
Documentation and Analysis of Microsoft® Access Databases



For Microsoft Office Access



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Acknowledgments

We would like to thank the entire Microsoft Access community for their many years of support for Total Access Analyzer. Over the years, Total Access Analyzer has won numerous “Best Access Add-in” awards and rave reviews, and we are deeply in debt to all the people who trust us to solve their Access database needs.

As our first Access add-in, Total Access Analyzer is what made it possible for us to offer our extensive line of products for Access. Our success would not be possible without the strong endorsement of Access users and developers from around the world.

Thanks to the many existing users who provided valuable feedback and suggestions, and to all of our beta testers for their diligence and feedback.

Many people at FMS, Inc. contributed to the completion of Total Access Analyzer, including:

- **Product Design:** Luke Chung and Dan Haught
- **Lead Developer:** Luke Chung
- **Contributing Developers:** Dan Haught and David Juth
- **Quality Assurance:** Molly Pell and Aparna Pophale
- **Technical Support:** John Litchfield
- **Documentation:** Luke Chung and Molly Pell

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Welcome to Total Access Analyzer!

Thank you for selecting Total Access Analyzer. Total Access Analyzer is the world's premier database analysis and documentation program for Microsoft Access, and has won more awards than any other Access product. We would like to thank all of our loyal customers, and we trust that you'll find this version more valuable than ever.

Total Access Analyzer is developed by FMS, the leading developer of Microsoft Access products. In addition to Total Access Analyzer, we offer a wide range of products for Microsoft Access developers, administrators, and users:

- Total Access Admin (database maintenance control)
- Total Access Components (ActiveX controls)
- Total Access Detective (difference detector)
- Total Access Emailer (email blaster)
- Total Access Memo (rich text format memo fields)
- Total Access Speller (spell checker)
- Total Access Statistics (statistical analysis program)
- Total Access Startup (version launcher)
- Total Visual Agent (database maintenance and scheduling)
- Total Visual CodeTools (code builders and managers)
- Total Visual SourceBook (code library)

We also offer many award winning products for SQL Server, Visual Studio .NET, and Visual Basic 6. Visit our web site, www.fmsinc.com, for more information.

If you didn't purchase Total Access Analyzer directly from us, please be sure to register on line and sign up for our free email newsletter. This guarantees that you are contacted in the event of upgrades, news, and beta invitations.

Once again, thank you for selecting Total Access Analyzer.



Luke Chung
President

Chapter 1: Introduction

Total Access Analyzer provides comprehensive documentation and analysis of your Access database objects. Documentation for ACCDBs, MDBs, and ADPs is generated for tables, fields, indexes, relationships, queries, views, database diagrams, stored procedures, forms, reports, controls, macros (regular and embedded), modules, command bars, users, groups, security, import/export specifications and more. You can view and search the documentation using the treeview display, or print the output using any of the program's 300+ reports. Since all output is stored in Access tables, you can also query or export the data for further analysis.

Topics in this Chapter

- **User's Guide Overview**
- **Product Highlights**
- **New Features in This Version**
- **Visit Our Web Site**

User's Guide Overview

This manual is designed to get you up and running as quickly as possible. It contains general information about installing and running Total Access Analyzer, and special areas of interest are highlighted to help you get the most out of the program. In addition to this manual, be sure to use the online help file that comes with Total Access Analyzer, which may be more complete and up-to-date than the printed documentation.

The manual is organized into the following chapters:

Chapter 1: Introduction

Introduces Total Access Analyzer and provides a brief overview of the manual.

Chapter 2: Installation and Startup

Lists system requirements, installation instructions, preparation steps, information on running the program for the first time, and troubleshooting tips for common startup errors.

Chapter 3: Documentation Basics

Explains how documentation improves your development efforts, and describes the limitations of Total Access Analyzer.

Chapter 4: Generating Full Documentation

Provides instructions on how to select objects and specify documentation options.

Chapter 5: Viewing Documentation

Explains how to view the output generated by Total Access Analyzer.

Chapter 6: Searching Results

Explains how you can search the documentation results to find a string, property value, object name, or piece of code.

Chapter 7: Printing Documentation

Describes how to select and customize the output reports.

Chapter 8: Quick Documentation

Explains how to use the Quick Doc feature to generate simple documentation on individual objects.

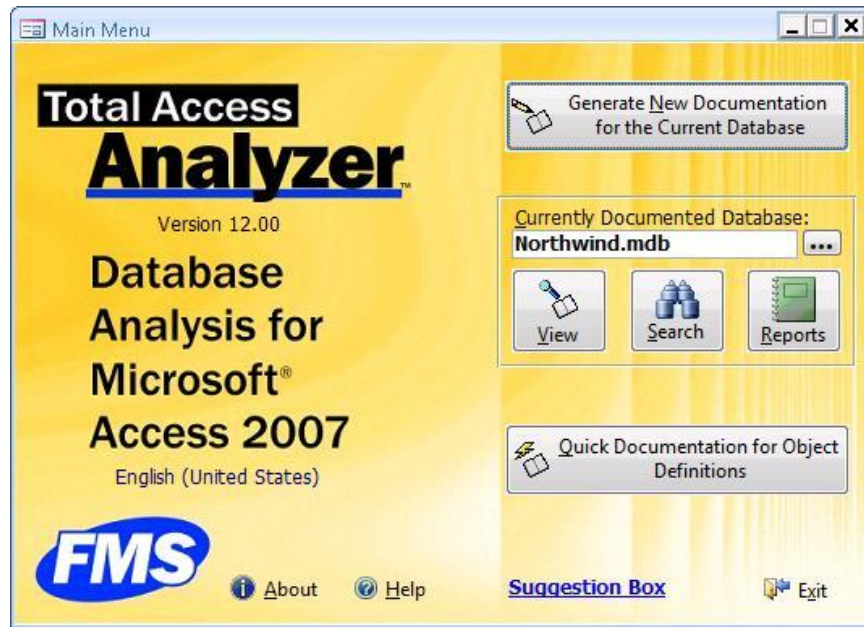
Chapter 9: Product Support

Provides resources for troubleshooting and obtaining technical support.



This manual assumes you are familiar with using Microsoft Windows and Microsoft Access. If you are not, please refer to the documentation accompanying those products.

Product Highlights



Total Access Analyzer 2007 Main Menu

Rave Reviews and Awards

The most popular Access add-in ever, Total Access Analyzer has received rave reviews and numerous awards, including every “Best Access Add-in” award since 1994. It is recognized as the premier tool for generating comprehensive documentation and analysis of Access databases, and many developers won’t ship their databases without running them through Total Access Analyzer first.

Comparison to the Built-in Documenter

Microsoft Access includes a built-in database documenter; however, its features are lacking for most Access users and developers. The built-in documenter only examines objects individually. It does not answer the critical question “Where is this object used?”, nor does it perform code analysis on your macros and VBA modules.

In addition to documenting individual objects, Total Access Analyzer is designed to analyze the entire database. Each object isn’t just considered by itself, but in relation to all the other objects in the database. It performs sophisticated analysis to show everywhere an object is used and the complex relationships between them. By examining the entire database, hidden information (such as references to fields or objects that don’t exist and objects that aren’t used) is revealed. Additionally, Total Access Analyzer documents offers almost 300 errors and improvement suggestions, and the ability to search for values across all your objects.

For more detailed comparisons, visit our web site:
<http://www.fmsinc.com/Products/analyzer/compare.htm>

Product Overview

Here are some highlights of Total Access Analyzer.

- Documents your Access databases and generates detailed views and 300+ reports of what’s in your database
- Detects and recommends almost 300 specific types of ways to fix, improve or speed up your application, including unused object and code analysis
- Detailed VBA code analysis with recommendations for applying coding Best Practices
- Generates diagrams to illustrate how your code and data flow across objects
- A powerful Search feature to locate strings, property values, and code within the documentation
- Completely Wizard driven, runs from the Add-ins ribbon, and offers a variety of filterable views and reports
- All results are stored in tables in a separate Access database that can be referenced in the future
- A Quick Doc feature to document basic information for individual objects and generate formatted module printouts

Basic Documentation

- Documents table fields, indexes, linked table information, and properties (including descriptions).
- Documents query type, SQL, included tables and fields, parameters, joins, and properties.
- Documents forms and reports with sections, controls, and properties including embedded macros.
- Generates form and report blueprints, showing their layout with annotated controls.
- Documents saved import/export specifications.
- Generates macro and module code listings with line numbers.
- Creates table relationship documentation with tables, fields, join type, and referential integrity settings.
- Documents workgroup, security, and permission settings.
- Documents ADP objects such as views, stored procedures, and diagrams.

Object Cross Reference

- Documents where and how objects reference each table, field, query, form, report, macro, and sub-macro.

Module Analysis

- Generates bracketed source code printouts showing where each loop begins, ends, and exits. Standardizes code indentations.
- Extensively analyzes modules, documenting definitions and usage of procedures, properties, variables, constants, user defined types, library declarations, events, classes, VBA functions, DoCmd, labels, TempVars, etc.

Hierarchical Diagrams

Cross reference documentation is only one level (what references an object). The diagrams in Total Access Analyzer illustrate the complex, multi-level hierarchy of those relationships.

For instance, the data flow diagram not only shows which objects reference a table, but also all the objects that reference those objects. Easily see how a table flows through a query, into another query, and into a subform that's referenced by a master form. See the objects that are impacted by modifying a table.

Total Access Analyzer offers three diagrams:

- **Application flow diagram**
Shows how your application flows across macros, objects, events, and procedures.
- **Data flow diagram**
Shows how your tables flow through the entire family of queries, forms, reports, and modules.
- **Object diagram**
Shows the family of objects referenced directly and indirectly by a form, report, or query.

Diagrams can show the entire application hierarchy, and can also be “redrawn” to display and print the hierarchy of a single object.

Errors, Suggestions and Performance Tips



A complete list of Errors, Suggestions and Performance Tips is available in Total Access Analyzer’s System Reports.

Errors

One of Total Access Analyzer’s most valuable features is its ability to detect errors in your database, including many hidden bugs that cause your database to crash when it is run. While no automated tool can catch every possible bug, Total Access Analyzer finds many types of problems and offers suggestions about how to resolve them. In fact, many developers won’t ship a database until it passes Total Access Analyzer’s analysis.

Suggestions Offered

Based on our experience developing Access applications and feedback from our customers, we’ve discovered a wide range of “Best Practices” techniques. Many of these tips can be detected and are offered to help users and developers improve their databases and learn better styles.

Suggestions are issues that are not likely to cause the database to crash, but that should be addressed to clean up the database and simplify future maintenance.

Performance Tips

Total Access Analyzer includes several Performance Tips to help you optimize your database. The Performance Tips detected by Total Access Analyzer include:

Output Reports

Over 300 presentation quality reports are available with a variety of sorting options, including:

- Database summary (overview)
- Lists and detailed reports of every object type
- Table structure reports including field descriptions
- Field dictionary reports to see where and how the same field name is defined across different tables
- Report Page Setup summary report to quickly see the orientation and margins of all the reports
- Module printouts including a basic listing and a formatted, bracketed source code report clearly showing every loop
- Summary for each module and class revealing their public interface and summary of private items
- Detailed module cross reference reports for procedures, variables, DoCmd, VBA functions, events, labels, user defined types, and many other parts of module code
- Diagram reports for Application, Data, and Object Flows

New Features in This Version

Total Access Analyzer 2007 offers many significant enhancements from the Access 2003 version, including:

Support for the New Features of Access 2007

- Supports the new ACCDB database format
- Documents and cross-references the new embedded macros in Access forms and reports
- Supports new Access 2007 macro commands
- Supports new Access 2007 VBA commands
- Documents saved import/export specifications
- Documents links to SharePoint
- Documents the use of variables tied to the TempVars object

General Enhancements

- Redesigned user interface to support the sleeker Office 2007, Vista/XP look and feel including support for Tabbed views
- Main screen redesign to simplify the context of the currently documented database and opening previous documentation
- The use of transparent buttons with graphics
- Datasheet filtering for object selection and viewing results

- Improved module syntax analysis
- Rather than storing output databases for your documentation in the Total Access Analyzer folder by default, it now stores it in your Application Data folder

Documentation Wizard Enhancements

- Documentation of databases that are not compiled is allowed after accepting a warning message, but your code should still compile
- Addition of a Finish button once objects are selected to bypass the last two wizard pages

New Module VBA Documentation

- Detects table/query references from the open command of ADODB recordsets and adds this to the Object XREF views and reports
- Detects explicit control references from code (e.g. Form_MyForm.txtValue) with new Object XREF reports

Viewing Documentation Results

- Enhanced switching to design view for the current object whether it's from the Diagrams, XREF, Errors, Suggestions, and Performance Tips tabs
- Significantly improved performance when viewing results, and looking at detailed property lists for one object or across all objects of one type

New Suggestions and Performance Tips

- Eliminate/Consolidate duplicate queries: Identical SQL Analysis to determine if the same SQL string is used across multiple queries, or the recordsource of forms and reports
- Checking and recommending the settings of the new Access options like tabbed view, Search Bar, datasheet design change option, etc.
- Forms with navigation bars should have a Navigation Caption
- Command Buttons should show Hyperlink Hand on mouse hover
- Datasheet and continuous forms should take advantage of the new alternating background color option
- Unused forms and reports
- Module analysis:
 - Use of old constants from pre-Access 97 syntax
 - Procedures with exits in the middle of its body
- New Access option for database picture property storage to reduce database size

Report Enhancements

- Reports can be sent to the new Report View which supports your ability to filter the results interactively
- Individual or multiple reports can be exported to formats such as HTML, PDF, RTF, Snapshot, Text, and XPS files to a folder
- The list of reports excludes reports with no data

New Reports

There are over 300 professional quality reports with the option to Preview, Print, Report View, or export. Here are some of the new reports:

- New Access Options reports
- Import Export Specifications
- Embedded macros and what they cross-reference
- TempVars assignments and cross-reference
- Objects with Identical SQL and RecordSource
- Unused forms, reports, and code
- Enhanced Database Summary reports
- Table field property slice reports

Search Enhancement

- Search lets you view results and jump directly into design view of the currently selected item

Visit Our Web Site

FMS is constantly developing new and better developer solutions. Total Access Analyzer is part of our complete line of products designed specifically for the Access developer. Please take a moment to visit us online at **www.fmsinc.com** to find out about new products and updates.

Product Announcements and Press Releases

Read the latest information about new products, new versions, and upcoming products. Press releases are available the same day they are sent to the press. Sign up in our Feedback section to have the latest news automatically sent to you via email.

Product Descriptions and Demos

Detailed descriptions for all of our products are available. Each product has its own page with information about features and capabilities. Trial versions for most of our products are also available.

Product Registration

Register your copy of Total Access Analyzer online. Be sure to select the email notification option so you can be contacted when updates are available or news is released. You must be registered to receive technical support.

Product Updates

FMS is committed to quality software. When we find problems in our products, we fix them and post the new builds on our web site. Check our Product Updates page in the Technical Support area for the latest build, or see **Using the Update Wizard** on page 15 for information about how to check for the availability of updates.

Microsoft Access Help Center

Our help center centralizes our resources for Microsoft Access users and developers.

Technical Papers

FMS personnel often speak at conferences and write magazine articles, papers, and books. Copies and portions of this information are available to you online. Learn about our latest ideas and tricks for developing more effectively.

Newsgroups

Share your experiences, learn from others, and ask your questions in our virtual community. Visit our newsgroups at:

www.fmsinc.com/support/newsgroup.htm

Or see our web site for additional instructions.

Links to Other Sites

Jump to other locations, including newsgroups, user groups, and other sites with news, techniques, and related services.

Chapter 2: Installation and Startup

Total Access Analyzer comes with an automated setup program to get you up and running as quickly as possible. This chapter describes the system requirements, installation steps, and instructions for uninstalling. It also provides information about running the program for the first time, and tips for troubleshooting startup errors.

Topics in this Chapter

- **System Requirements**
- **Upgrading from Previous Versions**
- **Installing Total Access Analyzer**
- **Using the Update Wizard**
- **Uninstalling Total Access Analyzer**
- **Preparing for Documentation**
- **Starting Total Access Analyzer**
- **Microsoft Visual SourceSafe (VSS)**
- **Startup Errors**

System Requirements

Total Access Analyzer is a Microsoft Access library database that runs within Access. Its system requirements are similar to the requirements of Microsoft Access, and include:

- A copy of the Microsoft Access version corresponding to the Total Access Analyzer version.
- Hardware and operating system supported by Microsoft Access.
- 40 MB free disk space to install the product, and additional disk space to store your documentation.

Upgrading from Previous Versions

Just like multiple versions of Microsoft Access can reside on the same machine, multiple versions of Total Access Analyzer can be installed—just make sure to install them in separate folders. Each version of Total Access Analyzer is a completely separate program, and files are not shared between versions. If you no longer use a version of Total Access Analyzer, you can remove it without affecting other installations (see page 15 for details).

Installing Total Access Analyzer

Total Access Analyzer is installed using an automated setup program. To install Total Access Analyzer, follow these steps:

1. Locate and run the setup program.
2. When prompted, enter your registration information and product key (serial number).
3. Specify the destination directory for the files.
4. Be sure to read the readme file for any late breaking news that is not included in the manual or help file.

Where to Install Total Access Analyzer

For best performance, install Total Access Analyzer on a local hard drive. Installing to a network drive may cause slower performance.

By default, Total Access Analyzer creates temporary files and stores its output in your Windows Application Data folder (you can change this). Regardless of where you install the program, it can document databases stored locally or on a network.

If you install Total Access Analyzer on a network drive, each user must have full rights to that folder. Do not make the folder read-only.

Installing Total Access Analyzer on a network drive allows you to save space on your local system and allows multiple network users to run Total Access Analyzer (but not at the same time). You must purchase a copy of Total Access Analyzer for each developer who uses the program. FMS offers quantity discounts to economically add developer counts.

List of Files Installed

The INSTALL.LOG file in the Total Access Analyzer installation directory lists the files installed plus a complete log of the Total Access Analyzer setup, including overwritten files, and the registry entries and Start Menu items created.

Using the Update Wizard

Total Access Analyzer includes a built-in mechanism to check the availability of updates via the Internet. If you have an active Internet connection, you can use the Total Access Analyzer Update Wizard to ensure that you have the latest version.

To run this program, press the Windows Start button and select Programs, FMS, Total Access Analyzer, Update Wizard. Follow the prompts to check for the latest update.

Uninstalling Total Access Analyzer

Total Access Analyzer follows standard Windows installation protocol, so uninstalling is straightforward:

From the Windows Start Menu, select Control Panel, then

Windows Vista

1. Select Uninstall a Program (in Programs section)
2. Select FMS Total Access Analyzer from the list of installed programs
3. Click on Uninstall/Change

Windows XP

1. Select Add/Remove Programs
2. Select FMS Total Access Analyzer from the list
3. Press the Change/Remove button
4. Then, follow the prompts to uninstall.

Please note that uninstalling does not delete any documentation databases that you created with Total Access Analyzer. If you want to remove these files, use Windows Explorer to locate and delete the files, which all have the *.TDB file extension.

Preparing for Documentation

Before documenting your database with Total Access Analyzer, make sure your database is ready. By understanding the issues listed here, you can document your databases more rapidly and effectively.

Have permissions for all objects

In order for Total Access Analyzer to document objects, it needs to open them in design mode. Ideally, you should open Access as the owner of the database with sufficient permissions for all objects. You must have at least **Read Definitions** permission for each object that you wish to document.

Make sure the database is not being used

You should be the only one in the database when you document it. This ensures that you have full access to all objects that Total Access Analyzer examines, and that your results are consistent. If this is not possible because your database is shared on the network, make a local copy to document. Total Access Analyzer can still run in a shared situation, but may generate incomplete results in cases where users are modifying objects or have objects open.

The best way to avoid this situation is to open your database in Exclusive mode (by selecting the Open Exclusive option on the [Open] button in the Open Database dialog).

Make sure your database is not corrupt

Total Access Analyzer cannot document corrupt or damaged database objects. We recommended compacting and repairing your database before running Total Access Analyzer.



Tip

For optimal performance, your databases should be regularly compacted and backed up. If you do not have an automated process in place, consider Total Visual Agent from FMS, which automates these administrative chores. For more information and a trial version, visit <http://www.fmsinc.com/Products/Agent/>

Verify linked tables for MDB and ACCDBs

If your Jet database contains linked tables, check your table links before generating documentation. Broken links often occur when linked databases or their objects are renamed or moved. Total Access Analyzer flags tables that are not linked properly, but it cannot document its properties, child objects, etc. It will also have problems documenting objects referencing those tables. You should make sure that all the links to external tables are

valid by using the Linked Table Manager available from the Navigation Pane when you right click on table.

Verify connection for ADPs

If your database is a Microsoft Access Project (ADP), then you must ensure that it is properly connected to its back-end server (the SQL Server, SQL Express, or other database containing its data objects). If a connection cannot be established, Total Access Analyzer cannot document the database.

Make sure your code compiles

Your module code must contain valid syntax if you want Total Access Analyzer to perform module cross referencing, which documents your procedures, variables, etc. Open one of your modules or press [Alt-F11] and select Debug|Compile <project name> from the menu. After correcting any syntax errors, select File|Save <project name>. This instructs Microsoft Access to compile and save all of your module code, including code behind forms and reports. Your project remains in a compiled state until you make additional changes to your database's VBA project.

Have sufficient disk space for output

Make sure the drive containing the Total Access Analyzer output directory has enough free space. By default, this is in your Application Data folder under Total Access Analyzer, 12.0, Output.

If you are generating blueprints, cross reference documentation, or all properties for all objects, a large amount of disk space may be required. The amount of space is based on the documentation options and the number and complexity of the objects selected. It is not based on amount of data stored in your database. Unfortunately, Total Access Analyzer cannot determine the amount of space required before documenting your database. It is not surprising, however, to have an output database that is many times larger than the database that you are documenting.

Make a backup copy of your database

We have tried to anticipate every possible situation that could cause unwanted results in your database during documentation. However, unexpected problems with Microsoft Access, Windows, or your hardware can cause problems that damage your database. You should always have a backup copy of your database before you run any utility program, including Total Access Analyzer. This ensures that you can recover from a system failure.

Starting Total Access Analyzer

Total Access Analyzer runs from within Microsoft Access. The program is a Microsoft Access Add-in and uses Microsoft Access forms, reports, tables, and queries. If you are familiar with Microsoft Access, you should feel very comfortable using Total Access Analyzer. Follow these steps to run the program:

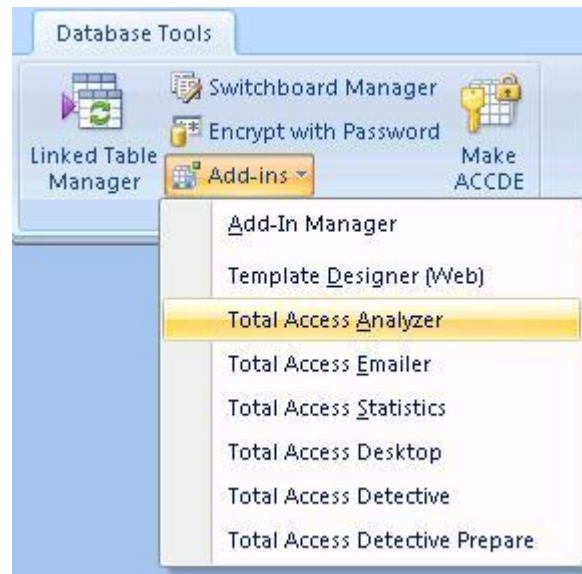
1. Start Microsoft Access.
2. Open the database to document. Select the Open Exclusive option if there's a chance that someone else may modify it during the documentation process. You do not need to enable the code in your database for Total Access Analyzer to document it.



Tip

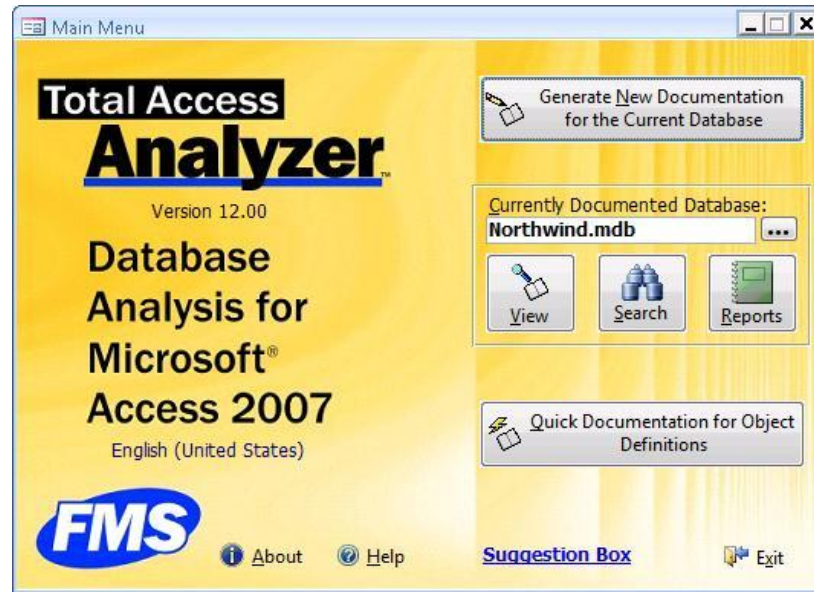
If you have an AutoExec macro or Startup form in your database, other objects may be automatically opened. To ensure that these objects do not interfere with Total Access Analyzer, close any open objects except the database window, or hold down the [Shift] key while clicking the [Open] button in the dialog box to prevent these objects from opening.

3. From the Database Tools ribbon, select Add-ins, then Total Access Analyzer:



Starting Total Access Analyzer

The main form appears:



Initial Screen

Documenting Databases on a Network

Total Access Analyzer allows you to document a database that resides on a network drive, but we recommend documenting local copies of these databases for a couple of reasons:

1. When you document a database, make sure no other users are using or designing objects. Total Access Analyzer cannot document objects that other users have open or locked.
2. Performance over a network connection is substantially slower than accessing a local drive. Total Access Analyzer is a disk-intensive program—it needs to open your objects in design view and read all properties and definitions. Because of this, running across a network connection may cause slower performance in Total Access Analyzer and may affect other users on the network.

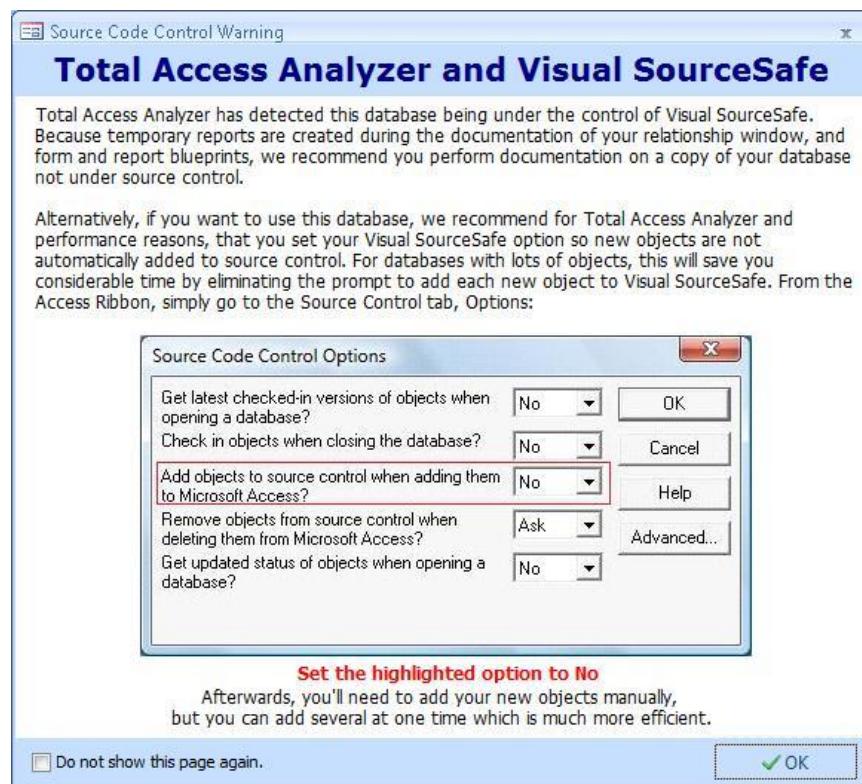
Context Sensitive Help

Throughout Total Access Analyzer, you can press the [Help] button or [F1] to view context-sensitive help. The help system is fully indexed with many jumps between topics. Most of this manual is in the online help system, which may also include more up-to-date information.

Microsoft Visual SourceSafe (VSS)

Microsoft Visual SourceSafe (VSS) is part of MSDN and can be used with Microsoft Access for version control. It is installed with the Access developer extensions program and lets you manage changes to your database objects with features such as check-in/check-out, rollback, version control, etc. It's great for multi-developer environments but also helpful for individual developers.

If your database is under Microsoft Visual SourceSafe control, a warning message appears when you launch Total Access Analyzer. The warning message recommends that a VSS option be set to No, so that you are not prompted when a new object is created.



Visual SourceSafe Warning

In the course of generating some of the documentation (form and report blueprints, and the relationship window reports), temporary objects get created in your database. If VSS is managing your database, and is set to prompt when new objects are created, a warning message will disrupt the documentation process, and require you to manually answer it each time. To avoid this, follow the instructions in the form and set your VSS option to

No. Check the “Do not show this page again” box to avoid this form in the future.

Disabling Visual SourceSafe

There are situations where a database under Visual SourceSafe (VSS) control may take a long time to document. To improve performance, create a copy of your database and remove that copy from VSS control. You can do this by compacting your database to a new name and answering “Yes” when prompted to remove the new database from VSS. Run Total Access Analyzer on that copy.

Startup Errors

Most errors that occur with Total Access Analyzer happen when you first start it. This section explains the most common problems how to fix them.

The Wizard you’ve requested is not installed or is in a bad state. Please install or reinstall the wizard.

This error is usually caused by a problem in the Microsoft Access registry setting for the Total Access Analyzer add-in. When you install Total Access Analyzer, it places entries in the Windows Registry to identify the location and name of the Total Access Analyzer library database and the name of the main Total Access Analyzer function.

If these entries are incorrect, or if the Total Access Analyzer program becomes corrupt, this error message appears. To resolve this issue, make sure the Windows user logged on has permissions to write to the Windows Registry, and re-install Total Access Analyzer from its setup program.

Current database is not updateable

This error indicates that you have opened the current database in read-only mode, or another condition has forced the database to be read-only (such as a read-only operating system attribute set for the database file or folder). Total Access Analyzer cannot document a database opened in read-only mode. To resolve this issue, either open the database in normal (not read-only) mode, or create a copy of the database with update rights for documentation purposes.

This copy of Total Access Analyzer is currently in use. Please try again later.

Total Access Analyzer can be installed on a shared or network drive, but can only be used by one user at a time. If more than one user attempts to start Total Access Analyzer at the same time, the second user sees a dialog box saying the copy of Total Access Analyzer is already in use.

This message also appears if you attempt to run Total Access Analyzer in two instances of Access on the same workstation. Press [OK] to return to Microsoft Access and try again after closing the other instance of Total Access Analyzer.

If Microsoft Access exits abnormally while Total Access Analyzer is running, an LDB lock file may be left in place that erroneously reports that Total Access Analyzer is in use, even though no one is using the program. If this happens, you should manually delete the lock file by following these steps:

1. Ensure that no other users are running Total Access Analyzer. This step is very important—if you manually delete the lock file while a user is running Total Access Analyzer, you may cause that user's copy of Analyzer and/or Access to crash.
2. Exit all instances of Microsoft Access.
3. Locate the directory in which you installed Total Access Analyzer, and delete the lock file (TAA_C.laccdb).
4. Restart Microsoft Access, and run Total Access Analyzer again.

Total Access Analyzer cannot be called from this database

This error occurs if you try to load Total Access Analyzer while the database (TAA_C.ACCDE) is open in another instance of Microsoft Access. Close the Total Access Analyzer database, open another database from Microsoft Access and restart Total Access Analyzer from the Database Tools | Add-Ins ribbon.

If you encounter other problems, please be sure to read **Chapter 9: Product Support** for more information about troubleshooting and obtaining technical support.

Chapter 3: Documentation Basics

This chapter explains the importance of documentation and how Total Access Analyzer can help you build better applications. This chapter provides an overview of using Total Access Analyzer, and the difference between documentation and analysis. Make sure you read the Limitations section to understand what Total Access Analyzer cannot do.

Topics in this Chapter

- **Why Document?**
- **ACCDB/MDB vs. ADP Documentation**
- **Documentation Process**
- **Documentation Limitations**
- **Documentation Limitations for ADPs**

Why Document?

Documentation is an essential part of application development and maintenance. Microsoft Access provides a great deal of control over the appearance and behavior of objects and controls. As your application grows, objects, properties, code, and relationships between objects become more numerous and complex. Without a consistent, automated documentation and analysis tool, development and maintenance becomes a major chore. Total Access Analyzer is designed to reduce and eliminate many of the tedious and difficult parts of documentation. You can use Total Access Analyzer in a variety of situations:

During Development

As you design new objects and relate them to other objects, documentation and analysis can be invaluable when selecting fields, creating expressions, and calling forms, reports, and queries. As you develop your application, you can run Total Access Analyzer to generate reports of table structures, form properties, modules, etc. for quick reference. Such information is vital for maintaining consistency across objects. Total Access Analyzer also detects errors and suggests specific ways to help you write better and faster solutions.

Maintaining an Inherited System

One of the most difficult aspects of taking over an existing database is determining what is in the database. Because Total Access Analyzer provides comprehensive analysis of your database, you can quickly get up to speed on an unfamiliar project. The application diagrams are particularly useful.

Providing System Documentation

As a developer, you are probably responsible for creating detailed system documentation. Total Access Analyzer eliminates much of the work, making it easy to supply professional, comprehensive, and accurate documentation in both printed and electronic format. You can even customize the header and footer of the reports in Total Access Analyzer to include your project name, your name, and/or your firm's name. See page 130 for more information

Increasing Application Quality

Before you start using or distributing your Access application, you need to test it. Done manually, this is a time-consuming, incomplete, and error-

prone task. Total Access Analyzer automatically finds many types of errors and performance problems in your application, and provides you with suggestions for improvement, minimizing what you need to test. Examples include:

- Invalid references to tables, fields, queries, forms, reports, macros, and procedures
- Linked tables with incorrect connections
- Queries with errors in their SQL strings
- Command buttons on forms without a hyperlink jump or code in their OnClick events
- Form controls with identical hotkeys
- Forms controls not in default tab order
- Reports tied to explicit printers rather than the default printer
- Procedures called with the wrong number of parameters
- Unused tables, queries, forms, reports, macros, sub-macros, procedures, variables, classes, and user defined types
- Global procedures that should be private
- Debug and Stop statements in your code
- Variables and functions that are not typecast
- Variable names that conflict with global and module-level variables
- Performance problems in your tables, queries, forms, reports, macros, and modules
- Performance problems with your database, your installation of Windows, and your computer

For more information about the Errors, Suggestions, and Performance items detected by Total Access Analyzer, see page 67.

ACCDB/MDB vs. ADP Documentation

Beginning with Access 2000, Access offered a new type of database, Access Projects (ADPs). This type of database uses SQL Server for its data storage rather than the Jet Engine ACCDB/MDB format.

The ACCDB format is the MDB format introduced with Access 2007. When compared against ADPs, MDBs and ACCDBs should be considered similar (they are both Access Jet Engine databases), so rather than referring to both ACCDB and MDB, we'll simply use MDB or Jet.

Because of the many differences between ADPs and MDBs and ADPs and the way add-ins work with them, there are significant differences with the documentation Total Access Analyzer generates and the way it behaves.

Certain object types are similar between MDBs and ADPs. For instance, forms, reports, macros, modules, and command bars are essentially the same and the documentation for those objects is identical.

Some objects only exist in one and not the other:

Type	ACCDB/MDB Jet Databases	Access Data Projects (ADPs)
Objects	Queries	Views Database Diagrams Stored Procedures
SQL Syntax	Access SQL can reference objects/controls and VBA	Transact SQL (TSQL)
Data	Local or linked tables	Links to SQL Server tables
Table Features		Keys Triggers

Total Access Analyzer generates the appropriate documentation for all of these objects.

Both MDBs and ADPs have tables, but they are different. The documentation of the tables is also different. Fields in MDBs are called Columns in ADPs. ADP tables also have Keys and Triggers. Again, these are documented based on the database type.

Due to the differences, the way documentation is displayed and the reports available differ for ACCDBs/MDBs and ADPs. Details of these differences are provided in **Chapter 5: Viewing Documentation**.

See **Documentation Limitations for ADPs** on page 31 for information about the limitations of ADP documentation.

Documentation Process

Total Access Analyzer works by examining the objects in your database. As it documents the database, Total Access Analyzer writes the results to tables in an output database you specify. Although the documentation process may create temporary objects in your database, no changes or permanent additions are made.

To generate documentation, you need to follow a series of steps. Before starting, decide if you need quick documentation or full documentation.

Quick Doc Documentation

Quick Doc documentation is a subset of Full Documentation that quickly provides basic information about individual objects. It does not perform analysis across multiple objects (including cross reference information and diagramming). You can use Quick Doc to document:

- Database Information and Object Inventory
- Table Structures and Properties
- Query Properties
- Relationships
- Form Properties and Blueprints
- Report Properties and Blueprints
- Macro Line Listings
- Module Code Printouts
- Command Bar Properties
- ADP Views
- ADP Database Diagrams
- ADP Stored Procedures

Follow these basic steps to generate Quick Doc documentation:

1. Open the database you want to document
2. Start Total Access Analyzer
3. Choose [Quick Documentation...] from the main menu
4. Select the object(s) to document
5. Generate the documentation
6. Preview, print, or export reports

For more information about Quick Doc, see **Chapter 8: Quick Documentation**.

Full Documentation

Full Documentation includes the Quick Doc features, but goes much further by providing extensive analysis. Because of this, full documentation takes more time.

Full documentation provides:

- Cross reference information showing where and how objects are referenced throughout your database
- Module analysis including listings and cross referencing of procedures, variables, constants, labels, etc.
- Hierarchical diagrams of how your application works
- Errors and suggestions to fix and improve your database
- Performance tips

Follow these basic steps to generate Full documentation:

1. Open the database you want to document
2. Start Total Access Analyzer
3. Choose [Document] and select the objects to document
4. Select the documentation options
5. Generate the documentation
6. View the documentation
7. Preview, print or export reports

Total Access Analyzer makes these steps easy with the Documentation Wizard. A principal design goal of the program is to allow you to generate documentation as quickly and easily as possible. For more information on Full Documentation, see **Chapter 4: Generating Full Documentation**.

Difference between Documentation and Analysis

Total Access Analyzer generates two distinct types of information: documentation and analysis. Documentation consists of information about an individual object's design. Table structures, form and report properties, query SQL strings, permission settings, and user and group information are examples of this type of information. The documentation provided by Total Access Analyzer is information about how each object is structured. It is very comprehensive and covers every object you select for documentation.

Analysis shows more complex information such as how objects are related to each other, module code details, and errors in your application. Much of the analysis is based on the Documentation results, but Analysis also includes the module cross reference information. This involves searching through a lot of data to reveal where objects are used, and to find other highlights or discrepancies. Examples include the diagrams, cross reference information, module details, and the list of errors, suggestions, and performance tips.

Documentation Limitations

Although Total Access Analyzer documents and analyzes most objects and links in your database, there are some limitations:

Errors with Objects

- Your VBA module code should compile for Total Access Analyzer to run. To compile your code, open any module, and select Debug|Compile <project name>. This performs a syntax check on all of your module code. As syntax errors are highlighted, fix them and continue invoking the Debug|Compile <project name> command

until all errors are gone, then select File|Save <project name> to save the compiled state of your VBA project.

- If an object cannot be opened for documentation, the references it makes to other objects are not documented.
- If a query's SQL property has a syntax error, the query and its references are not documented.

Data Access Pages Are Not Documented

Data Access Pages can exist in MDB and ADP files, and Access 2007 runs them. However, Access 2007 cannot put Data Access Pages in design mode. If you try, it instructs you to use Access 2003 instead. As a result, Total Access Analyzer 2007 cannot document them.

Object References

Total Access Analyzer effectively detects explicit object references, but there are some cases where it cannot determine which object is referenced, and therefore cannot verify that the reference exists.

References that are Resolved

These references are always documented properly for MDB and ACCDBs:

- Tables used by queries
- Tables, queries, and fields used by forms, and reports
- Macros called from events and other macros
- Objects opened by macros including embedded macros
- Command bars linked to forms and reports

Explicit object references in code are also documented, including references using constants:

```
Const cstrTableName = "MyTableName"  
Set rs = db.OpenRecordSet(cstrTableName)  
DoCmd.RunMacro "MyMacroName"  
DoCmd.RunQuery "MyQueryName"  
DoCmd.OpenForm "MyFormName"
```

When Total Access Analyzer detects a field or object reference, it checks whether the object exists. If it does not exist, the reference is stored as an error. This is an extremely powerful feature, since it validates all of your application's object references.

References that are Not Resolved

There are situations where Total Access Analyzer is unable to determine the referenced objects.

In module code, references to objects within an expression, variable, or function are documented but flagged as unresolved. Because the value of expressions, variables, and function return values is only known at runtime, Total Access Analyzer cannot determine the name of the referenced object. This is particularly important if you have a “table-driven” or “registry-driven” system where object names are stored in tables or the registry and not your code.

When an object is referenced with a variable, Total Access Analyzer records the reference in the cross reference documentation, and sets the [Variable] field to “Yes” and the [Resolved] field to “No.” This allows you to find the references that you need to manually resolve. The following are some examples that cannot be resolved:

```
DoCmd.RunMacro "Sales " & x
DoCmd.OpenTable "Customers For " & "2004"
DoCmd.RunQuery strQueryName
DoCmd.OpenForm MyTestFunction()
```

The following is another reference (to MyTable) that cannot be detected:

```
strSQL = "SELECT DISTINCTROW * FROM MyTable"
set rs = db.OpenRecordSet(strSQL)
```

Due to the inability to document data access pages, table and query references in data access pages are not documented.

Library Databases

References to variables, procedures, or objects in Library Databases or databases linked to your database with the References menu are also not resolved. Only references to objects in the database being documented can be resolved.

Hyperlinks in Tables

Total Access Analyzer does not document or verify hyperlinks stored in hyperlink fields in Access tables. Hyperlinks on forms or in code using the FollowHyperlink command are documented.

EVAL Statements

Total Access Analyzer cannot document references to procedures, variables, or other types of objects if the reference is made within an EVAL() function.

Ribbons

Total Access Analyzer does not document references defined in ribbon XML text.

Class Module References

Most class module references are properly documented. If you explicitly invoke a class module's method or refer to its property, the reference is documented:

```
Dim varName As New ClassName
Form_MyForm.MyMethod
Forms("MyForm").MyMethod
```

These references are not documented:

```
Dim varName As Object
Forms(MyFormVariable).MyMethod
```

Additionally, class references from elements of user-defined types are not documented.

Problems with Unresolved References

Unresolved references cause two major problems:

- The referenced object cannot be verified (it may or may not exist).
- Objects may be incorrectly flagged as unused. Unused objects are objects with no references from other objects. If an object is referenced in a way that Total Access Analyzer cannot detect, it may be incorrectly flagged as unused. Check the Object XRef reports for variable references to understand the references in the database that could not be resolved (see page 142 for more information).

Documenting MDE, ADE, and ACCDE Databases

Databases that are converted to MDE, ADE, or ACCDE files do not allow viewing of the code-bearing objects: forms, reports, and modules. Because of this, Total Access Analyzer cannot analyze these objects in these files.

Documentation Limitations for ADPs

In addition to the limitations listed above, there are some additional limitations associated with the documentation of ADPs:

Transact SQL Syntax

The Transact SQL (TSQL) syntax of ADPs is not examined for references to other objects. Therefore, references to data objects such as Tables, Views, and Stored Procedures in Views, Stored Procedures, and TSQL used in Form and Report RecordSource or RowSources are not available.

Direct references (without TSQL) to objects from form and report RecordSource and RowSources are documented.

Field Cross Referencing

Because Transact SQL is not analyzed, field cross referencing is not performed for ADPs.

Object Cross Referencing

Because Transact SQL is not analyzed, table and view cross reference is incomplete in ADPs. Therefore, the documentation of unused tables and views is not generated for ADPs. Similarly, the Data Diagram and Object Diagrams are not available.

For module cross reference, procedures passed through Input Parameters are not documented.

Security Documentation

Security settings for the underlying SQL Server/MSDE database are not documented.

MDB Only Objects

Certain objects, such as Queries, Documents, Containers, and Relationships, are unique to MDBs and ACCDBs. Because of this, these types of objects do not appear in the documentation for an ADP.

Chapter 4: Generating Full Documentation

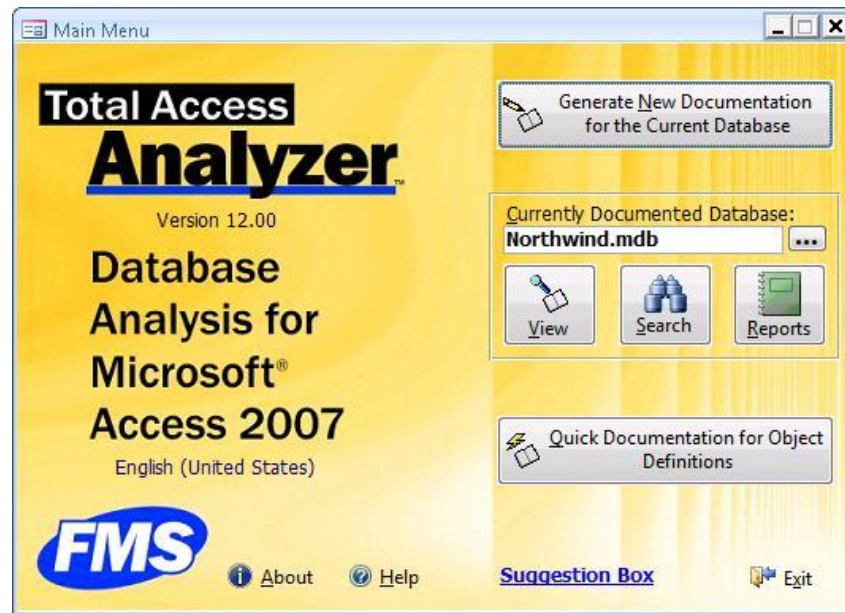
Now that you have a basic understanding of what Total Access Analyzer does, you are probably eager to generate full documentation of your databases. This chapter shows you how to generate the results you want with Total Access Analyzer. It explains how to select objects and documentation options, specify an output database, generate results, and troubleshoot problems that may occur. The Quick Start section is available to get you running quickly, and a more detailed description follows to explain all of the available options.

Topics in this Chapter

- **Main Form**
- **Documentation Wizard Quick Start**
- **Page 1: Selecting Objects to Document**
- **Page 2: Specifying General Options**
- **Page 3: Output Database and Scheduling**
- **Generating Documentation**
- **Troubleshooting Documentation Failures**

Main Form

After preparing your database for documentation (explained on page 16), you're ready to start using Total Access Analyzer. With the database you want to document open, start Total Access Analyzer from the Database Tools | Add-ins ribbon. After a moment, the screen appears:



Total Access Analyzer 2007 Main Form

The buttons on this form guide you through the process:

Generate New Documentation

This launches the Wizard that generates full documentation of your database. From this wizard you can select the objects to document, set documentation options, specify the output database name, and start or schedule documentation. When documentation finishes, you return to this Main Menu form.

Currently Document Database



Current Documentation Options

The currently documented database is displayed. You can change this by selecting the [...] button. The View, Search, and Reports buttons apply to the currently selected documentation.

View

After you generate the documentation and analysis, this button lets you browse the results in the Documentation Explorer. You can also retrieve and view documentation previously generated for other databases.

Search

After you generate the documentation and analysis, the Search feature lets you find all places that a string (word or phrase) occurs in the documented objects properties or lines of code (macro and modules).

Reports

After you generate the documentation and analysis, the [Print] button lets you access the Total Access Analyzer reports. You can preview any report and send multiple reports to your printer. You can also filter many of the reports to include only a subset of the documented objects.

Quick Documentation

The [Quick Documentation..] button launches a Wizard that quickly generates basic documentation of individual objects in the current database. This is performed without the full documentation and analysis features under the [Generate New Documentation...] button. See **Chapter 8: Quick Documentation** for more information.

Exit

This button closes Total Access Analyzer and returns you to Microsoft Access. Your database remains open and your workspace is reset to its original state. All settings and documentation in Total Access Analyzer are automatically saved.

Help

The online help system is available by pressing the [Help] button or [F1].

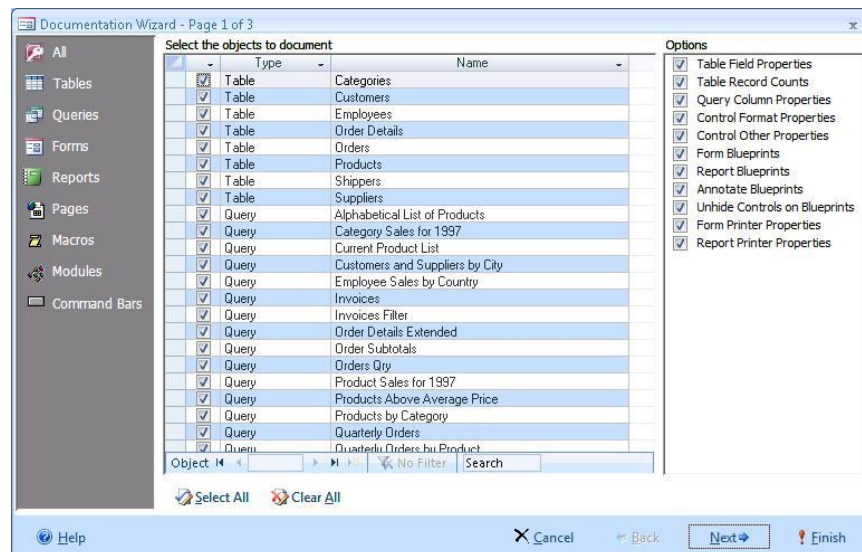
About

This button displays information on your version of Total Access Analyzer. It also allows you to generate a log file that includes information about your installation.

Documentation Wizard Quick Start

After pressing the [Generate New Documentation...] button, a Wizard guides you through the process of specifying the desired documentation. A summary of each screen is listed with suggestions for how to use it quickly. More detailed information is provided for each option in the following sections.

Page 1: Select the Objects to Document



Documentation Wizard (Page 1)

All database objects are displayed, and the icon menu on the left lets you display the items and options by object type. Basic documentation is generated for every object selected, and the options in the right column let you specify optional documentation. For more detailed information, see page 39.

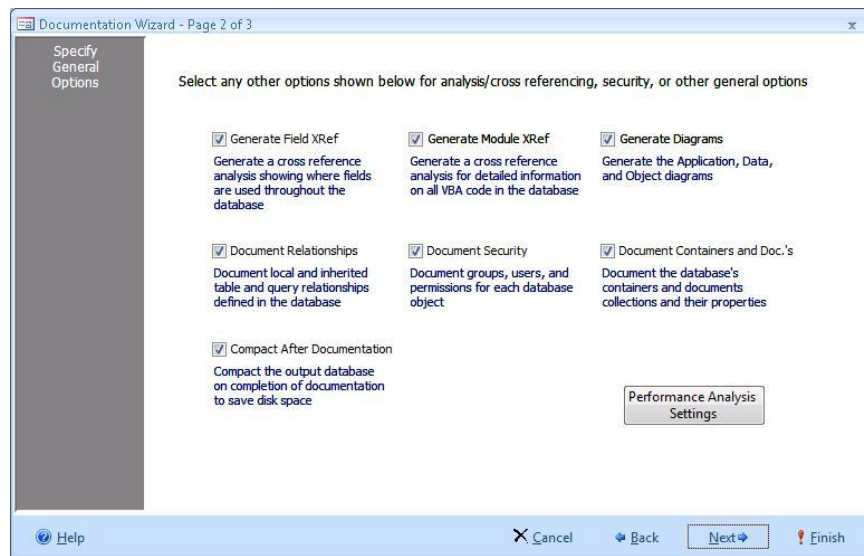
Quick Tips:

The more items you select, the more time it takes to document your database. If time is not an issue or if your database is relatively small, we suggest that you select these options:

- Choose all objects:
 - Select [All] from the icon menu to display all objects.
 - Press the [Select All] button to choose all objects.
- Eliminate built-in command bars unless you've customized them:
 - Select [Command Bars] from the icon menu.

- Click on the option button “Built-In” and press the [Clear All] button to deselect the built-in command bars.
- Choose all the options except for these:
 - Choose “Control Format Properties” only if you need information on the format properties of every control (height, width, color, font, etc.).
- Press [Next] to go to page 2 of the Wizard.
- If you don’t want to make changes on the remaining pages of the Wizard, you can just press [Finish] and start documenting.

Page 2: Specify General Options



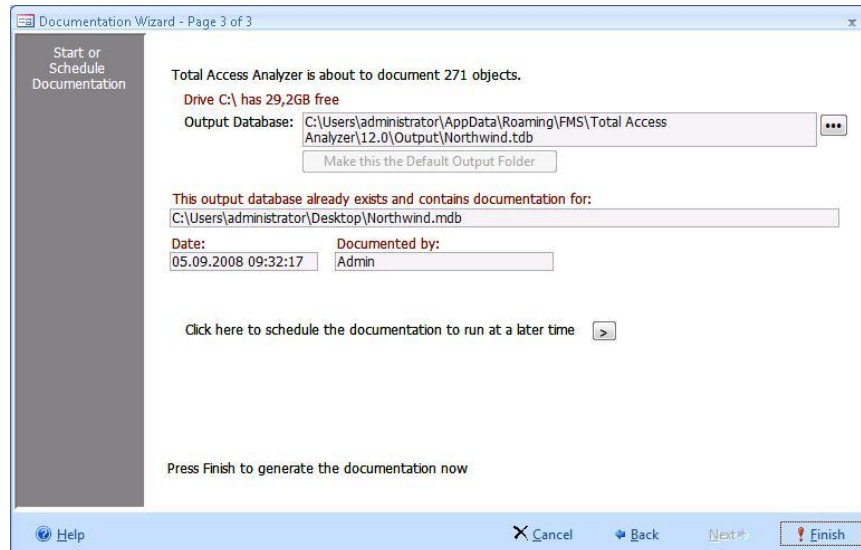
Documentation Wizard (Page 2)

Some documentation options apply to the entire database, not just the individual objects you selected on the previous screen. This page lets you select those options and specify settings under performance analysis. For more detailed information, see page 45.

Quick Tips:

- Select all options
- Ignore the [Performance Analysis Settings] button
- Press [Next] to go to that last page of the Wizard

Page 3: Start or Schedule Documentation



Documentation Wizard (Page 3)

The final page of the Wizard allows you to specify the output database name, and whether to start documenting the database immediately or schedule it for a later time (e.g. at night when the database is not used). By default, the output database is put your Application Data folder and given the same name as your database with a “.TDB” extension.

Quick Tips:

- Click the [Finish] button to accept the default values and start documenting your database.

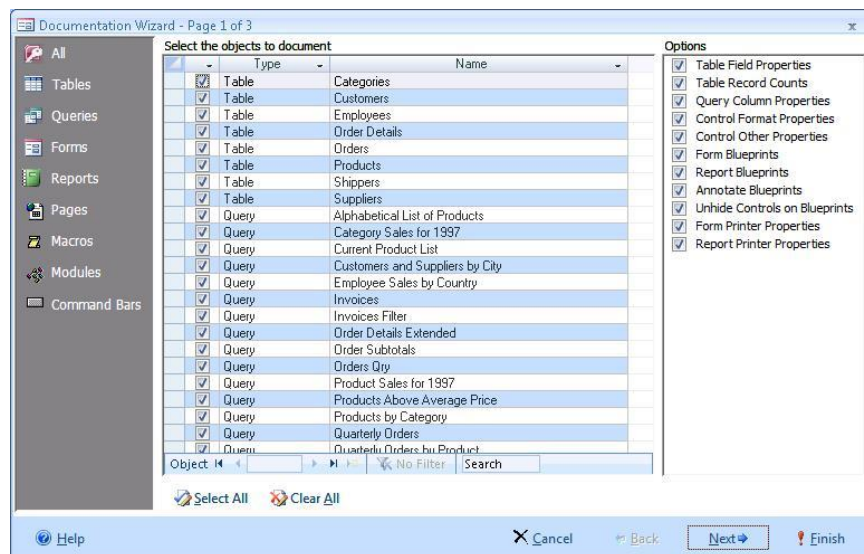
Generating Documentation

After clicking [Finish], the documentation is generated. This may take a while, depending on the complexity of your database, the selections you made, the speed and memory of your machine, and the hard disk speed. When documentation is complete, a summary screen appears. Press [Next] to return to the Main Menu form, and use the [View], [Search], and [Report] buttons to view, search, and print the results.

Page 1: Selecting Objects to Document

We'll now go through a more detailed description of the features and options in the Documentation Wizard.

When you select the [Document] option from the Main Menu form, the first of three pages of the Documentation Wizard appear. Use the [Back] and [Next] buttons to move through the pages.



Documentation Wizard (Page 1)

This form is divided into three sections. The icon menu on the left controls what is displayed in the list of objects and options sections. By default, [All] is selected and all objects and options are displayed. You can reduce your list by clicking on the other object types (tables, queries, forms, etc.).

This screen allows you to specify which objects to document as well as choose documentation options.



Tip

In general, you should select all objects, especially if you are interested in generating complete cross reference information and detection of unused objects.

For your convenience, if you have documented this database before, the objects you previously selected are selected by default. If you added new objects or renamed existing objects, they are listed but not selected. If you deleted any objects, they do not appear in the list.

To select or deselect one object

Click on the check box to the left of the object you want to select. Click the check box again to deselect the object.

To select or deselect all objects by type

You can select all the displayed objects by pressing the [Select All] button.

To deselect all displayed objects, press the [Clear All] button.

If you want to select all objects in your database at one time, display all the objects via the [All] icon, then press [Select All]. To deselect all objects in the list, press [Clear All].

Object Selection Strategies

The more options and objects you select, the longer it takes to generate the documentation and analysis. If, for example, you only want to document your tables, only select the tables for documentation. If you want to see how your tables are referenced from queries, forms, and reports, you must also select those queries, forms, and reports.

Selecting Objects for Object Cross Reference

For complete and accurate Object Cross Reference, all objects must be selected. If you need to find object references in modules (e.g. DoCmd.OpenForm), the Generate Module XRef option must also be selected.

Selecting Objects for Field Cross Reference

Field Cross Reference is available for MDB documentation and follows the same rules as Object Cross Reference. To generate Field Cross Reference, make sure all tables are selected.

Selecting Objects for Modules Cross Reference

The Generate Module XRef option on the next page automatically documents every module (regular or class modules)—even if you did not select them individually here. It also analyzes the modules of every selected form and report.

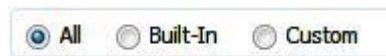
To generate complete cross reference, every object using module code must be selected. This includes all forms and reports, as well as any queries, macros, and command bars that invoke your functions. If you only want analysis of your modules, you do not need to select any objects. Just select Module XRef on the next page.

Selecting Options and Objects for Diagrams

To generate Diagrams, select all queries, forms, reports, macros, and command bars.

Selecting Fewer Command Bars

When you select [Command Bars] from the icon menu, the list of Command Bars appears. The number of command bars in the list may surprise you—the list includes all command bars available to your database, including the 100+ built-in command bars from Access. The built-in command bars are listed because you can customize them. Since there are so many command bars, you should decide whether you want to document them all. To help you, an option group appears under the list:



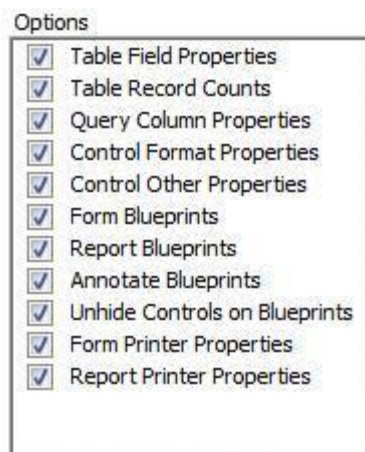
Differentiating Types of Command Bars

When you select “Built-In”, the list only displays the Access command bars. When you select “Custom,” the list shows command bars that you created. You should select every command bar listed under “Custom.” Additionally, you should choose every built-in command bar that has been modified.

If you are not sure, you should select all the command bars. Command bars can call procedures and macros, which you need to document if you want complete procedure cross referencing.

Specifying Options

The right side of the form lists documentation options for the different object types:



Object Documentation Options

By default, all the basic properties of each selected object and the database are documented. The options presented here allow you to perform additional documentation of your selected tables, forms, and reports. Even if you choose none of the options, plenty of documentation is still generated.

Your initial thought may be to turn on everything to get full and complete documentation. You may wonder why you would want to turn off any options. The simple answer is to save time and disk space. Each option takes time and adds to the amount of output generated. If you have no need for a certain type of documentation, turn it off to document your database more quickly and use less disk space. If time and disk space are not issues, select all of the options.

The available options fall into four categories: Table Options, Form and Report Control Properties, Blueprint Options, and Printer Properties.

Table Options

Table Field Properties

Total Access Analyzer examines the properties of tables, queries, fields, relations, and indexes. Unfortunately, if you have linked tables in a Jet/ACCDB/MDB database, there may be significant performance problems examining field properties in tables with a large number of fields. You can see this problem outside of Total Access Analyzer by running the Access Database Documenter on a linked table with a large number of fields.

To alleviate this problem, you can disable the “Table Field Properties” option. When you turn this option off, Total Access Analyzer does not document the properties of fields in tables other than their name, type, and size. Turning this option off does not affect the analysis or cross reference documentation—it merely makes the documentation process run faster. Of course, if you want reports listing all field properties, you must turn this option on. If you are generating documentation and notice that each table is taking an inordinately long amount of time to complete, consider turning this option off.

This is not an issue when documenting ADPs.

Table Record Counts

This option is used to get the record count of every selected table. If your tables contain a large number of records or are linked to large external tables, this can take a while. Turn this option off if you have large tables and are not interested in record counts.

Control Properties

Total Access Analyzer can document all of the properties of your form and report controls. This may, however, generate a huge amount of information that you may not want and would never use. In particular, you can decide whether you want to document format and other properties of controls on forms and reports.

Control Format Properties

Format properties appear in the “Format” tab of a control’s property sheet and determine appearance. If you are not interested in properties such as size, font, color, and border information of every control, turn off this option. Otherwise, this information is documented for every control on every form and report.

Control Other Properties

This option documents the properties listed in the Microsoft Access property sheet’s “Other” tab. Examples of these properties are Status Bar Text, HelpContextID, Tag, Tab Stop, etc. Properties that can reference other objects (e.g. Shortcut Menu Bar) are always documented.

Blueprints Options

One of Total Access Analyzer’s most powerful documentation features is blueprints, which are visual representations of your forms and reports. They are helpful in documenting objects in a “what-you-see-is-what-you-get” format. Annotations (numbers) can be placed on each control, making it easy to identify each control and cross reference the visual representation of the form with other documentation.

Blueprints take additional time to generate, and they require a considerable amount of space in the output database. If you do not need blueprints, do not enable them and you can decrease both the documentation time and the size of the output database.

There are several options for generating blueprints:

Generate Form Blueprints

This option generates a Blueprint for every selected form.

Generate Report Blueprints

This option generates a Blueprint for every selected report.

Annotate Blueprints

This option places an annotation number on each control on the Form or Report Blueprint. Controls are numbered starting with 1. Annotations make it easy to reference each control in the printed documentation. Additionally, annotations allow you to recognize controls that invoke VBA code or macros. Controls with italicized annotations have code.

If you want the Blueprints to be a closer approximation of what the user actually sees when they open the form or report, do not select this option.

Unhide Controls on Blueprints

This option makes invisible controls appear on the generated Blueprints. If you use invisible controls, this option can help locate and identify these controls. If you want the Blueprints to be a closer approximation of what the user actually sees when they open the form or report, turn this option off. With this option off, only the controls that are visible when the form or report is opened are printed on the Blueprint.

Printer Properties

Total Access Analyzer allows you to specify whether to document printer properties for forms and reports, such as Device Name, Default Size, Orientation, Paper Size, Margins, etc. Documenting these items takes some additional time, and can be turned off if not necessary.

Form Printer Properties

Select this option to document printer properties for each form selected for documentation. Forms are normally not printed, so you may never care what these settings are.

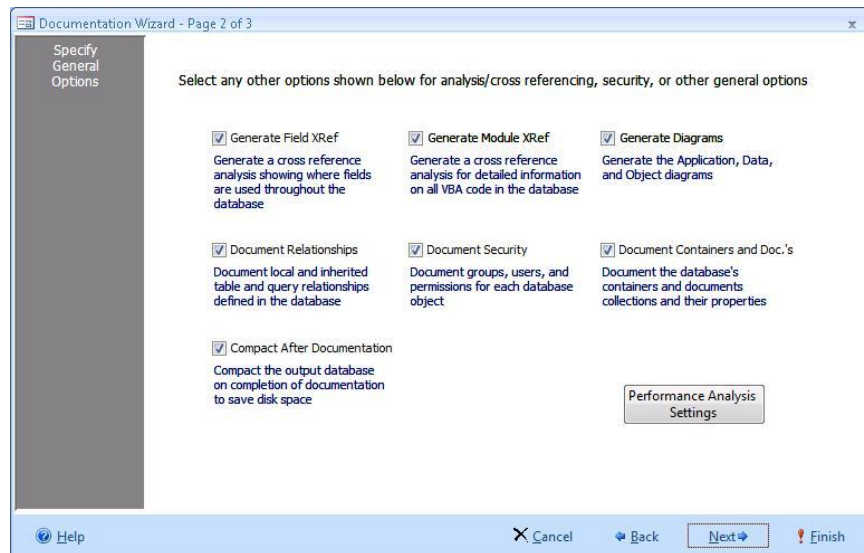
Report Printer Properties

Select this option to document printer properties for each report selected for documentation.

After selecting objects and documentation options, press the [Next>] button to go to the next page.

Page 2: Specifying General Options

The second page of the Documentation Wizard allows you to specify general documentation options not related to specific objects.



Documentation Wizard (Page 2)

One of the most powerful features of Total Access Analyzer is its ability to analyze the information generated from the basic documentation of individual objects. This includes how your objects are related to each other, where each object is used, and any errors that exist in your database due to incorrect or incomplete references. By default, cross reference analysis of tables, queries, forms, reports, and macros is always performed.

If you are only interested in the basic documentation of your database, turn all the Analysis options off. This results in faster documentation, but prevents Total Access Analyzer from generating some of its most valuable information, including the detection of some errors that may exist in your database.

In general, the two XRef options should be turned on. The Diagrams option should be turned on if you want the application, data, and object diagrams.



Tip

Generally, turn the Total Access Analyzer options off only if you are not concerned with how your database objects relate to each other.

Generate Field XRef

The Generate Field XRef option is available for ACCDBs/MDBs and generates field cross reference analysis, showing where fields are used and whether they exist. By showing every reference to a field in tables, queries, forms, reports, controls, and macros, Total Access Analyzer shows you where to make changes if a field's structure changes or if a field is deleted or renamed. If this option is turned off, error detection of references to undefined fields is not possible.

Generate Module XRef

The Module Cross Reference feature is one of the most powerful and useful features of Total Access Analyzer and works on ACCDBs, MDBs, and ADPs. A VBA code parser analyzes your module code and generates a great deal of information. This information includes procedure definitions, procedure calls, constants, variables, labels, procedure declarations, function calls, and much more. Total Access Analyzer detects a variety of errors, along with suggestions and performance tips. It analyzes all modules, regardless of whether you selected them, as well as the modules behind the selected forms and reports.

Keep in mind that other objects such as queries, macros, and command bars also reference module code and should be selected for complete module cross reference.

The Generate Module XRef option is independent of basic module documentation, which just prints your module code. Make sure your VBA code compiles and page 94 for information about the analysis performed. If this option is turned off, module errors are not detected.

Generate Diagrams

This option generates the Application Diagram. For ACCDBs/MDBs, Data and Object Diagrams are also generated. These diagrams are extremely powerful tools for understanding how your objects work together. While cross reference information shows only one level (where each object is used), the diagrams show the entire multi-level hierarchy. For more information on diagrams, see page 106.

Application Diagram

The Application diagram displays your application and procedure flow in a hierarchical format from its top-level object (Autoexec macro or startup form) through every referenced form, report, event, and procedure call. This multi-level tree provides an excellent illustration of the way your

program works. If you are interested in the Application Diagram, also select the Generate Module XRef option. Otherwise, procedure calls are not included in the diagram.

Data Diagram

The Data Diagram shows how data flows from tables through other objects such as queries, forms, reports, and code. It shows the entire family of objects using each table.

Object Diagram

The Object Data diagram shows all the objects (tables, queries, and macros) referenced by every form, report, and query. It shows the entire family of objects used by each object.

General Documentation

The options on the second and third rows of the page generate additional documentation. Note that these four options are not available for ADPs since they deal with objects that don't exist in ADPs:

Document Relationships

This option documents the table and query relationships as defined in the Database Tools | Relationships window. Each relationship is documented along with the relationship window showing all the related data sources.

Document Security

This option documents the security (permission) settings for each selected object by each group and user defined in the current workgroup.

Document Containers and Documents

JET databases store information about objects in Containers and Documents. Containers are object types (tables, queries, forms, reports, relationships, etc.). Documents are individual objects within each container (a table, query, form, etc.). Properties include values such as date created, date modified, etc. Most of this information is already in the inventory documentation Total Access Analyzer generates.

Turn this option on to document container and document properties. This option adds time especially if you have a large number of tables and queries. This documentation does not affect any other documentation or analysis, but you may want to run it for thoroughness.

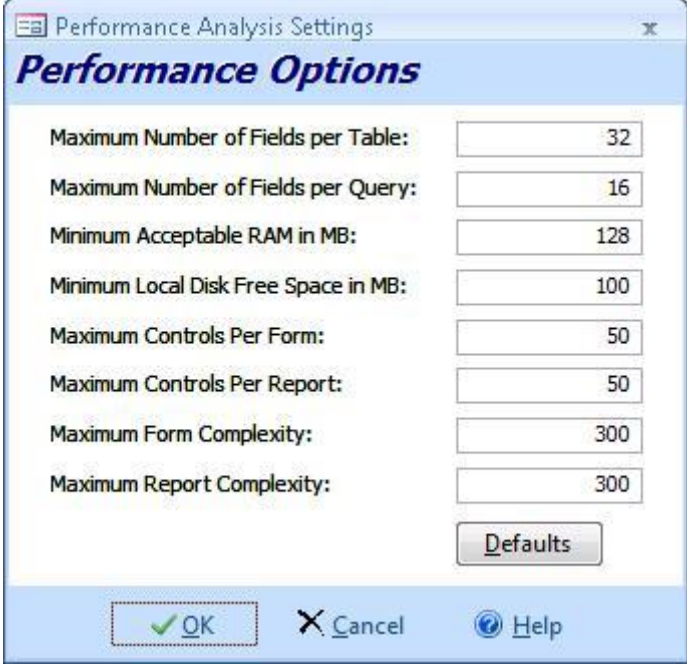
Compact After Documentation

This option compacts the output database after documentation. This can save considerable disk space, but takes extra time.

Performance Analysis Settings

Total Access Analyzer automatically generates extensive performance analysis of your system, database, and each object selected for documentation. The performance analysis offers suggestions and warnings on items that should be examined to improve performance. They do not imply that the flagged items need to be modified, only that they should be examined for potential improvement.

Several options are available to configure these tests from the [Performance Analysis Settings] button. Total Access Analyzer performs many more tests than are shown here—this form shows only the tests with configurable values. For more information, see page 81.

The image shows a Windows-style dialog box titled "Performance Analysis Settings". The title bar includes a standard icon, the text "Performance Analysis Settings", and a close button (X). The main area of the dialog has a blue header with the text "Performance Options" in a bold, italicized font. Below the header, there are eight rows of settings, each with a label on the left and a text input field on the right. The settings and their values are: "Maximum Number of Fields per Table:" (32), "Maximum Number of Fields per Query:" (16), "Minimum Acceptable RAM in MB:" (128), "Minimum Local Disk Free Space in MB:" (100), "Maximum Controls Per Form:" (50), "Maximum Controls Per Report:" (50), "Maximum Form Complexity:" (300), and "Maximum Report Complexity:" (300). At the bottom right of the main area is a button labeled "Defaults". The bottom of the dialog features a blue bar containing three buttons: "OK" with a green checkmark icon, "Cancel" with a red X icon, and "Help" with a blue question mark icon.

Performance Analysis Settings Form

Maximum Number of Fields per Table

Enter a number up to 255. This value is the maximum number of fields that can exist in a table before the table is flagged as a potential performance problem. For example, if you consider 32 fields to be the maximum number

of fields that should be in a table before performance suffers, enter that number here. The default value is 32.

Maximum Number of Fields per Query

Enter a number up to 255. This value is the maximum number of fields that a query can return before the query is flagged as a performance problem. The default value is 16.

Minimum Acceptable RAM

Enter the amount of RAM (in megabytes) that should be on the computer. If available physical RAM is below this level, a performance problem is recorded. The default value is 128 megabytes.

Minimum Local Disk Free Space

Enter the amount of disk space in megabytes that should be available on local, non-networked drives. If the amount of space falls below this level, a performance problem is recorded. The default value is 100 megabytes.

Maximum Controls per Form

Enter the maximum number of controls that can exist on a form before a performance problem is recorded. The default value is 50.

Maximum Controls per Report

Enter the maximum number of controls that can exist on a report before a performance problem is recorded. The default value is 50.

Maximum Form/Report Complexity

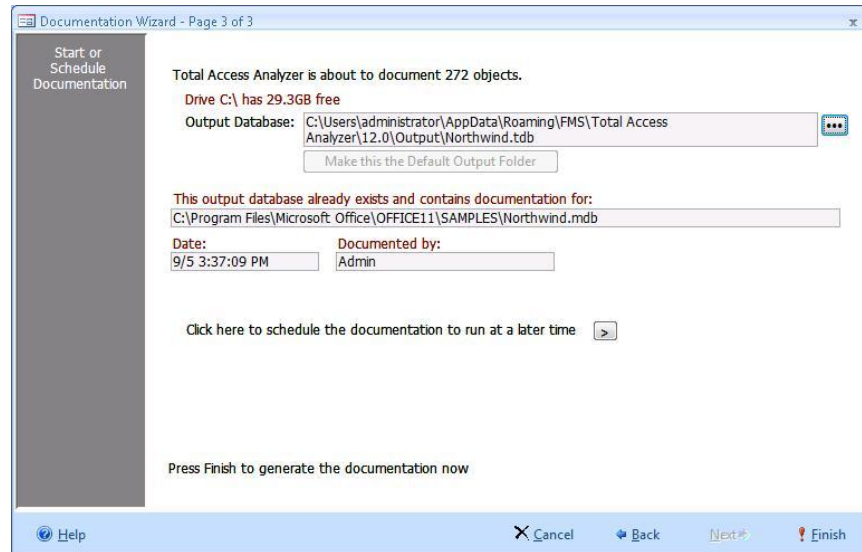
Different control types have different performance “weights” associated with them. For a list of the control types with their associated weights, see the System Report “Total Access Analyzer Performance Tips,” and look at the description for the **Form Control Cost** tip.

Enter the maximum control complexity that can exist on a form or report before the object is flagged as a performance problem. The default value is 300.

Press [OK] to return to page 2 of the Documentation Wizard, or [Next>] to go to the last page of the Documentation Wizard.

Page 3: Output Database and Scheduling

The third and final page of the Documentation Wizard provides information about the documentation and analysis that is about to be generated. It also allows you to specify the output database name, change the default output directory, and to start or schedule the documentation:



Documentation Wizard (Page 3)

Number of Objects to Document

The label at the top of the form displays the number of objects you selected to document.

Free Disk Space

This feature tells you how much disk space is available. Depending on the complexity of your objects and the number of objects selected, the documentation can be many times the size of your empty database (the amount of data does not affect the documentation size). Without documenting your database, it is impossible to determine the size of the documentation.

If the documentation process is started and Total Access Analyzer runs out of disk space, the program is halted. Your database is not modified in this situation, but you do need to provide more disk space and restart the documentation process.

A good safety margin is to have at least 100 MB free on the disk where you are placing the output database. Your system should also have enough free

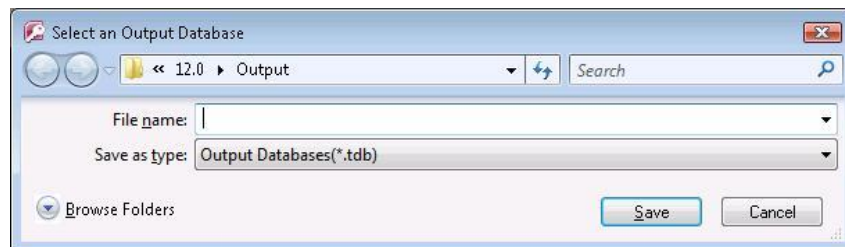
space for the Windows swap file (also known as the virtual memory file). Consult your Windows documentation for information on this file and its settings.

Output Database

Total Access Analyzer stores the documentation in a Microsoft Access database. This database is like any other Access database except it contains Total Access Analyzer documentation and has a file extension of TDB instead of the standard MDB. Total Access Analyzer uses the .TDB extension as an easy way to identify an output database.

Total Access Analyzer automatically supplies a default output database name based on the name of the current database. For example, if you are documenting your SALES.MDB database, the output database is named SALES.TDB.

You can specify the output database name and location by pressing the [...] button next to the output database name. This button brings up the “Select an Output Database” dialog box:



Select an Output Database Dialog

Specify the name and location for your output database, and then press the [Save] button. You can use any legal file name, but the .TDB extension cannot be changed.



Tip

Because of the way Access locks database files, you cannot have the output file with the same name and in the same directory as the database you are documenting.

Changing the Default Output Directory

The default directory for output databases is the “Output” subdirectory of the directory where Total Access Analyzer is installed. However, you can change the default directory by specifying an output database name in another directory and pressing [Make this the Default Output Directory].

For performance reasons, the output directory should be on your local hard disk and not on a network drive.

Previous Documentation

If the output database already exists, Total Access Analyzer provides information about the existing output database with the name of the database documented, the user who generated the documentation, and the date the documentation was generated. You can either overwrite the existing .TDB or choose another output file name.

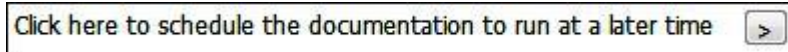


Output databases can be quite large. If you already have an output database for the current database, you should decide whether you want to overwrite it with the new documentation or select another output database name. Normally, one set of documentation for each database is sufficient; however, you may want to keep extra copies for archival purposes. The number of different copies that you can save is limited by the amount of available disk space.

Scheduling Documentation

You can choose to run Total Access Analyzer immediately or schedule it to run at a later time. This option is useful if you want documentation generated when users are not active in the database. In a multi-user environment, it may be difficult to document your database during normal hours since users may have objects exclusively locked. By scheduling documentation after hours, you can minimize or eliminate conflicts with other users. Alternatively, you can copy your database to a local drive and document it there.

To schedule Total Access Analyzer to run later, click the [>>] button:



This reveals scheduling information on the bottom portion of the page:

Current Date/Time:	9/5 9:27:54 AM	
The Documentation is scheduled for:	9/5 10:27:15 AM	Day Hour Min
Click here to cancel the scheduled documentation (you can press Finish, Back, or Cancel after doing this)		

Schedule Documentation

Use the buttons next to Day, Hour, and Minute to set the date and time that Total Access Analyzer should run, and leave the current window open. Total Access Analyzer will run at the designated time. Do not schedule documentation and close Total Access Analyzer or Microsoft Access.

Of course, if the scheduled time arrives and users are still using the database, Total Access Analyzer may still not be able to generate complete documentation.

If you schedule the documentation to run at a later time and then decide you would like to cancel the scheduling, click on the [X] button. This brings you back to the form without the schedule documentation information visible. From here you are given the option to click on the [Cancel], [Back], or [Finish] button. Click on the [Finish] button to begin documentation immediately.

Generating Documentation

While the documentation is being generated, the Generating Documentation form appears showing its progress.

Component	Status
Object Inventory . . .	Completed
Tables	8 of 8 Completed
Queries	21 of 21 Completed
Forms	22 of 22 Completed
Reports	10 of 14 Completed
Pages	5 to Document
Macros	6 to Document
Modules	2 to Document
Command Bars	193 to Document

Option	Status
Database	Enabled
Security	Enabled
Relationships	Enabled
Object XRef	Enabled
Field XRef	Enabled
Module XRef	Enabled
Diagrams	Enabled
Performance	Enabled
Explorer	Enabled

Documenting Report Sales by Year Subreport ...

25 %

Cancel

Generating Documentation Form

During form and report documentation, there may be some flickering on the screen and the form or report properties and other windows may appear. This is the normal operation of Total Access Analyzer based on its use of VBA and does not indicate problems.

Canceling Documentation

You can cancel documentation at any time by pressing the [Cancel] button. When Total Access Analyzer reaches a stopping point, it displays this dialog:



Documentation Generation Form - Cancel Documentation

Press [Yes] to cancel documentation or [No] to resume without canceling.

Screen Savers

If you are using a screen saver with Windows, it may move slowly or appear frozen while Total Access Analyzer is running. Moving the mouse may not immediately restore the status screen. Do not be alarmed; this does not indicate a problem. Total Access Analyzer is running while the screen saver is active. If you move the mouse while the screen saver is up, the program waits until the current object is documented, and then restores the status screen.

Documentation Summary

When documentation is completed, the Documentation Summary form appears displaying summary information about the documentation generated:

Object Type	Errors	Suggestions	Performance Tips
Table		12	8
Query		13	8
Form		142	5
Report	2	42	4
Page	5		
Macro		2	1
Module	4	58	1
Other	5	6	6

Documentation Summary Form

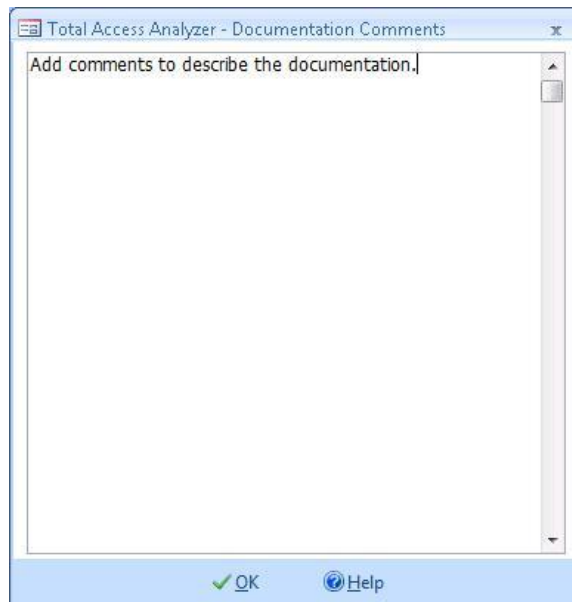
There may be situations where problems arise and you do not get to this screen. If this happens, refer to the Troubleshooting section on page 56.

Problems Detected

Total Access Analyzer can detect a variety of problems in your database. This form shows the types of errors, suggestions and performance problems that were found. To see a list of the actual items, use the Errors, Suggestions, and Performance tabs on the Documentation Explorer form.

Adding Comments

Comments can be added about the documentation you just generated by pressing the [Add Comments] button to bring up the Documentation Comments form:



Documentation Comments Form

Enter any comments or descriptive information you want to save with the documentation. Your comments can be viewed later when you select this output database again from the main form. See **Chapter 5: Viewing Documentation** for more information.

When you are finished, press [Next>] on the Documentation Summary form to return to the Main Form.

Where to Go Next

Your database is now documented. From the main Total Access Analyzer form, press [View] to view the results. Select [Reports] to print, preview,

and export reports, and [Search] to find specific values. If this is your first time, we strongly urge you to view the data and preview the reports before printing them. You will be surprised how large some of the reports can be. The following chapters show how to view the documentation and use the reports.

If you press [Exit], you return to Microsoft Access. Your settings, object selections, and documentation are automatically saved for the next time you start Total Access Analyzer.

Troubleshooting Documentation Failures

Unexpected situations may cause Total Access Analyzer to stop before completing the documentation process. Unfortunately, if you encounter these problems, the documentation generated up to that point is not usable. When an unexpected error occurs, this form appears:



The image shows a Windows-style error dialog box titled "Total Access Analyzer Error". The main heading inside is "Unexpected Error Encountered" in a stylized font. Below this, a text box contains the message: "Total Access Analyzer has encountered an unexpected error" followed by "Error 11 - Division by zero, Procedure StartProgram". To the left of this text is a yellow warning triangle icon. Below the error message, there is a section titled "To Solve This Problem:" which instructs the user to read the troubleshooting section of the Total Access Analyzer User Guide or help file. Another section titled "For Further Assistance:" states that an error log has been generated at "C:\Total Access Analyzer\12.0\TAAErr.txt" and provides a "View Error File" button. At the bottom, there are three buttons: "View Error File", "Close Total Access Analyzer", and "Help".

Total Access Analyzer Error

Unexpected Error Encountered

Total Access Analyzer has encountered an unexpected error

Error 11 - Division by zero, Procedure StartProgram

To Solve This Problem:
Read the troubleshooting section of the Total Access Analyzer User Guide or help file to see if the problem is described there.

For Further Assistance:
An error log has been generated here:
C:\Total Access Analyzer\12.0\TAAErr.txt

Press the [View Error File] button to open this file with the NotePad editor.

We are very interested in learning about this error. Please email this file to FMS along with your contact information. Our technical support department will contact you upon receipt of this file and provide assistance.

FMS Support Resources
Email: support@fmsinc.com
Web Site: <http://www.fmsinc.com/support/>

View Error File Close Total Access Analyzer Help

Total Access Analyzer Error Form

If the problem and solution is not obvious or listed, or you feel the problem is with Total Access Analyzer, please email us a copy of the error file. The error file can be viewed by pressing the [View Error File] button. From there you can choose to print the error message. The error file is saved as TAERR.TXT in Total Access Analyzer's application data folder.

At FMS, we are committed to supporting our products. Depending on the error, we may need a copy of your database to replicate the problem. We have attempted to anticipate all potential problems, but the variety of applications and limitations of Microsoft Access prevent us from handling every possible situation. Nevertheless, we are committed to resolving any problems you encounter. If the problem can be solved, we will provide instructions to work around it, or we will send you an updated version of Total Access Analyzer for free when we fix it. We apologize and thank you for your patience if you encounter errors.

Problems while Generating Documentation

Total Access Analyzer is written in VBA and uses Microsoft Access as its host environment. If you encounter a Microsoft Access error while running Total Access Analyzer, the most common cause is corrupted objects or code in your database. There are two ways to fix this:

Decompile

Sometimes corruption occurs in the compiled state of the VBA code of a database. There is a simple way to fix this by launching Access with the /decompile command line:

```
<Access installation path>\MSACCESS.EXE /decompile
```

1. Once in Access, open the database. It may take a moment to decompile.
2. Recompile it by putting a module in design mode.
3. From the Debug menu, select Compile <project name>.
4. From the File menu, select Save <project name>.

Steps to Fix Corrupted Databases

If decompile fails, a more complicated process is necessary to recover your database:

- Make a backup copy of your database.
- Repair your database with the Manage | Compact and Repair Database option from the Office button. Consult your Access documentation for more information.

- Create a clean copy of your database:
 1. Create a new database with a temporary database name such as TEMP.MDB.
 2. Choose the External Data ribbon, Import Access, then select the original database.
 3. Import all of the objects from the original database, including relationships, menus and toolbars, and Import/Export specs (click the Options button in the Microsoft Access Import Objects dialog box).
 4. Close the new database, archive the original database, and then rename the new database to the original database's name.

Re-install Total Access Analyzer

There is a chance that one or more objects in the Total Access Analyzer database may be corrupt. To eliminate this possibility, uninstall Total Access Analyzer (see page 15 for details). Then re-install Total Access Analyzer from its original setup.exe program. This does not overwrite or erase existing documentation, but you do need to add the *.TDB files to your documentation list if you want to use them. See page 111 for more information.

These steps should fix any corruption that may exist in your database or Total Access Analyzer. Run Total Access Analyzer again to ensure that you can document your database without problems.

Out of Memory Errors

If you encounter an out of memory error and have sufficient RAM, this usually indicates that Windows does not have enough free disk space on the drive it uses for its swap file. To alleviate this problem, you need to free up more space on the drive (we recommend 100 MB or more) for Microsoft Access to operate properly.

Other Known Problems

For a list of known problems not documented in the manual or help file, read Total Access Analyzer's README file or visit our web site for the latest information.

Chapter 5: Viewing Documentation

Total Access Analyzer includes a powerful explorer that organizes and displays the documentation you generated. This chapter explains the many ways you can view and filter data for multiple objects, individual objects, and parts of an object (fields, indexes, sections, controls, etc.). It also explains how to use the cross reference information, diagrams, and lists of errors, suggestions, and performance tips.

Topics in this Chapter

- **View or Print?**
- **Quick Start**
- **Using the Documentation Explorer**
- **Using Property Filters**
- **Errors, Suggestions, and Performance Tips**
- **Documentation by Object Type**
- **Selecting Another Output Database to View**

View or Print?

Even though you may be eager to print all of your documentation, we strongly recommend that you first view it in order to:

1. Verify that all the objects you selected were successfully documented.
2. Quickly spot errors in your application without printing a single page (if serious errors are listed, the documentation may be flawed or you may want to fix the problems and re-document your application before printing the reports).

There are advantages and disadvantages to viewing vs. printing the documentation.

First, there are some items that are only available in reports:

- Form and report blueprints
- Bracketed module code printouts
- Dictionary reports that show multiple types of data for an object (for example, the Table Dictionary report shows a table, its properties, and its list of indexes and fields with each of their properties)

Second, most of the data displayed with the Documentation Explorer is in tabular format. On the other hand, reports are richly formatted, with data organized and sorted in a variety of ways and with more types of data displayed on one page than the Explorer.

The reports, however, can be quite large. It is much easier to locate an object or other information by using the Documentation Explorer, especially with the objects organized in a treeview hierarchy. There are also interactive options, such as object selections, property filters, sorting, and the ability to mark Errors, Suggestions, and Performance issues as “reviewed.”

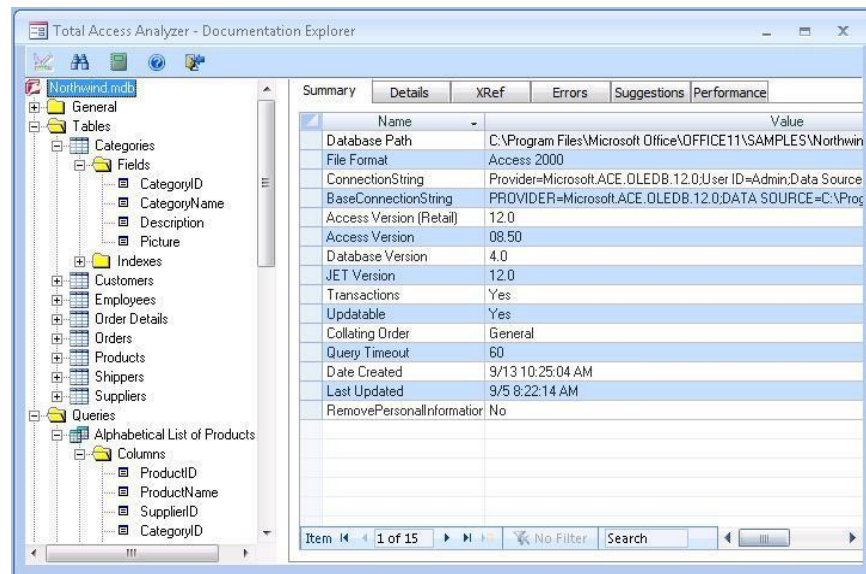
Another powerful feature available in the Documentation Explorer is the ability to open the current object in design view and modify it while exploring its documentation, analysis, and issues. This feature is described in more detail below.

Quick Start

This section offers tips on learning how to view the documentation generated by Total Access Analyzer. Once you understand this section and view some of the results, read the rest of the chapter to get the most out of

Total Access Analyzer. There are many ways to examine and use the documentation. Your ability to review and interpret the data presented can significantly reduce the effort needed to maintain and test your databases.

Click the [View] button on the Main Menu to display the Documentation Explorer form.



Documentation Explorer Form

How the Documentation Explorer Works

The documentation is organized in an easy-to-use, hierarchical treeview. This form is similar to the Windows Explorer. Folders contain individual items and may also include additional folders. You can easily “drill-down” to select more detailed items. When you select an item in the treeview, its corresponding information is displayed in the tabbed panes on the right. Some tabs are only available for certain items. If data exceeds a column’s width, you can widen the column or use [Shift F2] to Zoom, just like in an Access datasheet.

Here are some highlights and tips for using the explorer:

- Click on an object type folder (e.g. tables, queries, etc.) in the Treeview. You can examine the information shown in each of the tab views on the right side of the Documentation Explorer to see data for all documented objects of that type.
- Expand the object type folder, and click on any object under that folder. Notice that the tabs now display data for that object only.


- Expand the object (the “parent” object) to show any types of objects (“child” objects) it may contain (e.g., a table has fields and indexes, a form has controls, sections, etc.).
- Expand any of these folders to see a list of child objects. As you choose any of these, related information is presented on the right.

View Results and Your Objects at the Same Time

While browsing the documentation, you can also switch to the Access navigation pane and open any of your objects in design view.

Put the Current Object in Design Mode

A very powerful and time saving feature is the ability to put the current object in the Database Explorer into design mode. While viewing an object, or the list of errors, suggestions, and performance tips, Total Access Analyzer can put that object in design mode with a keystroke.

Simply press [Ctrl D] or the Design View button on the toolbar , and the object opens in Design Mode.

Fix the Errors Detected In Your Database

Click on the database icon (the first item in the Treeview), then click on the Errors tab. Ideally, there is nothing in the list. Every item listed is a potentially serious problem in your database or a problem Total Access Analyzer encountered while generating its analysis (which may indicate incomplete documentation). Many errors, such as invalid object references, can cause your database application to crash.

If the list is long, you can use the [Filter Items] button to limit the types of errors displayed. You can also click on folders or objects in the Treeview to show only the errors that apply to those object types or individual objects. For instance, click on the Modules folder to see only module errors. For more information, see page 67.

After fixing the errors, you may need to regenerate the documentation. This is especially important if you fixed objects that could not be documented originally, since they are likely to affect the cross reference and unused object analysis.



Tip

You can easily jump to the offending object by selecting an error from the list, and pressing [Ctrl D] or the Design View button on the toolbar. This feature allows you to easily fix errors as you view them in the Documentation Explorer. As you fix items, you can also mark them as “Reviewed,” and filter them out of the list.

Review Suggestions and Performance Tips

Under the Suggestions and Performance tabs, there are many tips for ways to improve your database. These are less serious than errors, but you should examine the tips and determine whether you want to implement them. If you make modifications to your database, you should run the documentation again.



Like with Errors, you can easily jump to the offending object by using the Design View button, and mark items as “Reviewed” to filter them from the list.

Diagrams of How Your Database Works

Expand the Diagram folder in the treeview to view the Application, Data, and Object diagrams. Click on the Summary tab to view any of them. For more information, see page 106.

Object Cross Reference

See where objects are used across your entire database. Select the XRef tab and the desired folder or item.

For instance, to see where each table is used, click on the Tables folder. Each referenced table is shown with information for its calling object. You can also view Field references by looking at a table’s Fields folder.

Module Cross Reference

Select the Modules folder and XRef tab. The Module XRef Filter lets you choose the output to view. You can see lists of procedure definitions, where procedures are used, constants, variables, etc. By clicking on items within the Modules folder you can reduce the items in the list. Modules are grouped into three major categories: general, form, and report.

Property Filters

Property filters let you view the value of one property across multiple objects. Select an object folder (tables, queries, etc.) and the Details tab. Specify a property in the Property Filter and see the values for that property across all the documented objects in the selected folder. This lets you easily verify consistent property settings across objects. You can switch between the properties for all parent objects (e.g., tables) and all child objects (e.g., fields).

Using the Documentation Explorer

The Documentation Explorer has the following components:

- Treeview on the left
- Tab Pane on the right
- Toolbar across the top
- Form Splitter

Treeview

The treeview on the left side of the form displays all the objects you selected for documentation. You can expand and collapse the nodes in the Treeview by double-clicking them, or by clicking the [+] / [-] box to the right of the name. The treeview has folders for major groups such as object types. Each folder can contain many individual items.

Tab Pane

The large area to the right of the treeview is the Tab Pane, which has six tabs to display the documentation. The tabs show information based on the currently highlighted item in the Treeview. Some tabs are not available for every item.

Summary Tab

This tab shows summary information for the object selected in the Treeview. The type of summary information shown depends on the type of object selected.

Details Tab

This tab shows detailed information for the object selected in the Treeview. The information shown depends on the type of object, but typically contains property information.

XRef Tab

This tab shows cross reference information for a single object, or for all objects of the object type selected in the Treeview.

Errors, Suggestions, and Performance Tabs

These provide high-level analysis of your database including information on errors, suggestions for improvement, and performance problems. For more information, see page 67.

The Toolbar

The toolbar at the top of the form has these buttons:



Design View

The Design View button allows you to open an object for modification, or jump to the object indicated in an Error, Suggestion, or Performance issue. This works for tables, queries, forms, reports, modules, and command bars. For security reasons, Access does not allow macros to be opened in design mode.

For this feature to work, you must open Total Access Analyzer from the documented database. If the object does not exist in the current database, an error message is displayed.



Search

Press this button to open the search form. See **Chapter 6: Searching Results** for more information.



Reports

Press this button to open the Print Documentation form to preview, print and export reports. See page 121 for more information.



Help

Press this button for on-line help on the Documentation Explorer form.



Close

Press this button to close the Documentation Explorer form and return the Main Menu.

Using the Form Splitter

The Documentation Explorer form has a vertical splitter bar to adjust the relative width of the treeview and Tab Pane. To use the Splitter, click on the vertical line between the treeview and Tab controls. To adjust the size, hold the mouse button down and move to the left or right.

Resizing the Form

If your database, under Access Options | Current Database, is set to use Tabbed Documents, Total Access Analyzer displays the Documentation Explorer as a maximized tab.

If it uses the Access 2003 Overlapping Windows option, the Documentation Explorer form is resizable. By default, the form is set for 800x600 resolution. If your monitor is higher resolution, you can enlarge the size of the form to display more documentation. When you close this form, your settings are automatically saved for next time.

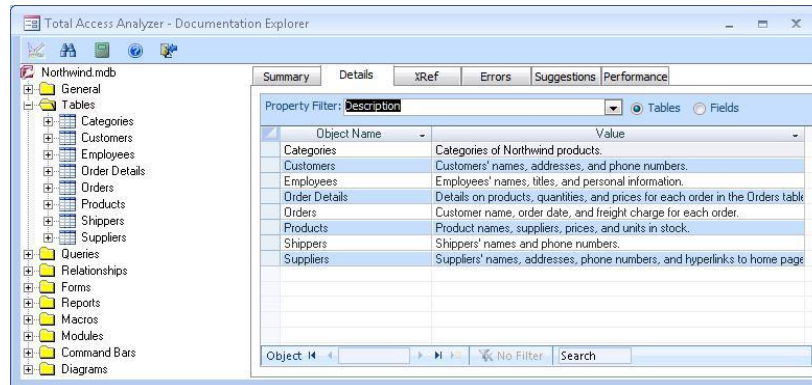
Using Property Filters

Total Access Analyzer documents the properties of every object selected. The Detail tab usually displays the properties for the current object, but there may be times that you want to see a property's settings across multiple objects. For example, as a quality control check on your forms, you may want to check the AutoCenter property value of every form.

This powerful functionality is available in Total Access Analyzer as Property Filters. Filters are available for any of the following folders in the Treeview:

Folder	Displays Property Values for	Page
Tables	All tables or fields	77
Table Fields	All fields in the current table	79
Views	All views	84
Stored Procedures	All stored procedures	85
Forms	All forms or form controls	87
Form Sections	All sections in the current form	88
Form Controls	All controls in the current form	88
Reports	All reports or all report controls	89
Report Sections	All sections in the current report	90
Report Controls	All controls in the current report	90
Report Group Levels	All group levels in the current report	90

After selecting one of the folders listed above, click on the Details tab and the Details form appears:



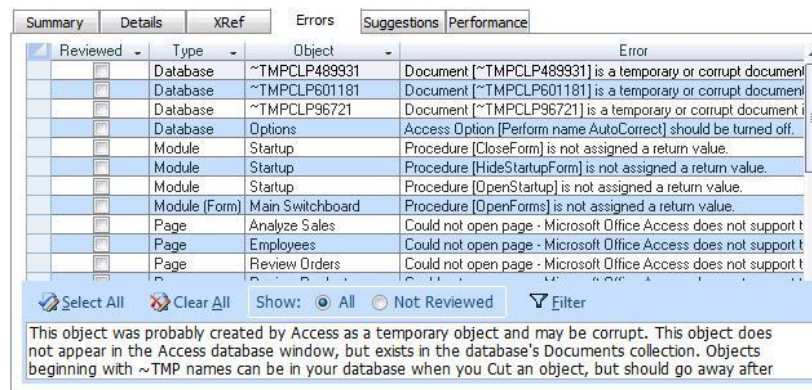
Property Filter for Tables

Use the Property Filter combo box to select the property you want to examine. The first time you use it, the form takes a moment to load the property values. All items in the current folder with that property are displayed. Objects without the property value (null values) are not listed. In the example above, the Option Group to the right of the Property Filter lets you switch between views of parent and child object properties.

The list of properties available is controlled by options you selected for documentation. For more information, see page 41.

Errors, Suggestions, and Performance Tips

One of the most powerful features of Total Access Analyzer is its ability to offer solutions for common database problems and suggestions to make your application more robust. This includes detection of errors that can crash your database, suggestions to improve your object design and application code, and tips to enhance application performance. This information can be viewed from the Errors, Suggestions, and Performance tabs on the Documentation Explorer.



Tab Pane with Errors Selected



For a complete list of all the Errors, Suggestions, and Performance tips detected by Total Access Analyzer, print the reports from the System category. See page 144 for more information.

Errors

This tab lists the errors that Total Access Analyzer detected in your database. Errors are triggered for objects that Total Access Analyzer could not document or for serious problems that may cause your database application to crash (e.g. invalid linked tables, references to missing objects, etc.). You should fix or at least understand every item in this list. After doing so, you may want to regenerate the documentation to make sure your entire object and cross reference information is valid.


Suggestions

This tab lists suggestions for improving your database. These suggestions focus on enhancing the reliability and maintainability of your application. Examples include lists of unused objects and code, form buttons that do nothing, procedures without error handling, etc.

Performance

This tab lists performance tips to help you optimize your database for speed and efficiency. Not every performance tip can be implemented, but the list tries to highlight areas where you should focus. For example, it lists queries that return a lot of fields or use the “SELECT * ” syntax. You may or may not be able to reduce the number of fields returned, but if you do, you can improve performance.



Use Design View button on the toolbar:  to open the object that triggered the Error, Suggestion, or Performance issue for editing. This feature allows you to easily fix issues as you view the list.

Reviewing Issues

Total Access Analyzer allows you to flag issues you’ve reviewed by checking the [Reviewed] column for the items you’ve fixed or deemed unnecessary to fix.

From the Documentation Explorer, you can filter the Errors, Suggestions, and Performance lists by reviewed status. The associated reports also show the reviewed status for each item, and can be filtered to show reviewed items, non-reviewed items, or all items.

Keeping Reviewed Status Between Documentation

The Reviewed status is saved between documentation runs, and can be seen the next time you document the database. This allows you to ignore items that you previously reviewed (note that issues that you fixed will no longer be in the list).

Reviewed status is stored in the output database. For this feature to work, make sure that the output database name remains the same every time you document the database.

Keep in mind that the output database name should be unique for each database you document. If you have multiple databases with the same name (e.g. C:\MySales\Sales.mdb and C:\CompanySales\Sales.mdb), the default output database name will be the same (OutputDirectory\Sales.tdb). To take advantage of this feature, be sure to specify unique output database names for each database you document.

Filtering by Reviewed Status

As you review Errors, Suggestions, and Performance issues, check the “Reviewed” box next to the issue. This feature helps you keep track of items you have addressed, or items that you determine require no action. The Reviewed status of each item is retained if you document the database again to make it easy to see new issues. Issues can also be filtered by Reviewed status on screen and in reports.

To filter by Reviewed status in the Documentation Explorer, select “All” or “Not Reviewed” from the option group at the bottom of the screen:



Filtering reports by Reviewed status is explained on page 130.

Filtering by Object or Object Type

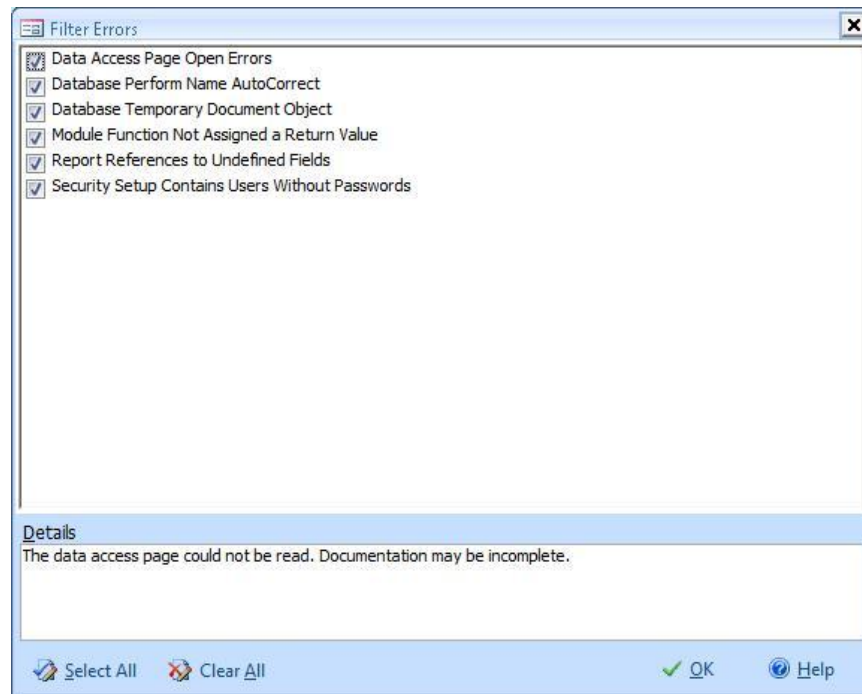
The number of Errors, Suggestions, and Performance tips can be quite large. To reduce the number of records displayed, click on a different folder or item in the Treeview. This adjusts the list to just the currently selected item in the Treeview.

For example, to view all Errors, Suggestions, and Performance tips for the entire database, click on the top item (database node) in the treeview and select the appropriate tab. To view all table errors, select the Tables folder in the Treeview. Similarly, you can reduce the list to a specific table by selecting that table in the Treeview.

In general, the Errors, Suggestions, and Performance tabs are available for parent or top-level objects (tables, relations, queries, forms, reports, macros, modules, command bars, and containers) and not available for child or sub-objects (fields, controls, sections, etc.). The one exception is module procedures; this is because there may be a large number of items per procedure.

Filtering by Error Type

You can also filter the Errors, Suggestions, and Performance lists by the type of error, suggestion, or performance tip. Just press the [Filter] button at the bottom of the form. A filter form appears showing all available items for your current tab. For example, if you are on the Errors tab and press the [Filter] button, the Filter form shows a list of all available Error types:



Filter Errors

Each error type is listed, and a description of the currently selected error type appears in the Details box. Select or deselect individual items, or use the [Select All] and [Clear All] buttons. Press [OK] to return to the Documentation Explorer, and the list is updated according to the items selected in the filter.

Documentation by Object Type

The following sections outline the documentation available in the Documentation Explorer. Organized by object type, it shows how the documentation is organized and explains the contents of each Tab for each type of object. In some cases, a particular tab is not applicable for a particular type of object and it is not listed. For example, when the General folder is selected in the Treeview, only the Summary tab has data.

In the remainder of this chapter, the term *Folder* is used to describe an entry in the treeview that has a folder icon. The term *Item* is used to describe all other objects in the Treeview.

Since Jet databases (MDBs) and Microsoft Access Projects (ADPs) can contain different types of objects, the descriptions that follow show whether the object type is available only in MDBs, only in ADPs, or in both types of databases.

The following table is a quick reference for finding information on the documentation you are interested in:

Documentation	Page
Database	72
General, Inventory, Ribbons, Import/Export Specifications, Security, References, Containers	72
Tables	77
Queries	81
Views	84
Database Diagrams	85
Stored Procedures	85
Relationships	86
Forms	87
Reports	89
Macros	91
Modules	92
Command Bars	105
Diagrams	106

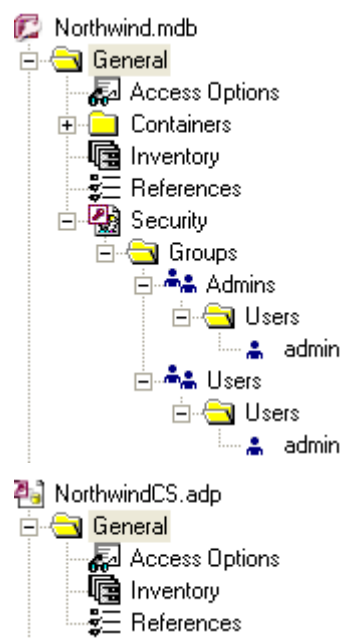
Database Item

The first object in the treeview is the Database item. This item represents the database whose documentation you are viewing. This is the data available under the tabs:

Tab Name	What's Displayed
Summary	Summary information about the database, including the full path, name, and version
Details	All database properties
Errors	All errors detected in the database
Suggestions	All suggestions for the entire database
Performance	All performance tips for the entire database

General Folder

For ACCDB/MDB and ADP The General folder contains information about your database at the highest level and is available for MDB and ADP documentation.



There is an inventory list of all objects regardless of the objects you documented, Access option settings, and library references.

MDB documentation also includes security information and container and document listings.

The General folder for ADPs is very simple.

Summary Tab	Summary information on the database, including the full path, name, and version
-------------	---

Inventory Item

Inventory contains a list of all top-level objects in the database. This includes tables, queries, forms, reports, command bars, macros, and modules.

Summary Tab	A list of the number of objects by type
Details Tab	A list of each object name by type (use the Filter feature to limit the list of objects by type)

Access Options Item

Access allows you to set a variety of options under Access Options. Those settings are documented by Total Access Analyzer and shown here. For more information on individual settings, in Access, go under Access Options and press F1.

Summary Tab	The number of options documented
Details Tab	Each option and its value

References Item

Visual Basic for Applications (VBA) allows you to define references to other objects (libraries) from the Tools | References menu when a module is open in design view. This item lists each reference in the current database. Note that Access automatically creates references in every database for:

- The Visual Basic for Applications library
- The Microsoft Access Object library
- The OLE Automation library
- The Microsoft ActiveX Data Objects library

Additionally, other references may be added by Access on your behalf. For example, when you place an ActiveX control on a form or report, Access creates a reference to the ActiveX control's resource library file.

Please note that the Microsoft DAO Object library is not included by default in new databases that are created in Microsoft Access 2000 or later. However in databases that need DAO, or in databases converted from previous versions of Access, this reference exists.

Summary Tab	The number of references in the database
Details Tab	Each reference in the database and its properties (such as the full path, name, and version)

Security Folder

Security settings are only available for MDBs and do not apply to ACCDB and ADP databases.

This folder contains security information on groups, users, permissions, and the workgroup. If you are not familiar with security, refer to the Access online help.

A workgroup is a collection of users and groups defined for security. Information for a workgroup is stored in an Access database called a Workgroup Information File, which typically has an extension of .MDW. If you implemented user-level security in your Access application, the information displays the specific users and groups of users you defined. If you have not implemented user-level security, the default Access Admins and Users groups are shown, along with an Admin user.

Workgroup Information Files are linked to Access itself, not to particular databases. This means multiple databases can share the same Workgroup Information File. Total Access Analyzer documents the Workgroup Information File in use by Access when documentation is generated.

For more information, search Access online help for **Workgroup Information Files**.

Summary Tab	Information about the workgroup, including the number of users and groups, and the path and name of the Workgroup Information file (.MDW) currently in use
Errors Tab	Errors detected with security

Security Groups Folder

This folder contains items for each group defined in the Workgroup Information file.

Summary Tab	The number of groups defined
Errors Tab	Errors encountered while documenting groups

Security Group Items

A group item appears for each group documented. If you implemented User-Level security in your application, this information is useful for tracking your group accounts.

Summary Tab	The name of the group, as well as the path and name of the Workgroup Information file (.MDW) where the group is defined
Details Tab	The properties of the group
Permissions	The group's permissions for each object

Important Note on Jet Database Security Documentation

The security settings documented by Total Access Analyzer are the Data Access Objects (DAO) permissions obtained using the Permissions and AllPermissions properties of Access Document objects. The names and types of permissions available through DAO are different from the permission names and settings available through the Access User Interface using the Database Tools, User and Permissions ribbon.

Unfortunately, Microsoft provides no documentation on how DAO permissions map to the Access User-Interface permissions. This, combined with the fact that there is no way for Total Access Analyzer to get to the User-Interface permissions means that there is a mismatch between some of the permissions documented by Total Access Analyzer and the permissions you see through the Access User-Interface. Rest assured that FMS has tested the DAO permissions documentation very carefully and the values being returned are correct. To use the Total Access Analyzer permissions documentation correctly, you must become familiar with the DAO permissions constants and properties.

We regret that we cannot accurately document permissions according to the terminology shown in the Access user interface, but the values we document are the exact values returned by the DAO object.

Security Users Folder

The Users folder contains all user objects in the group currently selected. If you implemented User-Level security on your database, this information is useful for tracking your user accounts. If you are not using User-Level security, this section lists the default Access User and Admin user accounts.

Summary Tab	The number of users defined
Errors Tab	Errors encountered during user documentation

Security User Items

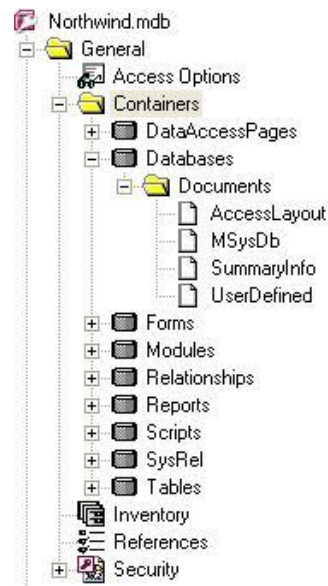
Each user has an item shown here.

Summary Tab	The user's name and workgroup name (of particular interest is the HasPassword property, which allows you to ensure that each user has a password set)
Details Tab	The properties of the user
Permissions Tab	The permissions for the current user for all objects and containers (see page 75 for important information concerning permissions)
Errors Tab	Errors encountered during user documentation

Not available
for ADPs

Containers Folder

Access organizes ACCDB and MDB database objects into Containers and Documents. These objects hold permissions and other security settings implemented by Access User-Level security.



If you selected the “Document Containers and Documents” option (see page 47), this node appears in the General folder of the Treeview.

The Container folder includes nine Containers, each with a Document folder that holds documents.

For more information on Container objects, search Access online help for **Containers**.

These nine containers are defined in Access by the JET database engine:

- **DataAccessPages** for all data access pages
- **Databases** for internal objects maintaining the database
- **Forms** for all forms
- **Modules** for all standard (non-form/report) modules
- **Relationships** for table relationships
- **Reports** for all reports
- **Scripts** for all macros
- **SysRel** for relationship window layout information
- **Tables** for all tables and queries

Containers Folder

The Containers folder contains all container objects.

Summary Tab	A list of all container names
-------------	-------------------------------

Container Item

Each container in the database is an item. Each item also has a Documents folder.

Summary Tab	The name of the container
Details Tab	The properties of the container

Documents Folder

Each container has a Documents folder that holds its members. For example, every form in the database is represented by a form document in the Forms container.

Summary Tab	The name of each document in the container
-------------	--

Document Item

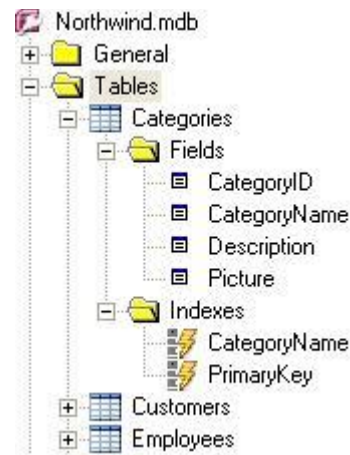
Each document item in the container is shown.

Summary Tab	The name of the document
Details Tab	The properties for the document

Tables Folder

For
ACCDBs/MDBs
and ADPs

The Tables folder contains information on the tables selected for documentation. This includes table properties, their fields and indexes, cross reference, errors, suggestions, and performance tips.



This is an example of the Tables folder for an MDB. Fields and index folders appear for each table.

The terminology is slightly different for ADPs (as documented below).

Summary Tab	The number of tables documented and sorted by table type
Details Tab	The Property Filter shows the values for a single property across all tables or fields (see page 66 for more information)
XRef Tab	Everywhere each table is used among the documented objects. See page 78 for a description of the columns shown in this view.
Errors Tab	Errors detected among all tables
Suggestions Tab	Suggestions for all tables
Performance Tab	Performance tips for all tables

Table Item

An item appears below the Tables folder for each table documented. Included below each table item is a list of properties, a list of the table's fields, and a list of the table's indexes.

For more information on table definitions, search Access VBA online help for **TableDef object**

Summary Tab	Basic information about the table, including the number of records in the table and the cumulative size in bytes per record (note that if you did not select "Document Record Counts" as an option as explained on page 42, the value of this property is -1)
Details Tab	A list of all properties for the table
XRef Tab	<p>Every place the table is used among the documented objects (the fields are as follows):</p> <p>The <i>Calling Object Type</i> and <i>Calling Object Name</i> fields show the type of object and object name referring to the table.</p> <p>The <i>Calling Child Type</i> and <i>Calling Child Name</i> fields show which item in the <i>Calling Object Name</i> refers to the table. For example, if a table is referenced by a control on a form, the form is the <i>Calling Object</i> and the control is the <i>Calling Child</i>.</p> <p>The <i>Referenced Object</i> shows the table being referred to.</p> <p>The <i>Called In</i> field shows the name of the property in the <i>Calling Object</i> or <i>Calling Child</i> that actually refers to the table.</p> <p>The <i>Resolved</i> field shows whether or not the referenced table exists. If the value is No, the table does not exist in the documented database. A value of No indicates a serious error in your database, and is reported in the Errors tab of the table object.</p> <p>The <i>Variable</i> field indicates whether the referenced table is a variable or expression. If this is the case, Total Access Analyzer cannot determine the validity of the reference, and automatically sets the <i>Resolved</i> field to No. If the <i>Variable</i> field is checked (Yes), you must manually inspect the reference to determine its validity.</p>

Errors Tab	Errors documented for the table
Suggestions Tab	Suggestions available for the table
Performance Tab	Performance tips for the table

Fields Folder

For ACCDB/MDB databases only, the Fields folder is the collection of fields in the table.

Summary Tab	A list of fields in the table
Details Tab	Property's values across all fields in the table
XRef Tab	Every place a field in the table is used among the documented objects (see page 78 for a description of the columns shown in this view)

Field Item

For ACCDB/MDB databases only, a field item exists for each field in the table.

Summary Tab	Basic information about the field, including its data type, size, and description
Details Tab	All of the field's properties (if you did not select the Document Field Properties option as explained on page 42, this section is blank)
XRef Tab	Everywhere the field is used among the documented objects (see page 78 for a description of the columns shown in this view)

Indexes Folder

The Indexes folder is the collection of Indexes belonging to a table.

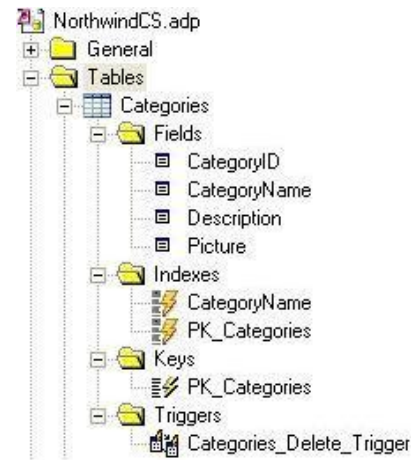
Summary Tab	A list of indexes in the table
-------------	--------------------------------

Index Item

An Index item exists for each index in the table.

Summary Tab	Name of the index, its fields, and whether or not the index is the Primary key
Details Tab	The index properties

Tables Folder for ADPs



This is an example of the Tables folder for an ADP. Columns, Indexes, Keys, and Triggers folders appear for each table.

Columns Folder

The Columns Folder for ADPs is similar to the Fields folder for ACCDBs/MDBs. See the information about the Fields Folder on page 79.

Column Item

The Column Item is similar to the Field item for MDBs. See the information about the Field Item on page 79.

Keys Folder

The Keys folder is the collection of Keys that belong to an ADP table.

Summary Tab	A list of keys in the table
-------------	-----------------------------

Key Item

A Key item exists for each key in the table.

Summary Tab	The name of the key and its fields
Details Tab	The key's properties

Triggers Folder

The Triggers folder is the collection of Triggers defined for an ADP table.

Summary Tab	List of triggers defined for the table
-------------	--

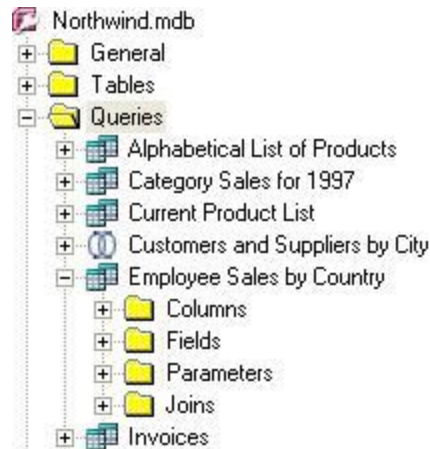
Trigger Item

A Trigger item exists for trigger in the table.

Summary Tab	The name of the trigger and its TSQL
Details Tab	The trigger's properties

Queries Folder

Queries only exist in ACCDB/MDBs, so are not part of ADP documentation.



The Queries folder contains information on the queries selected for documentation. This includes query properties, their exposed columns, their referenced fields, table joins, parameters, errors, suggestions, and performance tips.

Summary Tab	The number of queries documented and the number of queries by query type
Details Tab	The values for a single property across all queries (see page 66 for more information on Property Filters)
XRef Tab	Every place queries are used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	Errors detected for all queries
Suggestions Tab	Suggestions for all queries
Performance Tab	Performance tips for all queries

Query Item

An item appears below the Queries folder for each query documented. Included below a query item are folders for the columns exposed by the query, the fields used by the query, parameters, and joins.

For more information on query definitions, search Access VBA online help for **QueryDef object**

Summary Tab	Information about the query such as its SQL string and type
Details Tab	The query's properties
XRef Tab	Every place the query is used among the documented objects (for a description of the columns shown in this view, see page 78)
Errors Tab	All errors for the query
Suggestions Tab	All suggestions for the query
Performance Tab	All performance tips for the query

Columns Folder

The Columns Folder represents the collection of fields provided (exposed) by the query (not the fields used by a query which are in the Fields folder). Not every query has columns. For instance, Action queries never have columns. The columns correspond to the DAO Fields collection of a query, which contains the fields returned by a SELECT or Crosstab query.

Summary Tab	A list of fields referenced by the query
Details Tab	Property slices across all query's columns

Column Item

A column item appears in the treeview for every column provided by the query.

Summary Tab	Column name
Details Tab	Column properties

Fields Folder

The Fields Folder represents the fields used in the query. These fields may or not be columns (fields exposed by the query).

Summary Tab	A list of fields referenced by the query
-------------	--

Field Item

A field item appears in the treeview for every field referenced by the query.

Summary Tab	The name, type and other attributes of the field
-------------	--

Parameters Folder

Parameter queries require input values before running. These values are typically used in the query's constraint (WHERE clause) and allow your queries to be very flexible.

For more information, search Access VBA online help for **Parameters collection**

A query may have many parameters. Access queries support two types of Parameters, implicit and explicit. Implicit parameters are defined as a reference to a field or expression that cannot be resolved by the query engine until runtime. Explicit parameters are those that are explicitly identified using the Parameters dialog available while in query design under Design | Show Hide | Parameters.

All explicit and implicit parameters are documented in the Parameters folder.

Summary Tab	Each parameter and its name
Details Tab	Property slices across all query's parameters

Parameter Item

Each parameter in the query has a parameter item.

Summary Tab	The name and data type of the parameter
Details Tab	The properties of the parameter

Joins Folder

When a query links tables or queries together, it does so with joins. Each join in the query is in the Joins Folder.

Summary Tab	The joins identified by number starting at 1
-------------	--

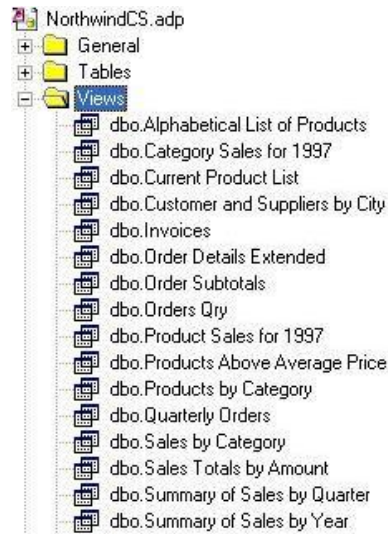
Join Item

Each join in the query is a Join Item.

Summary Tab	The tables and fields used by the join, and join type
-------------	---

Views Folder

Views only exist in ADPs. They are similar to Jet queries, but are stored on the server rather than inside the ADP.



The Views folder contains information on the views selected for documentation. This includes view properties.

Summary Tab	The number of views documented and the number of views by view type
Details Tab	The values for a single property across all views (see page 66 for more information on Property Filters)
XRef Tab	Every place views are used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	Errors detected for all views
Suggestions Tab	Suggestions for all views
Performance Tab	Performance tips for all views

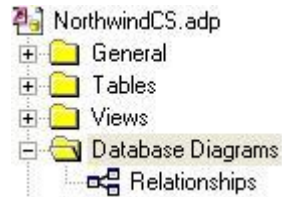
View Item

An item appears below the Views folder for each view documented

Summary Tab	Information about the view such as its TSQL string and type
Details Tab	The view's properties
XRef Tab	Every place the view is used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors for the view
Suggestions Tab	All suggestions for the view
Performance Tab	All performance tips for the view

Database Diagrams Folder

For ADPs only



The Database Diagram folder contains information on the database diagram selected for documentation. This includes database diagram properties.

Summary Tab	The number of database diagrams documented
Details Tab	The values for a single property across all database diagrams (see page 66 for more information on Property Filters)
Errors Tab	Errors detected for all views

Database Diagram Item

An item appears below the Database Diagrams folder for each database diagram documented.

Summary Tab	Information about the database diagram
Details Tab	The database diagram's properties
XRef Tab	Every place the database diagram is used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors for the database diagram

Stored Procedures Folder

For ADPs only



The Stored Procedures folder contains information on the stored procedures selected for documentation. This includes stored procedure properties.

Summary Tab	The number of stored procedures documented and the number of stored procedures by type
Details Tab	The values for a single property across all stored procedures (see page 66 for more information on Property Filters)

XRef Tab	Every place stored procedures are used among the documented objects (see page 78 for a description of the columns)
Errors Tab	Errors detected for all stored procedures

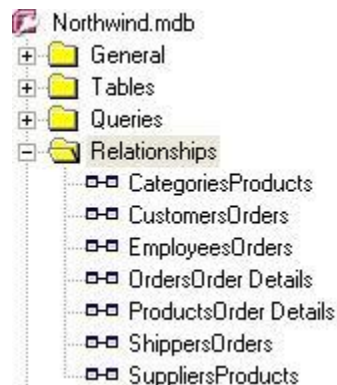
Stored Procedure Item

An item appears below the Stored Procedures folder for each stored procedure documented.

Summary Tab	Information about the stored procedure such as its TSQL string and type
Details Tab	The stored procedure's properties
XRef Tab	Every place the stored procedure is used among the documented objects (see page 78 for a description of the columns)
Errors Tab	All errors for the stored procedure

Relationships Folder

For
ACCDBs/MDBs
only



Relationships among tables and queries are defined from the Database Tools | Show Hide | Relationships.

Tables and queries can be linked 1-to-many, 1-to-1, or indeterminate relationships. You can also enforce referential integrity to ensure that data changes do not corrupt data.

Total Access Analyzer documents all relationships in your database, including those that are inherited from tables in linked databases.

The Relationships folder contains all relationships in the documented database.

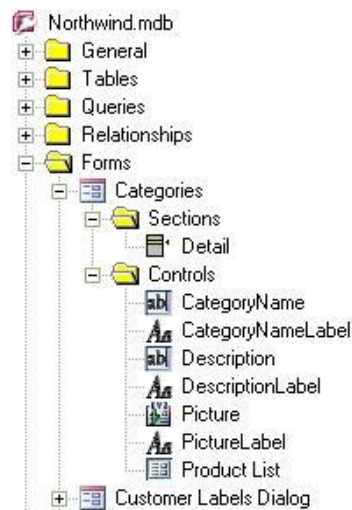
Summary Tab	Each relationship and its name
Details Tab	Option to preview and print a view of your Relationships window by pressing the [View Relationships Window] button (for more information, see page 141)
Errors Tab	All relationship errors

Relationship Item

A relationship item exists for each relationship.

Summary Tab	All relationship properties, including the names of the tables and fields the relationship uses, and the relationship type
Details Tab	A graphical representation of the relationship
Errors Tab	All errors for the relationship

Forms Folder



Every form selected for documentation is available in the Forms folder.

Each form has folders for Sections and Controls.

The module code behind the forms is not included here. Look in the treeview's Modules folder for form modules.

Summary Tab	The total number of documented forms and the number with and without code
Details Tab	The property filter for forms (select a property to see its values across all the forms or form controls; see page 66 for more information)
XRef Tab	Where forms are used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors documented for forms
Suggestions Tab	All suggestions for forms
Performance Tab	All performance tips for forms



Tip

Form errors, suggestions, and performance tips do not include information on the module code behind forms. Look in the Modules folder on the treeview for form errors, suggestions, and performance tips.

Form Item

Each documented form has a form item.

Summary Tab	Basic information about the form, including its name, description, and record source
Details Tab	All form properties
XRef Tab	Where the form is referenced among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors documented for the form
Suggestions Tab	All suggestions available for the form
Performance Tab	All performance tips for the form

Sections Folder

Access forms are divided into sections. There are five possible sections for forms: form header, form footer, page header, page footer, and detail. The Sections folder contains every section in the form. If a section does not exist, it is not listed.

Summary Tab	A list of sections and their names
Details Tab	Property filter for properties of all the sections in the form

Section Item

Each section in the form is represented by a section item.

Summary Tab	The section name and number
Details Tab	All properties for the section

Controls Folder

The Controls folder contains every control on the form.

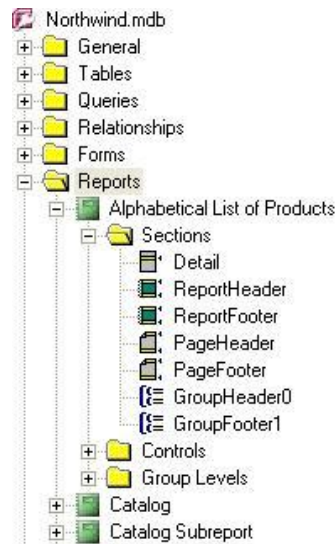
Summary Tab	A list of controls and their names
Details Tab	A property filter for all controls on the form

Control Item

Each control in the form is shown as a control item.

Summary Tab	Basic control information such as type, caption, and control source
Details Tab	All properties for the control (the properties listed depend on your selection of "Control Format Properties" and "Control Other Properties" as explained on page 43)

Reports Folder



Every report selected for documentation is available in the Reports folder.

Each report has folders for Sections, Controls, and Group Levels

The module code behind the reports is not included here. Look in the treeview's Modules folder for report modules.

Summary Tab	The total number of documented reports and the number with and without code
Details Tab	The property filter for reports (select a property to see its values across all the reports or report controls; see page 66 for details)
XRef Tab	Where reports are used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors documented for reports
Suggestions Tab	All suggestions for reports
Performance Tab	All performance tips for reports

Report Item

Each documented report has a report icon.

Summary Tab	Basic information about the report including its name, description, and record source
Details Tab	All report properties
XRef Tab	Where the report is used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors detected for the report
Suggestions Tab	All suggestions available for the report
Performance Tab	All performance tips for the report

Sections Folder

Access reports are divided into sections. There are several possible sections for reports: detail, headers and footers for the report, page headers and footers, and the report's sorting and grouping levels. The Sections folder contains all the sections in the report.

Summary Tab	A list of sections and their names
Details Tab	Property Filter for all the sections in the report

Section Item

Each section in the form is represented by a section item.

Summary Tab	The section name and number
Details Tab	All properties for the section

Controls Folder

The Controls folder contains all controls on the report.

Summary Tab	A list of all controls and their names
Details Tab	Property Filter across all report controls

Control Item

Each control in the report is shown as a control item.

Summary Tab	Basic information on each control including its type, caption, and control source
Details Tab	All properties for the control (the properties listed depend on your selection of "Control Format Properties" and "Control Other Properties" as described on page 43)

Group Levels Folder

The Group Levels folder contains all group levels on the report.

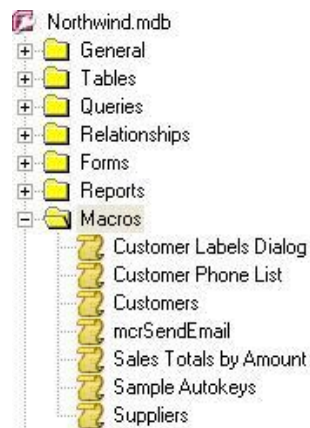
Summary Tab	A list of all group levels
Details Tab	Property Filter across all report group levels

Group Level Item

Each group level in the report is shown as a group level item.

Summary Tab	Basic information on each group level including its control source, group header, etc.
Details Tab	All properties for the group level

Macros Folder



Every documented macro is listed in the Macros folder.

For each macro, its properties, macro lines, and sub-macro names are listed.

Summary Tab	The number of macros documented
XRef Tab	Where macros are referenced among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors documented for macros
Suggestions Tab	All suggestions for macros
Performance Tab	All performance tips for macros

Macro Item

A macro item exists for each macro documented.

Summary Tab	The macro's name and number of lines
Details Tab	All macro settings (similar to the multi-pane view available when you open the macro in design view)
XRef Tab	Where the macro is used among the documented objects (see page 78 for a description of the columns shown in this view)
Errors Tab	All errors documented for the macro
Suggestions Tab	All suggestions for the macro
Performance Tab	All performance tips for the macro

Overview of Module Documentation

Total Access Analyzer generates a large amount of information about the module code in your database and works identically for ACCDB, MDB, and ADP databases. In addition to source code, Total Access Analyzer also documents and cross references procedures, variables, constants, declarations, user defined types, class modules, and many other VBA

constructs. Because the type of documentation generated for modules is different from other objects, module cross reference is discussed in detail later.

Types of Access Modules

Access supports four types of modules. Regardless of type, all documented modules appear under the Modules folder in the Total Access Analyzer Documentation Explorer form:

Standard Modules

The standard modules are the regular (general) modules that appear in your database window.

General Class Modules

Class modules allow you to create powerful self-contained objects defined with properties and methods. Variables can be based on class modules and used by any module.

Form Class Modules

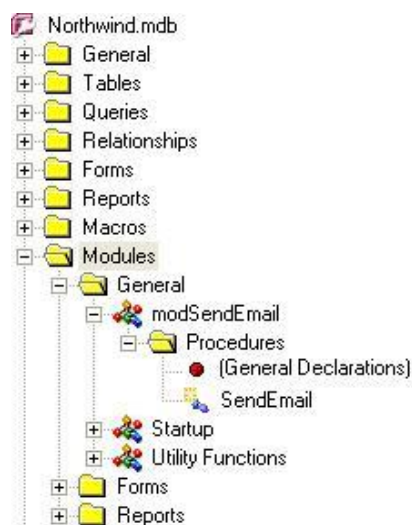
The code attached to a form is called a form class module. Forms are considered class modules and can be invoked from any module.

Report Class Modules

Similarly to form class modules, reports have report class modules.

Modules Folder

The Module folder contains all the documented modules.



There are three folders under the Modules folder: General, Forms, and Reports.

Every selected module, and form and report with module code, is listed.

The General folder contains the modules that appear in the Module tab of the database window (standard and general class modules).

Within each module item is a Procedure folder containing its declarations and individual procedures.

If you selected the “Generate Module XRef” option (see page 46), all the General modules are included even if you did not select them individually. This is because Total Access Analyzer must analyze all the general modules to pickup public objects for the Module XRef to work correctly.

Summary Tab	The number of modules documented and the number of each type of module
XRef Tab	Module XRef information for all modules (see page 94 for information on Module XRef)
Errors Tab	All errors documented for modules
Suggestions Tab	All suggestions for modules
Performance Tab	All performance tips for modules

General Folder

This folder contains all standard modules and general (non-form and report) class modules.

Summary Tab	The number of general modules documented
XRef Tab	Module XRef information for all general modules (see page 94 for more information)
Errors Tab	All errors documented for general modules
Suggestions Tab	All suggestions for general modules
Performance Tab	All performance tips for general modules

Module Item

An item exists for every general module documented.

Summary Tab	Information about the module including its description and whether it is a class module
Code Tab	The module’s VBA source code by procedure (use the vertical scroll bar, or [PgDn] and [PgUp] keys to move between the procedures)
XRef Tab	Module XRef information for the module (see page 94 for information)
Errors Tab	All errors documented for the module
Suggestions Tab	All suggestions for the module
Performance Tab	All performance tips for the module

Procedures Folder

The Procedures folder contains the module's declarations section and all its procedures.

Summary Tab	A list of all procedures in the module
-------------	--

Procedure Item

Each procedure in the module is a procedure item. This list includes the declarations section of the module, shown as "(General Declarations)".

Summary Tab	The procedure definition including its type, start line, number of lines of code, parameters, etc.
Code Tab	The VBA source code for the procedure
XRef Tab	Module XRef information for the procedure (see page 94 for more information)
Errors Tab	All errors documented for the procedure
Suggestions Tab	All suggestions for the procedure
Performance Tab	All performance tips for the procedure

Forms Folder

The Forms folder includes all the documented form modules. This folder has the same structure as the General Folder.

Reports Folder

The Reports folder includes all documented report modules. This folder has the same structure as the General Folder.

Module Cross Reference

One of the most powerful features of Total Access Analyzer is its ability to perform module code analysis. This module analysis is called "Module XRef" and gives you an incredible amount of detail about your modules and how they work.

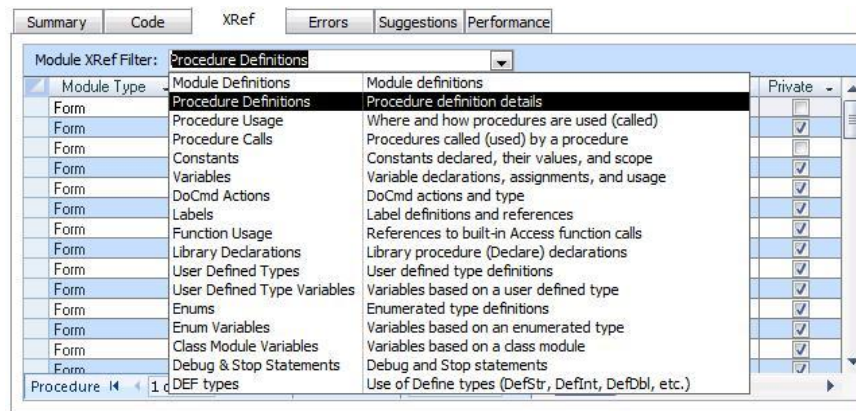
Module XRef information is displayed in the XRef tab when viewing a module or procedure object. The contents of the XRef tab changes according to the folder or object you are on in the Treeview. For example, when you click on the Modules folder and select the XRef tab, you are viewing cross reference information for all VBA code across all modules.

When you click on a specific module and select the XRef tab, you are viewing information for all VBA code in the current module.

Module XRef includes many types of information:

- **Module Definitions**
Module summary of options, procedure and line counts, etc.
- **Procedure Definitions**
Procedure declaration information including events
- **Procedure Usage**
Where and how procedures are used (called)
- **Procedure Calls**
Procedures called by each procedure
- **Constants**
Every declared constant, its value, and module scope
- **Variables**
Every variable and how its used (defined, assigned a value, or referenced)
- **DoCmd Actions**
Every DoCmd action and how it is used
- **Labels**
Every label definition and reference
- **Function Usage**
Every use of Access/VBA functions and the parameters passed
- **Library Declarations**
External procedures referenced with Declare statements
- **User Defined Types**
Every user defined type and its elements
- **User Defined Type Variables**
Variables based on user defined types
- **Enums**
Every enum definition and its elements
- **Enum Variables**
Variables based on enums
- **Class Module Variables**
Variables based on class modules
- **Debug & Stop Statements**
Everywhere a Debug or Stop statement is used
- **DEF Types**
Use of type definitions (DefInt, DefDbl, DefStr, etc.) to set variable types based on their first letter

For module folders and items, the XRef tab includes a Module XRef Filter that lets you select the data to view:



Module XRef Filter Selections

These items are available if you are on the Modules Folder or module item. If you are on a procedure item, the module level XRef items (e.g. Library Declarations, User Defined Types, and DEF types) are not available. The selected XRef item stays the same as you move among modules. If you move between modules and procedures, each preserves its last selection.

Each Module XRef type is described in detail:

Procedure Definitions

Detailed information for the definition of every declaration, procedure, and property Let/Get/Set statement is shown.

The documentation is based on this syntax for Subs:

```
[Private|Public] [Static] Sub ProcName [(arglist)]
```

This syntax is used for Functions:

```
[Private|Public] [Static] Function ProcName  
[(arglist)] [As ReturnType]
```

Events defined in the declarations section of a module are also included:

```
[Public] Event ProcName [(arglist)]
```

Similar syntax applies to Property Let, Get, and Set.

For each of these, the following information is shown. The declarations section is also listed, but most of the fields are not relevant:

Field Name	Description
Module Type	The type of module (module, form, or report)
Module Name	The module where the procedure is defined
Procedure	The procedure, event, or property name
Static	Checked if the procedure is declared as Static
Public	Checked if the procedure is declared as Public
Private	Checked if the procedure is declared as Private
Type	The procedure type (Sub, Function, or Event); for class modules, if it is a property, the type (Get, Let, or Set)
Parameters	The procedure's parameter declaration (argument list)
Parameter Count	The number of parameters (arguments)
Optional Parameters	The number of optional parameters (as specified by the VBA Optional keyword)
Returns	The explicit return type for functions
Comments	The comment block before your procedure declaration (or immediately after if no comments are found above your declaration)
Description	The first line of comment text which is assumed to be the procedure's description
Start Line	The line number where the procedure starts
End Line	The line number where the procedure ends
Error Trap	Checked if the procedure has error handling code (if the procedure has an "On Error" line, it is considered to have error handling)
Code Exists	Checked if the procedure has any code in it (if the procedure only has comments, it is not considered to have code)

Procedure Usage

Also known as the Procedure Cross Reference, this list shows every place a procedure is used. This includes references from other modules, form and

report events, macros, and even queries. This is extremely useful for understanding everywhere a procedure is called and the parameters used.

Field Name	Description
Referenced Module Type	The type of the module in which the referenced procedure is defined (module, form, or report)
Referenced Module Name	The name of the module in which the referenced procedure is defined
Referenced Proc	The name of the referenced procedure
Calling Proc	The procedure calling the Referenced Proc (may be blank if the reference is not from a procedure such as an event, macro, or query)
Calling Object Name	If there is a Calling Proc, the name of the module in which the Calling Proc is defined; otherwise, the name of the object calling the Referenced Proc
Calling Type	The object type of the Calling Object Name
Calling Child Type	If the procedure is called from a form or report control, the control type (Command Button, ListBox, Label, etc.); it is a “child” of the Calling Object
Calling Child Name	The name of the control referencing the procedure
Event	The event name, if the procedure is called from a form, report, or control event
Parameters	The parameters used to call the procedure
Line	If the procedure is referenced in module code, the line number in the Calling Object Name module where the reference is made

Common Fields

The remaining Module XRef listings each have these three fields:

Field Name	Description
Module Type	The type of module (module, form, or report)
Module Name	The module name
Procedure	The name of the procedure documented

Procedure Calls

For every procedure, the procedures it uses are listed. In addition to the common fields listed above, these fields are shown:

Field Name	Description
Referenced Procedure	The name of the referenced procedure
Parameters	The parameters used in the procedure call
Referenced Module Type	The type of module in which the referenced procedure is defined
Referenced Module Name	The name of the module in which the referenced procedure is defined
Line	The module line number where the object is referenced

Constants

Each constant declaration is listed, along with its assigned value. Constants are defined by this syntax:

```
[Public|Private] Const constName [As type] = value
```

In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Constant	The name of the constant
Value	The value of the constant
Type	The constant declaration type (Const, Public Const, or Private Const)
Dim Type	The data type of constant (string, integer, etc.), if specified
Line	The line number where the constant is defined

Variables

The list includes every variable (including constants) and how it is used. In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Variable	The name of the variable
Parameters	The array parameters, if any

Type	How the variable is referenced: Const – the variable is declared as a constant Dim – the variable is declared Assigned – the variable is assigned a value Referred – the value of the variable is used Param – the variable is a procedure parameter
DIM Type	If the variable is defined in a Dim statement, the variable's data type (String, Long, Boolean, etc.)
Line	The module line number where the variable is used

DoCmd Actions

Every use of DoCmd in your code is documented. DoCmd has this syntax:

```
[Application.]DoCmd.Action Arguments
```

In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Action	The DoCmd action (Hourglass, Echo, OpenForm, Close, etc.)
Arguments	The arguments of the DoCmd action
Line	The module line number where DoCmd is called

Labels

Every label definition and reference is documented. Labels are used in a variety of syntax. Labels are defined this way:

```
LabelName:
```

Or referenced this way:

```
GoTo LabelName  
Resume LabelName
```

In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Line	The module line number where the label is used
Label	The name of the label
Type	The type of label reference: Define, GoTo, or Resume

Function Calls

References to Access/VBA functions (such as IsNull, CInt, Mid\$, Len, etc.) are documented. Note that these are different from calls to user defined functions, which are part of the procedure calls list.

In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Function	The name of the function being called
Parameters	The parameters passed to the function
Line	The module line number where the function is called

Library Declarations

Library declarations are procedures stored in external DLL or EXE libraries. They are defined with the Declare syntax:

```
[Public|Private] Declare Sub procname Lib libname  
[Alias aliasname] [(arglist)]
```

There is a similar syntax for declared functions, which have a return type. In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Type	The declared procedure type: Function or Sub
Procedure	The name of the declared procedure
Alias	The alias of the declared procedure, if any
Library	The name of the EXE or DLL library
Parameters	The parameters of the declared procedure, if any
# of Params	The number of parameters
ReturnType	The data type of the return value if it is a function (String, Boolean, Integer, etc.)
Line	The module line number of the Declare statement

User Defined Types

User defined types are defined in the declarations section of a module with this syntax:

```
[Private|Public] Type typeName  
    element1 [(subscripts)] As varType1  
    element2 [(subscripts)] As varType2  
    ...  
End Type
```

There is one record for every user defined type and element. In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Type Name	The name of the user defined type
Public	Checked if the Type is defined as Public
Private	Checked if the Type is defined as Private (types defined in forms and reports are always Private)
Number	The element number, starting at one and incremented for each element in the type
Variable	The variable (element) name
Parameters	The parameters if the variable (element) is an array
Dim Type	The data type of the element (if defined)
Line	The module line number where the type element is defined

User Defined Type Variables

Every variable based on a user-defined type is listed. The documentation is based on this syntax:

```
Dim varName As UserDefinedType
```

In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Type Name	The name of the user defined type
Variable	The variable (element) name

Enum Definitions

Enums are defined in the declarations section of a module with this syntax:

```
[Private|Public] Enum enumName
    membername1 [= constantExpression]
    membername2 [= constantExpression]
    ...
End Enum
```

There is one record for every enum and element. In addition to the common fields (page 98), these fields are shown:

Field Name	Description
Enum Name	The name of the enum
Public	Checked if the Enum is defined as Public

Private	Checked if the Enum is defined as Private
Number	The number, starting at one and incremented for each member in the Enum
Member Name	The member name
Constant Expression	The integer value of the element (even if it isn't explicitly defined)
Implied	Checked if the constant expression was not explicitly defined
Line	The module line number where the enum member is defined

Enum Variables

Every variable based on an enum is listed. The documentation is based on this syntax:

```
Dim varName As EnumName
```

In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Enum Name	The name of the Enum
Variable	The variable name

Class Module Variables

Every variable based on a class module is listed. The documentation is based on this syntax:

```
Dim varName As ClassModuleName
```

In addition to the common fields (listed on page 98), these fields are shown:

Field Name	Description
Variable	The variable based on a class module
Class Name	The name of the class module referenced

Debug and Stop Statements

Shows all references to Debug.Print and Stop statements. You should examine this list since these debugging commands should not be running in a production database (of course, you may have logic that allows them to work when you are debugging). In addition to the common fields (listed on page 119), these fields are shown:

Field Name	Description
Line	The module line number of the command
Command	The command used: "Debug.Print" or "Stop"

Def Type Statements

Every use of a Deftype statement is documented. This command is used to set the data type of variables based on their first letter. This is an old style of Basic programming and is not recommended since you can now explicitly define the data type of each variable.

For more information, refer to "Deftype Statements" in the Access online help file. There are many Deftype commands: DefBool, DefByte, DefInt, DefLng, DefCur, DefSng, DefDbl, DefDec, DefDate, DefStr, DefObj, DefVar. They share this syntax:

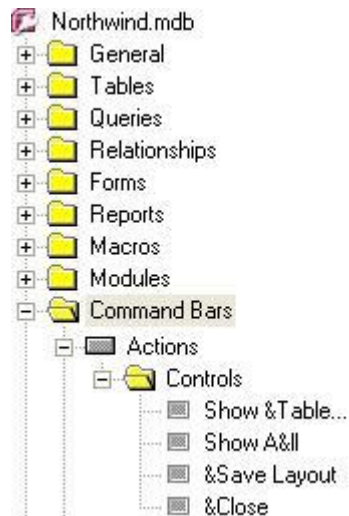
```
DefInt LowLetterRange[, HighLetterRange]
```

The definition can be set for one letter or a range of letters. These fields are shown:

Field Name	Description
Module Type	The type of module (module, form, or report)
Module Name	The module name
Define Type	The Deftype: DefInt, DefLng, DefStr, etc.
Low Range	The first letter of the range
High Range	The last letter of the range
Line	The module line number of the DefType

Command Bars Folder

Command Bars are available for ACCDBs/MDBs and ADPs and include built-in Access command bars and user defined ones.



The Command Bars folder contains all of the documented command bars.

Each command bar contains controls that may also contain additional controls.

Summary Tab	A list of all command bars
Details Tab	A property Filter for property values across all documented command bars or their controls (see page 66 for more information on using the Property Filter)
XRef Tab	Where command bars are referenced among the documented objects
Errors Tab	All errors documented for command bars

Command Bar Item

Each documented command bar is an item in the list.

Summary Tab	Basic information about the command bar (including the number of controls it has and whether it is a built-in command bar)
Details Tab	The command bar properties
XRef Tab	Where the command bar is used among the documented objects
Errors Tab	All errors documented for the command bar

Controls Folder

Each command bar contains one or more controls. This folder contains all the controls in the command bar.

Summary Tab	A list of all controls in the command bar
-------------	---

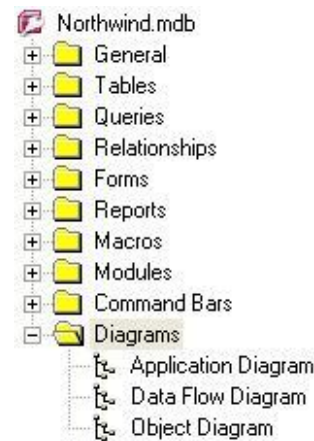
Control Item

Each control in the command bar is shown in this section of the Treeview. Note that command bar controls may contain other controls. When this occurs, Total Access Analyzer adds an additional folder node below the control item. Expand this node to see the controls contained in the control.

Summary Tab	The name and type of the control
Details Tab	Every control property

Diagrams Folder

Total Access Analyzer generates three types of diagrams.



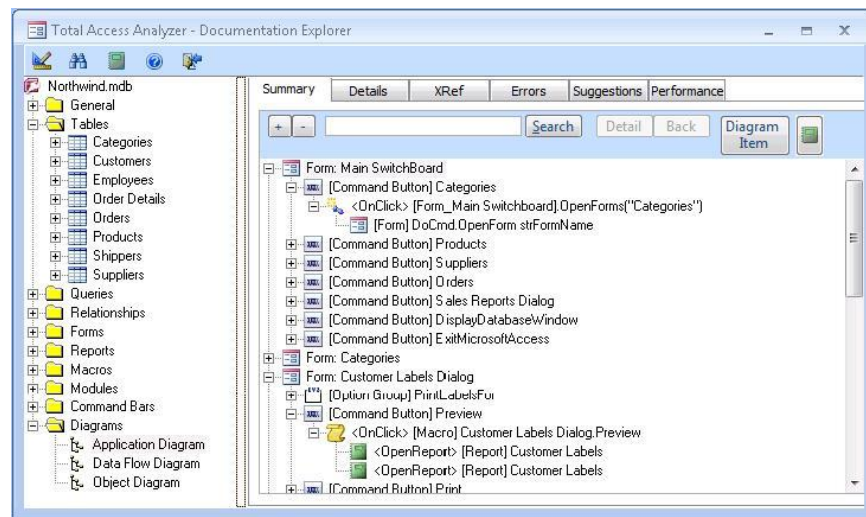
The diagrams are the highest summary level analysis of your database. Unlike cross reference information that only shows a relationship between two objects (described on page 94), the diagrams show multi-level hierarchies across multiple objects and really show how your application works.

Please remember, the diagram is limited by the capabilities of Total Access Analyzer. Some object references and procedure calls are not documented and therefore not included in the diagram. This is particularly true of forms and reports referenced by variables in your code. See **Documentation Limitations** on page 28 for more information.

Due to the cross reference limitations of ADP documentation (see page 31), only one of the diagrams (Application Flow) is available for ADPs.

Viewing the Diagrams

When you select the Summary tab, Total Access Analyzer loads the diagram tree. Depending on the number of objects and the complexity of your application, this may take a moment:



Viewing a Diagram

Root Level Objects

The first (*root*) level objects are displayed. Each object can be opened to show branches representing dependencies upon it. Although there are lines between the root level objects, there are no dependencies between them. They are just sorted by type and name.

Buttons

The following buttons are available at the top of the diagram:

+ and - Buttons

Within the diagram, you can expand individual branches by clicking on the [+] next to the branch. Click on the [-] box to close the branch. To expand or collapse all branches, use the [+] and [-] buttons next to the [Search] button.

Search Button

The [Search] button allows you to find a value in the diagram. This is particularly useful if the diagram is large. Enter a value in the combo box and press the [Search] button. The combo box keeps a list of the values entered for you to select again.

Detail and Back Buttons

The first time an object is encountered in the diagram, all of its branches are drawn. If the same object is used again, a reference is made to the original drawing. By showing each object's tree once, the diagram is considerably smaller and more manageable.

An object already drawn in the diagram is displayed with a [+] at the end of its line. If you click on that line, the [Details] button is enabled. Pressing the button jumps you to the first use of that object and its diagram. The [Back] button takes you back to where you last pressed [Details]. This lets you easily "drill-down" and go back through the items that you reviewed.

On the diagram reports, this corresponds to the [See Num] column that displays the line number of the original call.

Diagram Item Button

The [Diagram Item] button allows you to redraw the diagram to show the hierarchy of a single object. The redrawn diagram can also be printed, providing a report of a single object's diagram.

To redraw entire diagram, select it in the treeview.

Print Button

The [Print] button previews the diagram that is currently displayed. If the full diagram is showing, the printed report includes the diagram for all objects. If a redrawn diagram is showing, the printed report shows the diagram for a single object.

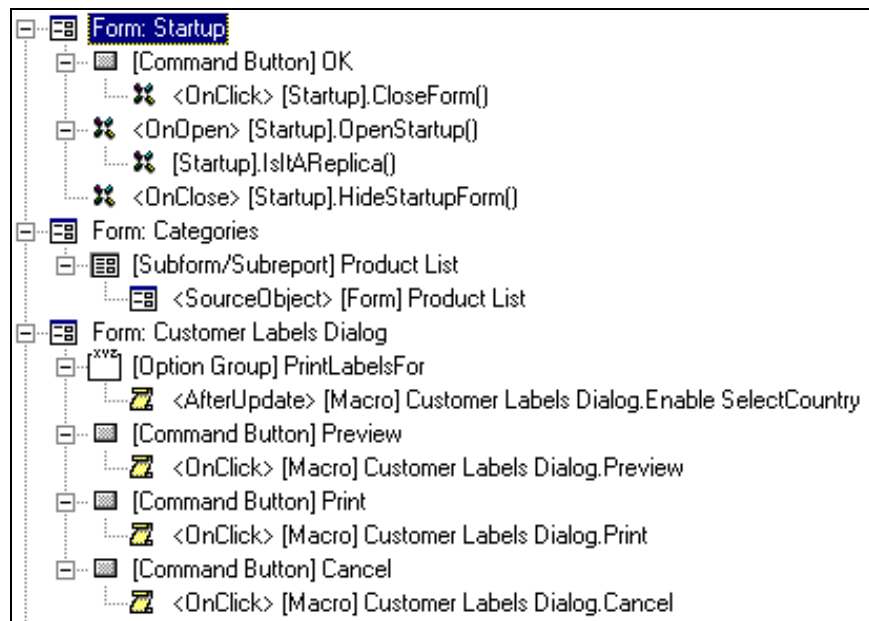
Diagram Descriptions

There are three types of diagrams:

- Application
- Data
- Object

Application Diagram

The most detailed of the three diagrams, the Application Diagram, shows the hierarchical flow of your entire application. It starts with the Startup form or Autoexec macro, then shows what procedures and objects it calls, and then does the same for the called objects. Every form, report, or procedure that is not called by another object starts its own tree. This provides a visual overview of all your procedure calls, macro calls, and form and report events.



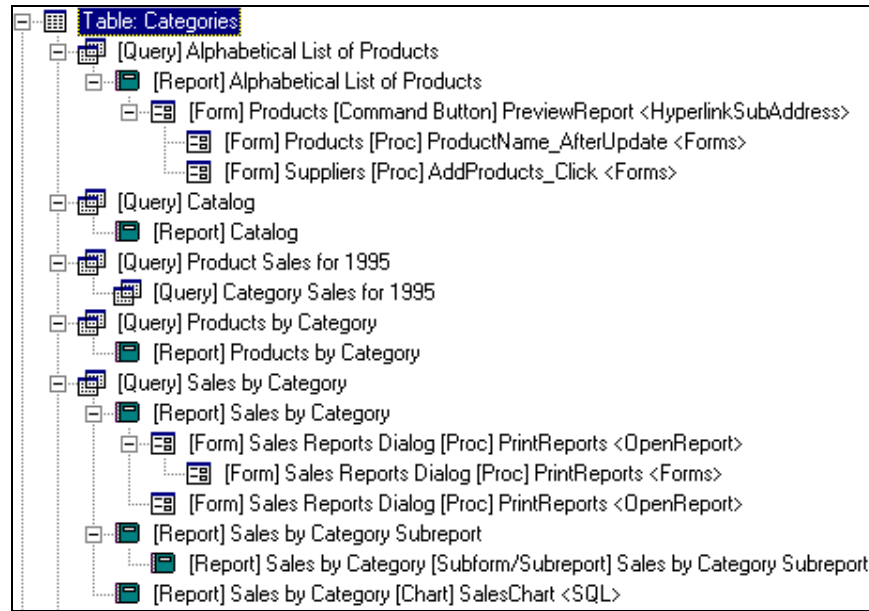
Application Diagram

In this example, the first object is the form named *Startup*. This form has a command button named "OK" that invokes the *CloseForm* procedure on its OnClick event. The form's OnOpen event invokes a procedure that calls the *IsItAReplica* function. The form's last item is an OnClose event. The next form is then drawn (*Categories*).

Every form, report, or procedure that is not used by another object has its own diagram. Not every form has its own diagram at the root (first) level. For instance, if a form is used by a procedure through an OpenForm command, the form's diagram is drawn from the procedure calling it, and does not appear on its own.

Data Diagram

The Data Diagram (not available for ADPs) shows how your database's tables are used across your application. The Table XRef (described on page 78) shows which objects reference each table. The Data Diagram shows this information, along with the objects that use the objects referencing each table. This illustrates the entire family of objects related to each table.



Data Diagram

This example shows only a partial view of the objects related to the *Categories* table. The first branch shows that the query *Alphabetical List of Products* uses the *Categories* table. That query is used in a report that is opened by a form's command button's Hyperlink SubAddress property. The form is referenced by two other procedures. Several other queries also use the *Categories* table, including *Catalog*, *Products by Category*, and *Sales by Category*.



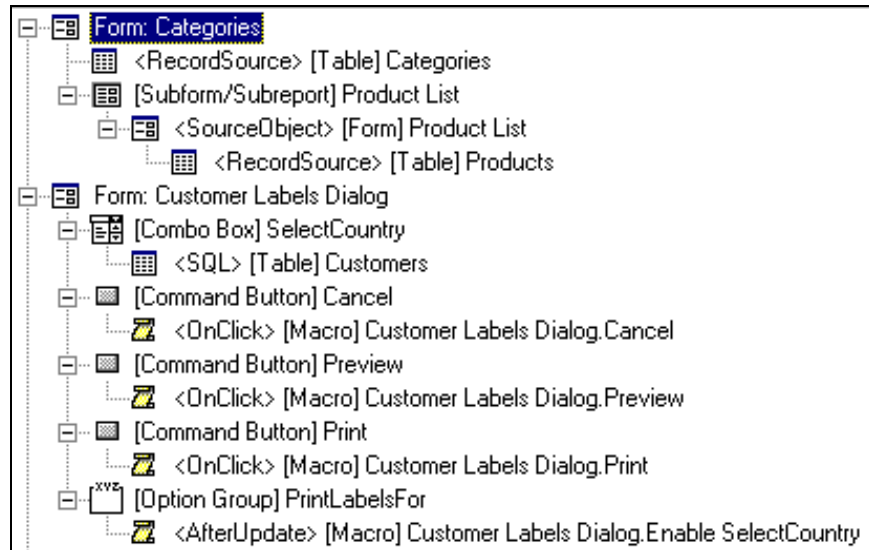
Tip

Beyond the first reference, subsequent items do not necessarily use the data in the table. For instance, a query that uses a table may be used by a form that does not use any fields from the table. Also, objects that open forms and reports referencing the table definitely do not use data from the table. They are included in the diagram to illustrate all objects directly and indirectly related to the table.

Object Diagram

The Object Diagram (not available for ADPs) shows all objects on which a form, report, or query is dependent. You can quickly see a form and its subforms, along with the queries, tables, and macros they use. The Object Diagram is almost like the Data Diagram in reverse; rather than seeing how data flows from a table, the Object Diagram displays what flows into an object.

Unlike the Application Diagram, the Object Diagram includes information on where forms and reports use tables and queries, and excludes procedure calls. This simplifies the diagram significantly.



Object Diagram from Documentation of Northwind.mdb

In the example above, you can easily see the *Categories* form's record source table, subform source object, and subform record source. You can also easily see where the *Customer Labels Dialog* form uses tables and macros.

Selecting Another Output Database to View

Total Access Analyzer stores documentation in output databases for each database you document. This lets you easily retrieve any documentation previously generated on other databases. When you open the Documentation Explorer, Total Access Analyzer retrieves the current output database: the one you last viewed or the one you just generated.

Note that Total Access Analyzer does not automatically load the documentation for the current database. For example, if you documented database DB1.MDB, then opened DB2.MDB, started Total Access Analyzer, from the Main Menu form, you would still see DB1.MDB listed.

You can load previously saved documentation by clicking on the [...] button on the Main Form:



The Select Output Database form is displayed:

Documented Database	Documented Database Path	Documented On	Output Database Name	Documented On
Northwind.mdb	C:\Program Files\Microsoft Office\OFFICE11\SAMPLES\Northwind.mdb	9/5 3:37:09 PM	C:\Users\administrator\AppData\Local\Microsoft\Access\Northwind.tdb	9/5 3:37:09 PM
Northwind.mdb	C:\Users\administrator\Desktop\Northwind.mdb	8/21 12:14:05 AM	C:\Users\administrator\AppData\Local\Microsoft\Access\Northwind.tdb	8/21 12:14:05 AM

Select Output Database Form

Every time you document a database, Total Access Analyzer keeps track of it and lists it here. The following information is provided:

- The path and name of the database that was documented
- The path and name of the output database containing the documentation
- The user who generated the documentation
- The date and time the documentation was generated

From this form, you can select an output databases to load, view the comments for a database, add a documentation database not in the list, delete a database, or print the list of output databases.

Selecting an Output Database

By selecting an output database, you are “pointing” Total Access Analyzer to the documentation it contains. The Documentation Explorer and all reports get their data from the selected output database.

To select an output database, click on the appropriate row in the list of available output databases then press [Select] (or double-click the output database).

Viewing Comments for an Output Database

You can view the comments saved in any output database (explained on page 55) by highlighting the output database and clicking on the [Comments] button. The Documentation Comments form appears, allowing you to view or edit the comments. When you are finished, press [OK] to return to the Select Output Database form.

Adding an Output Database

If you have an output database that does not appear in the list, you can add it with the [Add] button. This is useful if you receive an output database from another Total Access Analyzer user, or if you want to view documentation stored on another folder or on a network. It is also necessary if you re-install Total Access Analyzer.

Deleting an Output Database from the List

If you no longer need an output database, you can delete it by highlighting the database and clicking on the [Delete] button. Total Access Analyzer asks you for confirmation. Press [Yes] to delete the output database and remove it from the list. Press [No] to cancel.

If the output database was already deleted outside of Total Access Analyzer (from Windows Explorer for example), a message appears warning you that the output database does not exist. Press [Yes] to delete the output database from the list, or [No] to cancel without changes.

You may want to make a backup copy of your output databases before you delete them. Using compression, you can store large output databases in a much smaller amount of disk space.

Printing the List of Output Databases

If you would like a printed list of output databases, click on the [Preview] button, and the Output Databases report opens in preview mode. You can then print or export the report from the menu.

Chapter 6: Searching Results

Once the documentation is generated, you can search the results to find the occurrence of any string. This powerful feature lets you search all objects in your database that you selected for documentation, and easily find a property value, object name, or piece of code.

Topics in this Chapter

- **Initiating the Search**
- **Search Results**
- **Searching a Previously Documented Database**

Initiating the Search

After you generate documentation for your database, click on the [Search] button from the main form to open the Search dialog:



Search Dialog

Enter the text you want to find in the Find What text box. The text can be a partial word, a whole word, or a phrase (multiple words). You can even include punctuation. The search is similar to a Like query, so you can use criteria wildcards that you would use in a query or Access Find dialog.

Match Options

The Match options let you specify how the search should be conducted:

- If **Find Whole Word Only** is checked, your text is found only if it is separated from other text. If your search text includes multiple words, the same logic applies (the phrase must be separated from other text). If this option is not selected, any occurrence of the text is retrieved.
- If **Match Case** is checked, a case sensitive match is required. If it's not checked, any occurrence of the letters, regardless of case, is retrieved.

Scope Options

The Scope options let you specify what should be searched:

- Select **Object Properties** to search all documented property values across all the objects. This also includes field and control properties.
- Select **Macros** to search all macro commands, including comments, conditions, and option arguments.
- Select **Modules** to search all module code, including code behind the selected forms and reports.

When you are ready to conduct the search, press the [Find] button.



Keep in mind that the search is only as accurate as the documentation. If you made considerable changes since you documented the database, you will need to document your database again to generate accurate results.

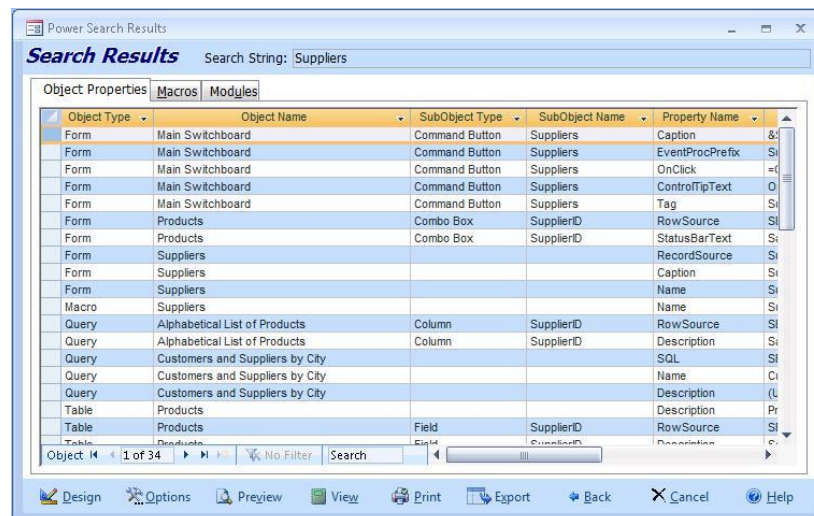
Search Results

After some churning, the results are shown in three tabs corresponding to the Scope options in the previous screen. If you didn't select a particular option, its tab does not appear. You can view the results, sort and resize the columns, and resize the form. You can also examine your own database objects while this form is open.

If your database is set to show Tabbed Documents, this form appears as a separate tab. Otherwise, it's a resizable and maximizable form.

Object Properties Tab

On the Object Properties tab, each row represents an object value matching the search string. The Object Type column shows the type of the object where the search string was found, the Object Name column shows the name of the object, the Property column shows the property name, and the Value column shows the property value containing the string. The SubObject Name and SubObject Type columns show information if applicable.



Search Results: Object Properties Tab

Macros Tab

On the Macros tab, every macro line with a match is shown. A macro line has many parts and if any has a match, the entire line is flagged. The Search Results column identifies which of the fields has a match. The columns Arg1, Arg2, etc. represent the text boxes that appear in the lower pane when you edit a macro line.

Search Results	Macro Name	Label	Line Number	Condition	Action	Comments
Comments	Suppliers		1			The macros in this
Comments	Suppliers		3			Attached to the Ad
Comments	Suppliers		7		SetValue	Set the SupplierID t (Fr
Comments	Suppliers		10			Attached to the Re
Comments	Suppliers		12	IsNull([SupplierID])	MsgBox	If no current suppli Mc
Arg4	Suppliers		15		OpenForm	Open the Product L Pr
Comments	Suppliers		16		MoveSize	Postion the Produc 11
Comments	Suppliers		18			Attached to the On
Comments	Suppliers	Show Related Proc	19	IsNull([SupplierID])	StopMacro	If no current suppli
Arg4	Suppliers		20	IsLoaded("Product	OpenForm	If the Products forr Pr
Comments	Suppliers		22			Attached to the On
Comments	Suppliers		26			Attached to the Be

Search Results: Macros Tab

Modules Tab

Under Modules, each procedure with a match is shown. Only the lines containing the match are shown:

Search Results	Module Type	Module Name
AddProducts command button on Suppliers form	Form	Products
strLinkCriteria = "[SupplierID] = Forms[Suppliers][SupplierID]"	Form	Suppliers
strLinkCriteria = "[SupplierID] = Forms[Suppliers][SupplierID]"	Form	Suppliers

Search Results: Modules Tab

Search Result Reports

While viewing any of the search results, reports corresponding to the tab being viewed are available. You can preview or print any of the three reports. Use the Options button to specify general report settings just as you would from the Options button under Print from the main form.

Searching a Previously Documented Database

If you want to search a previously documented database, you can change the current output database (see page 111). Keep in mind that the search is only accurate if your documentation is current and comprehensive.

Chapter 7: Printing Documentation

One of the main reasons for documentation is to create hard copy information on your database. For this purpose, Total Access Analyzer provides over 300 presentation-quality reports. This chapter shows you how to select, filter, preview, print, and customize the available reports. It also includes a brief discussion of each report category to highlight the information provided in the reports.

Topics in this Chapter

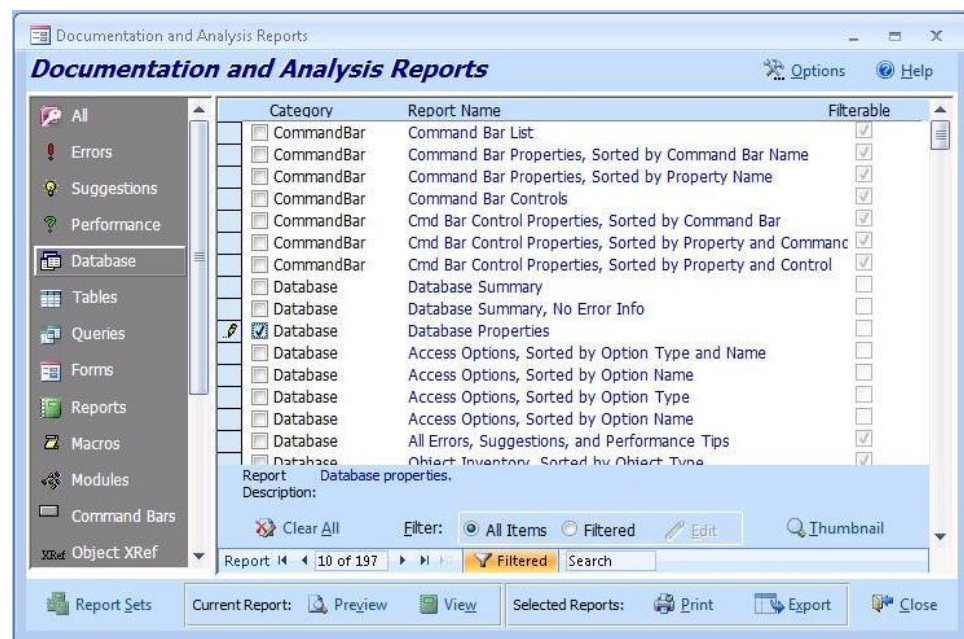
- Quick Start
- Selecting Reports
- Exporting Reports
- Filtering Reports
- Customizing Reports
- Report Categories
- Report Sets

Quick Start

Total Access Analyzer includes over 300 reports. While this may seem like a large number, the types of documentation and analysis generated are also numerous. This section is designed to give a quick overview of some of the highlights, as well as suggestions on how to select a report. Once you work through the Quick Start, read the rest of this chapter to get more information on how these reports can help you maintain your database.

Opening the Reports Form

From the main form, press the [Print] button, and the Reports form appears:



Selecting Documentation Reports

Use this form to select, preview, report view, print and export reports. You can also set options that control the appearance of the reports.

Using the Icon Menu

The icon menu on the left itemizes the report categories and filters the list of available reports on the right. By default, “All” is selected, and all available reports are shown on the right. The icon menu is scrollable—make sure you scroll down the list to see the other categories.

Previewing a Report

Once you have selected the appropriate category, scroll through the list of available reports on the right. Select a report by clicking on it (you don't need to put a check in the box, just make it the current record). You can press the [Thumbnail] view to see a sample of the report layout or press the [Preview] button to display the report (with your data) on the screen. Use the toolbar buttons to change the zoom level, or select the number of pages to preview at one time, and print or export it.

Report View

Similar to Preview, you can open the current report in Report View mode. This new feature in Access 2007 lets you filter the report interactively. Some reports are not available in Report View mode.

Printing Multiple Reports

To print multiple reports, select the reports by clicking on the checkbox to the left of the report name. Once you have selected all of your reports, press the [Print] button. A confirmation dialog appears. Press [OK] to send all the reports to your printer. If any are empty, a report is displayed listing the selected reports that had no data to print.



Tip

You should never print all reports! Many reports show the same information sorted differently, and many reports are enormous (especially the form and report control property reports). Make sure you preview the reports to understand their purpose, and choose only the reports you want to print.

Exporting Reports

To export multiple reports, select the reports by clicking on the checkbox to the left of the report name and press the [Export] button. A dialog appears letting you specify the type of output, the folder to place the files, and whether you want them opened. See page 128 for more information.

Filtering Reports

Many reports support object filtering. They are identified by a Check in the Filterable column. Filtering lets you limit the data presented in the reports. To apply a filter, select the "Filtered" option group button and click on the [Filter] button to specify the objects to include. With the filter turned on, the "Filterable" reports only include the objects you selected. See page 129 for more information about filtering reports.

Customizing Reports

You can customize the appearance of the reports by pressing the [Options] button. All reports allow you to customize their headers and footers, and you can modify how module code prints in the reports. See page 130 for more information about customizing reports.

The Reports to Select

If you are printing reports for the first time, you should preview these reports:

- **Database:** An overview of the entire database.
- **System:** A list and description of every report in Total Access Analyzer by category (system reports for errors, suggestions, and performance tips are also useful for understanding what Total Access Analyzer detects).
- **Errors:** A list of all errors found in your database.
- **Suggestions:** A list of items that may require modifications to make your application more robust. The Suggestions category also contains the *Table Fields with Different Types* report, which lists fields with different Data Type and Size settings. Use this report to make your fields consistent across all tables.
- **Performance:** A list of tips for improving your application's speed and resource usage.

After printing the Errors, Suggestions, and Performance reports, you should address the items listed. If you make extensive changes, you should run the documentation again. Assuming everything is okay, we suggest that you examine the following valuable reports:

- **Diagrams:** The Application, Data, and Object diagrams show you how your database works.
- **Module:** The bracketed module code report provides a well-formatted view of your application's code.
- **Module XRef:** This category contains many useful reports, such as *Module Analysis* and *Procedure List* reports.
- **Tables:** The field reports show field definitions for each table sorted by table name or field name.
- **Dictionary:** These reports show detailed information for each object. They are available under Tables, Queries, Forms, Reports, and Macros.
- **Blueprints:** These reports show a visual layout of each form. They are available for Forms and Reports.
- **Relations:** These reports contain information about the relationships in the database.

These are just some of the highlights. Eventually, you will want to view and understand what all the reports can do for you.

Learning More

The rest of this chapter describes each of the operations available in the Print Documentation form in detail. First, a description of this form is provided, including details on customizing the reports. Then, every report category is described with its highlights mentioned.

Selecting Reports

Never select all reports and print them—many reports show the same information sorted differently, and many reports are enormous. We strongly suggest that you preview the reports before printing, and select only the reports you need. Depending on the complexity of your database, you could easily print thousands of pages if you were not careful.



Tip

Report data is based on the current output database. Remember that the current output database can be different from the currently opened database.

If you want to print reports for a previously documented database, change the current output database by pressing the [Change DB] button and selecting a new output database from the list (see page 132 for details).

Selecting Categories and Reports

The reports in the Print Documentation form are organized into categories similar to those in the Documentation Explorer form. The categories are listed in the icon menu on the left side of the form. The [All] category shows all reports.

To select a report, click on the check box to the left of the report name. To deselect a report, click on the check box again. Pressing the [Clear All] button deselects all the reports for the currently selected category.

Selecting a report does not print it. You may choose several reports. When you have finished selecting reports, press [Print] to send all the selected reports to the printer.

Depending on the number of objects documented and the reports selected, printing can take a long time. Most Total Access Analyzer reports have graphics: titles, lines to separate data, etc. The blueprint reports are particularly graphic intensive, and therefore take more time to print.

Previewing Reports

Because there are so many reports available, selecting the correct reports may seem like a daunting task. Don't worry; there are features to help you understand the reports. Before printing a report, you can preview it on the screen.

Just click on a report name and press [Preview]. The report appears in preview mode. The preview is only for the report highlighted, not for all selected reports; the report currently highlighted is previewed regardless of whether the check box for it is checked. In preview mode, you can click anywhere on the report to zoom in or out. Use the navigation buttons at the bottom of the window to move among the pages. You can also use items on the Access Print Command Bar or menu to print the report, change the zoom percentage, and change the number of pages displayed.

To close the report, choose [Close Print Preview].

Report View

You can also open the current report in Report View. Report View shows the entire report on one page and you can filter the data by clicking on columns similar to viewing a datasheet. Due to formatting issues, not all reports can be displayed in Report View.

Printing Reports

The [Print] button lets you print all selected reports at once. The reports are printed in the order they appear in the list. While the reports are printing, a status form appears showing which report is being sent to the printer. You can press the [Cancel] button on this form to stop printing the current report and return to the list of reports.

Remember, the selected reports span categories and may include items not visible in the current view based on the report category selected. To see all selected reports, click on "All" in the icon menu.

Reports with No Data

For most of the reports, if there's no data, it would not appear in the list. However, reports may contain no data for a variety of reasons:

- You did not select any objects of a certain category for documentation.
- You did not select the options necessary to generate the documentation required for a report. For example, if you did not

select the “Generate Module XRef” option, none of the Module XRef reports will have data.

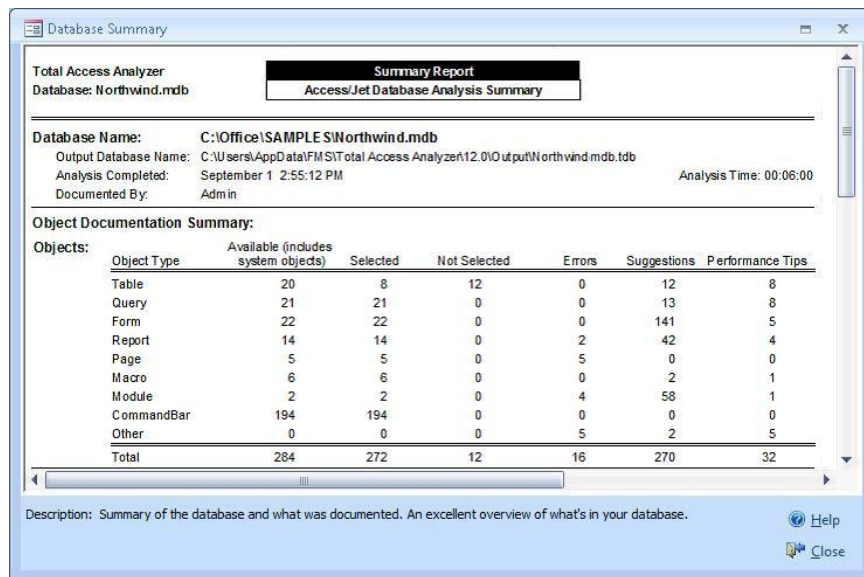
- There were no errors, suggestions, or performance tips generated for your database.
- You applied a filter that eliminates all data for a report.

Empty reports are identified in one of two ways:

- If you preview a report with no data, a message box tells you the report is empty.
- If you print multiple reports, and one or more report has no data, an “Empty Reports” report is printed listing every selected report without data.

Viewing Thumbnails

You can see a sample of any report by using the [Thumbnail] feature. Just click on any report in the list and press the [Thumbnail] button. An example of the report appears with a brief description:



Report Thumbnail

The image in the Thumbnail is not from your database—it is only an example of the report’s layout.

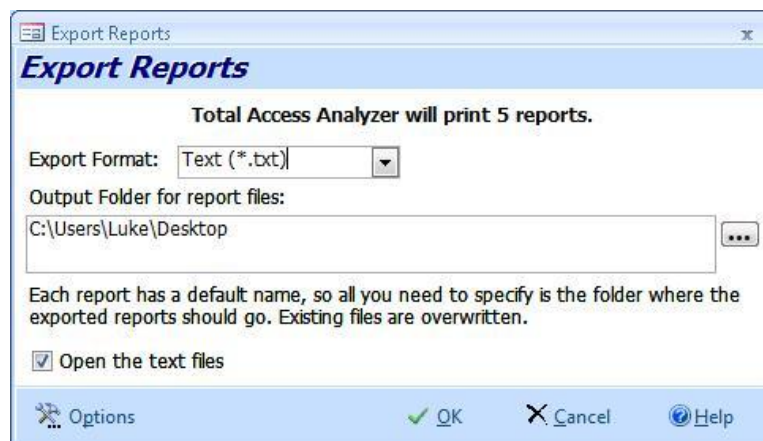
Exporting Reports

You can also export all the selected reports to files in a variety of formats:

- Adobe PDF (*.pdf)
- HTML (*.html)
- Snapshot (*.snp)
- Text (*.txt)
- Word RTF (*.rtf)
- XPX (*.xps)

To export to PDF and XPS formats, you must have the Office 2007 PDF and XPS add-in installed. It is not installed with Office 2007 automatically but can be downloaded from the Microsoft web site for free (search for “Save as PDF”).

When you press the Export button, this form appears:



Export Report Options

These options are available:

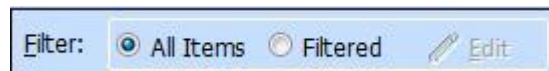
- **Format:** the output file format to create
- **Folder:** the location where the files should be created
- **Open:** an option to open the file after it is created. You must have a program installed and associated with the file type (for instance, Adobe Acrobat Reader for PDF files)

The reports are created in the folder you specify. Each report has a unique name that reflects the name of the report. If the file already exists, it is automatically overwritten without warning.

A list of file names is available in the System report “Report List with Export File Names”. Two reports are available listing the names by category or alphabetically.

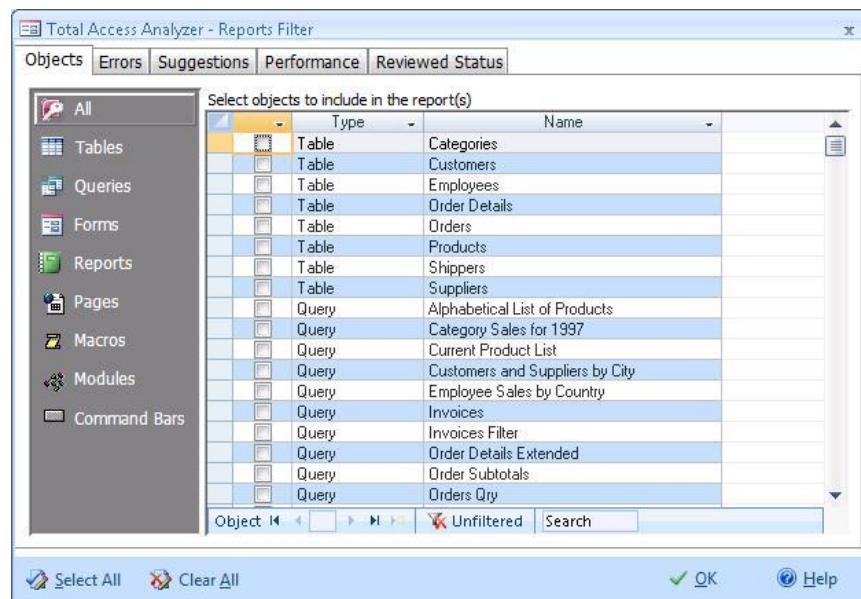
Filtering Reports

If you documented many objects, you may only want a subset of those objects in your reports, especially the large detailed reports. The Filter feature below the list of reports lets you limit the objects in the reports.



Filter Option

By default, [All Items] is selected and the reports include all documented objects. To filter objects, select [Filtered] and press the [Edit] button. The Reports Filter form appears:



Reports Filter

Object Filter

The Objects tab allows you to filter by object. Check the objects to include in the reports and press [OK] to return to the Print Documentation form. The Filtered option is selected, indicating that the filter is on.



The object filter does not apply to all reports. Only reports with a "Yes" in the "Filterable" column of the Print Documentation form respect the filter.

Use the icon menu on the left to filter the list by object type, and use the [Select All] and [Clear All] buttons to select or clear all objects.

Errors, Suggestions, and Performance Filter

The Errors, Suggestions, and Performance tabs allow you to filter any of the reports in the Errors, Suggestions, and Performance report categories by any of the possible items available on those reports. For example, if you want to preview or print a report that just shows broken linked tables, select that report, open the Reports Filter, click on the Errors tab, and select only the “Table with Invalid Links” error item.

Reviewed Status Filter

The Reviewed tab allows you to filter the reports in the Errors, Suggestions, and Performance report categories by Reviewed Status:

A screenshot of a dialog box titled "Reviewed Status Filter". The dialog box has a title bar and a main area. Inside the main area, there is a section titled "Reviewed Status" with a blue header. Below this header, there are three radio button options: "All (Reviewed and Not Reviewed)" which is selected, "Reviewed Only", and "Not Reviewed Only". Above the dialog box, there is a text box containing the text "For Errors, Suggestions, and Performance Issues, you can filter on the Reviewed status".

Reviewed Status Filter

Using the Documentation Explorer, you can mark issues as “Reviewed,” and filter them out of reports. The Reviewed Status filter allows you to include all issues (regardless of reviewed status), Reviewed issues only, or Not Reviewed issues only.

See **Reviewing Issues** on page 68 for information about flagging items as Reviewed.

Customizing Reports

Report Options Form

You can customize the appearance of the reports with your own headers, footers, date format, and more. Report options are global to Total Access Analyzer and not saved separately for each output database.

Press [Options] to see the Report Options form:

Total Access Analyzer - Report Options

Report Options

General Reports | Module Printout

Header 1: Total Access Analyzer

Header 2: Database: #DATABASE#
(Use #DATABASE# to include database name)

Footer: Total Access Analyzer

☐ Use A4 Paper ☒ Separator Lines

Date/Time Format: ☒ Long ☐ Short

Heading Colors: ☒ White on Black ☐ Black on White

Page Numbers: ☐ Page N ☒ Page N of M

Total Access Analyzer		Report Heading		September 2	
Database: #DATABASE#		Sub-heading		Time: 4:33:18 User: Admin	
#	FIELD NAME	FIELD TYPE	FORMAT	DESCRIPTION	INDEXED?
1	CustomerID	Counter	Long Integer	Unique ID for the customer record	Yes (Primary Key)
2	FirstName	Text	25	The customer's first name	No
3	LastName	Text	30	The customer's last name	Yes (Duplicates OK)
...					

Total Access Analyzer Page 1 of 25

Retrieve Defaults OK Cancel Help

Report Options Form

The top half of the form contains controls for setting options. As you set options, the sample report on the bottom half of the form updates the options that you select. These options are available:

Header 1

This text appears at the top left corner of every report page. It can be your company name, a project name, or any text. This field can contain up to 50 characters.

Header 2

This text appears below Header 1 on every report page. You can have Total Access Analyzer insert the name of the database by typing #DATABASE# anywhere in the field. For example, the default setting is “databases: #DATABASE#” which prints “databases: **Northwind.mdb**” at the top of each page (assuming Northwind.mdb is the documented database).

Footer

This text appears at the bottom left of every report page, and can be up to 50 characters. By default, this field is blank.

Use A4 Paper

By default, the output reports are formatted for US Letter size paper. For metric users, select this option to print on A4 paper.

Separator Lines

Many of the reports have an optional line between records. Check this option if you want Total Access Analyzer to print this line. The line makes it easier to read some reports, but can increase the time a report takes to print. By default, this option is enabled.

Date/Time Format

You can control the format of the date and time printed at the top of each report page. To use the short date format (e.g. 1/1/09), press [Short]. To use the long date format (e.g. January 1, 2009), press [Long]. The date and time printed is when the documentation was generated, not the current date and time. By default, this option is set to Long.

These formats are defined by your date and time formats specified by your Control Panel's regional settings.

Heading Colors

By default, the report headers are set to white on black. Some older printers (such as the HP LaserJet Series II) do not support the white on black color scheme. If your printer has problems printing this or you do not want this, change the option to "Black on White."

Page Numbers

By default, page numbers at the bottom of each page are displayed (e.g. Page 1). This option lets you display the page number with the total number of pages (e.g. Page 1 of 10).



Tip

If you display the total number of pages (Page N of M), larger reports will take longer to load. This is because the report must process all pages to determine the total page count prior to displaying the first page. If you display the page number only (Page N), the report can finish pages as they become available, even if all pages have not yet been processed.

Setting Options

There are two reports that print module code: the standard and the bracketed Module Printout reports (see page 139 for more information). The following options control how the Standard Module Printout report displays your source code.

Press the [Module Printout] tab to see the Module Options settings:

The screenshot shows the 'Total Access Analyzer - Report Options' dialog box with the 'Module Printout' tab selected. The dialog is divided into two main sections. On the left, there are three grouped boxes: 'General Appearance' with checkboxes for 'Greenbars' and 'Bold Proc Declarations', a 'Font' dropdown set to 'Courier New'; 'Comments' with checkboxes for 'Bold' and 'Italic', a 'Font' dropdown set to 'Arial'; and 'Line Continuation Characters' with radio buttons for 'Use Default (->)' (selected) and 'Custom', followed by a text box containing '->'. On the right, a preview area shows the output for 'Database: Northwind.MDB' and 'Module: Sample' dated 'September 2'. It displays a VBA function 'Function ShowTables()' with code lines numbered 1 to 13. The code includes comments like 'This function steps through each table' and 'Close the database'. The preview also shows 'Page 1 of 25'. At the bottom of the dialog are buttons for 'Retrieve Defaults', 'OK', 'Cancel', and 'Help'.

Module Options Form

General Appearance

These settings adjust the appearance of your module printouts. As you change the options, the sample report's layout reflects the new choices.

Greenbars

Enable this option to create a "green bar" effect with alternating white and gray sections. This makes the code easier to read, and is enabled by default.

Bold Proc Declarations

Enable this option to print procedure declarations in bold text. This makes it easier to see where each procedure begins. This option is enabled by default.

Font

Select the font to use for lines of code. The fonts available on your system are displayed in this combo box. Select a mono-spaced font so code lines up correctly. An 8-point type size is used, so you make sure the your font supports this size.

Comments

Comment lines can have their own special formatting to make it easier to differentiate between code and comments. These settings are only applied to comments on a line by themselves, not to comments that appear on the same line as code.

Set the text to Bold and/or Italic styles, and specify the Font.

Line Continuation

Lines of VBA code in Access can be very long and may word-wrap in the report. To show that a line is linked to the previous line, a special symbol is added to the beginning of the word-wrapped line. By default, the “->” symbol is added. If you prefer another symbol, select “Custom” and enter your own.



The line continuation symbol added in the reports is different from the VBA underline (_) character at the end of the line. The VBA character is always shown, but it may or may not be at the word-wrap point in the report.

Report Categories

Reports are grouped into categories similar to the Documentation Explorer. This section assumes you have a general understanding of the data available under each category. If you are not sure, refer to the previous two chapters.

Many of the reports contain the same data, but are sorted differently. Each sort provides a different perspective of the data. For instance, the reports sorted by property name let you view all the values for a single property across your objects and are ideal for verifying consistency. Special dictionary reports (called dictionaries because they provide the complete definition of a particular object) provide extensive information on the documented objects. Save the trees! Determine which reports are appropriate for you, and print only those reports.

If you are only interested in information on specific objects, use the object filter (described on page 129).

The following sections describe each report category and highlight reports to help you decide which ones you need.

Errors Category

This category shows errors detected in your database. Errors are defined as problems that may cause your database to work incorrectly, crash, or lose data. You should examine these items carefully and resolve them.

- “Summary of Errors by Type” shows, by type of error, the number of instances it was detected in your database.
- “By Error Type, All” lists all errors detected, sorted by error type (with descriptions) and object.
- The error reports sorted by Object Name are useful lists of items to fix in your database. All errors for each object are grouped together, making it easy to fix all the problems for an object.

- “Object Reference Errors” shows all errors involving references to objects that do not exist. This information is included in the other error reports, but this report shows the data in a columnar layout that is easier to understand, especially if references involve controls.

Under the System category, the “Total Access Analyzer List of Errors” report lists each type of error the program detects.

Suggestions Category

The reports in this category offer suggestions for improving your database. Suggestions cover items that are less severe than errors, but are useful for simplifying maintenance, making your code more robust, eliminating unnecessary objects, and applying Best Practices. Examples include lists of unused objects and code, procedures without error handling, procedures that should be private, and variable name conflicts.

- The “Summary of Suggestions by Type” report shows, by type of suggestion, the number of instances it was detected in your database.
- The “By Suggestion Type, All” report includes all the suggestions detected sorted by suggestion type and object. The Suggestion Reports sorted by Suggestion Type include a description of each type of suggestion.
- The suggestion reports sorted by object are useful when viewing and implementing the suggestions for each object.
- There are several other reports in this category that list only one specific type of suggestion. Each suggestion can include many items, so the listings by type are helpful if you are implementing one type of suggestion across your objects. For instance, you may want to use the report for Unused Variables to go through all of your objects to examine and eliminate those variables.
- The data in the “Table Fields with Different Types” report does not appear in the other suggestion reports. This report shows identically named fields with inconsistent data type and/or size. Ideally, identically named fields have identical settings regardless of the table. This report lets you see the fields that should be modified or renamed for consistency. This report is for identically named fields; to verify the spelling of your field names (e.g. “CustomerID” vs. “Customer ID” or “CustID”, etc.) use the “Table Fields, Sorted by Field Name” report in the Tables Category.

Under the System category, the “Total Access Analyzer List of Suggestions” report lists every type of suggestion Total Access Analyzer detects.

Performance Category

This category contains reports that show you how to improve the performance of your application. Performance tips are generated for your system, database, and specific objects and settings in your database.

- “Summary of Performance by Type” shows, by type of error, the number of instances it was detected in your database.
- “By Performance Type, All Items” includes all performance tips detected, sorted by the performance type and object. Descriptions of each tip are provided.
- The reports sorted by Object Type simplify the process of making modifications to your objects by grouping all the performance tips for the same type of objects together.

Under the System category, the “Total Access Analyzer List of Performance Tips” report lists every performance issue the program detects.

Database Category

The Database category contains reports about your database as a whole, including inventory reports and information on the database’s Container and Document objects.

- “Database Summary” provides an excellent overview of the complexity of your database.
- “All Errors, Suggestions, and Performance Tips” lists all the ways to improve all objects, and is sorted by object.
- “Object Inventory” reports are useful for giving you a list of every object in the database.
- “User Defined Properties” shows non-standard Access properties added to your database and objects.

Tables Category

This category includes reports for table properties, fields, field properties, and indexes. These are some of the highlights:

- “Table List” lists tables along with their basic table information.
- “Table Properties, Sorted by Property Name” lets you verify consistent values of a property across multiple tables.
- “Table Fields, Sorted by Table Name” is one of the most valuable reports. It shows each table and its fields, as well as each field’s field type, size, and description.
- “Table Field Properties, Sorted by Property and Field” compares even more field property values across your tables.

- “Table Dictionary” shows comprehensive information of each table on a separate page. It allows you to see all the table properties, fields, indexes, and field properties.
- “Table Field General Properties” and “Table Field Lookup Properties” display the field properties the way they appear in the table designer tabs.

Queries Category

This category exists only for ACCDBs/MDBs, and provides information on the queries you selected for documentation. Data includes query properties, SQL strings, fields used, fields returned (columns), and joins.

- “Query List” lists the queries by name and type.
- “Query Properties, Sorted by Query Name” makes it easy to see property settings across all queries. This report provides a good way to check for errors and inconsistencies.
- “Query Tables, sorted by Query Name” shows all tables referenced by each query.
- “Query Fields Referenced” shows each field referenced by each query.
- “Query Dictionary” shows all query documentation, including the fields used, fields returned, table joins, and parameters.

Views Category

The Views category exists only for ADPs, and provides information about views.

Database Diagrams Category

The Database Diagrams category exists only for ADPs, and provides information about database diagrams.

Stored Procedures Category

The Stored Procedures category exists only for ADPs, and provides information about stored procedures.

Forms Category and Reports Category

Documentation for forms and reports is very similar. This section describes both categories.

Information on each documented form or report is available, including object level properties, controls and control properties, sections, printer settings, and blueprints.

- “List” reports show documented objects with basic information, including whether the object has module code. There are List reports with and without the record source.
- “Subform” and “Subreport” reports list subforms and subreports in the documented objects.
- “Controls” reports list each control on each object sorted by control type or control name.
- “ActiveX” reports highlight ActiveX controls, show where they are used, and list their class types.
- “Dictionary” reports provide detailed information on each form or report, including properties, sections, subforms or subreports, and controls. Each form or report is printed on a separate page. The “Dictionary with Properties” reports also print out property settings for each control. This report is extremely large, as it lists the number of properties for every control on every form.

Form and Report Blueprints

If you selected the “Generate Form Blueprints” option (explained on page 43) for documentation, blueprint reports are available for each selected form and report. Blueprints are special reports that show a visual layout of each form or report. Blueprints are available only from the Print form, not from the Documentation Explorer.

Total Access Analyzer
Database: Northwind.mdb

Form: Orders

Form Blueprint
Sorted by Form Name

Detail

1 To: 2 3 Ship To: 4 5 6 7 8 9 10 11 12 13 14 15 b Via: 16 17 18 19 20 21 22 23 24 25 26 27 28 29 Required Date: 30 31 32 33 34 Total: 35 36 Print Invoice 37 Freight: 38 39 Total: 40

Sample Form Blueprint with Annotations

If the “Annotate Images” option was selected, each major control is annotated with a number in a box (labels, lines, boxes, etc. are not annotated). This allows easy reference between the layout and documentation for each control. Annotations also show which controls have code behind them:

- Controls with italicized numbers contain code (or run macros).
- Controls with non-italicized numbers in boxes have no code.

This lets you easily identify controls that contain code. When you print blueprints, the blueprint appears on one page followed by a separate page listing the names of the controls.



Tip

If you are previewing blueprints, please be patient as the individual blueprints are displayed. Each blueprint takes a moment to appear. The screen may appear frozen, but it is still processing.

To increase the speed of previewing and printing, consider filtering for a subset of forms or reports before previewing or printing blueprints (see page 129 for details).

Report Page Setup

Under Reports, the “Report Page Setup, Orientation” report is a great way to make sure all the reports in your database have the correct page size, orientation, and margins. You can easily examine the list to spot inconsistencies.

There is an Access bug that may cause reports to reset their orientation and margins, so it’s important to check this before you ship your databases. This bug can be avoided if you turn off Name AutoCorrect from the Access Options, Current Database section.

Macros Category

This category contains reports describing macros, including conditions, actions, names, and comments.

- “Macro List” reports show lists of macros, sorted by Macro name or Number of Lines.
- “Macro Dictionary” prints all the macro lines including labels, conditions, expressions, actions, and command arguments.

Modules Category

This category contains source code reports for all documented modules, including form, report, class, and standard modules. For more information on how Total Access Analyzer documents modules, see page 92.

Standard Module Printout

The “Module Printout – Standard” report prints your module code in a professional looking report—no modifications are made to the code indentation. The report shows line numbers, and applies fonts, green bars, and other options as specified under the Module Printout options (see page 132). At the end of each module is an index listing every procedure in the module and on which line it starts.

Bracketed Module Printout

The “Module Printout – Formatted with Brackets” report shows your code with standardized indentations and brackets around programming blocks.

Total Access Analyzer Database: Northwind.mdb	Bracketed Module Printout Sorted By Module Name
--	---

Module: Startup

```
1  Option Compare Database
2  Option Explicit
3  'Functions in this module are used in the Startup form.
4
5  Function OpenStartup() As Boolean
6      'Displays Startup form only if database is not a design master or replica.
7      'Used in OnOpen property of Startup form.
8      On Error GoTo OpenStartup_Err
9      If IsItAReplica() Then
10         'This database is a design master or replica, so close Startup form
11         'before it is displayed.
12         DoCmd.Close
13     Else
14         'This database is not a design master or replica, so display Startup form.
15         'Set the value of HideStartupForm check box using the value of
16         'StartupForm property of database (as set in code or in the
17         'Display Form/Page box in Startup dialog box).
18         If (CurrentDb().Properties("StartupForm") = "Startup" Or _
19             CurrentDb().Properties("StartupForm") = "Form.Startup") Then
20             'StartupForm property is set to Startup, so clear HideStartupForm
21             'checkbox.
22             Forms!Startup!HideStartupForm = False
23         Else
24             'StartupForm property is not set to Startup, so check HideStartupForm
25             'checkbox.
26             Forms!Startup!HideStartupForm = True
27         End If
28     End If
29
30     OpenStartup_Exit:
31     Exit Function
```

Sample Bracketed Module Code Printout

No matter how the actual code exists in your modules, this report standardizes the code and makes it easy to read and understand. For example, if the code uses non-standard indentation or no indentation at all, this report shows the code in a standardized manner. This is ideal in multiple developer environments where individual developers have different programming styles.

Every loop is bracketed and subsequent lines are indented two spaces. A block is any VBA construct that typically groups lines of code together (Sub, Function, If, Do, While, Select Case, With, Type, etc.).

Exits from blocks of code (e.g. Exit Function, Exit For, Exit Do, etc.) are also drawn. This is particularly helpful if an Exit is buried within several levels of loops.

Command Bars Category

Command bar reports list command bars, their properties, the controls on each command bar, and each control's properties.

Relations Category

For ACCDBs/MDBs only, relations reports contain information about the relationships in the database, including properties, fields, join types, and referential integrity settings. This category also includes the relationships window printout report.

- “Relationships” report prints a columnar text representation of all relationships in the database.
- “Relationships Window” report shows the layout of the relationships window as it appears in the database (in the Database Tools | Show/Hide | Relationships ribbon).

Security Category

This category is for ACCDBs/MDBs only, and contains information on users, groups, and object permissions. Note that the permission settings shown in these reports are the DAO permission settings as documented by Microsoft Access. See page 75 for important information on these settings.

- “Users” and “Groups” reports show lists of all users and groups.
- “Container Permissions for Groups” shows all permission settings for DAO Container objects for the current workgroup's groups.
- “Container Permissions for Users” shows all permissions setting for DAO container objects for each of the workgroup's users.
- “Object Permissions for Groups” shows the permissions settings for all database objects for Groups.
- “Object Permissions for Users” shows the permissions settings for all database objects for Users.

Object XRef Category

Object cross reference information shows where tables, queries, forms, reports, and macros are used throughout your database. This category contains several reports for flexible sorting and grouping.

Not all object references can be documented. See page 28 for Total Access Analyzer's limitations.

- The Query, Form, Report, Macro, and Command Bar References reports show where each object is referenced.
- Several reports are available to show references by referenced Object Type.
- The Hyperlinks report shows all Hyperlink references across your objects and the use of the FollowHyperlink command in your code.

Field XRef Category

This category is available for ACCDBs/MDBs only, and shows where table and query fields are used in other objects. Various sort options are available. Field cross reference information is in its own category with its own reports because of the large amount of field references that exist in a typical database.

- "Field References, Sorted by Table Name" shows where fields are used, and is sorted by the referenced table and field names.
- Several reports are available listing fields referenced by the calling object. There is a report for all objects that reference fields, and other reports for just query, form, and report references.

Module XRef Category

The Module cross reference category has the most extensive collection of reports. These reports are available if you selected "Generate Module XRef" (explained on page 46). The data is based on detailed analysis of your general module code and the modules behind the selected forms and reports.

The available reports are similar to the items available on the Module XRef tab in the Documentation Explorer (see page 94 for more information).

- "Module Analysis Summary" reports show the number of lines, procedures, variables, and various other summary statistics for each module.
- "Module Overview" provides a one-page summary for each module, showing its public and private interfaces with their procedures, properties, events, enums, user defined types, library declarations, implemented classes, and public variables. Class properties are

shown as ReadWrite, ReadOnly, or WriteOnly depending on whether the corresponding Get and Set/Let statements exist.

- “Procedure List” reports show a list of procedures defined in each module with information on their settings: procedure type, parameters, return type, etc. You can even include the comments of a procedure. The comments come from the comment block immediately before your procedure definition, or if there is none before it, the comment block immediately after the definition. This provides an excellent way to track each procedure’s purpose.
- “Procedure List, Sorted by Procedure Name” provides an alphabetical list of procedures and where they are defined. This is useful as a lookup when you know a procedure name, but not where it is defined.
- “Procedures Called – Where Procs are Called From” is the procedure cross reference showing where procedures are called from and the parameters used. This is ideal for reviewing procedure calls before making modifications to your code.
- “Procedures Called, Non-Event Procedures Only” shows the procedure cross reference for procedures excluding event procedures in forms, reports, and class modules.
- “Procedure Calls – What Each Procedure Calls” shows a list of procedures called by each procedure.
- “Library Declarations” reports show all uses of the Declare keyword to access external DLL or EXE procedures.
- “ENUM” reports list every enum definition and its members. Reports also show where they are used.
- “Event” reports show events defined by module, and where they are raised.
- “User Defined Type” reports list every user defined type along with its elements and where it is used.
- “Variable List” reports show a list of variables declared and their data types.
- “Variable References” reports show where variables are referred to or assigned values (these reports may be very large).
- “Variable Constants” reports shows all constants defined, their assigned values, and their scope.
- “Variables of Class Module” reports show variables based on class modules and where they are defined.
- “Classes Implements” reports show what classes are referenced via the IMPLEMENTS command.
- There are also reports for Line Labels, Access/VBA function calls, DoCmd calls, and DefType statements.

Diagram Category

Diagrams are the highest level of analysis generated by Total Access Analyzer. Three diagrams are available for ACCDBs/MDBs: Application, Data, and Object. Only the Application diagram is available for ADPs. The diagrams are described in detail for the Documentation Explorer (see page 108 for more information).

The diagram reports differ from the view of the diagrams in the Documentation Explorer in these ways:

- All branches are expanded.
- The called object's module type and name is shown.
- There is a [See Num] field for objects whose calls were drawn earlier in the diagram. The value in the column refers to the line number where the original drawing is located.
- Lines are not drawn between root level objects.

System Category

The System category contains reports about Total Access Analyzer. These reports are helpful for giving you a better idea of the features of the program:

- "Total Access Analyzer Report List" shows every Total Access Analyzer report, along with its description.
- "Report List with Export File Names" lists the reports and the name used when you export it to a folder.
- Reports listing all Errors, Suggestions, and Performance Tips detected by Total Access Analyzer are available, and include descriptions of each detected item and ways to fix your objects.
- "Total Access Analyzer Output Databases" lists all documentation databases. See page 108 for more information about documentation output databases.

Report Sets

Total Access Analyzer allows you to create collections of reports you save for easy retrieval, called Report Sets.

This powerful feature lets you retrieve a set of reports and minimize the complexity of dealing with the huge number of reports available in Total Access Analyzer.

For example, you may want to consider creating the following report sets:

- Database administrator reports that includes Table Dictionary, Relationships, and other reports to help manage a database's data
- Developer reports with all the relevant module code reports for developer code review meetings
- A set of form and report blueprints for application design sessions

Total Access Analyzer ships with a set of built-in report sets that may suit many of your needs. You can access the Report Sets form by clicking on the [Report Sets] button on the Print Documentation form to open this:

Total Access Analyzer - Report Sets

List of Report Sets

ID	Name	Builtin	Created	Modified
1	Executive Summary	<input checked="" type="checkbox"/>		
2	Diagrams and Relationship	<input checked="" type="checkbox"/>		
3	Issues to Review	<input checked="" type="checkbox"/>		
4	Unused Objects and Code	<input checked="" type="checkbox"/>		
5	Code Printouts	<input checked="" type="checkbox"/>		

Report Set: No Filter Search

Description:
Database Overview and summary counts of errors, suggestion, and performance tips, plus overview of module complexity.

Selected Reports:

Category	Report Name
Database	Database Summary (MDB Only)
Database	Database Summary (ADP Only)
Error	Summary of Errors by Type
Module XRef	Module Analysis Summary, Sorted by Module Type
Performance	Summary of Performance Tips by Type
Relationship	Relationships Window (MDB Only)
Suggestion	Summary of Suggestions by Type

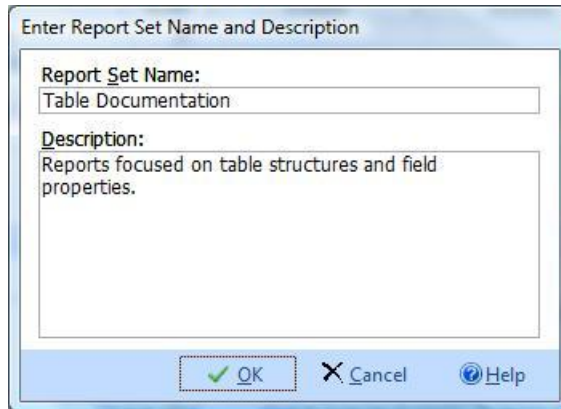
Report: 1 of 7 No Filter Search

New Close Help

Report Sets Form

There is a considerable amount of functionality built into this feature. Here are tips for using it:

- To select a report set, highlight any of the sets listed and click the [Select] button. You are returned to the Print Documentation form, with all of the reports in the chosen set selected. The name of the chosen report set is displayed on the top of the Print Documentation form.
- To create a new report set that includes the reports that are currently selected on the Print Documentation form, click the [New] button, and enter the name and description for the new set, then click [OK]:



Enter Report Set Name and Description

Report Set Name:
Table Documentation

Description:
Reports focused on table structures and field properties.

OK Cancel Help

Creating a New Report Set

- To rename a report set and/or change its description, press the [Rename] button.
- To copy the selected report, press the “Duplicate” button.
- To delete user-defined report sets, use the [Delete] button. Built-in reports cannot be deleted.
- To update the selected report set by replacing its selected reports with those currently selected, click the [Update] button.



Tip

If you close the Print Documentation form with a report set selected, your report selections are preserved but the currently selected set name is reset. The next time you use the Print Documentation form, you will see that the set name label at the top of the form is reset to “Report Set: <none>.”

Chapter 8: Quick Documentation

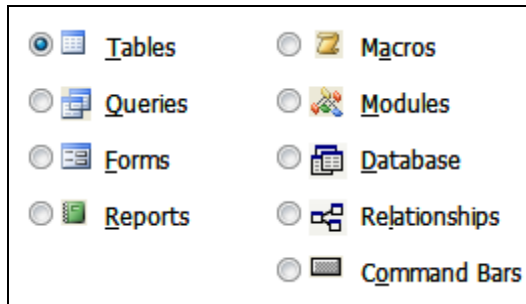
This chapter explains how to use the Quick Doc feature of Total Access Analyzer to generate basic information for individual objects in your database quickly. Learn how the Quick Doc Wizard works, and how it can help you understand your objects when full documentation and analysis of your entire database is not necessary.

Topics in this Chapter

- Introduction
- Quick Doc Wizard

Introduction

There are times when you simply need a quick printout of an object's structure. For example, the field and property list of some tables, or a module's code. For such simple tasks, Total Access Analyzer offers a Quick Doc feature as an alternative to the full documentation. The Quick Doc feature allows you to document basic information for



Quick Doc Options for Jet Engine (MDB & ACCDB) Databases

Since the point of Quick Doc is to generate documentation quickly, the advanced information provided by the main Total Access Analyzer documentation operation is not available. This means that errors, suggestions, performance tips, cross reference, module analysis, and diagrams are not available through Quick Doc.

For a complete list of which Full Documentation reports are available in Quick Doc, print the list of Total Access Analyzer reports from the Main Menu form's [Report] button. The report is available under the System category.

To start Quick Doc, press the Quick Doc button on the Main Menu form.



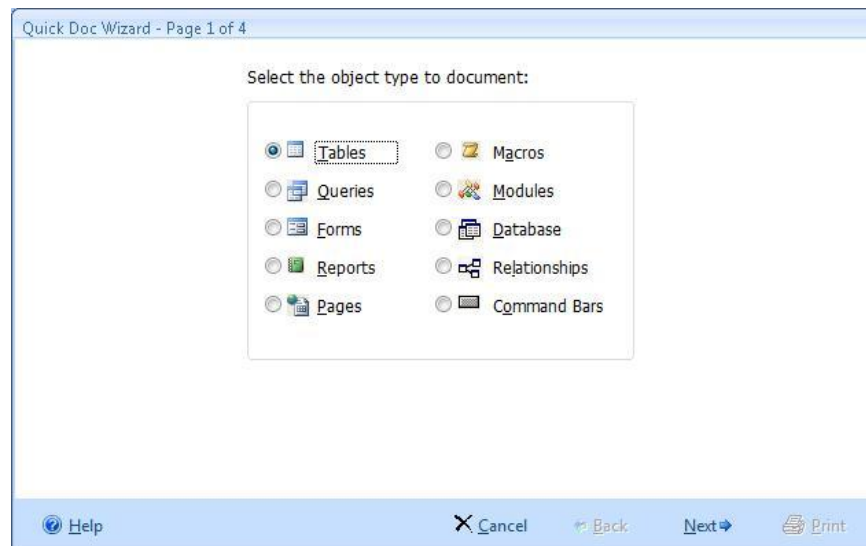
Unlike full documentation, Quick Doc documentation is not saved. When you leave the Quick Doc Wizard, the results are discarded. Note that the documentation generated by Quick Doc is based on a snapshot of the current state of your database. This may differ from previously generated results for the same database.

Quick Doc Wizard

Quick Doc is a multi-page wizard that guides you through the process of selecting an object, selecting options, generating results, and printing or previewing the output reports.

Page 1: Selecting a Category

The first page of the Quick Doc Wizard displays a list of documentation categories. Note that you can only select one category at a time:

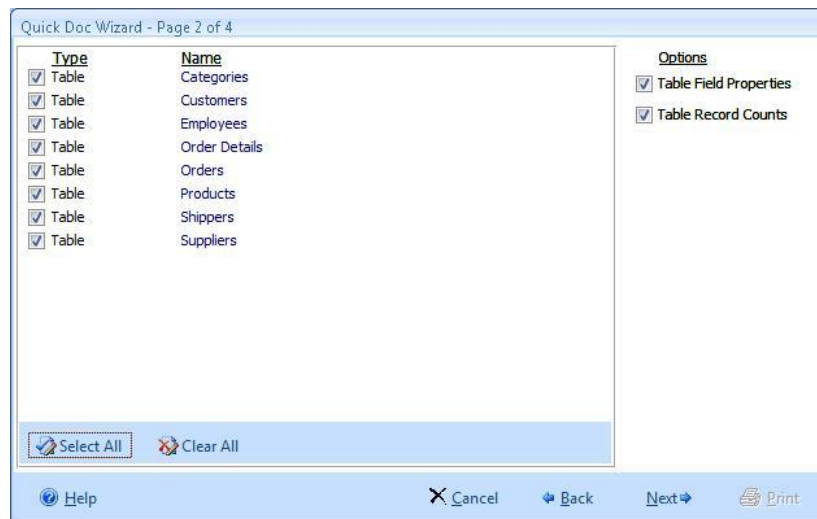


Quick Doc Wizard (Page 1)

Select a category and press [Next] to continue.

Page 2: Selecting Objects

The second page lists the objects available in the selected category. If you selected the Database or Relationships category, this screen does not appear since those categories do not have objects to select.



Quick Doc Wizard (Page 2)

Select a single object by checking its checkbox, or use the [Select All] button to select all objects. To deselect an object, clear its checkbox, or use the [Clear All] button to clear all objects.

Setting Options

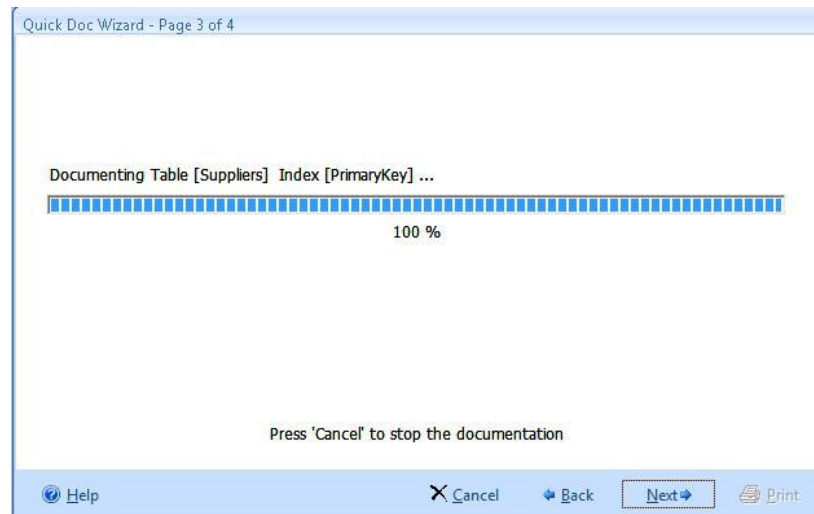
Depending on the category specified on the first page of the Wizard, there may be additional options available. These options appear below the list of available objects on the second page of the form. The options are the same options as the full documentation options. See page 42 for more information on the individual options. Your selection of Quick Doc options is not related to the options selected under [Document]. This lets you set your options independently on the Document and Quick Doc sides.

After selecting the objects and options you want, press the [Next] button. Total Access Analyzer displays a dialog asking you if you want to generate documentation. Select [Yes] to generate the documentation.

Page 3: Generating Documentation

Depending on the number of objects you have selected, and their complexity, this process can take anywhere from a few seconds to several

minutes. As documentation is generated, a status form keeps you updated on the progress:



Quick Doc Wizard (Page 3)

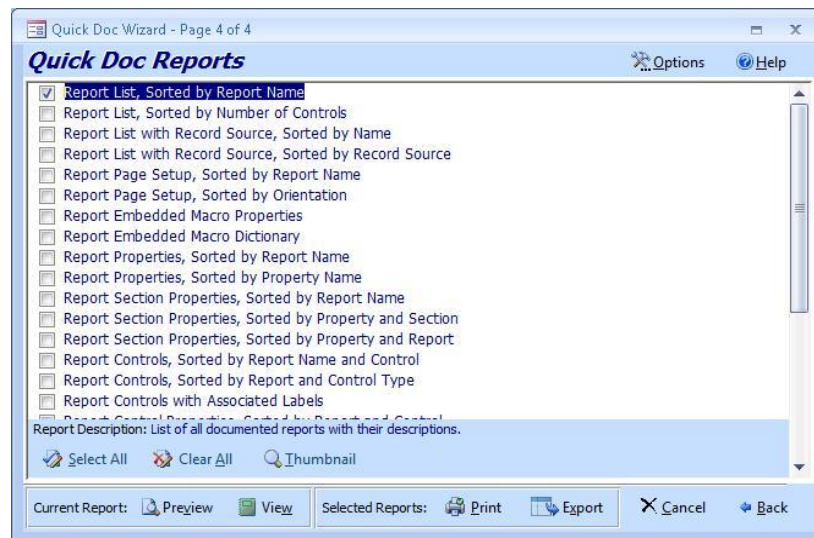


Tip

Like Full Documentation, the screen may flash as objects are documented. This is normal behavior. When the processing is complete, the next page appears.

Page 4: Selecting Reports

When the documentation is complete, the last page of the Quick Doc Wizard appears:



Quick Doc Wizard (Page 4)

This page lists the available reports. The list depends on the category you selected on the first page. For example, if you selected the Tables category, the list shows table documentation reports. Only reports with data are listed.

The report selection screen behaves like the report selection screen for the main documentation. To preview or open a report in report view, go to the report row (no need to check it), and press [Preview] or [View].

To print or export reports, check the ones you want and press the [Print] or [Export] buttons.

To change report options, press the [Options] button. See page 130 for the report options. The report options are the same for both Full Documentation and Quick Doc. That is, if you change the report layout here, it also changes for your Full Documentation reports.

Finishing

After you finish previewing and printing your reports, you can:

- Press the [Back] button once to select new objects to document.
- Press the [Back] button twice to return the first page of the Quick Doc Wizard where you can specify a new category.
- Press the [Cancel] button to close the Quick Doc Wizard and return to the Total Access Analyzer Main Form.



Keep in mind that Quick Doc results are not saved. When you leave the Quick Doc Wizard, the results are discarded.

Chapter 9: Product Support

This chapter provides information on troubleshooting problems that arise and obtaining support for Total Access Analyzer.

Topics in this Chapter

- **Troubleshooting**
- **Web Site Support**
- **Technical Support Options**
- **Contacting Technical Support**

Troubleshooting

There are many resources available to resolve issues you may encounter. Please check the following:

Startup Errors

See page 21 for information about common startup errors.

Documented Limitations

See page 28 for information about the limitations of Total Access Analyzer, and page 31 for specific limitations related to ADPs.

Documentation Failures

See page 56 for information about common problems associated with the documentation process, and how to resolve these problems.

Readme File

Check the README file for the latest product information. The README file is located in the directory where you installed the product.

Product Documentation

We've spent a great deal of time and care to make sure the Total Access Analyzer manual and help file are very detailed. Check the Table of Contents and Index for your question, and read the appropriate pages.

Web Site Support

The FMS web site contains extensive resources to help you use our products better. Resources include product updates, frequently asked questions (FAQs), newsgroups, information on new versions, betas, and other resources.

Main Page

News and important announcements are posted on the main page of our web site:

www.fmsinc.com

Check this site often for the latest information from FMS.

Support Site

From the Support site, you can quickly locate technical support resources, such as product registration, updates, frequently asked questions, newsgroups, and more. The Support site is located at:

www.fmsinc.com/support

Product Updates

FMS takes product quality very seriously. When bugs are reported and we can fix them, we make updates available on our web site. If you are encountering problems with our product, make sure you are using the latest version.

Product updates are linked from our Support site. You can also check for product updates by using the built-in Update Wizard. See **Using the Update Wizard** on page 15 for details.

Frequently Asked Questions (FAQs)

Our FAQs provide answers to Common questions and additional information beyond what is in the manual and help file. General and product-specific FAQs are linked from our Support site.

Newsgroups

FMS has general and product specific newsgroups. Connect with FMS Technical Support and other users there. Share your experiences, learn from others, and ask your questions in our virtual community:

www.fmsinc.com/support/newsgroup.htm

Microsoft Patches

Our Support site includes links to Microsoft patches that are related to our products. Make sure you're using the latest versions by checking our site, or visiting Microsoft's web site.

Technical Support Options

FMS is committed to providing professional support for all of our products. We offer free access to our online FAQs and newsgroups. Bug reports, feature requests, suggestions, and general pre-sales questions related to our products are always available at no cost.

Additional maintenance plans are available to provide subscribers with enhanced technical support. This is the best way for you to stay current with the rapidly changing technologies that impact project development, and to

ensure you are getting the maximum return from your software investment. Please visit our web site, www.fmsinc.com, for the most up-to-date information.

Features & Benefits	Premium	Incident	Standard
Access to FAQs	✓	✓	✓
Access to Newsgroups	✓	✓	✓
Minor Upgrades/ Bug Fixes	✓	✓	✓
Telephone Support	✓	Per incident	First 30 Days
Email Support	✓	Per incident	First 30 Days
Priority Response Time ¹	✓	✓	
Senior Engineer Support Team	✓	✓	
Email Project for Testing	✓	✓	
Programmatic Code Assistance ²	✓	✓	
Cost	Annual Fee	Fee Per Incident	Included
<p>1. Response generally within two business days. Actual resolution may take longer depending on complexity of the issue reported.</p> <p>2. Custom programming implementation is not provided in our Support Maintenance plans. For products that include a programmatic interface, we can provide instructions for using our programmatic interface, and show examples, but we do not implement this into your projects. This service is available from our Professional Solutions Group.</p>			

Premium Subscription

The Premium Subscription is the ideal option for customers seeking the highest level of support from FMS. The annual fee entitles you to telephone and email technical support from a senior support engineer.

Subscriptions are available for a twelve-month period, and may be purchased at any time. You must be the registered owner of the product to purchase and use a subscription. Please ensure that you have purchased the subscription you need for Total Access Analyzer.

Per Incident

Our Per Incident package is available individually or by purchasing multiple incidents in advance. The Per Incident support package provides telephone and email technical support from a Senior Technical Support Engineer for resolving one incident.

An incident is defined as a single question related to one of our products. The Per Incident period is from start to finish (report of the incident to resolution) for a single incident. If you anticipate multiple questions for a single product, we recommend purchasing the Premium Subscription.

Standard Subscription

Our Standard Subscription comes with every product purchased for no additional cost. The standard subscription comes with access to our FAQs and newsgroups, and responses to bug reports and feature requests for that version.

Please note that the person requesting support must also be the registered user of the product. Registration is required and will be requested by our Technical Support professionals.

Contacting Technical Support

If the troubleshooting suggestions and other support resources fail to resolve your problem, please contact our Technical Support department. We are very interested in making sure you are satisfied with our product.

Registering Your Software

Please register your copy of Total Access Analyzer. You must be registered to receive technical support. Registration also entitles you to free product updates, notifications, information about upcoming products, and beta invitations. You can even receive free email notification of our latest news.

You may register your software by mailing in your registration card or directly on our web site.

Contact Us

The best way to contact us is via email at:

Support@fmsinc.com

Please provide detailed information about the problem that you are encountering. This should include the name and version of the product, your operating system, and the specific problem. If the product generated an error file, please submit that as well.

With email, technical support issues can be more accurately resolved and tracked in our internal technical support system. Email also gives us more time to understand the entire problem and allows our technical support staff to contact the developers with the entire story when necessary. Please bear in mind that a unique issue may involve meetings between the technical support staff and product developers, so your patience is appreciated.

Microsoft Technical Support

FMS only provides technical support for its products. If you have questions regarding Microsoft products, please contact Microsoft technical support.

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