ Change the entity Name</li><li>▪ Modify entity forms and Views</li><li>▪ Change Attribute Display names</li><li>▪ Customize messages</li><li>▪ Modify affected reports</li><li>▪ Modify on –line help content</li></ul>

After completing this chapter, students will be able to:

- Describe basic Microsoft CRM Customizations.
- Understand the basic capabilities of the Microsoft CRM Customization tools.
- Understand the security privileges necessary to perform customizations.
- Apply customizations.
- Re-use customizations.
- Customize forms.
- Create custom entity attributes.
- Modify Previews.
- Customize Views.
- Re-name an existing entity.
- Modify the on-line help.

## Chapter 3: Custom Entities

This chapter explains how to plan and implement custom entities

<b>Lessons</b>
<ul style="list-style-type: none"> <li>▪ Value of Custom Entities</li> <li>▪ Custom entities and System Entities</li> <li>▪ Planning a Custom Entity</li> <li>▪ Ownership Type</li> <li>▪ Entity Relationships</li> <li>▪ Relationship Behavior</li> <li>▪ Supported Relationships</li> <li>▪ Entity Security and Customizations</li> <li>▪ Working With Custom Entities</li> <li>▪ Configuring a Custom Entity</li> <li>▪ Default Entity Attributes and Features</li> <li>▪ Entity Icons</li> <li>▪ Deleting a Custom Entity</li> <li>▪ Defining Relationships</li> <li>▪ Entity Mapping</li> <li>▪ Add a Mapping</li> </ul>
<b>Lab 3.1 – Create a Custom Entity</b>
<ul style="list-style-type: none"> <li>▪ Create an Entity</li> <li>▪ Set Entity attributes</li> <li>▪ Apply Form and View Customizations</li> </ul>
<b>Lab 3.2 – Creating Relationships</b>
<ul style="list-style-type: none"> <li>▪ Create a Relationship</li> <li>▪ Configure a Relationship</li> </ul>
<b>Lab 3.3 – Add Mapping</b>
<ul style="list-style-type: none"> <li>▪ Add mapping</li> </ul>
<b>Lab 3.4 – Planning, Creating and Configuring a Custom Entity</b>
<ul style="list-style-type: none"> <li>▪ Planning</li> <li>▪ Create Entity</li> <li>▪ Create Relationships</li> <li>▪ Secure the entity</li> <li>▪ Modify the entity</li> <li>▪ Create Mappings</li> </ul>

After completing this chapter, students will be able to:

- Plan for custom entities
- Create custom entities
- Define entity relationships
- Define entity mapping
- Delete a custom entity

## Chapter 4: WorkFlow

This chapter explains how to create and define Microsoft CRM Workflow and Sales Processes.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>▪ Core Concepts</li> <li>▪ Creating a Workflow Rule</li> <li>▪ Defining Workflow Rules</li> <li>▪ WorkFlow Limitations</li> <li>▪ Defining Workflow Actions</li> <li>▪ Activity Creation Actions</li> <li>▪ Object Update Actions</li> <li>▪ Flow Control Actions</li> <li>▪ Using Dynamic Text in Workflow</li> <li>▪ Using Dynamic Values in Workflow</li> <li>▪ Defining Workflow Conditions</li> <li>▪ Sales Processes</li> <li>▪ Organizing Workflow</li> <li>▪ Managing Workflow</li> <li>▪ Importing and Exporting Workflow Rules</li> <li>▪ Troubleshooting Workflow</li> </ul>
<b>Lab 4.1 – Activity Creation Actions</b>
<ul style="list-style-type: none"> <li>▪ Create Activity</li> <li>▪ Create Note</li> <li>▪ Create E-Mail</li> </ul>
<b>Lab 4.2 – Object Update Actions</b>
<ul style="list-style-type: none"> <li>▪ Update Object</li> <li>▪ Assign Object</li> <li>▪ Change Status</li> </ul>
<b>Lab 4.3 – Flow Control Actions</b>
<ul style="list-style-type: none"> <li>▪ Call Assembly</li> <li>▪ Run Sub Process</li> <li>▪ Stop</li> </ul>
<b>Lab 4.4 – Check Conditions</b>
<ul style="list-style-type: none"> <li>▪ Check Objects</li> <li>▪ Check Date</li> <li>▪ Check Activities</li> <li>▪ Else If</li> </ul>
<b>Lab 4.5 – Wait for Conditions</b>
<ul style="list-style-type: none"> <li>▪ Wait Object</li> <li>▪ Wait Activity</li> </ul>
<b>Lab 4.6 – Wait for Timer Conditions</b>
<ul style="list-style-type: none"> <li>▪ From now on</li> <li>▪ After</li> <li>▪ Before</li> </ul>

**Lab 4.7 – Basic Sales Processes**

- Define Stages
- Create Activities

After completing this chapter, students will be able to:

- Create Workflows
- Define Workflows
- Define Workflow Conditions
- Define Workflow Actions
- Configure Sales Processes
- Manage and Monitor Workflows
- Import and export Workflows
- Troubleshoot Workflow problems

**Chapter 5: Application Event Programming**

This chapter explains how to perform client-side actions on Microsoft CRM form events.

**Lessons**

- Core Concepts
- Common uses for Client-side Code
- Using Form Events
- Using Field Events
- Configuring Event Detail Properties
- Referencing and Manipulating Form Values
- DHTML DOM
- Essential JScript
- Microsoft CRM Document Object Model
- crmForm
- crmForm Fields
- General Field Properties and Methods
- Picklist field Properties and Methods
- Lookup Field Properties
- Troubleshooting
- Tips and Tricks
- DHTML use within Microsoft CRM

**Lab 5.1 – Creating Simple Event Scripts**

- Form events
- Field events

**Lab 5.2 – Referencing Microsoft CRM Values**

- General Field Values
- Picklist Field Values
- Lookup Field Values

After completing this chapter, students will be able to:

- Recognize capability for client-side script to provide solutions
- Create simple scripts
- Apply previously developed client-side scripts
- Modify previously developed client-side script
- Test client-side scripts
- Troubleshoot client-side scripts
- Participate in informed discussion related to client-side scripts in Microsoft® CRM 3.0.

## **Chapter 6: Application Integration**

This chapter explains how to integrate other applications into Microsoft CRM.

<b>Lessons</b>
<ul style="list-style-type: none"><li>▪ Application Integration Features and Resources</li><li>▪ IFrame</li><li>▪ Dynamic IFrame</li><li>▪ URL Addressable Forms</li><li>▪ Creating Custom Menus, Navigation items and Buttons</li><li>▪ ISV. Config Integration Points</li><li>▪ Configuring Controls</li><li>▪ Control Types</li><li>▪ ISV.config structure</li><li>▪ SiteMap</li><li>▪ SiteMap Structure</li><li>▪ SDK Capabilities</li><li>▪ ISV Solutions</li></ul>
<b>Lab 6.1 – Add an IFrame</b>
<ul style="list-style-type: none"><li>▪ Add an IFrame</li><li>▪ Passing Parameters</li></ul>
<b>Lab 6.2 – Creating Custom Buttons, Navigation Items and Menus</b>
<ul style="list-style-type: none"><li>▪ Enabling Customizations</li><li>▪ Configuring Controls</li></ul>
<b>Lab 6.3 – Implement the Clone Contact Feature</b>
<ul style="list-style-type: none"><li>▪ Add Solution files as Virtual Directory to Microsoft CRM Web Site</li><li>▪ Modify isv.config.xml</li></ul>
<b>Lab 6.4 – Apply Site Map Customizations</b>
<ul style="list-style-type: none"><li>▪ Configure Areas</li><li>▪ Configure Groups</li><li>▪ Configure Sub Areas</li><li>▪ Configure Permissions</li></ul>

After completing this chapter, students will be able to:

- Use IFrame to integrate other applications
- Add custom menus, side tabs and buttons to the Microsoft CRM application
- Reference Microsoft CRM Forms from other applications
- Customize the Navigation Pane
- Recognize opportunities to extend Microsoft CRM
- Locate ISV solutions

## **Chapter 7: Report Customization**

This chapter explains how to create and customize Microsoft CRM Reports using SQL Server 2000 Reporting Services and Microsoft Office 2003 applications.

<b>Lessons</b>
<ul style="list-style-type: none"><li>▪ Reporting and CRM</li><li>▪ Core Concepts</li><li>▪ Transition to SQL Server 2000 Reporting Services</li><li>▪ Reporting Services Overview</li><li>▪ Microsoft CRM Reporting Features</li><li>▪ Creating Excel Reports</li><li>▪ Edit and Organize Reports</li><li>▪ Deploying and Removing Reporting Services Reports</li><li>▪ Control Access to Reports</li><li>▪ Reporting Services Report Designer</li><li>▪ Modify Existing Reporting Services Reports</li><li>▪ Microsoft CRM Pre-Filtering</li><li>▪ Scheduled Reports</li></ul>
<b>Lab 7.1 – Create Excel Reports</b>
<ul style="list-style-type: none"><li>▪ Export records to Excel</li><li>▪ Upload the Report to Microsoft CRM</li></ul>
<b>Lab 7.2 – Create a Simple Reporting Services Report</b>
<ul style="list-style-type: none"><li>▪ Use the Report Wizard</li></ul>

After completing this chapter, students will be able to:

- Basic understanding of SQL Reporting Services
- Create a new Report
- Modify Existing Reports
- Organize Reports
- Deploy Reports
- Remove Reports
- Schedule Reports
- Control who can view reports