

Wonderware intouch training manual for scada

wonderware intouch training manual for scada is an essential resource for engineers, automation professionals, and system integrators aiming to master the powerful SCADA (Supervisory Control and Data Acquisition) software. As one of the leading industrial automation tools in the market, Wonderware InTouch offers robust features for creating, monitoring, and managing complex control systems across various industries such as manufacturing, energy, water treatment, and more. A comprehensive training manual serves as a vital guide, helping users understand the software's capabilities, develop efficient SCADA applications, and troubleshoot common issues effectively. Whether you are a beginner or an experienced user, a well-structured training manual can dramatically shorten your learning curve and enhance your operational productivity. Understanding Wonderware InTouch and SCADA Systems What is Wonderware InTouch? Wonderware InTouch is a graphical HMI (Human-Machine Interface) software that allows operators to visualize and interact with industrial processes. It provides real-time data visualization through customizable screens, enabling operators to monitor system status, alarms, and trends

seamlessly. Its user-friendly interface and extensive library of graphic objects make it accessible for users with varying levels of technical expertise. What is SCADA? SCADA systems are integral to industrial automation, providing centralized control and data acquisition from remote or distributed sensors and devices. They facilitate real-time monitoring, data logging, alarm management, and control functions, all vital for maintaining operational efficiency and safety. Wonderware InTouch acts as the visual interface within a SCADA architecture, translating complex data into understandable visual formats.

Key Components of Wonderware InTouch

- 1. Graphics and Visualization** Creating intuitive and interactive graphics is at the core of InTouch. Users can design screens with buttons, gauges, trend charts, and other objects to represent physical equipment and processes.
- 2. Tags and Data Sources** Tags are references to real-time data points, such as sensor readings or device statuses. InTouch connects to various data sources including OPC servers, databases, or direct device drivers.
- 3. Alarms and Events** Effective alarm management ensures operators are promptly notified of abnormal conditions. InTouch provides comprehensive alarm configuration, logging, and acknowledgment functionalities.
- 4. Scripting and Automation** Advanced users can utilize scripting languages like VBA or InTouch's internal scripting to automate tasks, customize behaviors, and enhance system responsiveness.

Getting Started with Wonderware InTouch Training

Setting Up the

Environment Before diving into application development, it is crucial to install and configure the software correctly.

- System Requirements: Ensure your hardware and operating system meet Wonderware's specifications.
- Installation Process: Follow the official installation guide, select appropriate components, and configure licensing.
- Connecting to Data Sources: Set up communication protocols (OPC, DDE, direct drivers) to access real-time data.

Basic Navigation and Interface Familiarize yourself with the InTouch development environment:

- Application Manager: For creating and managing projects.
- Graphics Builder: To design and layout screens.

Runtime: The environment where the application runs for operators.

Designing Effective SCADA Applications with InTouch

Creating Graphics and Screens Designing user-friendly interfaces enhances operational efficiency.

- Use standard graphic objects like rectangles, circles, and images.
- Incorporate dynamic objects such as animated gauges or trend charts.
- Organize screens logically for easy navigation.

Tag Management and Data Binding Properly managing tags ensures accurate data representation.

- Define tags with correct data types.
- Bind tags to graphic objects for real-time updates.
- Use aliasing for ease of maintenance.

Alarm Configuration Set up alarms to detect and notify operators of critical events.

- Define alarm conditions based on tag values.
- Configure alarm priorities and acknowledgement procedures.
- Log alarm history for troubleshooting.

Scripting and Automation Leverage

scripting to automate repetitive tasks or implement custom logic. - Use internal scripting languages like VBA. - Create event-driven scripts for specific triggers. - Test scripts thoroughly to prevent unintended behaviors.

Advanced Features and Best Practices

Trending and Historical Data Analysis

Monitoring historical data helps in analyzing system performance. - Configure trend charts for real-time and historical data. - Use data logging for long-term analysis. - Export data for external analysis tools.

Security and User Management

Protect your SCADA system from unauthorized access. - Implement user authentication and role-based permissions. - Enable password protection for sensitive screens. - Regularly update software to patch vulnerabilities.

Performance Optimization

Ensure your InTouch application runs smoothly under load. - Optimize graphics and avoid unnecessary animations. - Limit the number of active tags and graphic objects. - Use efficient scripting practices.

Troubleshooting and Maintenance

Common Issues and Solutions

- Connectivity Problems: Verify network connections and OPC configurations.
- Performance Lags: Check for excessive tags or graphics causing slowdowns.
- Alarm Failures: Ensure alarm conditions are correctly configured and triggers are active.

Regular Backup and Updates

Maintain system integrity and security. - Regularly back up application files and configurations. - Keep Wonderware InTouch updated with the latest patches and service packs. - Document changes

for future reference. Resources for Further Learning - Official Wonderware Documentation: Detailed manuals and user guides. - Training Courses: Certified courses offered by Wonderware or authorized training partners. - Online Communities and Forums: Engage with other users for tips and troubleshooting. - YouTube Tutorials: Visual demonstrations of common tasks and advanced features. Conclusion A well-structured Wonderware InTouch training manual is invaluable for anyone involved in SCADA system development and operation. It provides the foundational knowledge needed to design, implement, and maintain efficient supervisory control systems. By mastering key concepts such as graphics design, tag management, alarm configuration, scripting, and troubleshooting, users can significantly improve their system's reliability and performance. As industries continue to evolve towards smarter automation, proficiency in Wonderware InTouch will remain a critical skill for automation professionals seeking to optimize their processes and ensure safety and productivity. Remember: Consistent practice and continual learning are essential. Leverage available resources, stay updated with the latest software releases, and actively participate in user communities to enhance your expertise in Wonderware InTouch and SCADA systems.

Wonderware Intouch Training Manual for SCADA: An In-Depth Review

Introduction to Wonderware Intouch and Its Significance in SCADA Systems

Wonderware Intouch is a leading SCADA (Supervisory Control and Data Acquisition) software platform widely adopted across industries for real-time process visualization, control, and data management. Its intuitive interface, robust functionalities, and scalability make it a preferred choice for engineers and automation professionals seeking seamless system integration and efficient operational oversight. The Wonderware Intouch Training Manual for SCADA serves as an essential resource, guiding users through the complexities of system setup, configuration, and maintenance. It empowers technicians, engineers, and system integrators with the knowledge needed to harness the full potential of Intouch, ensuring reliable, efficient, and secure industrial automation.

Core Components of the Wonderware Intouch Training Manual

The manual typically covers a broad spectrum of topics, structured to facilitate progressive learning. The core components include: 1. Introduction to SCADA and Wonderware Intouch 2. System Requirements and Installation 3. Configuration and Design of Visualizations 4. Tag Management and Data Handling 5. Alarm and Event

Management 6. Scripting and Automation 7. Security and User Management 8. Troubleshooting and Maintenance 9. Integration with Other Systems 10. Best Practices and Optimization Each section delves into specific functionalities, providing step-by-step instructions, practical examples, and troubleshooting tips.

Understanding the Basics: What the Manual Offers

Getting Started with Wonderware Intouch

The manual begins with an overview of SCADA concepts and how Wonderware Intouch fits into the industrial automation landscape. It introduces users to:

- The architecture of Wonderware Intouch systems
- Basic terminologies such as tags, graphics, alarms, and scripts
- Navigating the user interface efficiently

This foundational knowledge is crucial for beginners and serves as a refresher for experienced users.

Installation and System Requirements

Proper installation forms the backbone of a reliable SCADA system. The manual details:

- Hardware prerequisites (CPU, RAM, storage)
- Software dependencies and compatibility considerations
- Step-by-step installation procedures
- Post-installation configuration and licensing setup

Understanding

these steps ensures a smooth deployment process and minimizes operational issues.

Designing Visual Interfaces: Building Effective HMI Screens

Creating Graphics and Objects

One of Intouch's strengths is its graphical interface. The manual guides users on: - Using the graphics builder tool to create intuitive HMI screens - Incorporating standard objects such as buttons, indicators, charts, and gauges - Customizing visual styles for clarity and aesthetic appeal - Layer management and object grouping for complex screens

Implementing Navigation and Interactivity

Designing an interactive interface involves: - Adding navigation buttons for seamless movement between screens - Linking objects with tags for real-time data display - Using pop-up windows and contextual menus to enhance usability

Best Practices in HMI Design

To avoid clutter and confusion, the manual emphasizes: - Consistent color schemes for different signal states - Clear labeling and legends - Minimizing unnecessary animations - Ensuring readability across various devices

Data Management and Tag Configuration

Understanding Tags in Wonderware Intouch

Tags are the core data elements representing process variables. The manual explains: - Creating and configuring tags for different data types - Linking tags to PLCs, databases, or other data sources - Tag addressing and addressing conventions

Data Logging and Historical Data

For trend analysis and reporting, the manual covers: - Setting up data logging mechanisms - Configuring historical data files - Using Wonderware Historian or other databases for long-term storage

Data Validation and Filtering

Ensuring data integrity involves: - Implementing validation rules - Filtering noisy signals - Handling data anomalies and deadbands

Alarm and Event Handling

Configuring Alarms

Effective alarm management is vital for operational safety. The manual details: - Creating alarm conditions linked to tags - Setting alarm priorities and severities - Defining alarm acknowledgment procedures

Alarm Notification and Logging

For timely responses, users learn to: - Configure email, SMS, or on-screen notifications - Log alarms for audit trails - Implement alarm suppression and reset logic

Event Management

Beyond alarms, event logging captures system activities, aiding in troubleshooting and compliance.

Scripting and Automation Capabilities

Using Intouch Scripting Language

Scripts automate repetitive tasks and enhance system intelligence. The manual guides users through: - Basic scripting syntax and constructs - Creating scripts for process control, data manipulation, and user interaction - Event-driven scripting for real-time responses

Best Practices for Scripting

To maintain system stability: - Comment scripts thoroughly - Modularize code for reusability - Test scripts thoroughly before deployment

Security and User Management

User Roles and Permissions

The manual emphasizes securing SCADA systems by: - Defining user roles with specific access rights - Implementing login authentication - Managing password policies and audit trails

Securing Communication and Data

Ensuring data integrity involves: - Using encryption protocols - Setting firewalls and network security controls - Regularly updating the system to patch vulnerabilities

Maintenance, Troubleshooting, and Optimization

Routine Maintenance Practices

The manual recommends: - Regular backups of configuration files - Monitoring system performance metrics - Updating

software patches

Troubleshooting Common Issues

Guidance is provided on resolving: - Connectivity problems with PLCs and data sources - Graphics display errors - Alarm misconfigurations - Script failures

Performance Optimization Tips

To ensure system responsiveness and reliability: - Optimize graphics and scripts for minimal resource usage - Use efficient data polling intervals - Regularly review and refine alarm thresholds

Integration and Scalability

Connecting Wonderware Intouch with Other Systems

The manual discusses integrating with: - PLCs, DCS, and other controllers - Enterprise systems like ERP or MES - Cloud platforms for remote monitoring

Scaling for Larger Operations

Designing scalable systems involves: - Distributed architectures - Redundancy configurations - High-availability setups

Conclusion: The Value of a Comprehensive Wonderware Intouch Training Manual

The Wonderware Intouch Training Manual for SCADA is an indispensable resource for mastering industrial automation control systems. Its detailed explanations, practical instructions, and best practice recommendations help users maximize system efficiency, security, and reliability. Whether a novice or experienced engineer, leveraging this manual accelerates learning, reduces errors, and enhances system performance. By thoroughly understanding each aspect covered—from interface design and data management to security and troubleshooting—users can confidently deploy and maintain robust SCADA solutions tailored to their operational needs. As industries continue to evolve towards smarter manufacturing and automation, proficiency in Wonderware Intouch remains a valuable asset, and a comprehensive training manual is the key to unlocking its full potential.

The availability of downloadable **Wonderware Intouch Training Manual For Scada** has transformed the way people access, share, and engage with information. In the digital era, knowledge is no longer confined to physical libraries or printed books. Instead, digital formats provide instant access to books, manuals, academic resources, and research papers,

significantly reducing traditional barriers related to cost, location, and availability. This shift represents a major step toward more inclusive and democratic access to education.

One of the most important advantages of digital access is immediacy. Downloading **Wonderware Intouch Training Manual For Scada** allows users to obtain information within moments, eliminating long waiting times associated with physical distribution. For students, researchers, and professionals, this speed is essential. Whether preparing for an exam, completing a project, or conducting research, instant access ensures that learning and productivity are not interrupted.

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The global reach of digital content fosters collaboration and shared understanding. Downloading **Wonderware Intouch Training Manual For Scada** allows learners from different

countries and cultural backgrounds to access the same materials, encouraging dialogue and exchange of ideas. Digital access supports a more connected and informed global learning community.

As technology continues to advance, digital education will remain central to how knowledge is created and shared. The ability to download **Wonderware Intouch Training Manual For Scada** reflects an adaptive approach to learning that aligns with modern technological trends. Developing strong digital literacy skills is now essential.

In conclusion, digital access to **Wonderware Intouch Training Manual For Scada** exemplifies the power of technology in democratizing education. Through efficiency, portability, adaptability, and ethical usage, downloadable resources empower learners worldwide. Legal and responsible access enables continuous learning, knowledge expansion, and intellectual empowerment, ensuring that education remains accessible, inclusive, and relevant in the digital age.

Questions & Answers About wonderware intouch training manual for

scada

N o	Question	Answer
1	What are the key topics covered in the Wonderware InTouch SCADA training manual?	The training manual covers topics such as creating and configuring screens, tag management, scripting and alarms, data logging, security settings, and troubleshooting techniques for Wonderware InTouch SCADA systems.
2	How can I effectively use the Wonderware InTouch training manual to improve my SCADA development skills?	By following the manual step-by-step, practicing the exercises, and exploring real-world scenarios provided, you can enhance your understanding of SCADA design, configuration, and troubleshooting with Wonderware InTouch.
3	Does the Wonderware InTouch training manual include best practices for SCADA system security?	Yes, the manual provides best practices for securing SCADA systems, including user authentication, access control, network security measures, and maintaining system integrity to prevent unauthorized access.
4	Can the Wonderware InTouch training manual help with integrating SCADA with other industrial systems?	Absolutely. The manual covers integration techniques such as OPC communication, scripting for system interoperability, and configuring data exchange with PLCs and other industrial devices.

5	Is hands-on practice emphasized in the Wonderware InTouch training manual?	Yes, the manual emphasizes practical exercises, real-world examples, and tutorials to help learners gain hands-on experience in developing and managing SCADA projects.
6	Where can I access the latest Wonderware InTouch training manual and resources?	The latest manuals and resources can typically be accessed through Wonderware's official website, authorized training partners, or through Dassault Systèmes' industrial automation support portals.

Wonderware InTouch, SCADA training, InTouch manual, SCADA software guide, Wonderware tutorials, HMI programming, industrial automation, visualization training, InTouch scripting, SCADA system setup

Wonderware Intouch Training Manual For Scada eBook Resource

Wonderware Intouch Training Manual For Scada eBooks provide structured digital knowledge.

Core Discussion

Digital books help readers maintain productivity.

Practical Use

Wonderware Intouch Training Manual For Scada eBooks support consistent study routines.

Conclusion

Digital reading improves access to information.

Wonderware Intouch Training Manual For Scada eBooks offer a practical solution for learners seeking depth without overwhelming complexity.

Centralized content improves trust and reliability.

Wonderware Intouch Training Manual For Scada eBooks help bridge theoretical understanding and practical application.

They balance innovation with reliability.

Wonderware Intouch Training Manual For Scada eBooks enable learning across multiple contexts, including work, travel, and home environments.

Logical sequencing reduces confusion.

The portability of Wonderware Intouch Training Manual For

Scada eBooks ensures that learning materials are always available, whether at home, in the office, or while traveling.

The flexibility of Wonderware Intouch Training Manual For Scada eBooks allows learners to combine structured study with real-world experimentation.

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The portability of Wonderware Intouch Training Manual For Scada eBooks ensures that learning materials are always available regardless of location or time constraints.

Logical sequencing reduces cognitive overload.

Wonderware Intouch Training Manual For Scada eBooks align with structured knowledge systems.

Methodical study improves mastery.

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Wonderware Intouch Training Manual For Scada eBooks contribute to a more efficient learning ecosystem.

Wonderware Intouch Training Manual For Scada eBooks help bridge theoretical understanding and practical application.

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settings.

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Clear organization guides readers from fundamentals to advanced topics.

The digital format of Wonderware Intouch Training Manual For Scada eBooks allows rapid revision, correction, and content expansion.

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They offer continuity amid change.

This autonomy encourages deeper understanding and reduces

learning-related stress.

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Content depth can be revisited as understanding grows.

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Repeated exposure reinforces mastery.

Wonderware Intouch Training Manual For Scada eBooks help learners manage complex information.

Wonderware Intouch Training Manual For Scada eBooks represent a shift in how information is consumed, prioritizing convenience, efficiency, and adaptability in modern learning environments.

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These interactive features help learners transform passive reading into an engaged and intentional learning process.

Wonderware Intouch Training Manual For Scada eBooks allow rapid content revision and correction.

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Complete FAQ Guide for Using PDF Files Effectively

PDF files have become an essential part of modern digital communication, education, and documentation. Their ability to preserve layout, structure, and formatting across devices makes them a trusted format worldwide. When working with Wonderware Intouch Training Manual For Scada in PDF format, understanding best practices ensures better usability, long-term accessibility, and an overall smoother experience for readers and professionals alike.

Unlike editable document formats, PDFs are designed to remain stable. Fonts, images, spacing, and page layouts stay consistent whether viewed on Windows, macOS, Linux, Android, or iOS. This reliability makes PDF an ideal choice for distributing structured content such as manuals, guides, ebooks, research papers, and instructional resources like Wonderware Intouch Training Manual For Scada.

Why PDF is widely used for digital content

The popularity of PDF files is driven by their universal compatibility and ease of sharing. Most devices come with built-in PDF viewers, eliminating the need for specialized software. This allows users to access Wonderware Intouch Training Manual For Scada instantly without technical barriers. Additionally, PDFs support advanced features such as hyperlinks, bookmarks, embedded media, and interactive elements, making them versatile for many use cases.

Another advantage of PDF files is their suitability for long-term storage. PDF standards are well-documented and widely supported, reducing the risk of format obsolescence. Institutions, educators, and professionals rely on PDFs to archive important materials securely, ensuring continued access to content like Wonderware Intouch Training Manual For Scada over time.

Optimizing PDF readability for better user experience

Readability is crucial, especially for long documents. Adjusting zoom levels, page layouts, and display modes can greatly enhance comfort during reading sessions. Many PDF readers offer features such as continuous scrolling, dual-page view, and night mode. These options allow users to customize how they interact with Wonderware Intouch Training Manual For Scada based on their preferences and devices.

Clear typography and sufficient spacing also play an important role. Well-structured PDFs reduce eye strain and improve comprehension. On smaller screens, readers that support text reflow can adapt content dynamically, making Wonderware Intouch Training Manual For Scada easier to read without constant zooming or scrolling.

Navigation tools in PDF documents

Efficient navigation transforms large PDFs into practical reference tools. Bookmarks allow quick access to major sections, while clickable tables of contents improve usability. These features are especially valuable when working with extensive materials such as Wonderware Intouch Training Manual For Scada.

Page thumbnails provide visual orientation, helping users locate specific sections quickly. Combined with internal links and

structured headings, navigation tools save time and enhance productivity when using PDF documents regularly.

Search functionality and information retrieval

One of the strongest benefits of PDFs is searchable text. Instead of scanning pages manually, users can locate specific terms or topics instantly. This feature is particularly useful for study, research, and professional reference involving Wonderware Intouch Training Manual For Scada.

Advanced PDF readers offer enhanced search options, including result highlighting and navigation between matches. These tools help users analyze content efficiently, especially in documents containing technical or repeated terminology.

Annotation and note-taking features

PDF annotation tools allow users to highlight text, add comments, and insert notes directly into the document. These features turn static PDFs into interactive learning and working tools. When using Wonderware Intouch Training Manual For Scada, annotations help capture insights, summarize sections, and mark important references for future use.

Annotations are particularly useful for students and professionals who revisit documents frequently. Saving annotated versions ensures that notes remain available,

reducing the need for separate files or external note-taking systems.

Managing PDF file size and performance

Large PDF files may load slowly, especially on older devices or limited hardware. Optimizing PDFs improves performance without sacrificing quality. Techniques such as image compression, font optimization, and removal of unnecessary metadata help reduce file size while preserving content clarity in Wonderware Intouch Training Manual For Scada.

For extremely large documents, splitting content into smaller PDF sections can improve navigation and responsiveness. This approach also makes file sharing faster and more reliable.

Security and protection in PDF files

PDFs offer various security options, including password protection, restricted editing, and controlled printing permissions. These features help protect the integrity of Wonderware Intouch Training Manual For Scada when sharing it publicly or privately.

While security is important, it should not hinder usability. Applying appropriate protection based on audience and purpose ensures that content remains accessible while preventing unauthorized modifications or misuse.

Avoiding corrupted or unreadable PDF files

PDF corruption can occur due to interrupted downloads, storage errors, or incompatible software. To minimize risk, users should download files from trusted sources and verify file integrity when possible. Keeping backup copies of Wonderware Intouch Training Manual For Scada provides added security against data loss.

Updating PDF readers regularly also helps prevent compatibility issues. New versions often include bug fixes and improved support for modern PDF standards, ensuring smoother performance.

Cross-device access and synchronization

Modern workflows often involve multiple devices. PDFs support seamless cross-platform access, allowing users to open the same file on desktops, tablets, and smartphones. Cloud storage services enable synchronization, ensuring that the latest version of Wonderware Intouch Training Manual For Scada is always available.

For users who annotate PDFs, syncing features help maintain consistency across devices. Understanding how annotations are stored and synchronized prevents accidental loss of notes and highlights.

Organizing a digital PDF library

As collections grow, organization becomes essential. Clear folder structures, descriptive filenames, and consistent naming conventions make it easier to manage PDF documents. Proper organization ensures that Wonderware Intouch Training Manual For Scada can be located quickly when needed.

Regular library maintenance—such as deleting outdated files and consolidating duplicates—keeps storage efficient and reduces confusion over multiple versions of the same document.

Accessibility considerations for PDF documents

Accessible PDFs are usable by a wider audience, including those using assistive technologies. Features such as selectable text, logical heading structure, and alternative text for images improve accessibility. When Wonderware Intouch Training Manual For Scada follows these practices, it becomes more inclusive and easier to navigate.

Accessibility enhancements also benefit all users by improving clarity, structure, and overall usability of the document.

Best practices for academic and professional use

In academic and professional environments, PDFs often serve as official records. Maintaining clean formatting, accurate

metadata, and consistent structure increases credibility. When distributing Wonderware Intouch Training Manual For Scada, attention to detail reinforces trust and professionalism.

Including proper references, citations, and hyperlinks within PDFs allows readers to explore related materials efficiently, adding depth and value to the document.

Long-term archiving and backups

PDFs are well-suited for long-term archiving due to their stability and standardization. Storing multiple backups of Wonderware Intouch Training Manual For Scada—both locally and in cloud environments—protects against hardware failure and accidental deletion.

Clear version labeling helps users track updates and revisions, preventing confusion when multiple editions exist over time.

Future-proofing your PDF usage

Although technology evolves, PDFs remain adaptable. Staying informed about updated standards and tools ensures continued compatibility. Periodically reviewing storage methods, reader software, and security practices helps keep Wonderware Intouch Training Manual For Scada accessible in the future.

Using widely supported PDF features rather than proprietary

extensions increases the likelihood that files will remain usable across platforms and devices for years to come.

Final thoughts on PDF best practices

PDF files are more than static documents; they are powerful containers for structured information. By applying effective navigation, organization, security, and accessibility strategies, users can maximize the value of Wonderware Intouch Training Manual For Scada. With consistent habits and thoughtful management, PDFs remain a reliable solution for learning, research, and professional documentation without unnecessary technical issues.