Oxford new english file intermediate teacher exam Complete Guide

Oxford New English File Intermediate Teacher Exam: Your Ultimate Guide to Success

Preparing for the Oxford New English File Intermediate Teacher Exam can be a rewarding journey that enhances your teaching skills and deepens your understanding of English language instruction. This comprehensive guide aims to equip educators with the essential information, strategies, and resources needed to excel in the exam, whether you're a seasoned teacher or new to the certification process.

Understanding the Oxford New English File Intermediate Teacher Exam

What Is the Exam?

The Oxford New English File Intermediate Teacher Exam is a certification process designed to assess teachers' proficiency in delivering the Oxford New English File series at the intermediate level. It evaluates both theoretical knowledge and practical teaching skills, ensuring educators are well-equipped to facilitate effective language learning.

Who Should Take the Exam?

This exam is ideal for:

- English teachers aiming to enhance their teaching credentials
- Instructors seeking to adopt the Oxford New English File series confidently
- Language schools wanting to ensure quality teaching standards
- Teacher trainers and educators involved in teacher development programs

Exam Objectives

The main goals of the exam are:

- Assessing knowledge of the Oxford New English File Intermediate curriculum
- Evaluating teaching methodologies and classroom management skills

- Testing understanding of language skills integration (listening, speaking, reading, writing)
- Encouraging reflective teaching practices and continuous professional development

Preparation Strategies for the Exam

Familiarize Yourself with the Exam Format

Understanding the structure of the exam is crucial. Typically, the exam includes:

- **Theoretical Knowledge Test:** Multiple-choice and short-answer questions on language teaching principles and Oxford New English File content
- **Lesson Planning and Delivery:** Demonstration of teaching a lesson based on the curriculum
- **Practical Teaching Skills:** Classroom management, activity design, and student engagement techniques

Review the Oxford New English File Intermediate Series

To succeed, delve deeply into the series:

- Understand the key themes and language points of each unit
- Practice using the accompanying teacher?s book and resources
- Familiarize yourself with the student book exercises and their pedagogical aims

Develop Effective Lesson Plans

Create lessons that align with the series? objectives:

- Set clear learning outcomes
- Incorporate varied activities (pair work, group work, individual tasks)
- Integrate assessment opportunities
- Plan for classroom management and engagement strategies

Practice Teaching Demonstrations

Simulate exam conditions:

- Record yourself delivering lessons

- Seek feedback from peers or mentors
- Refine your delivery based on constructive criticism

Stay Updated on Teaching Methodologies

Be aware of contemporary approaches:

- Communicative Language Teaching (CLT)
- Task-Based Language Learning (TBLL)
- Student-centered learning techniques

Key Content Areas Covered in the Exam

Language Skills and Content Knowledge

Understanding the core language skills is vital:

- **Listening:** Strategies for teaching comprehension and note-taking
- **Speaking:** Promoting fluency, pronunciation, and interactive activities
- **Reading:** Developing comprehension through diverse texts
- **Writing:** Structuring essays, reports, and creative writing tasks

Grammar and Vocabulary

Be prepared to:

- Explain grammar points covered in the series
- Design activities that reinforce vocabulary acquisition
- Address common student errors and misconceptions

Classroom Management and Student Engagement

Effective teaching involves:

- Creating an inclusive and motivating environment
- Managing diverse learner needs
- Using technology and multimedia tools appropriately

- Handling classroom challenges confidently

Assessment and Feedback

Understanding assessment techniques:

- Designing formative and summative assessments
- Providing constructive feedback that encourages improvement
- Using assessment results to adapt teaching strategies

Exam Day Tips and Best Practices

On the Day of the Exam

Ensure you're prepared:

- Arrive early with all necessary materials (ID, notes, resources)
- Dress professionally and maintain a confident attitude
- Read all instructions carefully before starting each section
- Manage your time effectively to complete all parts of the exam

During the Teaching Demonstration

Strategies for success:

- Start with a clear lesson objective
- Engage students with interactive and varied activities
- Use clear instructions and positive reinforcement
- Reflect briefly on your lesson delivery and student participation

Post-Exam Reflection

After completing the exam:

- Review your performance and identify areas for improvement
- Gather feedback from colleagues or mentors if possible
- Stay engaged with professional development resources

Resources for Preparing for the Oxford New English File Intermediate Teacher Exam

Official Materials

Utilize the following:

- Oxford New English File Intermediate Teacher?s Book
- Supplementary practice tests and sample questions provided by Oxford
- Exam guidelines and scoring criteria

Online Courses and Workshops

Consider enrolling in:

- Teacher development courses focused on the Oxford series
- Workshops on classroom management and innovative teaching techniques

Peer Networks and Forums

Join communities:

- Online forums for English teachers
- Social media groups dedicated to Oxford English File users

Additional Reading and Practice

Enhance your knowledge with:

- ELT methodology books
- Research articles on language acquisition
- Sample lesson plans and teaching demonstrations

Conclusion

Achieving success in the Oxford New English File Intermediate Teacher Exam requires thorough preparation, practical teaching skills, and a solid understanding of the curriculum. By familiarizing

yourself with the exam structure, engaging in targeted practice, and continuously refining your teaching techniques, you can confidently approach the exam and elevate your professional teaching standards. Remember, this certification not only validates your expertise but also enriches your teaching practice, ultimately benefiting your students? language learning journey. Stay motivated, utilize available resources, and embrace the challenge as an opportunity for growth. Good luck!

Oxford New English File Intermediate Teacher Exam: A Comprehensive Guide for Educators

Introduction

Oxford New English File Intermediate Teacher Exam is a pivotal assessment tool designed to evaluate the effectiveness of instructors delivering the renowned English language curriculum. As English continues to serve as a global lingua franca, the standardized certification for teachers not only assures quality education but also enhances professional credibility. This article delves into the nature of the exam, its structure, preparation strategies, and overall significance for educators seeking to excel in teaching English at the intermediate level.

Understanding the Oxford New English File Intermediate Teacher Exam

What is the Oxford New English File?

The Oxford New English File series, developed by Oxford University Press, is a widely adopted curriculum for teaching English across various proficiency levels. Its intermediate level caters to students who have a foundational understanding of the language but are aiming to improve fluency, comprehension, and communicative skills. The series integrates contemporary topics, engaging activities, and real-world language use to foster effective learning.

The Purpose of the Teacher Exam

The Oxford New English File Intermediate Teacher Exam aims to assess teachers? mastery of the course content, pedagogical strategies, and ability to facilitate student engagement effectively. It ensures that educators possess the necessary skills to deliver the curriculum according to Oxford?s standards, employing best practices in language teaching.

Who Should Take the Exam?

The exam is suitable for:

- Experienced English teachers seeking certification.
- New educators preparing for formal recognition.

- Institutions aiming to verify their teaching staff?s competencies.
- Teachers wishing to align their teaching methods with Oxford standards.

Structure and Content of the Exam

Exam Format Overview

The Oxford New English File Intermediate Teacher Exam typically comprises multiple components designed to evaluate various teaching aspects:

- Written Examination: Tests theoretical knowledge of language teaching principles, lesson planning, and curriculum understanding.
- Practical Teaching Demonstration: Candidates deliver a sample lesson to demonstrate their pedagogical skills.
- Lesson Planning and Materials Preparation: Evaluation of the ability to design effective lessons aligned with the Oxford curriculum.
- Knowledge of Student Assessment: Understanding of formative and summative assessment strategies.

Note: The exact structure may vary depending on regional adaptations or specific certification programs.

Key Areas Covered

- Content Knowledge: Grammar, vocabulary, and language use appropriate for intermediate learners.
- Teaching Methodologies: Communicative language teaching, task-based learning, and student-centered approaches.
- Classroom Management: Strategies for maintaining an engaging, disciplined learning environment.
- Use of Resources: Incorporating multimedia, authentic materials, and Oxford?s digital tools.
- Assessment and Feedback: Techniques for evaluating student progress and providing constructive feedback.

Preparing for the Oxford New English File Intermediate Teacher Exam

Familiarizing with the Curriculum

A thorough understanding of the Oxford New English File Intermediate series is crucial. Teachers

should:

- Study the student book and workbook content.
- Review the Teacher?s Book for guidance on lesson plans and activities.
- Understand the progression of skills from unit to unit.

Developing Pedagogical Skills

Effective teaching is central to passing the exam. Educators should focus on:

- Mastering interactive teaching techniques.
- Practicing lesson delivery with peer or mentor feedback.
- Incorporating varied activities to cater to different learning styles.

Practicing Lesson Planning

Candidates should prepare sample lesson plans that:

- Align with specific units of the Oxford series.
- Include clear objectives, procedures, and assessment criteria.
- Utilize authentic resources and technology.

Engaging in Mock Exams and Workshops

Participating in mock exams or preparatory workshops can:

- Help identify areas of strength and weakness.
- Build confidence in delivering lessons.
- Clarify exam expectations and standards.

Tips for Success in the Exam

- Stay Updated: Keep abreast of the latest developments in English language teaching methodologies.
- Plan Thoroughly: Well-structured lesson plans demonstrate professionalism and mastery.
- Practice Delivery: Rehearse lessons to ensure clarity, engagement, and timing.

- Reflect: After practice sessions, review recordings or seek feedback to refine your teaching style.
- Understand the Criteria: Familiarize yourself with assessment rubrics to meet or exceed standards.

Significance of Certification for Teachers and Institutions

Professional Development

Achieving the Oxford New English File Intermediate Teacher Certification signifies a commitment to professional growth, enhancing a teacher?s reputation and career prospects.

Quality Assurance

Institutions benefit from employing certified teachers, ensuring that students receive high-quality instruction aligned with international standards.

Global Recognition

Oxford certification often holds international recognition, facilitating opportunities for teaching abroad or joining global networks of educators.

Challenges and Considerations

While the exam offers numerous benefits, teachers may face challenges such as:

- Resource Accessibility: Ensuring availability of the Oxford series and supplementary materials.
- Language Barriers: Non-native teachers may need additional support to master specific terminology.
- Time Management: Balancing exam preparation with ongoing teaching responsibilities.
- Adapting to Diverse Classrooms: Demonstrating flexibility in teaching methods for varied student needs.

Conclusion

The Oxford New English File Intermediate Teacher Exam stands as a comprehensive benchmark that verifies a teacher?s ability to deliver engaging, effective English instruction at the intermediate level. Through diligent preparation, mastery of the curriculum, and pedagogical excellence, educators can not only succeed in the exam but also significantly elevate their teaching practice. As the demand for qualified English teachers continues to grow globally, obtaining this certification can

serve as a pivotal step towards a rewarding and impactful teaching career.

QuestionAnswer What are the key topics covered in the Oxford New English File Intermediate Teacher Exam? The exam typically covers grammar, vocabulary, reading comprehension, writing skills, listening, and speaking activities aligned with the Oxford New English File Intermediate syllabus. How can teachers effectively prepare students for the Oxford New English File Intermediate exam? Teachers should incorporate practice tests, focus on exam-specific skills, review vocabulary and grammar, and simulate exam conditions to build students' confidence and familiarity with the format. Are there any official practice materials available for the Oxford New English File Intermediate teacher exam? Yes, Oxford provides official practice tests and teaching resources that help teachers prepare students for the exam format and question types. What assessment criteria are used in the Oxford New English File Intermediate teacher exam? Assessment criteria include accuracy and fluency in speaking and writing, comprehension skills, vocabulary range, grammatical correctness, and the ability to understand and interpret texts. How often is the Oxford New English File Intermediate teacher exam updated or revised? The exam is periodically reviewed to reflect updates in the course material and language teaching standards, with revisions typically aligned with new editions of the Oxford New English File series. What strategies can teachers use to improve students' performance in the listening section of the exam? Teachers can incorporate regular listening practice with diverse accents, teach note-taking skills, and expose students to exam-style audio exercises to enhance listening comprehension. Is there a certification or qualification awarded upon passing the Oxford New English File Intermediate teacher exam? Yes, successful candidates typically receive a certificate acknowledging their proficiency in teaching the Oxford New English File Intermediate level, which can enhance their teaching credentials.

Related keywords: Oxford New English File Intermediate, teacher exam, English teaching certification, language instructor exam, TEFL certification, English teacher test, intermediate English exam, teaching qualification, language teaching assessment, Oxford English teaching

Windows Nt File System Internals En Anglais

windows nt file system internals en anglais

Understanding the internal architecture of the Windows NT file system is essential for IT professionals, cybersecurity experts, and developers working with Windows-based environments. The Windows NT operating system, introduced in the early 1990s, revolutionized Windows architecture by providing a robust, secure, and scalable platform. Its file system internals are complex but crucial for ensuring data integrity, security, and performance. This article provides a

comprehensive overview of Windows NT file system internals, exploring key components, data structures, and operational mechanisms.

Overview of Windows NT File System Architecture

The Windows NT file system architecture is designed to abstract hardware details and provide a consistent interface for applications and users. It comprises several layers, including hardware abstraction, the I/O manager, file system drivers, and the user-mode interface.

Key Components of the File System

- NTFS (New Technology File System): The primary file system used in Windows NT and later versions, known for its advanced features like journaling, security descriptors, and support for large files.
- File System Drivers: Kernel mode drivers responsible for managing specific file systems such as NTFS, FAT32, or exFAT.
- Object Manager: Manages kernel objects, including files, directories, and symbolic links.
- Cache Manager: Handles caching of data to improve performance.
- I/O Manager: Coordinates all input/output operations between user applications and hardware devices.

Core Data Structures in NTFS

The effectiveness of the NTFS file system relies heavily on several core data structures that organize and manage data on disk.

Master File Table (MFT)

- Central to NTFS, the MFT contains a record for every file and directory.
- Each record is a fixed-size data structure (typically 1 KB).
- Stores metadata such as filename, timestamps, permissions, and pointers to data extents.
- Enables quick file access and efficient management of files.

File Record

- Represents individual files or directories.
- Contains attributes like standard information, filename, security descriptors, data runs, and more.

- Uses a structured format with attribute headers and data.

Attributes

- Basic units of information stored about files.
- Types include Standard Information, File Name, Data, Security Descriptor, and others.
- Can be resident (stored within the MFT record) or non-resident (pointing to external clusters).

Data Runs

- Describe how file data is laid out on disk.
- Use a run-length encoding scheme to specify sequences of clusters.
- Enable efficient mapping of logical file offsets to physical disk locations.

NTFS File System Internals and Operations

Understanding how NTFS reads, writes, and manages files is key to grasping its internal mechanisms.

File Creation and Opening

- When a file is created or opened, the system searches the MFT for a matching record.
- If creating a new file, a new record is allocated, initialized, and linked into directory structures.
- Opening a file involves locating its record and establishing a handle.

Reading and Writing Data

- Data is accessed through data runs in the file's attributes.
- For resident data, the data resides within the MFT record.
- For non-resident data, the data runs provide a mapping to disk clusters.
- The Cache Manager optimizes repeated access by caching data in memory.

File Deletion and Truncation

- Mark the file as deleted by updating its MFT record.
- The actual data remains on disk until overwritten or the space is reclaimed through

defragmentation.

Security and Permissions in NTFS

Security is integral to NTFS, with features enabling fine-grained access control.

Security Descriptors

- Store permissions, ownership, and audit settings.
- Associated with files and directories via attributes.
- Use Access Control Lists (ACLs) to specify permissions for users and groups.

Access Control Lists (ACLs)

- Contain Access Control Entries (ACEs) that define permissions.
- Enable complex security policies.
- Are checked during file access operations to enforce security.

Journaling and Data Integrity

NTFS employs journaling to maintain data integrity, especially in case of system crashes or power failures.

Log File and Transactional Operations

- NTFS maintains a log (USN journal) recording changes.
- Uses transactions to ensure consistency; either all changes are committed or none.
- Reduces the risk of file system corruption.

Recovery Mechanisms

- On startup, NTFS replay logs to recover incomplete transactions.
- Ensures filesystem integrity and consistent state.

Advanced Features of Windows NT File System

NTFS supports numerous advanced features that enhance performance, security, and usability.

File Compression

- Allows compression of files and directories to save space.
- Transparent to users and applications.

Encryption

- Supports Encrypting File System (EFS) for data security.
- Uses public-key cryptography to encrypt file contents.

Disk Quotas

- Enable administrators to limit disk space usage per user.
- Helps manage storage resources effectively.

Sparse Files and Reparse Points

- Sparse files optimize storage by not allocating space for empty regions.
- Reparse points facilitate symbolic links, mount points, and volume management.

Performance Optimization and Caching

Windows NT optimizes disk and memory usage through caching and scheduling.

Cache Manager

- Caches frequently accessed data in RAM.
- Reduces disk I/O latency.

Prefetching and Read-Ahead

- Anticipates data needs based on access patterns.
- Improves performance during sequential reads.

I/O Scheduling

- Manages disk access requests to optimize throughput and reduce latency.
- Uses algorithms like FIFO, C-SCAN, and others.

Conclusion

The Windows NT file system internals are a sophisticated amalgamation of data structures, mechanisms, and features designed to provide efficient, secure, and reliable data management. From the core Master File Table to advanced security features and journaling, every component plays a vital role in ensuring the robustness of Windows operating systems. A thorough understanding of these internals is invaluable for system administrators, developers, and cybersecurity professionals aiming to optimize, troubleshoot, or secure Windows environments.

Keywords for SEO optimization: Windows NT file system internals, NTFS architecture, Master File Table, Data runs, Security descriptors, Journaling, File system security, Windows NT file management, NTFS features, Windows file system structure.

Windows NT File System Internals: An In-Depth Examination

The Windows NT file system internals form a complex yet highly optimized architecture that underpins one of the most widely used operating systems globally. As the backbone of Windows NT-based platforms?including Windows 10, Windows Server, and even earlier versions?understanding how the file system operates at a low level is essential for system administrators, security professionals, developers, and researchers alike. This article aims to explore the detailed internal mechanisms of the Windows NT file system, including its architecture, data structures, and operational procedures, providing a comprehensive understanding of how Windows manages files, directories, and storage.

Introduction to Windows NT File System Architecture

The Windows NT architecture introduced a robust, modular, and scalable approach to file management, contrasting sharply with older DOS-based systems. At its core, the Windows NT file system is designed to abstract hardware details, provide security, and ensure data integrity across various storage devices. The architecture can be broadly divided into several components:

- File System Drivers (FSDs): Responsible for interfacing with specific storage media (e.g., NTFS, FAT).
- Object Manager: Manages kernel objects, including files and directories.
- Cache Manager: Implements caching strategies to optimize I/O operations.
- Memory Management: Handles buffers, caches, and buffer pools associated with file I/O.

Among the various file systems supported, NTFS (New Technology File System) is the most prevalent and sophisticated, offering features like journaling, encryption, compression, and security descriptors.

NTFS: The Heart of Windows NT File System Internals

NTFS has been the primary file system for Windows NT since its inception, designed with a focus on reliability, scalability, and advanced features.

Key Features of NTFS

- Journaling: Maintains a transaction log to recover from crashes.
- Security: Implements Access Control Lists (ACLs) and security descriptors.
- Metadata: Uses Master File Table (MFT) to track all files and directories.
- Sparse Files & Compression: Supports efficient storage.
- Encryption: Integrates with Encrypting File System (EFS).
- Disk Quotas & Sparse Files: Manage storage allocations effectively.

Master File Table (MFT): The Core Data Structure

At the heart of NTFS lies the Master File Table (MFT), a relational database that contains a record for every file and directory. Each MFT record is a fixed-size 1 KB structure, which includes:

- File Record Header: Identifies the record and its status.
- File Attributes: Metadata such as timestamps, security, and data content.
- Resident and Non-Resident Data: Data stored directly within the MFT (resident) or elsewhere on disk (non-resident).

The MFT allows for rapid access to file metadata and supports features like defragmentation, security, and recovery.

Deep Dive into NTFS Data Structures

Understanding NTFS internals necessitates a detailed look at its core data structures.

1. FILE_RECORD_HEADER

Every record in the MFT begins with this header, which contains:

- File reference number
- Sequence number
- Flags indicating the record's status (e.g., in use, deleted)
- Pointers to attribute lists

2. ATTRIBUTES

Attributes describe various aspects of files and directories, such as:

- Standard Information: Timestamps, link counts
- File Name: Unicode name, parent directory reference
- Data: Actual file contents or pointers to data
- Security Descriptor: Security information
- Object IDs: Unique identifiers for tracking

Attributes can be resident or non-resident:

- Resident: Data stored directly within the MFT record.
- Non-resident: Data stored elsewhere; the attribute contains extents pointing to data clusters.

3. Attribute List

For large files or files with multiple attributes, an attribute list attribute references additional attributes spread across the disk.

4. Indexing Structures

Directories are implemented as B+ trees, enabling efficient lookups:

- Index Root: Contains the initial part of the directory index.
- Index Allocation: Stores additional index blocks when directories grow large.
- Index Headers: Manage the structure and integrity of index nodes.

File and Directory Operations Internally

The internal operations of Windows NT's file system involve complex sequences of steps, often optimized for performance and reliability.

File Creation and Opening

- The system locates the directory?s index structure.
- Searches the B+ tree for the filename.
- If not found, creates a new MFT record, allocates disk space, and updates the directory index.
- Returns a handle for further operations.

Reading and Writing Files

- The system examines the file's data attributes.
- For resident data, reads/writes are direct.
- For non-resident data, the system interprets extents and performs sequential or random disk I/O via the cache manager.

Security and Permissions Handling

- Each file/directory has a security descriptor stored as an attribute.
- Access requests are checked against ACLs.
- Security auditing and inheritance are managed through these descriptors.

Advanced Features and Internal Mechanisms

The internal workings extend beyond basic file management to include features that improve robustness and security.

1. Journaling and Crash Recovery

NTFS uses a transaction log (the journal) to record metadata changes before they are committed to disk. This ensures:

- Consistency after crashes
- Atomic updates
- Faster recovery times

2. File Compression and Encryption

- Compression alters how data extents are stored.
- EFS encrypts file data using cryptographic keys, stored securely within the security descriptors.

3. Disk Quotas and Sparse Files

- Quotas limit user storage consumption.
- Sparse files optimize storage by only allocating space for data that is actually written.

Security and Integrity at the File System Level

Security is deeply integrated into Windows NT file system internals:

- Security Descriptors: Store ACLs, owner, and group information.
- Access Tokens & Impersonation: Enforce permissions during I/O operations.
- Integrity Checks: Use checksum and journaling to verify data integrity.

While NTFS remains highly sophisticated, it faces challenges such as:

- Fragmentation affecting performance
- Security vulnerabilities at the driver level
- Compatibility issues with newer storage technologies (e.g., SSDs)

Recent developments focus on:

- Enhancing support for large disks and files
- Integrating with cloud storage solutions
- Improving resilience and recovery mechanisms

Conclusion

The Windows NT file system internals reveal a layered, resilient, and feature-rich architecture designed for high performance, security, and reliability. From its foundational data structures like the MFT and B+ trees to its advanced features such as journaling, encryption, and quotas, NTFS exemplifies a modern file system engineered for robust enterprise and consumer use. As storage technologies evolve, understanding these internals becomes vital for developers, security analysts, and system architects aiming to optimize or secure Windows-based environments.

By dissecting these internal mechanisms, professionals can better diagnose issues, develop low-level tools, and contribute to future advancements in Windows file system technology.

QuestionAnswer What are the main components of the Windows NT file system architecture? The main components include the NTFS driver, the Master File Table (MFT), the File Record, the Log File, the Bitmap, and the Directory Indexing structures, all working together to manage file storage, retrieval, and integrity. How does the NTFS handle file permissions and security? NTFS uses Access Control Lists (ACLs) embedded within file metadata to define permissions for users and groups, supporting detailed security settings, including discretionary access controls and system-level security features. What is the Master File Table (MFT) and how does it function in NTFS? The MFT is a central database that stores metadata about every file and directory on the volume, including attributes, security information, and data location, enabling efficient file management and access. How does NTFS ensure data integrity and recoverability? NTFS uses a transaction-based logging system via the USN Journal and the Log File (transaction log), which helps recover from crashes by replaying logs and maintaining consistency of the file system. What are the differences between the NTFS Master File Table and FAT file systems? Unlike FAT, which uses a simple File Allocation Table to track clusters, NTFS stores extensive metadata in the MFT, supports larger file sizes, improved security, journaling, and better fault tolerance. How does NTFS handle large files and disk space management? NTFS employs features like extents and a dynamic bitmap to efficiently manage large files and disk space, reducing fragmentation and improving performance for large data sets. What is the role of the Master File Table Record and how is it structured? Each MFT record contains attributes such as file name, data, security descriptors, and timestamps; it is structured with a fixed-size record that allows quick access and updates to file metadata. How do NTFS directory structures optimize file searching and access? NTFS uses B+ trees for directory indexing, which enable fast lookup, insertion, and deletion of files within directories, greatly improving search performance especially in directories with many files.

Related keywords: Windows NT, file system, internals, NTFS, kernel mode, file management, disk management, registry, I/O subsystem, file allocation table

Read the full article online: windows nt file system internals en anglais