

developing microsoft sharepoint server 2013 advanced solutions Document

exam 70 488 is a widely recognized certification exam that validates a developer's proficiency in designing and developing applications using Microsoft SQL Server 2012/2014. As organizations increasingly rely on robust database solutions, earning the Microsoft MCSA: SQL Server 2012/2014 certification by passing exam 70-488 can significantly enhance a professional's career prospects, showcase technical expertise, and open doors to advanced roles in database development and administration.

In this comprehensive guide, we will explore everything you need to know about exam 70-488, including its objectives, preparation strategies, key topics, and tips for success. Whether you're a seasoned developer looking to validate your skills or a newcomer aiming to enter the SQL Server domain, understanding the details of exam 70-488 is essential for effective preparation.

Understanding Exam 70-488: Microsoft SQL Server 2012/2014 Database Development

What is Exam 70-488?

Exam 70-488, titled "Developing Microsoft SQL Server 2012/2014 Databases," is designed for database professionals who develop applications that interact with SQL Server databases. The exam assesses a candidate's ability to develop database objects, implement programming objects, troubleshoot and optimize databases, and ensure data integrity.

Successfully passing this exam demonstrates a candidate's mastery in developing solutions that leverage SQL Server's capabilities, including Transact-SQL programming, database design, and deploying database objects.

Who Should Take Exam 70-488?

This certification is ideal for:

- Database developers
- Application developers working with SQL Server
- Software engineers involved in database programming
- Data professionals seeking to validate their SQL Server development skills

Prerequisites for the exam typically include familiarity with SQL Server management and development tools, as well as experience with database design and programming.

Exam 70-488 Objectives and Skills Measured

Microsoft outlines specific skills and knowledge areas tested in exam 70-488. The exam covers four main domains:

- **Design Database Objects (20-25%)**
- **Implement Database Objects (35-40%)**
- **Develop Programming Objects (20-25%)**
- **Troubleshoot and Optimize SQL Server Objects (15-20%)**

Each domain includes specific skills and tasks, such as designing tables, creating views, implementing stored procedures, managing transactions, and optimizing query performance.

Key Topics Covered in Exam 70-488

1. Designing Database Objects

Understanding how to create efficient and scalable database objects is fundamental. Topics include:

- Designing tables with appropriate data types and constraints
- Creating and managing indexes for performance
- Designing views, stored procedures, functions, and triggers
- Establishing relationships and referential integrity
- Implementing data integrity and security measures

2. Implementing Database Objects

This area focuses on the actual creation and management of database objects:

- Creating tables, views, stored procedures, and functions
- Managing schemas and permissions
- Implementing data validation and constraints
- Using DDL (Data Definition Language) and DML (Data Manipulation Language) statements
- Managing indexes and partitions

3. Developing Programming Objects

In this domain, candidates learn to develop and optimize programming solutions:

- Writing Transact-SQL scripts and queries
- Developing stored procedures, functions, and triggers
- Handling parameters, error handling, and transaction control
- Implementing cursors and dynamic SQL
- Using Common Language Runtime (CLR) integration (if applicable)

4. Troubleshooting and Optimizing SQL Server Objects

Performance tuning and troubleshooting are vital skills:

- Analyzing query execution plans
- Identifying and resolving deadlocks
- Optimizing indexes and queries
- Diagnosing performance issues
- Managing statistics and database health

Preparation Strategies for Exam 70-488

Preparing for exam 70-488 requires a structured approach, combining study materials, hands-on practice, and exam-taking strategies.

1. Review Official Microsoft Learning Paths and Resources

Microsoft offers comprehensive training modules, tutorials, and documentation that align with exam objectives. These resources are invaluable for understanding core concepts and practical implementation.

2. Utilize Practice Exams and Sample Questions

Taking practice tests helps familiarize candidates with the exam format, question style, and time constraints. Many online platforms provide sample questions and full-length practice exams.

3. Engage in Hands-On Practice

Practical experience is crucial. Set up a SQL Server environment and practice creating database

objects, writing T-SQL scripts, and troubleshooting common issues.

4. Join Study Groups and Forums

Online communities such as TechNet, Stack Overflow, and Reddit offer peer support, tips, and shared experiences that can boost your understanding.

5. Use Official Microsoft Certification Guides

Books dedicated to exam 70-488 are available and often contain detailed explanations, practice questions, and lab exercises.

Tips for Success in Exam 70-488

- Thoroughly understand the exam objectives and focus your study accordingly.
- Practice writing T-SQL code and creating database objects in a real SQL Server environment.
- Review common performance issues and their solutions.
- Manage your exam time by practicing under timed conditions.
- Read each question carefully to understand what is being asked before answering.
- Use elimination strategies for multiple-choice questions to improve your chances.
- Ensure you understand how to troubleshoot and optimize database objects, as these are heavily tested topics.

Benefits of Achieving the Microsoft Certified: Developing SQL Server Databases

Earning the certification provides multiple advantages:

- Validates your expertise in SQL Server development
- Enhances your professional credibility
- Opens up advanced career opportunities such as database developer, SQL programmer, or database analyst
- Demonstrates commitment to continuous learning and professional growth
- Provides access to Microsoft certification benefits and community resources

Conclusion

exam 70 488 is a challenging yet rewarding certification that signifies a professional's competency in developing and managing SQL Server databases. Proper preparation, practical experience, and

understanding the exam objectives are key to success. Whether you're seeking to validate your skills, advance your career, or deepen your knowledge of SQL Server development, passing exam 70-488 can be a significant milestone in your IT journey.

Start your preparation today with official resources, practice exams, and hands-on experience to increase your chances of success. With dedication and strategic study, you can confidently approach the exam and achieve certification that underscores your expertise in developing Microsoft SQL Server solutions.

Exam 70-488: Mastering the Microsoft SharePoint 2013 Development Certification

Exam 70-488 has become a pivotal certification for software developers aiming to demonstrate their expertise in designing, developing, and customizing SharePoint 2013 solutions. As organizations increasingly rely on SharePoint for collaboration, content management, and enterprise solutions, professionals with an in-depth understanding of its development framework are in high demand. This article provides a comprehensive overview of the exam, from its objectives and structure to preparation strategies, ensuring aspiring candidates are well-equipped to succeed.

Understanding the Significance of Exam 70-488

The Role of the Certification in the IT Landscape

Microsoft certifications are globally recognized benchmarks of proficiency for IT professionals. The 70-488 exam, specifically, validates an individual's skills in developing SharePoint 2013 solutions, which include custom web parts, workflows, event receivers, and application pages. Earning this certification signals to employers not only technical competence but also a commitment to staying current with Microsoft's enterprise technologies.

Who Should Consider Taking Exam 70-488?

This exam is tailored for developers, software engineers, and solution architects who:

- Build custom SharePoint 2013 solutions.
- Develop client-side and server-side components.
- Integrate SharePoint with other enterprise systems.
- Customize and extend SharePoint functionalities to meet organizational needs.

Candidates should have prior experience with SharePoint development, familiarity with Visual Studio, and a solid understanding of C# and .NET Framework.

Exam Structure and Content Domains

Overview of the Exam Format

The 70-488 exam typically comprises approximately 40-60 questions, which may include multiple-choice, case studies, drag-and-drop, and scenario-based questions. The exam duration spans 150 minutes, with a passing score set at around 70-75%. The exam is designed to test candidates across several core areas.

Key Domains Covered

The exam content is divided into the following major domains:

- Designing and Developing SharePoint Apps (20-25%)
- Designing and Developing SharePoint Solutions (35-40%)
- Designing and Developing SharePoint Web Parts (20-25%)
- Designing and Developing SharePoint Workflows and Event Receivers (15-20%)

Each domain emphasizes different skill sets, from app development to customization and integration.

Deep Dive into Key Topics

Designing and Developing SharePoint Apps

This section assesses the candidate's ability to develop apps that run within SharePoint or remotely. Topics include:

- Understanding SharePoint-hosted vs. provider-hosted apps.
- Using REST APIs and client-side object models (CSOM).
- Implementing OAuth authentication.
- Managing app permissions and deployment.

Core Skills:

- Creating SharePoint-hosted apps using JavaScript and HTML.
- Developing provider-hosted apps with Visual Studio, leveraging server-side code.
- Securing apps with OAuth and app permissions.

Designing and Developing SharePoint Solutions

This domain covers customization of SharePoint environments through:

- Custom list forms and content types.
- Using SharePoint Designer workflows.
- Developing custom solutions with SharePoint Framework (SPFx).
- Managing deployment, versioning, and solution packages.

Core Skills:

- Building sandboxed solutions and farm solutions.
- Configuring solution packaging and deployment.
- Developing custom forms and maintaining solution lifecycle.

Designing and Developing SharePoint Web Parts

Web parts are reusable components that display information or provide interaction:

- Creating server-side web parts with Visual Studio.
- Developing client-side web parts using JavaScript frameworks.
- Implementing properties and customization options.
- Enhancing user experience with AJAX and REST.

Core Skills:

- Developing web parts that communicate with SharePoint lists and libraries.
- Managing web part lifecycle and rendering.
- Optimizing web parts for performance.

Designing and Developing SharePoint Workflows and Event Receivers

Automation and event-driven programming are vital:

- Creating declarative workflows with SharePoint Designer.
- Developing custom workflows using Visual Studio Windows Workflow Foundation.

- Implementing event receivers to handle list or site events.
- Securing event handlers and workflows.

Core Skills:

- Building workflows that automate business processes.
- Managing workflow states and persistence.
- Handling event receiver registration and execution.

Preparation Strategies for Success

Understanding the Prerequisites

Before embarking on exam preparation, candidates should:

- Have practical experience with SharePoint 2013 development.
- Be comfortable with C and the .NET Framework.
- Understand SharePoint architecture, object models, and deployment models.
- Familiarize themselves with Visual Studio and SharePoint Designer.

Recommended Study Resources

- Official Microsoft Curriculum: Microsoft Learning paths and official exam guides.
- Books: Titles such as "Exam Ref 70-488: Developing Microsoft SharePoint Server 2013 Core Solutions."
- Online Courses: Platforms offering instructor-led or self-paced courses focused on SharePoint 2013 development.
- Practice Tests: Simulated exams to assess readiness and identify weak areas.

Hands-On Practice and Real-World Scenarios

Theoretical knowledge must be complemented with practical experience:

- Set up a SharePoint 2013 development environment.
- Build sample web parts, workflows, and apps.
- Experiment with deployment and troubleshooting.
- Engage in community forums and developer groups.

Time Management and Study Planning

Create a structured study schedule, allocating sufficient time to each domain. Prioritize areas where your experience is limited, and incorporate regular practice exams to track progress.

Challenges and Common Pitfalls

Complexity of SharePoint Development

SharePoint's extensive feature set can be overwhelming. Focus on understanding core concepts before delving into advanced topics.

Keeping Up with Evolving Technologies

While SharePoint 2013 is a mature platform, some development paradigms have shifted towards newer frameworks like SPFx. Concentrate on the technologies specified in the exam objectives.

Managing Exam Anxiety

Practice under timed conditions and develop strategies for question analysis and elimination to improve confidence.

Post-Certification Opportunities

Earning the 70-488 certification opens doors to various career paths:

- SharePoint Developer
- Solutions Architect
- SharePoint Administrator (with additional skills)
- Consultant specializing in SharePoint customization

It also paves the way for further certifications, such as Microsoft Certified Solutions Developer (MCSD) for SharePoint.

Conclusion: The Path to Mastery

Exam 70-488 is a comprehensive assessment that validates a developer's ability to design and implement robust SharePoint 2013 solutions. Success requires a blend of theoretical knowledge, practical experience, and exam strategy. By understanding the exam structure, mastering core topics, and engaging in deliberate practice, candidates can confidently approach the exam and earn

a certification that signifies their expertise in one of Microsoft's most enterprise-critical platforms.

In a landscape where digital collaboration is paramount, earning the 70-488 certification not only enhances professional credibility but also positions individuals at the forefront of enterprise SharePoint development. As organizations continue to leverage SharePoint for their digital transformation initiatives, certified professionals will remain highly sought after, making this certification a valuable investment in one's IT career.

Question What are the main topics covered in the Microsoft Exam 70-488 (Developing Microsoft SharePoint Server 2013 Core Solutions)? The exam covers topics such as developing SharePoint apps, implementing SharePoint solutions, developing client-side components, working with SharePoint data, and customizing SharePoint sites using JavaScript and REST APIs. What are the prerequisites for preparing for Exam 70-488? Prerequisites include a solid understanding of SharePoint development, experience with SharePoint Server 2013, proficiency in JavaScript, C, and ASP.NET, and familiarity with SharePoint APIs, workflows, and client-side development techniques. What are some effective study resources for passing Exam 70-488? Effective resources include Microsoft official training courses, the Microsoft Learning paths, practice exams, detailed study guides, and hands-on experience building SharePoint solutions and apps. How can I best prepare for the practical aspects of Exam 70-488? Gain hands-on experience by developing SharePoint solutions, working with SharePoint APIs, creating apps, and deploying solutions in a SharePoint environment. Using lab environments and practice exercises can also enhance practical understanding. What is the significance of passing Exam 70-488 for SharePoint developers? Passing Exam 70-488 validates your skills in SharePoint development, enhances your professional credibility, and can lead to better job opportunities and recognition as a SharePoint solutions developer.

Related keywords: Microsoft Certification, Programming in C, Visual Studio, .NET Framework, Coding Skills, Software Development, Exam Preparation, Certification Exam, .NET Programming, Developer Certification

Microsoft Project Server 2013 Tutorial

Microsoft Project Server 2013 Tutorial

If you're looking to enhance your project management capabilities and streamline collaboration across teams, understanding how to effectively utilize Microsoft Project Server 2013 is essential. This comprehensive Microsoft Project Server 2013 tutorial will guide you through the fundamental setup, configuration, and usage of this powerful project management platform. Whether you're a

beginner or looking to deepen your knowledge, this guide covers everything you need to know to get started and optimize your projects.

Understanding Microsoft Project Server 2013

What is Microsoft Project Server 2013?

Microsoft Project Server 2013 is an enterprise project management (EPM) solution that integrates with Microsoft SharePoint Server to provide a centralized platform for managing projects, resources, and portfolios. It enables organizations to plan, execute, and monitor projects efficiently while fostering collaboration among team members.

Key features include:

- Centralized project data management
- Portfolio and resource management
- Timesheet and task tracking
- Reporting and analytics
- Integration with Microsoft Office and SharePoint

Prerequisites for Using Project Server 2013

Before diving into the tutorial, ensure you have:

- Windows Server with SharePoint Server 2013 installed
- SQL Server installed and configured
- Proper permissions and administrative rights
- Basic knowledge of SharePoint and Project Management concepts

Setting Up Microsoft Project Server 2013

Step 1: Installing SharePoint Server 2013

To deploy Project Server 2013, SharePoint Server 2013 must be installed and configured. Follow Microsoft's official installation guide, ensuring:

- SharePoint is configured in a farm topology suitable for your organization
- Service applications such as Managed Metadata and User Profile Service are properly set up

Step 2: Installing Project Server 2013

Once SharePoint is ready:

- Run the Project Server 2013 installation files.
- Choose the appropriate installation type (standalone or farm).
- Select "Install Project Server" during the setup.

Step 3: Configuring Project Server 2013

Post-installation, you need to:

- Connect Project Server to your SharePoint farm
- Configure service applications
- Set up security and permissions
- Create enterprise data as needed

Tip: Use the Project Server Service Application to manage project data, resources, and permissions.

Configuring Project Server 2013

Creating Enterprise Resources

Resources are vital for project planning and execution:

- Navigate to the Project Server interface
- Go to 'Server Settings' > 'Manage Resources'
- Add resources manually or import from Active Directory
- Assign resource details like skill set, availability, and costs

Setting Up Enterprise Projects

To create a project:

- Access Project Web App (PWA)
- Click 'New' > 'Project'
- Fill in project details such as name, start date, and project manager

- Define project phases, tasks, and milestones

Configuring Permissions and Security

Ensure appropriate access:

- Use SharePoint groups and permissions
- Assign roles such as Project Manager, Resource Manager, or Team Member
- Fine-tune access to sensitive data and project details

Managing Projects in Microsoft Project Server 2013

Creating and Planning Projects

Learn to effectively plan:

- Use the Project Web App interface to create new projects
- Break down projects into phases, tasks, and subtasks
- Assign resources and set dependencies
- Define task durations, start and end dates

Tracking Progress and Updating Tasks

Stay on top of project progress:

- Use timesheets for resource updates
- Update task statuses regularly
- Monitor actual vs. planned progress
- Adjust schedules as needed

Managing Resources Effectively

Resource management tips:

- View resource availability and workloads
- Reallocate resources to avoid bottlenecks
- Use resource leveling to optimize utilization

- Track resource costs and budgets

Generating Reports and Analytics

Leverage built-in reporting tools:

- Use predefined reports like Project Overview, Resource Usage, and Task Status
- Customize reports with Microsoft Excel or Power BI
- Export data for stakeholder presentations

Advanced Features and Best Practices

Using Portfolio Management

Prioritize and select projects:

- Analyze project proposals
- Evaluate resource capacity
- Use Portfolio Analysis to align projects with organizational goals

Implementing Timesheets and Expense Tracking

Track time and expenses:

- Enable timesheet submissions for resources
- Approve or reject submitted timesheets
- Record expenses and monitor budgets

Automating Workflows and Alerts

Enhance productivity:

- Set up email alerts for task updates, deadlines, or issues
- Use workflows for approval processes
- Integrate with other Microsoft 365 tools for automation

Best Practices for Using Microsoft Project Server 2013

- Regularly update project data to maintain accuracy
- Train team members on using PWA effectively
- Use dashboards for real-time visibility
- Maintain security standards and review permissions periodically
- Backup and document your configuration settings

Common Troubleshooting Tips

- Ensure all services are running and properly configured
- Check permissions if users can't access projects
- Verify network connectivity and server health
- Consult logs for detailed error messages
- Keep your system updated with the latest patches

Conclusion

Microsoft Project Server 2013 remains a robust platform for enterprise project management, offering extensive features for planning, tracking, and reporting. By following this tutorial, you can set up a functional environment tailored to your organization's needs, streamline project workflows, and foster better collaboration among your teams. Remember, successful implementation depends on proper planning, user training, and ongoing maintenance to maximize the benefits of Microsoft Project Server 2013.

Additional Resources

- Microsoft Official Documentation for Project Server 2013
- SharePoint Server 2013 Deployment Guides
- Online courses and tutorials on project management best practices
- Community forums for troubleshooting and tips

Start leveraging Microsoft Project Server 2013 today to elevate your project management practices and drive organizational success!

Microsoft Project Server 2013 Tutorial: A Comprehensive Guide to Mastering Enterprise Project Management

Microsoft Project Server 2013 is a powerful enterprise project management platform designed to help organizations plan, execute, and monitor complex projects effectively. As a successor to previous versions, it offers robust features that integrate seamlessly with SharePoint Server 2013,

enabling improved collaboration, resource management, and reporting. This tutorial aims to provide a detailed understanding of Microsoft Project Server 2013, guiding users through its core functionalities, setup, configuration, and best practices for successful implementation.

Introduction to Microsoft Project Server 2013

Microsoft Project Server 2013 is an enterprise project management (EPM) solution that centralizes project data, enhances team collaboration, and provides powerful reporting tools. It extends the capabilities of Microsoft Project Professional by offering a server-based environment where multiple projects can be managed, monitored, and analyzed collectively.

Key Benefits of Project Server 2013 include:

- Centralized project data repository
- Enhanced resource management and allocation
- Customizable dashboards and reports
- Integration with SharePoint for document management and collaboration
- Support for portfolio management and prioritization
- Security and permissions management at granular levels

Prerequisites and System Requirements

Before diving into the setup and usage of Project Server 2013, ensure your environment meets the necessary prerequisites:

Hardware Requirements:

- Server with a 64-bit processor, at least 8 GB RAM (depending on scale)
- Adequate disk space for databases and SharePoint content
- Network connectivity with clients

Software Requirements:

- Windows Server 2008 R2 SP1 or Windows Server 2012
- SharePoint Server 2013 installed and configured
- Microsoft SQL Server 2012 or later for the Project Server databases
- Microsoft Office 2013 Professional or Project Professional 2013 for client-side work

Service Accounts:

- Dedicated service accounts for SharePoint, SQL Server, and Project Server services with appropriate permissions

Installing and Configuring Microsoft Project Server 2013

- Installing SharePoint Server 2013

Since Project Server 2013 relies on SharePoint 2013, install and configure SharePoint first:

- Deploy SharePoint Farm
- Configure Service Applications (Managed Metadata, Search, User Profile, etc.)
- Create a SharePoint Web Application and a Site Collection dedicated to Project Server

- Installing Project Server 2013

- Run the Project Server 2013 setup on the SharePoint server
- Follow the installation wizard, specifying the SharePoint Farm details
- Choose to install the ?Project Server? features during setup

- Configuring Project Server Service Application

- Navigate to SharePoint Central Administration
- Create a new Project Server Service Application
- Associate it with the SharePoint Web Application and configure service settings

- Setting Permissions

- Assign users to appropriate groups (e.g., Project Managers, Team Members)
- Configure permissions at site, project, and resource levels

- Connecting to SQL Server
- Establish database connections for Project Server Content and Draft databases
- Ensure proper security and backup strategies are in place

Understanding the Core Components of Project Server 2013

- Project Server Interface

Provides a web-based interface for users to access project data, manage tasks, and generate reports.

- Project Web App (PWA)

The primary portal for project management activities, including task updates, resource management, and reporting.

- Project Server Databases

- Published Database: Stores current project data visible to users
- Draft Database: Acts as a staging area for changes before publishing
- Archive Database: Stores historical project data

- Integration with SharePoint

Enables document management, team sites, and collaboration features linked directly to projects.

Creating and Managing Projects in Project Server 2013

- Creating a New Project
- Access Project Web App as a Project Manager
- Use the ?New Project? option

- Fill out project details:
 - Name, description, start and end dates
 - Calendar selection
 - Project type and priority

- Defining Project Tasks
 - Import existing plans from Microsoft Project Professional or create tasks directly
 - Structure tasks hierarchically into phases or work breakdown structures (WBS)
 - Set task dependencies (Finish-to-Start, Start-to-Start, etc.)
 - Assign durations and constraints

- Assigning Resources
 - Add resources to the enterprise resource pool
 - Allocate resources to specific tasks
 - Set work hours, availability, and costs
 - Use Resource Engagements for temporary resource requests

- Managing Project Calendars
 - Customize calendars for project-specific working hours
 - Define holidays and non-working days to reflect organizational policies

- Publishing Projects
 - Save and publish projects to make them available to team members
 - Publish updates regularly to reflect progress

Resource Management and Allocation

Effective resource management is critical in Project Server 2013.

- Creating and Managing Resources

- Use the Resource Center to add and categorize resources:

- People (employees, contractors)
- Equipment
- Materials
- Define resource details:
 - Max units
 - Standard and overtime costs
 - Availability

- Resource Allocation Strategies

- Assign resources at task level to balance workload
- Use the Resource Plan to view overall resource allocation
- Identify over-allocated resources with the Resource Usage view
- Adjust assignments or reschedule tasks to resolve conflicts

- Resource Leveling

- Use built-in leveling tools to optimize resource utilization
- Set leveling options to prioritize tasks, minimize overallocation, and maintain project deadlines

Tracking Progress and Updating Tasks

Monitoring project progress is vital for ensuring timely delivery.

- Updating Task Status

- Team members update task completion percentages via Project Web App or Project Professional

- Use actual start and finish dates to record real progress
- Log work hours and expenses

- Viewing Progress Reports

- Use built-in dashboards to track:
 - Tasks completed vs. remaining
 - Resource utilization
 - Variance analysis
 - Customize reports for specific project insights

- Handling Changes and Revisions
 - Re-plan tasks as needed
 - Reassign resources or adjust schedules
 - Publish updates to reflect latest changes

Reporting and Business Intelligence

One of Project Server 2013's strengths lies in its reporting capabilities.

- Built-in Reports
 - Access via Project Web App or SharePoint
 - Reports include:
 - Project status
 - Resource allocation
 - Cost analysis
 - Critical path

- Using Excel and Power BI
 - Export data for advanced analysis
 - Create custom dashboards
 - Embed reports into SharePoint sites

- Using PerformancePoint and Visio
- Develop interactive dashboards
- Create visual representations of project schedules and resource flows

Security, Permissions, and User Management

Proper security configuration ensures data integrity and controlled access.

- User Groups
 - Assign users to predefined groups:
 - Portfolio Managers
 - Project Managers
 - Team Members
 - Viewers
- Permission Levels
 - Configure permissions at site, project, and task levels
 - Use permission inheritance or unique permissions as needed
- Managing Access
 - Limit editing rights to authorized personnel
 - Enable audit trails for changes and updates
 - Enforce authentication protocols

Best Practices for Implementing Microsoft Project Server 2013

- Plan Thoroughly: Define project management processes, user roles, and reporting needs before deployment.
- Train Users: Offer comprehensive training sessions for project managers, team members, and

administrators.

- Maintain Data Integrity: Regularly back up databases and monitor for inconsistencies.
- Standardize Templates: Use project templates to ensure consistency across projects.
- Leverage Integration: Maximize SharePoint and Office integration for collaboration.
- Monitor Adoption: Track user engagement and feedback to improve usability.
- Keep Software Updated: Apply patches and updates to ensure security and performance.

Advanced Features and Customizations

- Custom Fields and Lookup Tables: Tailor project data to organizational needs.
- Workflow Automation: Implement approval workflows for project changes.
- Custom Reports and Dashboards: Use SQL Server Reporting Services (SSRS) or Power BI for tailored insights.
- API and SDK Usage: Integrate with other enterprise systems or develop custom add-ins.

Conclusion

Microsoft Project Server 2013 is a comprehensive solution for enterprise project management, offering tools for planning, scheduling, resource allocation, tracking, and reporting. Mastering its features requires a structured approach?from proper installation and configuration to effective project and resource management, culminating in insightful reporting. By following this detailed tutorial, organizations can leverage Project Server 2013 to enhance project visibility, improve resource utilization, and ensure project success.

Remember: Success with Project Server 2013 hinges on thorough planning, user training, and continuous process improvement. Whether managing a single project or a portfolio of initiatives, the platform provides the flexibility and depth needed to meet diverse organizational needs.

Question What are the key features of Microsoft Project Server 2013? Microsoft Project Server 2013 offers features such as centralized project management, resource management, timesheet tracking, portfolio analysis, and reporting. It integrates with SharePoint to provide collaboration tools and enables organizations to manage projects across teams efficiently. **How do I install Microsoft Project Server 2013?** Installation involves preparing the SharePoint environment, installing the Project Server 2013 software, configuring service applications, and setting up user permissions. Microsoft provides detailed step-by-step guides to assist with each phase of the installation process. **What are the prerequisites for deploying Project Server 2013?** Prerequisites include a supported Windows Server environment, SQL Server for the database backend, SharePoint Server 2013, appropriate hardware resources, and proper network configurations. Ensuring all prerequisites are met helps facilitate a smooth deployment. **How can I create and publish a new project in Project Server 2013?** To create and publish a project, open Microsoft

Project Professional connected to Project Server, design your project plan, then click 'Publish' to upload it to the server. This makes it accessible to team members and stakeholders for collaboration and updates. What are the best practices for managing resources in Project Server 2013? Best practices include maintaining an up-to-date resource pool, assigning resources based on availability and skills, utilizing resource views for workload analysis, and regularly reviewing and adjusting allocations to optimize utilization. How do I generate reports in Project Server 2013? Reports can be created using built-in reporting tools like Microsoft Excel and Visio, or via report server integrations. You can also customize dashboards and use SharePoint-based reporting features to visualize project data effectively. What are common troubleshooting steps for Project Server 2013 issues? Common steps include checking service status, verifying permissions, reviewing event logs, ensuring database connectivity, and consulting Microsoft support resources. Keeping software updated and backing up configurations also helps prevent and resolve issues. Can I integrate Project Server 2013 with other Microsoft tools? Yes, Project Server 2013 integrates seamlessly with Microsoft Office tools like Project Professional, SharePoint, Outlook, and Power BI for enhanced collaboration, reporting, and data analysis capabilities. Where can I find comprehensive tutorials for Microsoft Project Server 2013? Official Microsoft documentation, online training platforms like Microsoft Learn, and community forums provide detailed tutorials and guides. Many third-party websites also offer step-by-step tutorials and videos for hands-on learning.

Related keywords: Microsoft Project Server 2013, Project Server tutorial, Microsoft Project Server setup, Project Server 2013 training, Project Server administration, Project Server 2013 features, Project Server deployment, Project Server project management, Project Server integration, Microsoft Project Server best practices

Read the full article online: [Microsoft Project Server 2013 Tutorial](#)

SHAREPOINT 2013 TRAINING MATERIAL

SharePoint 2013 training material is an essential resource for IT professionals, developers, business users, and administrators aiming to harness the full potential of SharePoint 2013. As a robust collaboration platform, SharePoint 2013 offers a wide array of features designed to improve teamwork, document management, business process automation, and enterprise content management. To effectively utilize these features, comprehensive training materials are vital, whether for onboarding new users, enhancing technical skills, or preparing for certification exams. This article explores the core components of SharePoint 2013 training material, including key topics covered, types of resources available, best practices for training delivery, and how to select or develop effective training content.

Understanding the Importance of SharePoint 2013 Training Material

Why Training Material Is Critical

Effective training material ensures users and administrators can:

- Maximize the platform's capabilities.
- Reduce troubleshooting time.
- Improve productivity and collaboration.
- Ensure compliance and security standards.
- Facilitate smoother adoption across departments.

Well-structured training resources help organizations transition smoothly from legacy systems or manual processes to SharePoint 2013, enabling users to work efficiently and confidently.

Target Audience for SharePoint 2013 Training

Training materials are typically tailored for different user groups:

- End Users: Focused on document management, collaboration, and basic site navigation.
- Site Owners: Responsible for managing site collections, permissions, and content.
- Developers: Creating custom solutions, workflows, and web parts.
- Administrators: Overseeing farm configuration, deployment, backup, and security.

Each group requires specialized content, and effective training materials address these distinct needs.

Core Topics Covered in SharePoint 2013 Training Material

Fundamentals of SharePoint 2013

- Overview of SharePoint architecture and components.
- Understanding SharePoint sites, site collections, and subsites.
- Navigation and user interface features.
- Basic document management (libraries, lists, metadata).

Site and Content Management

- Creating and customizing sites.
- Managing lists and libraries.
- Content types and site columns.
- Document versioning and check-in/check-out processes.
- Using metadata for effective content categorization.

Permissions and Security

- Understanding SharePoint permissions hierarchy.
- Managing user roles and groups.
- Permission inheritance and breaking inheritance.
- Securing content and customizing security policies.

Workflows and Business Processes

- Introduction to SharePoint Designer workflows.
- Automating processes with built-in workflows.
- Creating custom workflows.
- Integration with Microsoft Visio and other tools.

Search and Navigation

- Configuring search schemas.
- Refining search results and relevance.
- Customizing search pages.
- Managed metadata and navigation structures.

Enterprise Content Management

- Records management and compliance.
- Content deployment and publishing.
- Content approval workflows.
- Document sets and records centers.

Development and Customization

- Introduction to SharePoint development environment.
- Creating web parts and app parts.
- Using SharePoint Designer for customization.
- Developing custom solutions with Visual Studio.

Administration and Deployment

- Farm architecture and deployment strategies.
- Backup and restore procedures.
- Monitoring and performance tuning.
- Upgrading and patching SharePoint environments.

Types of SharePoint 2013 Training Materials

Official Documentation and Guides

Microsoft provides comprehensive official documentation, including:

- TechNet articles.
- Step-by-step configuration guides.
- Best practices and troubleshooting tips.

Online Courses and Tutorials

Platforms like Pluralsight, LinkedIn Learning, Udemy, and Microsoft Learn offer structured courses covering:

- Beginner to advanced topics.
- Video tutorials with demonstrations.
- Hands-on labs for practical experience.

Books and E-books

Numerous books are available, such as:

- "SharePoint 2013 Unleashed" by Michael Noel.
- "Inside Out: Microsoft SharePoint 2013" by Microsoft Press.

These provide in-depth explanations, case studies, and best practices.

Hands-on Labs and Practice Environments

- Virtual labs for practicing configuration and customization.
- Sandbox environments to experiment without impacting production.
- Sample datasets and scenarios to reinforce learning.

Community Resources and Forums

- SharePoint community blogs.
- TechNet forums.
- User groups and webinars.
- YouTube channels with tutorials.

Best Practices for Developing Effective SharePoint 2013 Training Material

Identify Learner Needs and Goals

- Conduct assessments or surveys to understand user proficiency.
- Define clear learning objectives aligned with organizational goals.

Use a Blended Learning Approach

- Combine instructor-led sessions, e-learning modules, and hands-on labs.
- Incorporate multimedia elements like videos and interactive quizzes.

Ensure Content Relevance and Practicality

- Use real-world scenarios relevant to the organization.
- Include step-by-step instructions and screenshots.

Maintain Up-to-Date Content

- Keep training material aligned with the latest SharePoint 2013 updates and best practices.
- Regularly review and revise materials based on user feedback.

Facilitate Interactive Learning

- Encourage questions and discussions.
- Use case studies and problem-solving exercises.
- Provide practical exercises for skill reinforcement.

Implementing SharePoint 2013 Training Programs

Planning and Scheduling

- Develop a comprehensive training plan covering all user groups.
- Schedule sessions to minimize disruption to business operations.
- Offer different formats (on-site, virtual, self-paced).

Delivery Methods

- Instructor-led workshops for hands-on learning.
- E-learning modules for flexible access.
- Webinars and live Q&A sessions.

Measuring Effectiveness

- Use quizzes and assessments to evaluate understanding.
- Collect feedback through surveys.
- Monitor user adoption and engagement metrics.

Supporting Ongoing Learning

- Establish a knowledge base or intranet resource hub.
- Provide refresher sessions and advanced training.
- Encourage community participation and peer support.

Conclusion

Effective SharePoint 2013 training material is fundamental to maximizing the platform's benefits within an organization. From comprehensive documentation and engaging tutorials to hands-on labs and community support, a well-rounded training program equips users and administrators with the skills necessary to leverage SharePoint 2013's capabilities fully. Whether developing custom solutions, managing content, or ensuring security, tailored training resources foster confidence, reduce errors, and promote a culture of continuous improvement. By carefully selecting or creating relevant, up-to-date, and practical training materials, organizations can ensure a smooth transition, higher adoption rates, and sustained success with SharePoint 2013.

SharePoint 2013 Training Material: An In-Depth Review and Analysis

In today's enterprise landscape, collaboration platforms like SharePoint have become essential tools for organizations seeking to enhance productivity, streamline workflows, and foster seamless communication. Among these, SharePoint 2013 stands out as a significant release, offering a plethora of new features and capabilities that require comprehensive training for effective deployment and utilization. This review delves into the intricacies of SharePoint 2013 training material, examining its structure, content quality, delivery methods, and overall efficacy for learners and organizations alike.

Understanding the Need for SharePoint 2013 Training Material

As organizations increasingly adopt SharePoint 2013, the complexity of its features and the depth of its capabilities pose challenges for users ranging from end-users to IT administrators. Proper training material becomes essential to bridge the knowledge gap, ensure user adoption, and maximize return on investment.

The importance of well-structured training resources is underscored by several factors:

- **Feature Complexity:** SharePoint 2013 introduces advanced features such as SharePoint Apps, Business Connectivity Services, and an improved user interface, which require detailed instruction.
- **User Adoption:** Without proper training, users may underutilize or misuse the platform, leading to decreased productivity.
- **Customization and Development:** Developers and administrators need specialized knowledge to tailor SharePoint solutions to organizational needs.
- **Maintenance and Support:** Ongoing support relies heavily on comprehensive training materials that can serve as reference points.

Scope and Structure of SharePoint 2013 Training Material

Effective training materials for SharePoint 2013 are typically comprehensive, covering a wide

spectrum of topics tailored to different user roles. They are structured into modules that address specific areas such as installation, configuration, end-user functionalities, and advanced development.

Common Components of SharePoint 2013 Training Material:

- Introduction and Overview
- Installation and Deployment Guides
- User Interface Navigation
- Content Management and Collaboration
- Site and Subsite Creation
- Permissions and Security Management
- Workflows and Business Processes
- Customization and Branding
- SharePoint Apps and Add-ins
- Search Configuration
- Development and Custom Solutions
- Maintenance, Backup, and Troubleshooting

This modular approach facilitates targeted learning, allowing different user groups to focus on relevant sections.

Sources and Formats of SharePoint 2013 Training Material

The availability and quality of training material are critical to successful learning outcomes. SharePoint 2013 training resources come from multiple sources, each with distinct advantages:

Official Microsoft Resources

Microsoft offers a comprehensive suite of official training materials, including:

- Microsoft Virtual Academy (MVA): Free courses covering core concepts and advanced features.
- Microsoft TechNet and Docs: Detailed documentation, how-to guides, and reference materials.
- Official Guides and eBooks: Published by Microsoft Press, these serve as authoritative references.

Advantages include authoritative content, up-to-date information, and alignment with best practices.

Third-Party Training Providers

Several organizations and educators develop specialized training courses, often including:

- Video tutorials
- Instructor-led webinars
- Interactive labs
- Certification prep materials

Popular providers include Pluralsight, Udemy, LinkedIn Learning, and Simplilearn.

Community and Open-Source Resources

The SharePoint community actively contributes tutorials, blogs, forums, and open-source projects, which can supplement formal training:

- SharePoint Stack Exchange
- TechNet Forums
- GitHub repositories for SharePoint solutions

While valuable, these resources vary in quality and depth.

Analyzing the Quality and Effectiveness of SharePoint 2013 Training Material

The effectiveness of training material hinges on several key attributes:

Comprehensiveness and Depth

Good training material covers foundational concepts and dives into advanced topics, enabling learners to progress from basic understanding to mastery.

Clarity and Accessibility

Clear explanations, step-by-step instructions, and illustrative screenshots or videos enhance comprehension.

Practical Application

Hands-on exercises, labs, and real-world scenarios help reinforce learning and build confidence in applying skills.

Update Frequency and Relevance

Given the evolving nature of SharePoint, training content must be current, reflecting the latest features and best practices.

Role-Based Customization

Materials tailored to specific roles (end-user, developer, administrator) increase relevance and engagement.

Challenges and Limitations in SharePoint 2013 Training Material

Despite the abundance of resources, learners and organizations face several challenges:

- Information Overload: The breadth of content can be overwhelming, especially for newcomers.
- Inconsistent Quality: Variability among third-party resources can lead to confusion.
- Rapid Technological Changes: Keeping materials current with updates or patches is difficult.
- Learning Curve: SharePoint's complexity demands dedicated time and effort, which not all training materials adequately address.

Best Practices for Utilizing SharePoint 2013 Training Material

To maximize the benefits of available training resources, organizations and learners should adhere to best practices:

- Assess Needs: Identify user roles and tailor training accordingly.
- Combine Multiple Formats: Use a blend of videos, guides, and hands-on labs for comprehensive learning.
- Encourage Community Engagement: Leverage forums and user groups for peer support.
- Schedule Regular Updates: Review and refresh training materials to reflect platform updates.
- Provide Ongoing Support: Establish mentorship or helpdesk channels for post-training assistance.

Future Outlook and Evolution of SharePoint Training Resources

While SharePoint 2013 remains in use, Microsoft has shifted focus toward SharePoint Online and the Microsoft 365 ecosystem, prompting a reevaluation of training material relevance. However, many organizations still rely on on-premises deployments, making high-quality SharePoint 2013 training resources valuable.

Emerging trends include:

- Interactive eLearning Modules: Enhanced engagement through gamified and interactive content.
- AI-Powered Support: Chatbots and virtual assistants to aid learning.
- Community-Driven Content: Increased contributions from user communities fostering peer-to-peer learning.
- Integration with Cloud-Based Platforms: Combining traditional training with cloud services to simulate real-world environments.

Conclusion

SharePoint 2013 training material plays a pivotal role in enabling organizations to harness the platform's full potential. Its effectiveness depends on the quality, relevance, and delivery of the content, as well as the learners' engagement and organizational support. While official resources provide a solid foundation, supplementary third-party and community-driven materials expand learning opportunities. As SharePoint continues to evolve, so must the training resources, ensuring users are equipped to navigate the platform's complexities and leverage its capabilities effectively.

In sum, investing in comprehensive, well-structured SharePoint 2013 training material is essential for ensuring successful adoption, optimizing workflows, and empowering users at all levels. As organizations weigh their training strategies, they should consider a layered approach combining authoritative guides, practical exercises, and community engagement to achieve the best learning outcomes and maximize the platform's value.

Question What are the key topics covered in SharePoint 2013 training materials? SharePoint 2013 training materials typically cover site and content management, workflow creation, SharePoint Designer, PowerShell scripting, search configuration, business connectivity services, social features, and administration best practices. **Where can I find comprehensive SharePoint 2013 training resources online?** You can find comprehensive SharePoint 2013 training resources on Microsoft's official documentation, e-learning platforms like LinkedIn Learning, Udemy, Pluralsight, and community sites such as SharePoint-Community and TechNet. **Are there any free SharePoint 2013 training materials available for beginners?** Yes, Microsoft offers free tutorials and documentation for beginners on their official site, and various community websites provide free video tutorials, guides, and forums to learn SharePoint 2013. **What are the best practices for learning SharePoint 2013 through training materials?** Best practices include starting with foundational concepts, following structured courses or tutorials, practicing hands-on exercises, participating in community forums, and applying learned skills in real or simulated environments. **How can SharePoint 2013 training help in preparing for certification exams?** Training materials provide in-depth knowledge of SharePoint 2013 features and administration, which are essential for

certifications like Microsoft Certified: SharePoint Server, helping candidates understand exam topics and practical applications. Are there specific training materials focused on SharePoint 2013 development? Yes, there are dedicated resources for SharePoint 2013 development, including guides on SharePoint Add-in development, client-side object model, server-side object model, and workflows, available through Microsoft documentation and developer-focused courses. Can SharePoint 2013 training materials help with migration and upgrade projects? Absolutely, training resources cover migration strategies, upgrade procedures, and best practices to ensure smooth transitions from earlier versions or other platforms to SharePoint 2013. What skills will I gain after completing SharePoint 2013 training? Upon completing SharePoint 2013 training, you will gain skills in site and content management, workflow automation, customization, search configuration, administration, and development, enabling effective deployment and management of SharePoint environments.

Related keywords: SharePoint 2013 tutorials, SharePoint 2013 documentation, SharePoint 2013 online course, SharePoint 2013 development, SharePoint 2013 administration, SharePoint 2013 certification, SharePoint 2013 user guide, SharePoint 2013 deployment, SharePoint 2013 workflows, SharePoint 2013 best practices

Read the full article online: [sharepoint 2013 training material](#)

EXAM 70 489

Exam 70-489: The Complete Guide to Implementing and Managing Microsoft SharePoint Server 2013

Introduction to Exam 70-489

The **exam 70-489** is a significant certification exam designed for IT professionals aiming to demonstrate their expertise in designing, implementing, and managing SharePoint Server 2013 solutions. This exam validates your ability to plan, deploy, configure, and maintain SharePoint environments, ensuring organizations can leverage the full potential of SharePoint for collaboration, document management, and business process automation. Achieving the 70-489 certification can enhance your career prospects by showcasing your skills in one of Microsoft's critical enterprise technologies.

Why Take the 70-489 Exam?

Benefits of Certification

- Career Advancement: Certified professionals are often prioritized for higher roles and responsibilities.
- Skill Validation: Demonstrates your proficiency in SharePoint 2013 architecture, deployment, and administration.
- Industry Recognition: Recognized globally by employers and industry peers.
- Access to Exclusive Resources: Certification holders often gain access to specialized training and community networks.

Who Should Consider This Certification?

The 70-489 exam is tailored for:

- SharePoint Developers
- IT Professionals responsible for SharePoint deployment
- Solution Architects
- System Administrators working with SharePoint Server 2013
- Technical Consultants providing SharePoint solutions

Exam Overview and Details

Exam Format and Structure

- Number of Questions: Typically 40-60 questions
- Question Types: Multiple choice, case studies, drag-and-drop, and scenario-based questions
- Duration: 120 minutes
- Passing Score: Approximately 700 out of 1000 points
- Languages: Available in multiple languages, including English, Japanese, and Chinese

Topics Covered in the Exam

The exam focuses on four primary domains:

- Planning for the deployment of SharePoint Server 2013
- Installing and configuring SharePoint Server 2013
- Designing and implementing SharePoint applications
- Managing and maintaining SharePoint Server 2013

Prerequisites and Recommendations

While there are no strict prerequisites, Microsoft recommends candidates have:

- Experience with SharePoint Server 2010 or earlier versions
- Familiarity with Windows Server, SQL Server, and network infrastructure
- Hands-on experience with deploying and managing SharePoint environments

Core Topics and Skills Assessed

Planning SharePoint Server 2013 Deployment

- Assessing hardware and software requirements
- Designing topology and farm architecture
- Planning for high availability and disaster recovery
- Security planning and compliance considerations

Installing and Configuring SharePoint Server 2013

- Preparing environment and prerequisites
- Installing SharePoint Server 2013
- Configuring service applications and sites
- Implementing security and permissions

Designing SharePoint Applications

- Customizing sites, lists, and libraries
- Developing custom web parts and solutions
- Configuring workflows and business process automation
- Integrating with other enterprise systems

Managing and Maintaining SharePoint Server 2013

- Monitoring farm health and performance
- Applying updates and patches
- Backup and recovery strategies
- Troubleshooting common issues

Preparation Strategies for the 70-489 Exam

Study Materials and Resources

- Official Microsoft Learning Paths: Microsoft offers comprehensive online modules tailored for this exam.
- Microsoft Official Practice Tests: Simulate real exam conditions and identify knowledge gaps.
- Training Courses: Enroll in instructor-led or online courses from authorized training partners.
- Books and Guides: Use reputable books focused on SharePoint 2013 administration and development.

Hands-On Experience

Practical experience is crucial. Set up a test environment to:

- Deploy SharePoint Server 2013
- Configure farms and service applications
- Develop and customize SharePoint sites
- Practice troubleshooting and maintenance tasks

Practice Exams and Quizzes

Regularly test your knowledge with practice exams to:

- Familiarize yourself with the question format
- Time your responses
- Identify weak areas for focused study

Key Tips for Exam Success

- Understand the Exam Objectives: Review the official skills measured document.
- Stay Updated: Be aware of any recent updates or changes in SharePoint 2013 features.
- Time Management: Allocate time wisely during the exam to review difficult questions.
- Read Questions Carefully: Pay attention to details and keywords.
- Use Process of Elimination: Narrow down options to improve chances of selecting the correct answer.

Post-Certification Opportunities

Career Paths with a 70-489 Certification

- SharePoint Administrator
- SharePoint Developer
- Solutions Architect
- IT Consultant specializing in SharePoint
- Business Analyst for SharePoint projects

Continuing Education and Certifications

- Pursue advanced certifications like Microsoft Certified Solutions Expert (MCSE) in Productivity or SharePoint-specific paths.
- Stay current with SharePoint Online and Office 365 integrations.

Conclusion

The **exam 70-489** is a comprehensive certification that signifies your expertise in deploying, configuring, and managing SharePoint Server 2013 solutions. Preparing effectively involves understanding the core concepts, gaining hands-on experience, and utilizing official study materials. Achieving this certification can open doors to advanced career opportunities and establish you as a proficient SharePoint professional. Whether you're an administrator, developer, or consultant, mastering the skills tested in the 70-489 exam ensures you can deliver robust, scalable, and secure SharePoint environments that meet organizational needs.

Additional Resources

- [Microsoft Official Certification Page](<https://learn.microsoft.com/en-us/certifications/>)
- [SharePoint 2013 Technical Documentation](<https://docs.microsoft.com/en-us/SharePoint/>)
- [Online Training Platforms (LinkedIn Learning, Pluralsight)](<https://www.linkedin.com/learning/>)

Embark on your journey to become a certified SharePoint expert by preparing thoroughly for the **exam 70-489**. With dedication and the right resources, you can achieve your certification goals and enhance your IT career.

Comprehensive Guide to the Microsoft Certification Exam 70-489: Developing Microsoft® SharePoint® Server Core Solutions

Preparing for the 70-489 exam, also known as Developing Microsoft® SharePoint® Server Core Solutions, is a critical step for developers aiming to demonstrate their expertise in building solutions on the SharePoint platform. This exam validates your ability to design, develop, and deploy SharePoint applications, web parts, event handlers, and workflows. Achieving this certification not only boosts your professional credibility but also opens doors to advanced career opportunities within the SharePoint development ecosystem.

In this detailed guide, we will explore the exam's structure, core topics, preparation strategies, and best practices to help you succeed in passing the 70-489 exam.

Understanding the 70-489 Exam: An Overview

The 70-489 exam focuses on assessing a candidate's proficiency in developing SharePoint solutions using the Microsoft development tools and technologies. It is tailored for developers who are familiar with SharePoint's architecture and are experienced in designing custom solutions.

Key Details

- Exam Code: 70-489
- Name: Developing Microsoft® SharePoint® Server Core Solutions
- Type: Microsoft Certified Professional (MCP)
- Prerequisites: Basic knowledge of SharePoint development, .NET Framework, and Visual Studio
- Format: Multiple choice, case studies, and scenario-based questions
- Duration: Approximately 120 minutes
- Number of Questions: Usually 40-60

Core Topics Covered in the 70-489 Exam

The exam evaluates your skills across several critical areas related to SharePoint development. Below are the main domains and their respective subtopics:

- Designing and Developing SharePoint Solutions (30-35%)
 - Understanding SharePoint's architecture and development model
 - Designing custom web parts and application pages
 - Developing SharePoint features and solutions
 - Creating and deploying sandboxed and farm solutions

- Managing SharePoint artifacts like content types, site columns, and lists

- Developing SharePoint Web Parts (20-25%)
 - Building web parts using Visual Studio
 - Implementing server-side and client-side web parts
 - Customizing web parts with SharePoint APIs
 - Handling web part properties and configurations
 - Enhancing user experience with JavaScript and HTML

- Developing Event Handlers and Workflows (15-20%)
 - Creating event receivers for list and site events
 - Developing SharePoint workflows using SharePoint Designer or Visual Studio
 - Managing workflow states and persistence
 - Automating business processes

- Managing Data and Content (10-15%)
 - Connecting to SharePoint data sources
 - Querying data with CAML and REST APIs
 - Implementing data validation and filtering
 - Working with content types and content deployment

- Implementing Security and Permissions (10%)
 - Configuring SharePoint security models
 - Developing solutions that respect permissions
 - Managing authentication and authorization techniques

Preparing for the 70-489 Exam: Strategies and Resources

Success in the 70-489 exam hinges on thorough preparation and practical experience. Here are

effective strategies and recommended resources:

- Gain Hands-On Experience
 - Build real-world SharePoint solutions
 - Practice deploying web parts, features, and workflows
 - Experiment with SharePoint Online and on-premises environments
- Review Official Microsoft Documentation
 - Study the [Microsoft SharePoint Developer Documentation](https://docs.microsoft.com/en-us/sharepoint/dev/)
 - Focus on development patterns and API usage
 - Explore sample code and tutorials
- Use Practice Exams and Sample Questions
 - Take mock exams to familiarize yourself with question formats
 - Analyze your performance to identify weak areas
 - Review explanations for both correct and incorrect answers
- Enroll in Training Courses
 - Microsoft's official training courses (if available)
 - Online platforms like Pluralsight, Udemy, or LinkedIn Learning
 - Community-led webinars and workshops
- Leverage Community Resources
 - Participate in SharePoint developer forums
 - Join user groups and technical communities

- Follow blogs from SharePoint experts

Key Tools and Technologies to Master

To excel in the 70-489 exam, you should be comfortable working with the following tools and technologies:

- Visual Studio 2019 or later: For developing SharePoint solutions
- SharePoint Designer: For workflows and customization
- SharePoint Server 2013/2016/Online: Understanding the environment specifics
- SharePoint APIs: Server-side Object Model, Client-Side Object Model (CSOM), REST API
- C and .NET Framework: Core programming languages
- JavaScript and HTML: For client-side web parts and UI enhancements
- PowerShell: For deployment and management tasks

Exam Day Tips and Best Practices

- Read questions thoroughly: Many questions include scenario-based details. Pay attention to specifics.
- Manage your time: Allocate time proportionally to each section; don't linger too long on difficult questions.
- Use process of elimination: Narrow down options to improve your chances.
- Review your answers: If time permits, revisit questions you're unsure about.
- Stay calm and focused: Confidence and clarity are key to optimal performance.

Post-Exam: Next Steps After Passing 70-489

Achieving the 70-489 certification signifies a solid foundation in SharePoint development. Consider the following next steps:

- Advance your certifications: Pursue related certifications like Microsoft 365 Certified: Teamwork Administrator Associate or Microsoft Certified: SharePoint Server Hybrid.
- Build a portfolio: Showcase your SharePoint solutions on professional platforms like LinkedIn or GitHub.
- Contribute to community projects: Gain recognition and deepen your expertise.
- Stay updated: SharePoint is continually evolving; keep abreast of new features and best practices.

Final Thoughts

The 70-489 exam is a comprehensive assessment designed to validate your ability to develop core SharePoint solutions effectively. It covers a broad spectrum of development skills, from web parts and event handlers to security and data management. Success requires a blend of theoretical knowledge and practical experience, so focus on building real-world solutions, studying official documentation, and practicing exam questions.

By following this guide and dedicating ample time to preparation, you will be well-positioned to pass the 70-489 exam and take a significant step forward in your SharePoint development career.

Good luck on your certification journey!

QuestionAnswer What topics are covered in the Microsoft Exam 70-489: Developing Microsoft Azure and Web Services? The exam covers topics such as designing and developing services and applications using Microsoft Azure, implementing security, managing data, implementing web services, deploying and debugging solutions, and integrating cloud services with on-premises systems. What are the recommended skills and prerequisites for preparing for Exam 70-489? Candidates should have a good understanding of developing solutions with Microsoft Azure, experience with Visual Studio, knowledge of web services, and familiarity with cloud integration, security, and deployment practices. Prior experience in developing Azure applications is highly recommended. What is the format of the Microsoft Exam 70-489, and how many questions does it typically include? The exam typically includes around 40-60 multiple-choice, case study, and scenario-based questions. The format is computer-based, with a time limit of approximately 150 minutes. What are some effective study resources for preparing for Exam 70-489? Effective resources include official Microsoft learning paths, instructor-led training courses, practice exams, Microsoft documentation, and online tutorials focused on Azure development and web services. How can I register for the Microsoft Exam 70-489, and what is the cost? You can register for the exam through the Microsoft certification portal or authorized testing centers. The cost varies by region but is generally around \$165 USD. Prices may change, so check the official Microsoft certification website for the latest details. What is the passing score for Exam 70-489, and how is it scored? The passing score typically ranges between 700 and 800 on a scale of 1000, depending on the exam version. Microsoft does not publish exact scoring details but recommends achieving the minimum passing score to earn certification. What are the benefits of passing Exam 70-489 for developers? Passing Exam 70-489 certifies your skills in developing cloud-based and on-premises solutions using Microsoft Azure, enhances your professional credibility, and can lead to better job opportunities and career advancement in cloud development roles. How often is the content for Exam 70-489 updated to reflect new technologies? Microsoft updates its certification exams regularly, typically every 1-2 years, to reflect new features, best practices, and technological advancements in Azure development and web services. It's important to review the official exam skills outline before preparing.

Related keywords: MCPD, Microsoft Certification, Visual Studio, .NET Framework, C programming, coding exam, software development, exam preparation, certification exam, programming skills

Read the full article online: [EXAM 70 489](#)

MS PROJECT WEB APPLICATION 2013

MS Project Web Application 2013 is a powerful project management tool that enables organizations to plan, collaborate, and manage projects efficiently through a web-based interface. As part of the Microsoft Project Server 2013 suite, this application offers a robust platform for project managers, team members, and stakeholders to work seamlessly from any location with internet access. In this comprehensive guide, we will explore the features, benefits, setup procedures, and best practices for MS Project Web Application 2013 to help you leverage its full potential for your project management needs.

Understanding MS Project Web Application 2013

What is MS Project Web Application 2013?

MS Project Web Application 2013 is an online interface that connects users to Microsoft Project Server 2013, allowing for centralized project management. It provides real-time access to project data, enabling collaboration, task updates, and resource management across an organization.

Key features include:

- Project scheduling and tracking
- Resource allocation and management
- Timesheet submission and approval
- Portfolio and demand management
- Reporting and analytics
- Integration with SharePoint and Office 365

Differences Between MS Project Desktop and Web Application

While MS Project Desktop offers extensive features for detailed project planning, the Web

Application focuses on collaboration, quick updates, and access from any device. Notably:

- Web Application is accessible via browsers, eliminating the need for local installation.
- It offers a simplified interface suitable for team members.
- Advanced planning and scheduling features are more comprehensive in the desktop version.

Key Features of MS Project Web Application 2013

1. Centralized Project Management

- Manage multiple projects within a single platform.
- View project timelines, milestones, and critical path.
- Update tasks and statuses in real-time.

2. Resource Management

- Assign resources to tasks.
- Monitor resource availability.
- Balance workloads effectively.

3. Timesheet and Task Updates

- Submit and approve timesheets.
- Track actual work versus planned.
- Facilitate accurate billing and payroll.

4. Collaboration and Communication

- Share project documents and reports.
- Comment directly on tasks and issues.
- Use SharePoint integration for document management.

5. Reporting and Dashboards

- Generate customizable reports.

- Use dashboards for visual project insights.
- Export data for presentations.

6. Demand and Portfolio Management

- Evaluate project proposals.
- Prioritize projects based on resources and strategic goals.
- Track project statuses and outcomes.

Benefits of Using MS Project Web Application 2013

Enhanced Accessibility

- Access project data from any location with internet connectivity.
- Compatible with various browsers such as Internet Explorer, Chrome, and Firefox.

Improved Collaboration

- Enable team members to collaborate in real-time.
- Reduce communication gaps and delays.

Streamlined Project Tracking

- Quickly update task statuses.
- Monitor progress through dashboards and reports.

Resource Optimization

- Allocate resources effectively.
- Identify and resolve resource conflicts promptly.

Integration with Microsoft Ecosystem

- Seamless integration with SharePoint, Outlook, and Office 365.
- Facilitates document sharing and communication.

Cost and Time Efficiency

- Minimize the need for physical meetings.
- Accelerate decision-making processes.

Setting Up MS Project Web Application 2013

Prerequisites

Before deploying MS Project Web Application 2013, ensure:

- SharePoint Server 2013 is installed and configured.
- Microsoft SQL Server is set up for data storage.
- Proper permissions and security settings are in place.
- Necessary hardware and network infrastructure are available.

Installation and Configuration Steps

- Install SharePoint Server 2013

Set up a SharePoint environment suitable for hosting Project Server.

- Install Project Server 2013

Run the installation files and configure the Project Server service application.

- Configure Server Settings
- Establish a Project Web App site collection.
- Set permissions for users and groups.
- Configure authentication methods.
- Create and Manage Enterprise Data

- Define enterprise resources.
- Set up enterprise projects and portfolios.

- Customize the Interface

- Adjust dashboards and reports.
- Tailor access permissions based on roles.

Using MS Project Web Application 2013 Effectively

Best Practices for Project Managers

- Regularly update task statuses for accurate tracking.
- Use dashboards for quick project health overview.
- Engage stakeholders through collaborative features.
- Maintain a consistent project schedule and resource plan.

Tips for Team Members

- Log work daily via timesheets.
- Communicate issues and delays promptly.
- Review project plans regularly.
- Use comments and notifications to stay informed.

Security and Permissions Management

- Assign appropriate roles (Administrator, Member, Guest).
- Regularly review access rights.
- Protect sensitive project data through security policies.

Advantages and Limitations of MS Project Web Application 2013

Advantages

- Accessibility from anywhere.

- Real-time collaboration.
- Integration with Microsoft tools.
- Simplified user interface for team members.

Limitations

- Limited advanced planning features compared to desktop.
- Performance may vary based on internet connection.
- Requires SharePoint and server infrastructure.
- Licensing and setup can be complex for small organizations.

Conclusion

MS Project Web Application 2013 is an essential component for organizations seeking a collaborative, cloud-based project management solution. Its ability to centralize project data, facilitate teamwork, and integrate with the Microsoft ecosystem makes it a valuable tool for project managers and teams alike. Proper setup, effective usage, and adherence to best practices can significantly enhance project delivery, resource management, and organizational productivity.

Whether you are managing small projects or large portfolios, understanding and leveraging MS Project Web Application 2013 ensures your organization remains competitive and agile in today's fast-paced environment. As technology evolves, staying updated with the latest features and best practices will help maximize the benefits of this powerful project management platform.

Keywords: MS Project Web Application 2013, Microsoft Project Server 2013, online project management, collaboration tools, project tracking, resource management, enterprise project management, SharePoint integration, project dashboards, timesheet management

Microsoft Project Web Application 2013: An In-Depth Review

Microsoft Project Web Application 2013 (often abbreviated as PWA 2013) represents a significant evolution in project management tools offered by Microsoft. As part of the broader Microsoft Project Server ecosystem, PWA 2013 provides a robust platform for organizations seeking to streamline project planning, collaboration, and resource management across the enterprise. This review delves into the features, architecture, usability, integration capabilities, and overall value proposition of Microsoft Project Web Application 2013, offering a comprehensive understanding for project managers, IT professionals, and organizational decision-makers.

Overview of Microsoft Project Web Application 2013

Microsoft Project Web Application 2013 is a web-based interface that connects users to Project Server 2013, enabling centralized project management across diverse teams and geographies. Unlike the traditional desktop version of Microsoft Project, PWA 2013 emphasizes collaboration, real-time updates, and cloud access, aligning with modern enterprise workflows.

Key Highlights:

- Designed for collaboration and enterprise project management
- Integrates seamlessly with SharePoint and Office 365
- Supports multiple project views, reports, and dashboards
- Emphasizes resource management, portfolio analysis, and workflow automation

Core Features of Microsoft Project Web Application 2013

A comprehensive review of PWA 2013 must explore its core features, which are tailored to enhance project planning, execution, and reporting.

1. Project Planning and Scheduling

- Gantt Charts: Interactive Gantt charts allow users to visualize project timelines, dependencies, and milestones effectively.
- Task Management: Users can create, assign, and prioritize tasks, set start and end dates, and track progress.
- Critical Path Analysis: The system highlights critical tasks, helping project managers identify potential delays.
- Baseline Management: PWA 2013 supports setting and comparing project baselines to measure deviations.

2. Resource Management

- Resource Allocation: Allocate resources to tasks, ensuring optimal utilization.
- Resource Pooling: Centralized resource pools enable sharing resources across multiple projects.
- Availability Tracking: Monitor resource availability and prevent overallocation.
- Skills and Role Management: Assign resources based on skills, roles, and certifications.

3. Portfolio Management and Prioritization

- Project Portfolio Analysis: Evaluate projects based on strategic fit, risk, and resource capacity.
- Scenario Planning: Simulate different project scenarios to aid decision-making.
- Approval Workflows: Implement approval workflows for project proposals and changes.

4. Collaboration and Communication

- Document Sharing: Integration with SharePoint allows sharing project documents.
- Discussion Boards and Alerts: Facilitate communication within project teams.
- Status Updates: Real-time status updates and dashboards keep stakeholders informed.

5. Reporting and Dashboards

- Built-in Reports: Multiple pre-defined reports on project status, resource utilization, and financials.
- Custom Reports: Use Report Builder or Excel to create tailored reports.
- Dashboards: Visual dashboards provide at-a-glance insights into project health and metrics.

6. Workflow Automation

- Custom Workflows: Automate common processes like approval cycles, task notifications, and status updates.
- Integration with SharePoint Designer: For more advanced workflow customization.

Architecture and Deployment of PWA 2013

Understanding the architecture of PWA 2013 is crucial for effective deployment and maintenance.

1. Server Infrastructure

- SharePoint Foundation/Server: PWA 2013 is built on SharePoint 2013, requiring an appropriate SharePoint farm.
- Project Server 2013: The backend service that manages project data, resources, and workflows.
- SQL Server: Used for storing project, resource, and configuration data.

2. Deployment Models

- On-Premises Deployment: Organizations can deploy PWA 2013 on their own servers for complete control.
- Hybrid/Cloud Deployment: Compatible with SharePoint Online and Office 365, enabling cloud-based project management.

3. Scalability and Performance

- Designed to support small teams up to large enterprise environments.
- Load balancing, caching, and optimized SQL Server configurations improve performance.

4. Security and Permissions

- Role-based access control (RBAC) ensures users see only what they are permitted.
- Integration with Active Directory for authentication.
- Data encryption and compliance features to safeguard sensitive information.

User Experience and Interface

The user interface of PWA 2013 is designed to be intuitive yet powerful, balancing ease of use with advanced capabilities.

1. Navigation and Layout

- Dashboard View: Customizable dashboards provide quick access to key metrics.
- Navigation Bar: Consistent navigation across projects, resources, and reports.
- Quick Launch Menu: Facilitates rapid switching between views and features.

2. Customization

- Users can customize views, filters, and reports.
- The interface supports personalization based on user roles and preferences.

3. Responsiveness and Accessibility

- Designed for use across devices, including tablets and smartphones.
- Accessibility features compliant with standards ensure usability for all users.

Integration Capabilities

One of the strengths of PWA 2013 lies in its ability to integrate seamlessly with other Microsoft tools and third-party applications.

1. Microsoft Office Suite

- Export data to Excel, Word, and PowerPoint for detailed analysis and reporting.
- Import project data from Office applications.
- Co-authoring and real-time collaboration with Office 365.

2. SharePoint Integration

- Document management and team collaboration via SharePoint.
- Use of SharePoint lists and libraries within project workflows.
- Custom SharePoint workflows complement PWA processes.

3. Outlook and Exchange

- Integration with Outlook allows users to view tasks and deadlines.
- Email notifications for task updates, approvals, and alerts.

4. Third-party Add-ins

- Compatibility with various add-ins for enhanced analytics, reporting, and automation.

Advantages of Microsoft Project Web Application 2013

- Centralized Management: One platform to oversee multiple projects, resources, and portfolios.
- Enhanced Collaboration: Facilitates real-time communication and document sharing.
- Accessibility: Web-based nature ensures access from anywhere with internet connectivity.
- Scalability: Suitable for small teams as well as large enterprises.
- Deep Integration: Works harmoniously with other Microsoft tools, creating a unified ecosystem.
- Customizability: Users can tailor dashboards, reports, and workflows to their needs.

Challenges and Limitations

While PWA 2013 offers numerous benefits, some challenges are worth noting:

- **Complex Deployment:** Setting up and maintaining SharePoint and Project Server environments requires technical expertise.
- **Learning Curve:** Advanced features and workflows may require training for effective use.
- **Performance Dependence:** Performance can vary based on server infrastructure and network conditions.
- **Limited Offline Capabilities:** Primarily designed for web access; offline workflows are limited compared to desktop versions.
- **Cost:** Licensing and infrastructure costs can be significant for large deployments.

Use Cases and Ideal Scenarios

Microsoft Project Web Application 2013 is best suited for:

- **Large Enterprises:** Managing multiple complex projects simultaneously.
- **Project Portfolio Management:** Organizations prioritizing strategic project alignment.
- **Resource-Intensive Projects:** Environments where resource allocation and tracking are critical.
- **Collaborative Teams:** Distributed teams requiring real-time updates and communication.
- **Regulatory Compliance:** Projects needing structured workflows, documentation, and audit trails.

Conclusion: Is PWA 2013 Still Relevant?

Microsoft Project Web Application 2013 remains a powerful, enterprise-grade project management solution, especially for organizations with existing SharePoint infrastructure. Its deep integration, customizable workflows, and comprehensive feature set make it a valuable tool for large-scale project management.

However, considering the evolution of cloud technologies and newer versions of Microsoft Project (such as Project Online and Project for the Web), organizations should evaluate their current needs, infrastructure, and future plans. While PWA 2013 offers a robust platform, newer solutions may provide enhanced usability, mobility, and integration features aligned with modern digital workplaces.

Final Verdict:

If your organization relies heavily on SharePoint 2013 and seeks a customizable, scalable project management environment with enterprise controls, Microsoft Project Web Application 2013 remains a viable choice. For those looking towards cloud-first, mobile-friendly solutions, exploring newer

Microsoft offerings might be advisable.

In summary, Microsoft Project Web Application 2013 is a comprehensive project management platform that combines powerful features with deep integration capabilities. Its architecture supports diverse organizational needs, from planning and scheduling to resource management and reporting. While it may present deployment challenges, its benefits in enterprise project management are significant, making it a noteworthy component of Microsoft's project management ecosystem during its time.

QuestionAnswer What are the key features of MS Project Web Application 2013? MS Project Web Application 2013 offers features such as project scheduling, resource management, collaboration tools, real-time project updates, and integration with SharePoint, enabling users to plan, track, and manage projects efficiently through a browser-based interface. How does MS Project Web Application 2013 differ from the desktop version? While the desktop version provides advanced planning and customization capabilities, the 2013 Web Application allows users to access and update project information from anywhere with internet access, focusing on collaboration, ease of sharing, and real-time updates within a web browser. What are the system requirements for running MS Project Web Application 2013? MS Project Web Application 2013 requires a compatible SharePoint Server 2013 environment, supported web browsers such as Internet Explorer 9 or later, and appropriate server hardware and software configurations, including SQL Server 2012 or later for database management. Can MS Project Web Application 2013 be integrated with other Microsoft Office tools? Yes, MS Project Web Application 2013 integrates seamlessly with tools like SharePoint, Exchange, and Office 365, enabling better collaboration, document sharing, and communication within project teams. What are common challenges users face with MS Project Web Application 2013, and how can they be addressed? Common challenges include limited functionality compared to the desktop version, user access permissions issues, and performance concerns. These can be addressed by proper training, configuring user roles correctly, ensuring server resources are adequate, and leveraging SharePoint integration to enhance collaboration.

Related keywords: Microsoft Project Web App, Project Server 2013, MS Project Online, Project Management, Web-based Project Planning, Project Portfolio Management, PWA 2013, Microsoft Project Server, Collaboration Tools, Resource Management

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