
**Maintenance Scheduling for
Microsoft® Office Access and Visual Basic 6.0**



**Supports Microsoft® Office Access
and Microsoft Visual Basic 6.0**

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At Microsoft, we would like to thank all those on the Access and Jet Engine team who helped with technical support.

Many people at FMS, Inc. contributed to the creation of Total Visual Agent. They include:

- **Design and Development:** Luke Chung, Scott Ellis, Jim Ferguson, and Dan Haught
- **Quality Assurance:** Molly Pell and Aparna Pophale
- **Technical Support:** John Litchfield
- **Documentation:** Luke Chung and Molly Pell

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Welcome to Total Visual Agent!

Thank you for selecting Total Visual Agent. This is the sixth major version of the product since its debut with Access 2.0 in 1996.

Total Visual Agent is developed by FMS, the world's leading developer of products for Microsoft Access and Visual Basic. In addition to Total Visual Agent, we offer a wide range of products for Microsoft Access and VB developers, administrators, and users:

- Total Access Analyzer (database documentation)
- 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 VB Statistics (statistical analysis program)
- Total Visual CodeTools (code builders and managers)
- Total Visual SourceBook (code library)

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

If you didn't purchase Total Visual Agent 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 Visual Agent.



Luke Chung
President

Chapter 1: Introduction

Total Visual Agent offers a practical and professional solution to ensure that your Access/Jet databases perform optimally and are administered properly. Simply schedule it to perform all your database chores—repair/compact, backup, extract data, run macros, collect statistics, run custom commands—and you never have to worry about them again. This chapter introduces the product, and explains how it can help you manage and maintain your databases automatically.

Topics in this Chapter

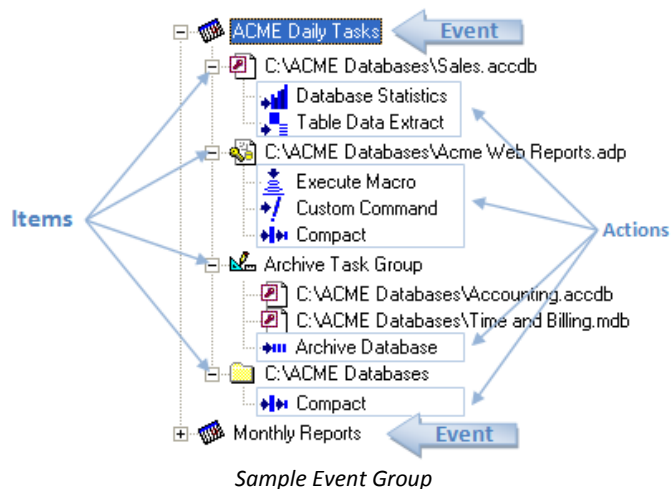
- **About Total Visual Agent**
- **How Total Visual Agent Works**
- **New Features in This Version**
- **Visit Our Web Site**

About Total Visual Agent

People and computers run on different schedules. The best time to perform routine maintenance tasks on your databases—compacting, repairing, and backing them up—is when nobody is actively using the databases. For most organizations, this means the middle of the night or the weekend, but nobody wants stay behind to compact and repair the databases.

Total Visual Agent solves this problem by automating your most tedious maintenance chores. Total Visual Agent works with a combination of Events, Items, and Actions:

- **Events** are your schedules—an Event handles everything you need to do at a particular time. Create Events to run tasks multiple times per hour, hourly, daily, weekly, monthly, or one time.
- Events consist of any number of **Items**. An item can be a specific database or project, a set of databases organized into a Task Group, or all of the databases or files in a selected directory.
- Items have one or more **Actions** to perform. Actions are the tasks that you want to perform on the Item:
 - **Compact** and repair your database
 - Create rolling **archive** versions (copies) of your databases
 - **Extract data** from selected tables and write them into another database while users are in the database
 - Run **macros** and **command lines**
 - **Track statistics** on the objects and records in your databases



The Total Visual Agent Manager lets you configure and schedule your Event Groups interactively, and the Monitor and Service execute them.

How Total Visual Agent Works

Total Visual Agent includes four separate components that work together to help you manage administrative tasks:

Total Visual Agent Manager

The Total Visual Agent Manager is where you configure your Events, Items, and Actions. Additionally, the Manager is where you view log files and other administrative reports showing the results of previous activity. You can also start and stop the Total Visual Agent Monitor and Service from the Manager.

Once you define your Event Groups in the Manager, determine whether to use the Monitor or the Service to run the scheduled Events.

Total Visual Agent Monitor

The Total Visual Agent Monitor runs in the background, waiting for the time to process the next scheduled Event. For each Item in the Event Group, the Monitor dispatches the Total Visual Agent Engine to perform the Action.

For the Monitor program to run, a user must be logged onto the computer that is running Total Visual Agent. If a user will not be logged on, consider using the Service instead of the Monitor.

Total Visual Agent Service

The Total Visual Agent Service executes Event Groups as a Windows Service. The Service runs more securely than the Monitor, since it doesn't require a user to be logged on. Additionally, the Service can be configured to start automatically with Windows, so you can be confident that it's running.

Note, however, that using the Service to launch external programs (such as macros, custom commands, and compacting ADPs) is potentially dangerous. If the external program fails for any reason, the program may remain open in memory with no feedback shown on screen. This can cause your computer to stop responding, and may potentially cause database corruption.

See **Chapter 8: Running Scheduled Events** for details about the differences between the Monitor and the Service, and the limitations of each.

Total Visual Agent Engine

The Total Visual Agent Engine is the part of Total Visual Agent that performs the Actions (compact and repair, archive, etc.). The Total Visual Agent

Engine performs its work behind the scenes, and you do not interact with this component directly.

New Features in This Version

Since Total Access Agent was first introduced in 1996, we have released six major versions in the Agent product line. The latest version of Total Visual Agent builds on our vast expertise, and offers the best database management solution to date. This version of Total Visual Agent includes the following new features and enhancements:

Support for Access 2007 and ACCDBs

The latest version of Total Visual Agent includes support for Microsoft Access 2007 and the new Access 2007 file format (ACCDBs). It continues to support all earlier versions of Microsoft Access (1.0 through 2003) and Visual Basic (3.0 through 6.0).



With the release of Access 2007, Microsoft no longer allows distribution of the components that support the new Access ACCDB format. For this reason, Total Visual Agent 2007 requires Access 2007 to be installed on the computer or server running Total Visual Agent.

This can be added by installing the free Runtime version of Microsoft Access 2007, which is available for download from Microsoft.com. A link for the download is available from the Total Visual Agent FAQ page on www.fmsinc.com.

Enhanced Total Visual Agent Service

The Total Visual Agent Service now supports launching external programs (such as macros and custom commands). Before using this feature, keep in mind that launching programs from a Service is potentially dangerous. See **Chapter 8: Running Scheduled Events** for details and special considerations.

Streamlined Database Statistics Form

The user interface for viewing Database Statistics is redesigned and streamlined to make it more modern and user-friendly.

Windows Theme Support

The Manager has a more modern look, with support for Windows themes.

New User Manual and Help File

Total Visual Agent includes a new user manual and online help file to support the new features.



If you are upgrading from a previous version of Total Visual Agent (or Total Access Agent), Total Visual Agent allows you to import your existing schedules and configuration. See **Importing Settings from a Previous Version** on page 20 for more information.

Visit Our Web Site

FMS is constantly developing new and better developer solutions. Total Visual Agent 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 Registration

If you did not order Total Visual Agent directly from us, you can register it 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 11 for information on how to check for the availability of updates.

Product Announcements and Press Releases

Read the latest information on new products, new versions, and future products. Press releases are available the same day they are sent to the press. Sign up in our Feedback section to have press releases 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. Demo versions for most of our products are also available.

Technical Papers and Tips

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.

Blog and Newsgroups

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

www.fmsinc.com/blog

Visit our newsgroups at:

www.fmsinc.com/support/newsgrp.htm

Or see our web site for additional instructions.

Links to Other Development Sites

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

Chapter 2: Installation

Total Visual Agent 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 Total Visual Agent.

Topics in this Chapter

- **System Requirements**
- **Installing Total Visual Agent**
- **Using the Update Wizard**
- **Uninstalling Total Visual Agent**

System Requirements

Total Visual Agent is written in Visual Basic, and its requirements are similar to those of Visual Basic itself:

- Microsoft Office Access 2007 or its runtime version
- Hardware and operating system supported by Microsoft Access 2007.
- Internet Explorer 5.01 or higher.
- 10 MB free disk space for Total Visual Agent program files; 150 MB free disk space for Microsoft .NET Framework; additional free space to store Total Visual Agent log files and Database Statistics.



While previous versions of Total Visual Agent did not require Microsoft Access, the latest version requires Microsoft Access 2007 installed.

This requirement is because with the release of Access 2007, Microsoft no longer allows distribution of the components that support the new Access ACCDB format. You may install the free Runtime version, which is available for download from Microsoft.com. A link for the download is available from the Total Visual Agent FAQ page on www.fmsinc.com.

Installing Total Visual Agent

The latest version of Total Visual Agent replaces all earlier versions, and all prior versions should be uninstalled before proceeding with the installation. See page 11 for details.

Total Visual Agent is installed with an automated setup program. To install the program, 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 folder 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.

List of Files Installed

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

Using the Update Wizard

Total Visual Agent 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 Visual Agent Update Wizard to ensure that you have the latest version.

To run this program, select Programs, FMS, Total Visual Agent, Update Wizard from the Windows Start menu. Follow the prompts on the form to check for the latest update.

Uninstalling Total Visual Agent

Total Visual Agent 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 Visual Agent from the list of installed programs
3. Click on Uninstall/Change

Windows XP

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

After a few moments, the Total Visual Agent program files and its registry entries are deleted



Uninstalling Total Visual Agent does not remove the settings database (TVAGENT12.MDB), which holds all configuration and Event Schedule information. This database is retained to allow you to use your existing settings with future installations of the product. If you do not plan to reuse your settings, however, you may manually delete the settings database from your installation folder.

Chapter 3: Startup and Configuration

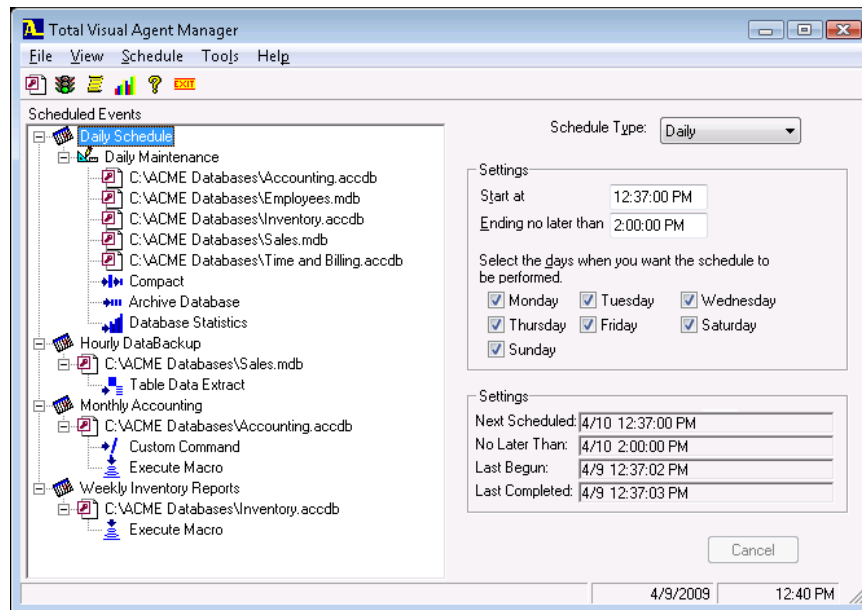
After installing Total Visual Agent, it's important to take some time to configure the product to suit your needs. This chapter explains how to start the program for the first time, how to use the available options to get the most out of Total Visual Agent, and how to import schedules from a previous installation.

Topics in this Chapter

- **Starting Total Visual Agent**
- **Configuring the Options**
- **Importing Settings from a Previous Version**

Starting Total Visual Agent

After installing Total Visual Agent, use the Manager to configure options and create a schedule. To start the Total Visual Agent Manager, select Start, Programs, Total Visual Agent, Total Visual Agent Manager:

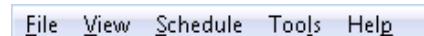


Main Total Visual Agent Manager Screen

The Manager is comprised of three main sections: the Menu and Toolbar, the Scheduled Events Treeview, and the Details Pane.

Menu and Toolbar

Most program functionality is available from the Total Visual Agent Manager menu bar, and shortcuts for common tasks are available from the Toolbar.



Total Visual Agent Menu




Total Visual Agent Toolbar


The menu contains the following items:


File Menu


 **Exit:** Close Total Visual Agent Manager.

View Menu

 **Managed Databases:** Review and configure databases and projects currently managed by Total Visual Agent. See page 68 for details.

 **Monitor/Service Status:** Start and stop the Monitor and Service. See page 69 for details.

 **History:** View the event log to see details about events run and errors encountered. See page 70 for details.

 **Database Statistics:** View statistics collected using the Databases Statistics Action. See page 72 for details.

Schedule Menu

Schedule Total Visual Agent Events, Items, and Actions. Schedule menu items are also available from the Treeview right click menu. See **Chapter 4: Scheduling Events** for details.


Tools Menu

Options: Configure program options. See page 16 for details.

Add Monitor Shortcut to Startup Menu: Add a shortcut item to the Startup menu to start the Monitor when the user logs into Windows, See page 79 for details.

Import Manager Settings: Import schedules from a previous installation of Total Visual Agent. See page 20 for details.

Help

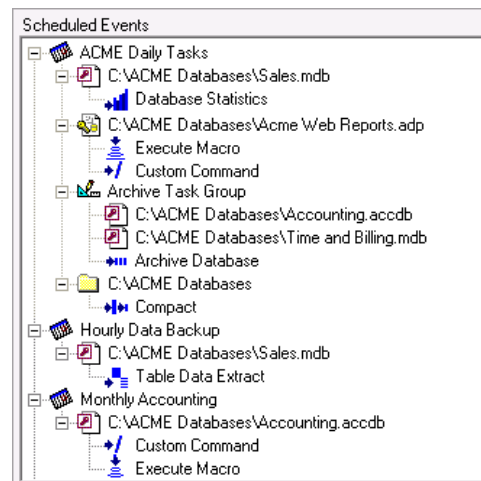
 **Total Visual Agent Help:** View the Help file for Total Visual Agent.

About: Open the About form to see information about the program version, copyright information, and more.

Scheduled Events Treeview

The Scheduled Events Treeview shows a hierarchical view of your scheduled Events, Items, and Actions.

See Creating an Event on page 24 for details.

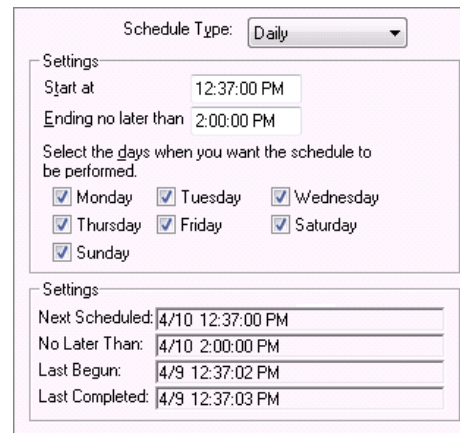


Scheduled Events Treeview

Details Pane

The Details Pane displays settings specific to the selected item in the treeview.

The information displayed in this pane depends on whether an Event, an Item, or an Action is selected in the treeview. See **Chapter 4: Scheduling Events** on page 23 for more information.



The screenshot shows a 'Details Pane' window with a 'Schedule Type' dropdown set to 'Daily'. Under the 'Settings' section, there are two sub-sections. The first sub-section contains: 'Start at' (12:37:00 PM), 'Ending no later than' (2:00:00 PM), and a list of days with checkboxes: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday, all of which are checked. The second sub-section contains: 'Next Scheduled:' (4/10 12:37:00 PM), 'No Later Than:' (4/10 2:00:00 PM), 'Last Begun:' (4/9 12:37:02 PM), and 'Last Completed:' (4/9 12:37:03 PM).

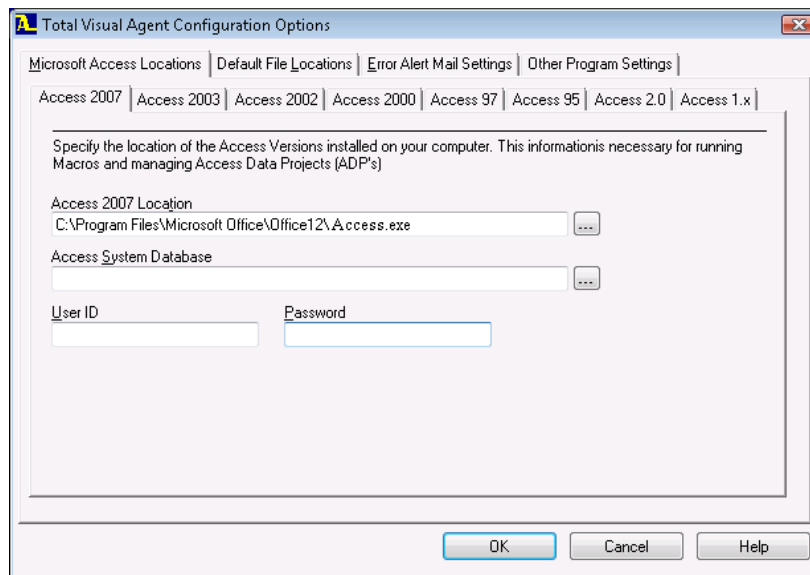
Details Pane

Configuring the Options

Prior to scheduling tasks, it's important to configure Total Visual Agent's global settings and options. Open the Manager, and select Tools, Options from the menu to display the Configuration Options.

Default Access Settings

Use the "Microsoft Access Locations" tab to specify file locations and settings for the installed versions of Access:



The screenshot shows the 'Total Visual Agent Configuration Options' dialog box with the 'Microsoft Access Locations' tab selected. The dialog has several tabs: 'Microsoft Access Locations', 'Default File Locations', 'Error Alert Mail Settings', and 'Other Program Settings'. Under the 'Microsoft Access Locations' tab, there are sub-tabs for 'Access 2007', 'Access 2003', 'Access 2002', 'Access 2000', 'Access 97', 'Access 95', 'Access 2.0', and 'Access 1.x'. The main area contains the text: 'Specify the location of the Access Versions installed on your computer. This information is necessary for running Macros and managing Access Data Projects (ADP's)'. Below this are two text boxes: 'Access 2007 Location' (containing 'C:\Program Files\Microsoft Office\Office12\Access.exe') and 'Access System Database'. At the bottom are 'User ID' and 'Password' text boxes. At the very bottom are 'OK', 'Cancel', and 'Help' buttons.

Configuration Options—Default Access Settings

For most tasks, Total Visual Agent does not need to run Microsoft Access. There are certain Actions, however, that require Access:

- **Execute Named Macro:** When executing a macro, Total Visual Agent launches Access and runs the macro. Configure the Access database version(s) to use for launching macros (see page 62).
- **Compact Access Data Projects:** Because the Microsoft Jet database engine does not control Access Data Projects, Total Visual Agent must launch Microsoft Access to compact ADPs (see page 55).



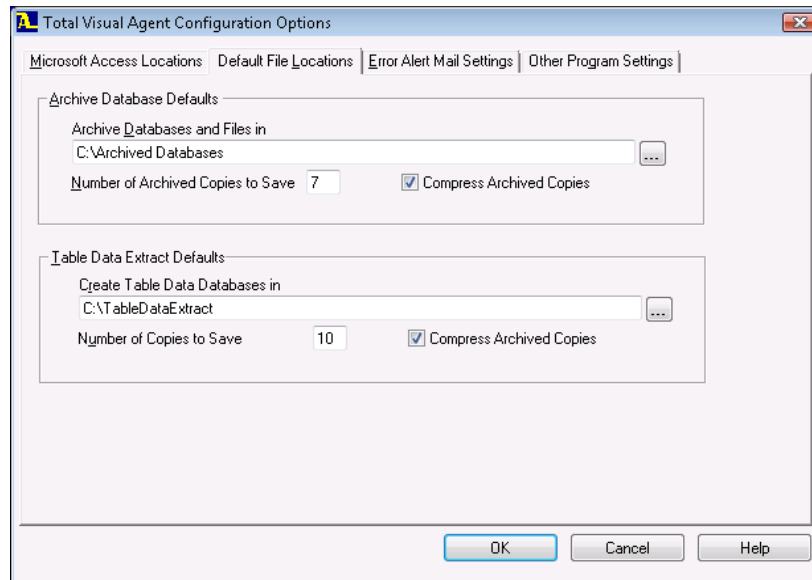
Tip

If you do not plan to execute macros or compact Access Data Projects, you do not need to specify the Microsoft Access file locations.

If you are managing secured databases, optionally specify the default security options (Workgroup system database, User ID, and password). These global security settings are used by default for secured databases, but can be overridden for individual databases. Note that database-level passwords cannot be set here, but must be set at the database level.

Default File Locations

The Default File Locations tab allows you to specify default settings for Archives and Table Data Extracts:

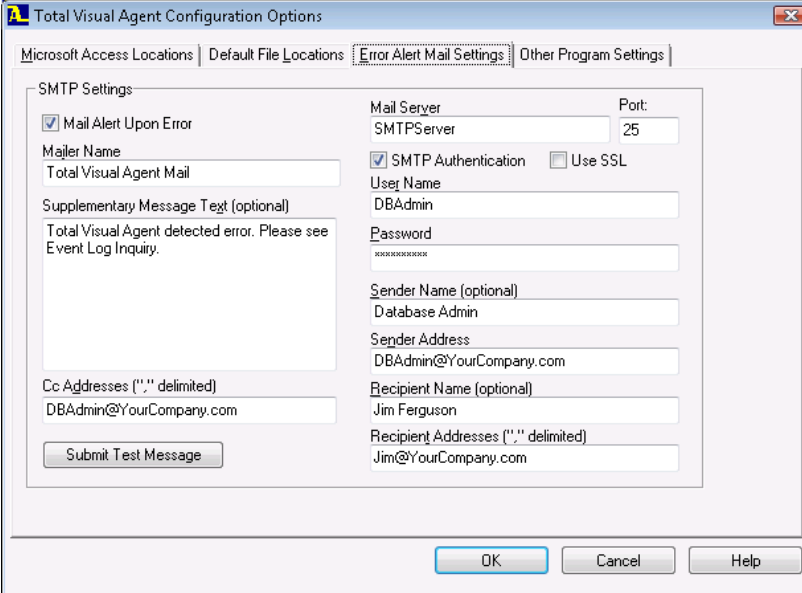


Configuration Options—Default File Locations

Specify the default directory, whether to compress archive files, and the number of archive copies to save. These settings are used by default for new actions, but they can be overridden on a case-by-case basis.

Error Alert Mail Settings

If Total Visual Agent encounters an error while processing a Scheduled Event, it automatically logs the error into the History Log File (see page 70). Total Visual Agent can also email a designated recipient using SMTP. Use the “Error Alert Mail Settings” tab to configure mail settings:



The screenshot shows the 'Total Visual Agent Configuration Options' dialog box with the 'Error Alert Mail Settings' tab selected. The dialog is divided into several sections:

- SMTP Settings:** Includes a checked checkbox for 'Mail Alert Upon Error', a 'Mailer Name' field containing 'Total Visual Agent Mail', and a 'Supplementary Message Text (optional)' text area containing 'Total Visual Agent detected error. Please see Event Log Inquiry.' Below this is a 'Cc Addresses ("'" delimited)' field with 'DBAdmin@YourCompany.com' and a 'Submit Test Message' button.
- Mail Server:** A text field containing 'SMTPServer' and a 'Port:' field containing '25'.
- Authentication:** Includes a checked checkbox for 'SMTP Authentication' and an unchecked checkbox for 'Use SSL'.
- User Name:** A text field containing 'DBAdmin'.
- Password:** A text field with masked characters '*****'.
- Sender Name (optional):** A text field containing 'Database Admin'.
- Sender Address:** A text field containing 'DBAdmin@YourCompany.com'.
- Recipient Name (optional):** A text field containing 'Jim Ferguson'.
- Recipient Addresses ("'" delimited):** A text field containing 'Jim@YourCompany.com'.

At the bottom of the dialog are 'OK', 'Cancel', and 'Help' buttons.

Configuration Options—Error Alert Mail Settings

To send email error alerts, check “Mail Alert Upon Error”, and provide the required settings. Then click “Submit Test Message” to validate the settings and send a test message.

Mailer Name

This name is included in the message header of your email to indicate the program sending the message.

Supplementary Message Text

In addition to the error messages provided by Total Visual Agent, optionally specify additional text to include in the message. This can include the machine name, contact information, etc.

Mail Server/Port

Enter the name or IP address of the SMTP server used to send message, and the port number on which the SMTP service is running. Note that the server must allow relay in order for Total Visual Agent to send email.

The default port is 25 (or 465 for servers that require SSL).



If your organization or email provider offers an SMTP service that allows relay, configure Total Visual Agent to use that. Many internet service providers and webmail services, including gmail.com, allow access to SMTP servers.

If you do not have access to an existing SMTP server that allows relay, Windows 2000, XP Professional, and 2003 include it for free. Contact your network administrator, or follow these steps to install:

Step 1: Install IIS

1. Open “Add/Remove Programs” from your Windows Control Panel, and select “Add/Remove Windows Components” from the menu on the left. This opens the Windows Components Wizard.
2. Select “Internet Information Services (IIS),” and click “Details.”
3. Check “SMTP Service,” and click “OK.” Click “Next” on the Windows Components Wizard, and Windows installs the service. During installation, you will be prompted to insert your Windows CD.

Step 2: Enable Relay

1. Open “Administrative Tools” from the Windows Control Panel, and open “Internet Information Services.”
2. Select “Default SMTP Virtual Server,” and click “Properties”.
3. On the Access tab of the Properties form, click “Relay,” and add your IP address to the permissions list.

SMTP Authentication/User Name/Password

Select this option if the server requires SMTP authentication. In the User Name and Password fields, enter the credentials of a user who has sufficient privileges to send email through the SMTP server.

Use SSL

Select this option if the server requires an encrypted connection (SSL). The port changes to 465, which is the default port number for servers that require SSL.

Sender Name/Address

In the Sender Name field, optionally enter a “friendly” name for the email sender. In the Sender Address field, enter the sender’s email address.

Recipient Name/Address

In the Recipient Name field, optionally enter a “friendly” name for the email recipient. In the Sender Address field, enter the recipient’s email address.

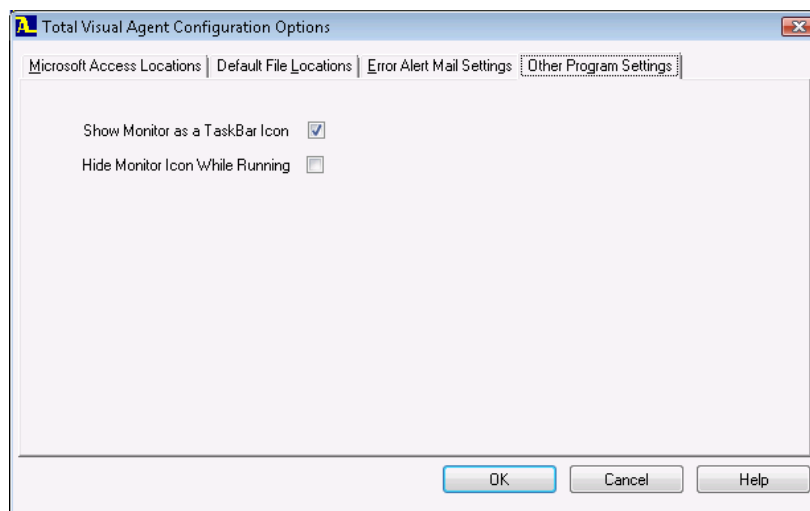
CC Addresses

In addition to the Recipient Address, optionally enter one or more email addresses to receive a Cc of the email. Separate multiple email messages with a comma, for example:

dbadmin@fmsinc.com, backupadmin@fmsinc.com

Other Program Settings

This “Other Program Settings” tab shows two additional options:



Configuration Options—Other Program Settings

Show Monitor as a TaskBar Icon

Optionally show the Monitor icon in the System Tray on your TaskBar.

Hide Monitor Icon While Running

Optionally hide the Total Visual Agent Monitor while it’s running. When it runs invisibly, there is no way to interact with it unless you have also chosen the “Show Monitor as a TaskBar Icon.”

Importing Settings from a Previous Version

When upgrading from a previous version of Total Visual Agent (or Total Access Agent) you can import your existing schedule and configuration settings rather than setting them up from scratch. You can also import settings from the trial version, or another installation of Total Visual Agent.

Total Visual Agent and Total Access Agent store their configuration settings in a Microsoft Jet database. The name of the database differs depending the version of Total Visual Agent:

Database Name	Description
TVAGENT12.MDB	Total Visual Agent 2007 (version 12)
TVAGENT11.MDB	Total Visual Agent 2003 (version 11)
TVAGENT10.MDB	Total Visual Agent 2002 (version 10)
TVAGENT9.MDB	Total Visual Agent 2000 (version 9)
TAAGNT32.MDB	Total Access Agent 8.0 or 1.0 (32-bit version)

When you import settings, all current schedule configuration information is overwritten. There is no option to merge schedules from different settings databases.

To start the import process, select Tools, Import Manager Settings from the Total Visual Agent Manager. The following form appears:



Import Previous Settings Dialog

Locate the settings file to import, and click [Import]. After a final confirmation message, all existing schedule settings are deleted, and the new settings are imported.

Chapter 4: Scheduling Events

The Total Visual Agent Manager gives you complete control over when and how Total Visual Agent works. This chapter describes how to set up and manage the schedules that determine when Total Visual Agent performs its Actions.

Topics in this Chapter

- **Event Schedule Overview**
- **Creating an Event**
- **Event Schedule Cycles**
- **Managing Events**
- **Next Steps**

Event Schedule Overview

Event Schedules are configured using the Total Visual Agent Manager. Schedules are organized into a hierarchy of **Events**, **Items**, and **Actions**.

- **Events** are your schedules—an Event handles everything you need to do at a particular time. Events run tasks multiple times per hour, hourly, daily, weekly, monthly, or one time. See page 25 for details.
- Events contain **Items**. An item can be a specific database/project, a set of databases organized into a Task Group, or all databases or files in a selected directory. See **Chapter 5: Adding Items to Events** for details.
- For each Item in an Event, one or more **Actions** can be performed. Actions include Archive Database, Table Data Extract, Compact Database, Custom Command, Database Statistics, and Execute Named Macro. See **Chapter 6: Adding Actions to Event Items** for details.

For instance, to archive several databases at 2:00 A.M. each day, create one Event, and schedule it to run at 2:00 A.M. If your requirements change, you can easily reschedule the Event's time.

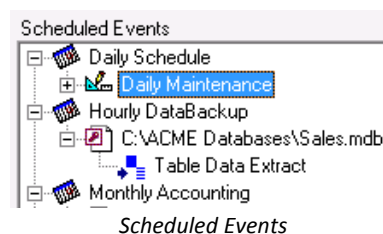
Then add the databases as Items under the event. If the Items have common Actions, add them as a Task Group. If they require different Actions, add each as a separate item.

Finally, specify the Actions—archive, compact, collect statistics, extract table data, execute macro, and/or run custom command. All Actions are performed when the Event's scheduled time arrives.

A database can be in more than one Event. For example, you may want to perform Actions on your Sales database at different times. Once an hour, you want to extract (backup) data from your Orders table, once a day you want to archive the entire database, and once a week you want to repair and compact. To set this up, create three Events (hourly, daily, and weekly), include the Sales database in all three, and add the appropriate Actions.

Creating an Event Group

The Total Visual Agent Manager's main form is organized with a hierarchical treeview listing of the Events, Items, and Actions on the left side of the screen.



Event Schedule Cycles

Events can be scheduled to run **Hourly, Daily, Weekly, Monthly, or One-Time**. Additionally, you can run Events **multiple times per hour** using the options in the Hourly schedule type. By default, Total Visual Agent contains Events for hourly, daily, weekly, and monthly schedules, but events can be added, deleted, or modified to suit your needs.

Adding a New Event

To create a new Event, select Schedule, Add Event from the Manager's menu. When the dialog appears, enter a name that describes the Event:

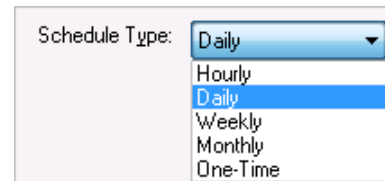


New Event Name Dialog

The new event is added to the Treeview on the left of the form.

Configuring Event Schedules

Select the Event in the treeview, and the right side of the form changes to display the appropriate information. Choose a schedule type from the drop-down list.



Schedule Type

Different settings are available depending on the schedule type you choose. Each schedule type allows you to specify the Event Processing Window.

Event Processing Window

Each schedule types allow you to specify starting and ending times. This range is known as the **Event Processing Window**. The Event Processing Window is useful when you only want to run an Event within a specified period of time, or when going beyond a particular time could interfere with other events or people working on the databases.

If an Event does not start right at its scheduled time (either because another event has not finished, or because the Monitor or Service is not running), it can still begin if the Event Processing Window has not passed. If this period of time passes, the Event does not start, it is skipped, and an error is logged.

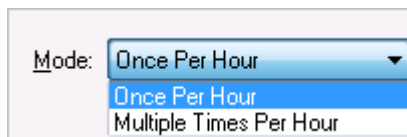
Once started, the Event processes each of its scheduled Items. After processing each Item, it checks to see if the time has passed the Event

Processing Window. If so, the remaining Items are not processed and an error is logged. Check the Total Visual Agent Event Log periodically to see if you need to adjust your schedule parameters so that all Events can finish within their Event Processing Window. Processing times increase as Items are added to an Event or existing databases get larger over time.

Hourly Schedules

If you select the Hourly schedule type, the Settings section of the form changes to display the hourly options.

These options depend on the mode you choose. Using the Mode drop-down, choose whether to run the Event Once Per Hour or Multiple Times Per Hour.

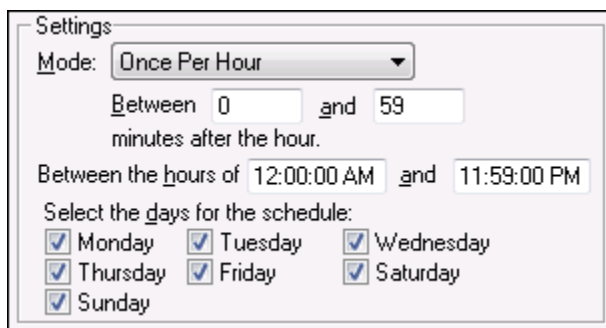


The image shows a dropdown menu labeled 'Mode:'. The menu is open, showing three options: 'Once Per Hour' (which is highlighted in blue), 'Once Per Hour', and 'Multiple Times Per Hour'.

Hourly Schedule Options

Running Events Once Per Hour

Selecting Once Per Hour displays this screen:



The image shows a 'Settings' form for an hourly event. It includes a 'Mode' dropdown set to 'Once Per Hour', a 'Between' field with '0' and '59' minutes, and a 'Between the hours of' field with '12:00:00 AM' and '11:59:00 PM'. Below these are checkboxes for each day of the week, all of which are checked.

Hourly Event, Once Per Hour Options

The Event begins and ends at the specified number of minutes after the hour. You can optionally limit the event to certain hours of the day by specifying beginning and ending hours, or limit the days of the week by unchecking the days that you do want to run the event.

If you do not specify a beginning time, processing begins at midnight. If you do not specify an ending time, the latest processing can begin is midnight. Leave both times blank to create a continuous hourly schedule.

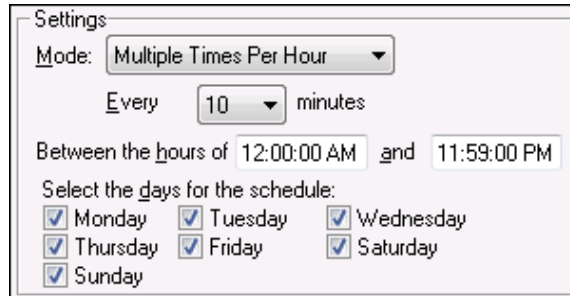


Tip

Note that the beginning and ending hours must be within the same day. For example, you cannot schedule an event to run from 10:00 PM until 3:00 AM. To create an hourly schedule that spans two days, create two identical hourly events. Schedule the first to run from 10:00 PM until 11:59 PM, and the second to run from 12:00 AM until 3:00 AM.

Running Events Multiple Times Per Hour

Selecting Multiple Times Per Hour displays this screen:



Settings

Mode: Multiple Times Per Hour

Every 10 minutes

Between the hours of 12:00:00 AM and 11:59:00 PM

Select the days for the schedule:

Monday Tuesday Wednesday
 Thursday Friday Saturday
 Sunday

Hourly Event, Multiple Times Per Hour Options

Select how often to run the Event by choosing every 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, or 30 minutes. Note that your tasks should be completed in fewer minutes than you specify—i.e., if an Event takes up to 11 minutes to run, you shouldn't schedule it to run every 10 minutes.

As with Events that run once per hour, you can limit the event to certain hours of the day or certain days of the week. If you do not specify a beginning time, processing begins at midnight. If you do not specify an ending time, the latest processing can begin is midnight. Leave both times blank to create a continuous hourly schedule. Note that the beginning and ending hours must be within the same day—see page 26 for details.

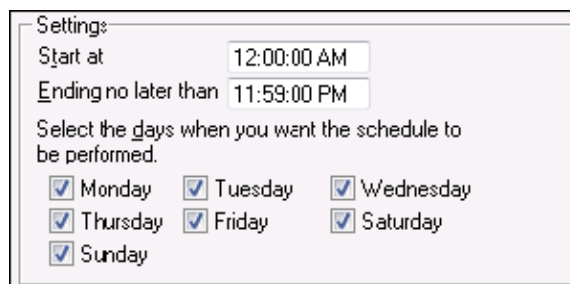


Tip

The Event Processing Window for an Event that runs multiple times per hour is one minute. If the Event cannot run when it reaches its scheduled minute (because the Monitor or Service is not running or another Event has not finished processing), it is skipped and rescheduled for the next appropriate time. An error is not logged in this situation. See page 25 for details about the Event Processing Window.

Daily Schedules

The Daily schedule type displays these options:



Settings

Start at 12:00:00 AM

Ending no later than 11:59:00 PM

Select the days when you want the schedule to be performed.

Monday Tuesday Wednesday
 Thursday Friday Saturday
 Sunday

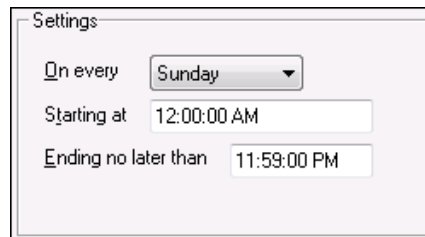
Daily Event Options

Enter the Event Processing Window for this Event (see page 25 for details). Total Visual Agent begins processing the Event as soon as possible after the “Start at” time, and stops at the “Ending no later than” time.

To create a daily Event limited to certain days of the week, un-check the days that you do not want to run the Event.

Weekly Schedules

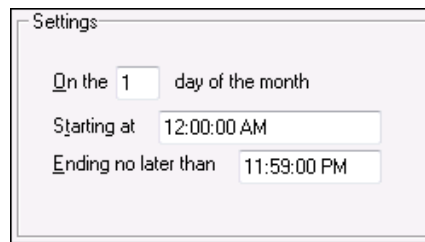
The Weekly schedule type displays options for the day of the week to run the event, and for the Event Processing Window. See page 25 for details about the Event Processing Window.



Weekly Event Options

Monthly Schedules

The Monthly schedule type displays options for the day of the month to run the event, and for the Event Processing Window (explained on page 25).



Monthly Event Options

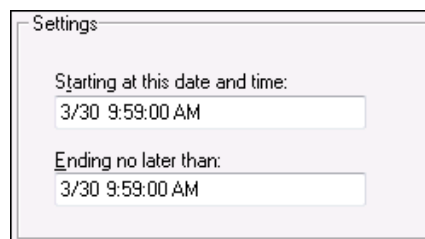


Tip

To run an Event on the last day of every month, schedule it to run on the 31st day of the month. This runs the Event on the month’s last day, even for months with fewer than 31 days. For instance in February, the Event would run on the 28th (or the 29th in a leap year).

One-time Schedules


A one-time schedule is performed on the specific date and time that you specify. Enter the hours of the Event Processing Window for this Event in the “Starting at this date and time” and “Ending no later than” fields (see page 25).

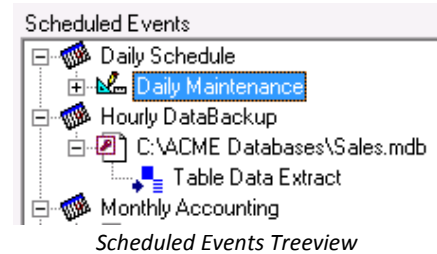


One-time Event Options

After the Event is processed, the schedule is disabled. If you want to execute the Event again, change the “starting at” time to a future time and enable the Event.

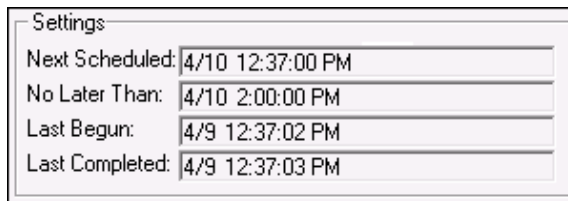
Managing Events

Events that are set up in Total Visual Agent are shown with the  icon, as the top-level items in the treeview.



Schedule Status

Select an Event in the treeview to see its status at a glance. The right side of the Manager displays information about when the Event was last run, and when it will run again:



Schedule Status

Enabling and Disabling Events

Occasionally you may want to suspend processing an Event without removing it permanently. You can temporarily disable an Event by selecting “Disable Event” from the Schedule menu or the right-click shortcut menu. To re-enable the Event, select “Enable Event” from the Schedule menu or the right-click shortcut menu.

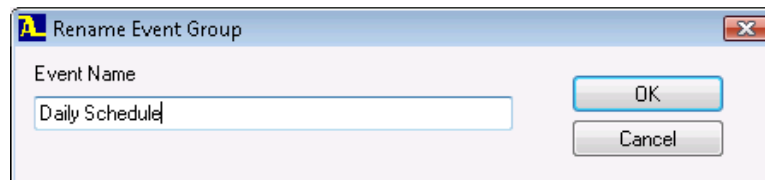


Tip

You can visually identify which Events are enabled by looking at the Event in the treeview. If the Event is disabled, the icon is grayed out, and the Event name is followed by a note that reads, “(disabled)”.

Renaming Events

To change an Event’s name, select “Rename Event” from the Schedule menu or the right-click shortcut menu. The following dialog appears:



Rename Event Dialog

Enter the new name for the Event. Only the name is changed; no other schedule information is affected.

Deleting Events

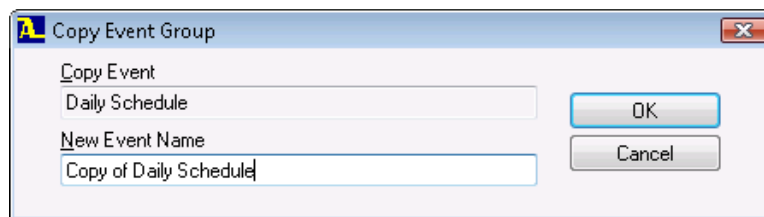
To delete an Event, select “Delete Event” from the Schedule menu or the right-click shortcut menu. After confirming the deletion, the Event is deleted, along with all related schedule information.



Prior to deleting an Event, you should stop the Total Visual Agent Monitor and Service so that you don't delete an Event while it's being processed. See page 69 for information about starting and stopping the Monitor.

Copying Events

To duplicate an Event and all related schedule information, select “Copy Event” from the Schedule menu or the right-click shortcut menu:



Copy Event Group Dialog

Enter the name for the new Event and click [OK]. When you copy an Event, the Event schedule parameters are copied (i.e., the dates and times you specify) along with the Items and Actions associated with that Event.

Next Steps

Configuring a Scheduled Event

So far, we have created and scheduled an Event, but have not instructed Total Visual Agent on what to do when the scheduled time arrives. To do that, configure the Event to specify the Items to manage and the Actions to perform. This is described in **Chapter 5: Adding Items to Events**.

Activating Schedules

Creating the Event Groups and specifying the databases and tasks to perform does not automatically execute the Actions. Either the Monitor or the Service must be running at the scheduled time. See **Chapter 8: Running Scheduled Events** for more information about these components.

Chapter 5: Adding Items to Events

After creating Event Groups to control when Events are run, you need to instruct Total Visual Agent on what to do when the scheduled time arrives. This chapter describes how to configure the Event Group to specify the Items to manage and the Actions to perform on these items.

Topics in this Chapter

- **Event Item Overview**
- **Adding a Jet Database Item**
- **Adding an Access Data Project Item**
- **Adding a Task Group Item**
- **Adding a Directory Item**
- **Moving Items to a Different Event**
- **Next Steps**

Event Item Overview

In **Chapter 4: Scheduling Events**, you learned how to create and manage Event Groups, but you still need to instruct Total Visual Agent on what to do when the scheduled time arrives. To do that, configure the Event Group to specify the Items to manage and the Actions to perform on these items.

Event Items

There are four types of Items that can be added to an Event: Jet databases (MDBs/ACCDBs), Access Data Projects (ADPs), Task Groups, and Directories.

Jet Database

This is a specific, named Microsoft Access (Jet) database, created in any version of Microsoft Access from Access 1.x to Access 2007. Generally Microsoft Jet databases use the file extension .MDB or .ACCDB.

Access Data Project

Access 2000 and later include Access Data Project, which generally have the file extension .ADP. This file type does not contain any local data storage, but instead works with data stored in a SQL Server or SQL Server Express (MSDE) client server database.

Task Group

A Task Group is a list of specific Microsoft Access databases or projects that are grouped together, so that the Actions and settings apply to all of the Items in the group. Task Groups make it easy to manage multiple Items with similar settings.

Directory

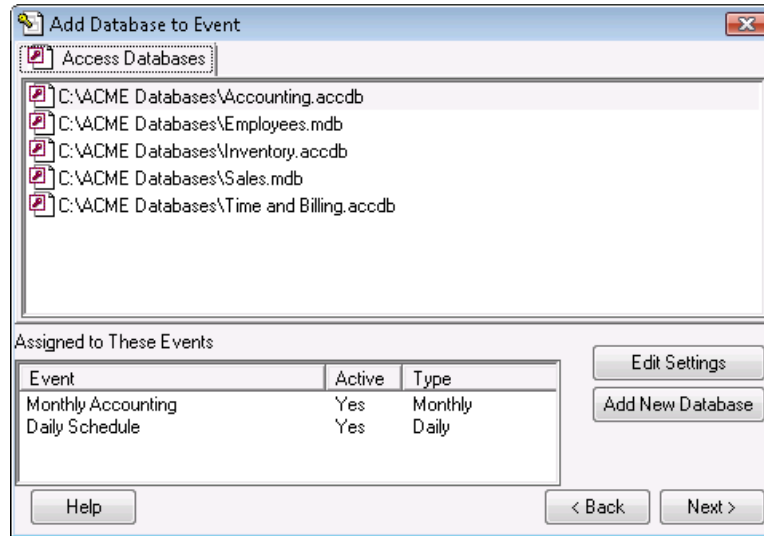
When you add a Directory to an Event, Total Visual Agent performs the same set of Actions for all files in that folder that match the specified file type and mask. This lets you perform the tasks against all the files in a drive and/or folder without specifying their names.

The Directory may be set up so that the files it finds are assumed to be Jet databases (MDBs/ACCDBs), Access Data Projects (ADPs), or other files. You can choose to also include its subdirectories.

Adding a Jet Database Item

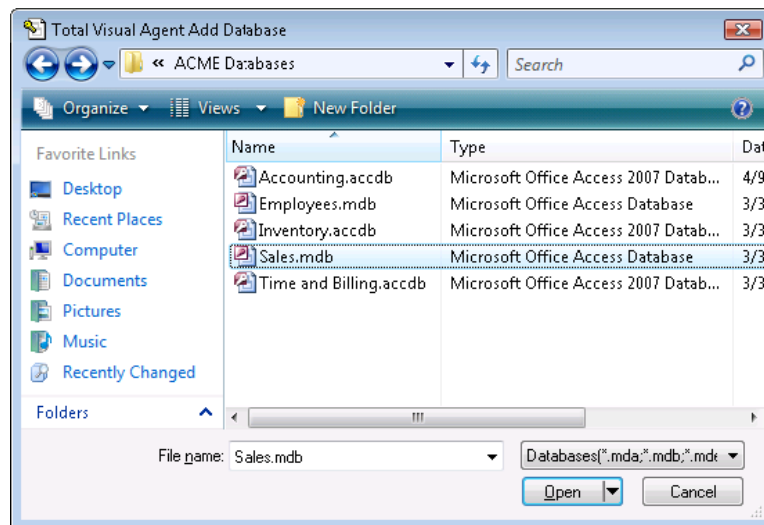
To add a Jet database to the Scheduled Event, select “Add Database to Event” from the Schedule menu, or “Add Database” from the right-click shortcut menu.

The following form opens:



Add Database to Event

Databases that you have already added are listed in the upper pane, and the “Assigned to These Events” pane lists all Events that the Database is included in. Select an existing database from the list, or click [Add New Database] to add a new database to the list:



Add Database dialog

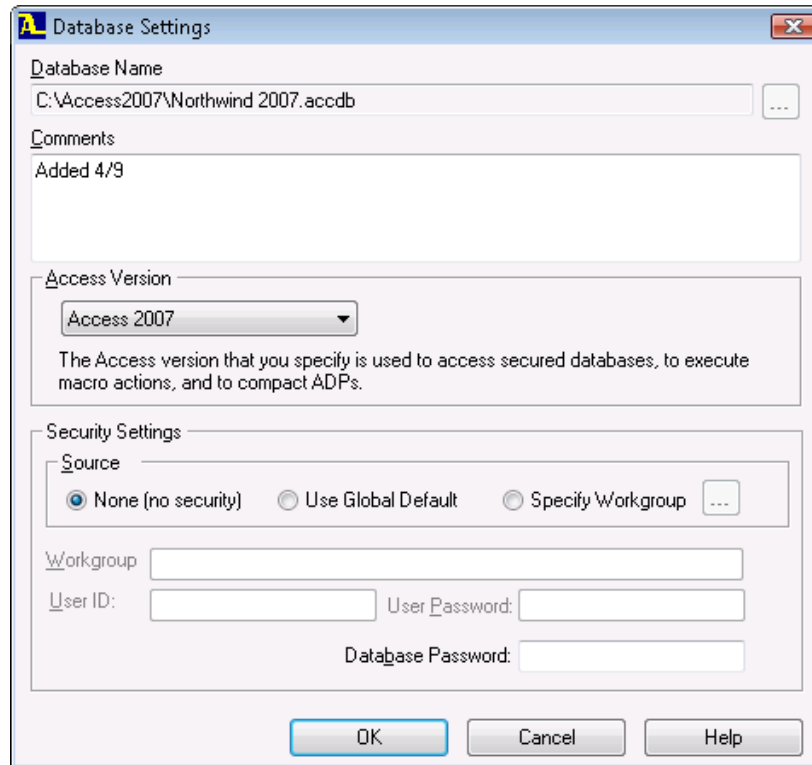


Tip

Select multiple databases from the same folder by holding the [Ctrl] key and clicking the database names in the list.

Database Settings

After adding the database, the Database Settings form appears:



Database Settings Dialog



Tip

Note that this is the same dialog used to maintain database settings for existing database entries. You can also open this dialog by pressing the [Settings] button on the Event Group Details form. If you select more than one database to add, the settings you select in the Database Settings dialog will be applied to each database.

Comments

The Comments field lets you add notes about the database. By default, Total Visual Agent displays the date that the database was first added to an Event Group.

Access Version

Specify the Microsoft Access version that you want to associate with the database. The Access version that you specify is used to access secured databases and to execute Macro Actions.

Security Settings

To perform certain Actions, such as compacting, repairing, and archiving data, Total Visual Agent must be able to open, read, and write to those databases. If the database is secured, you must provide Total Visual Agent with a User ID and Password to log on to that database. You must also specify the system “workgroup database” to use for logging on.

Note that the workgroup database is also known as a “system database” or a “workgroup information file.” For more information, search the Access or Visual Basic online help for “Security.”

Security Source

Tell Total Visual Agent how to access your databases:

Security Method	Process
None (no security)	The database is not secured. No special login ID or system workgroup database is required.
Use global default	Use the system-wide settings established in the Configuration Options. See page 15 for details.
Specify Workgroup (or INI file)	For databases created with Access 95 or higher, specify the path to the system workgroup database. For databases created with earlier versions of Access and VB (Jet 1.x and 2.x), specify the initialization file that contains the reference to your system workgroup database.

Access 2003/2002/2000/97/95 and Visual Basic 6.0/5.0/4.0 Security

If your database is secured, and you wish to use security settings that are different from the global settings on the Total Visual Agent Configuration Options screen, you must specify the system workgroup database, User ID, and password for Total Visual Agent to perform its work:

Database Security Settings

You can type in the full path to the system workgroup database, or browse for it by pressing the [...] button.

Alternatively, if your database is protected with just a database password, you only need to enter that.



If you enter a “Database Password” for a database that does not have a password assigned, and you use Total Visual Agent to compact that database, the “Database Password” is assigned to the compacted database. Be sure to enter the correct password for your database.

Access 2.0/1.x and Visual Basic 3.0 Security

For databases created with earlier versions of Access or VB, specify the initialization file (.INI file) containing a reference to the workgroup database:

Security Settings

Source

None (no security) Use Global Default Specify INI File ...

INI File: C:\Windows\faqsys.ini

User ID: MPell User Password: *****

Database Password:

Database Security Settings

The initialization file should have a section similar to the following, which provides the path to the secured system workgroup database:

```
[Options]
SystemDB=C:\Access\Apps\faqsys.mda
```

By default, Access 2.0 uses C:\WINDOWS\MSACC20.INI.

Security Considerations

In order to compact secured databases, you must provide Total Visual Agent with enough information to open them. In addition, Total Visual Agent needs Read definitions and Read Data permissions to extract data from your tables, and Execute permission to run macros.

When managing secured databases, it is important to test the Actions you schedule to ensure your security settings are correct. See page 30 for more information on the test feature.

If Total Visual Agent is unable to perform an Action because of insufficient security privileges, or if you provide incorrect system workgroup settings,

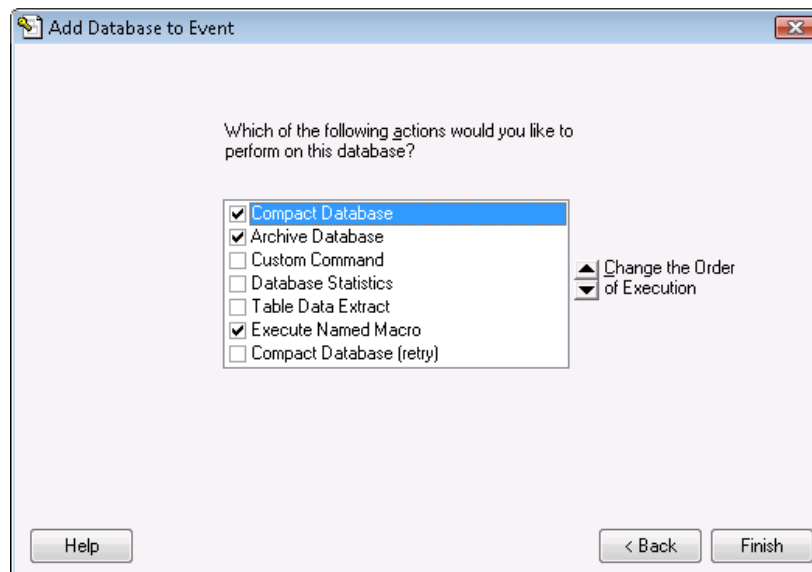
an entry is made in the Total Visual Agent log file when the task fails. See page 70 for information on using the log file to track activity and detect errors.

Total Visual Agent stores the User IDs and passwords that you provide in the configuration database TVAGENT12.MDB. The information in this table is inaccessible, even when the database is opened with Access. For maximum security, however, Total Visual Agent should be installed to a secured location on the network, where you can ensure that only authorized personnel have access.

Adding the Database and Selecting Actions

After configuring your database settings, select the databases from the list and press the [Next] button.

The Wizard displays a list of available Actions for the database:



Database Actions

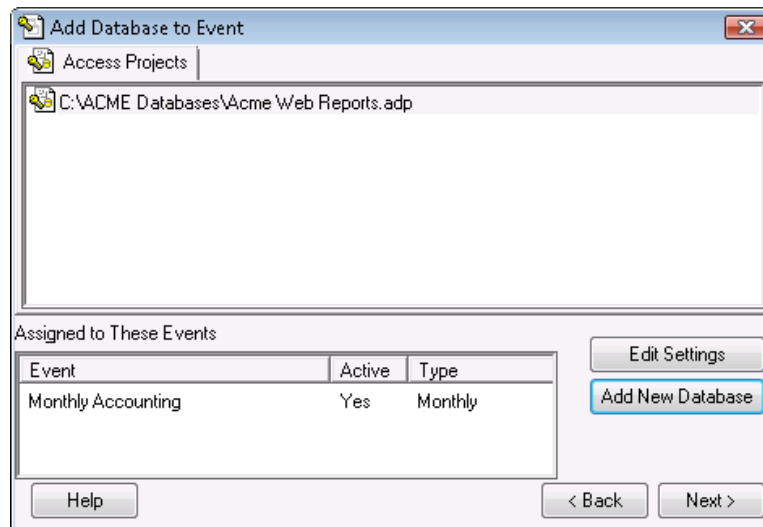
Select the Actions to perform by checking the items in the list. To change the order in which the Actions are performed, select the Action and press the up or down arrow to change its position in the list.

When you finish selecting the Actions, press the [Finish] button to add the Item and Actions to the Event Group. After adding Items and Actions, be sure to review each Action and configure its settings to suit your needs.

Actions are described in detail in **Chapter 6: Adding Actions to Event Items**.

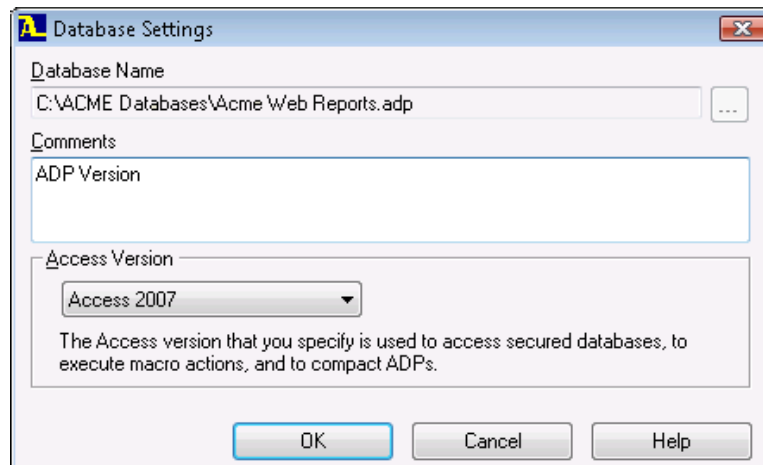
Adding an Access Data Project Item

Adding an Access Data Project (ADP) Item to an Event is similar to adding a Jet Database (see page 32). To add an ADP, choose “Add ADP to Event” from the Schedule menu, or “Add ADP” from the right-click shortcut menu:



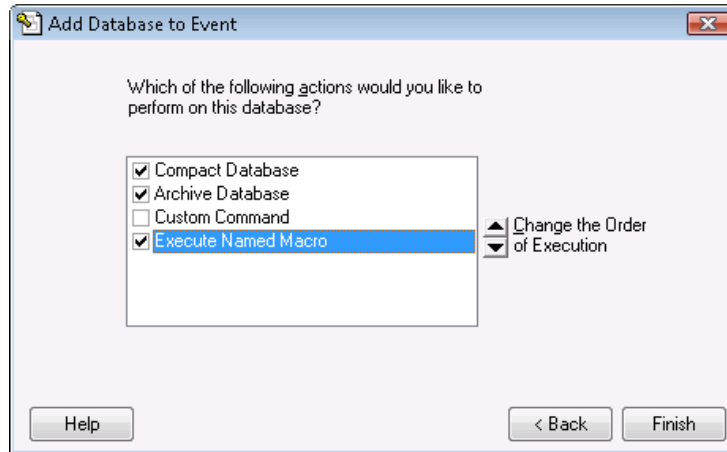
Add ADP to Event

As with Jet databases, you can either select an existing ADP from the list, or add a new ADP by clicking [Add New Database]. After you select the ADP(s) to add, the Database Settings form is displayed. The options on this form are similar to the database options (explained on page 34), but note that there are no security options for ADPs:



ADP Settings

After configuring the database settings, select the ADPs from the list, and click [Next]. The Wizard displays a list of available Actions for the ADP:

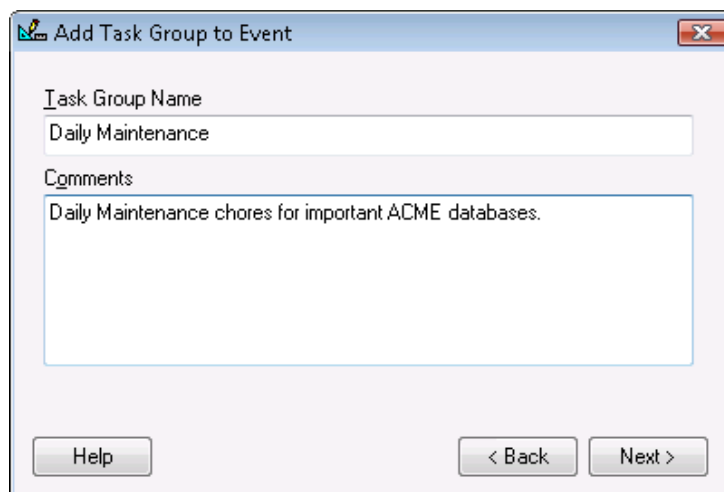


Select Actions

Select the Actions for the ADP, and optionally use the arrows to change the order in which the Actions are performed. Then click [Finish] to add the Item and Actions to the Event. After adding Items and Actions, review each Action and configure its settings to suit your needs. Actions are described in detail in **Chapter 6: Adding Actions to Event Items**.

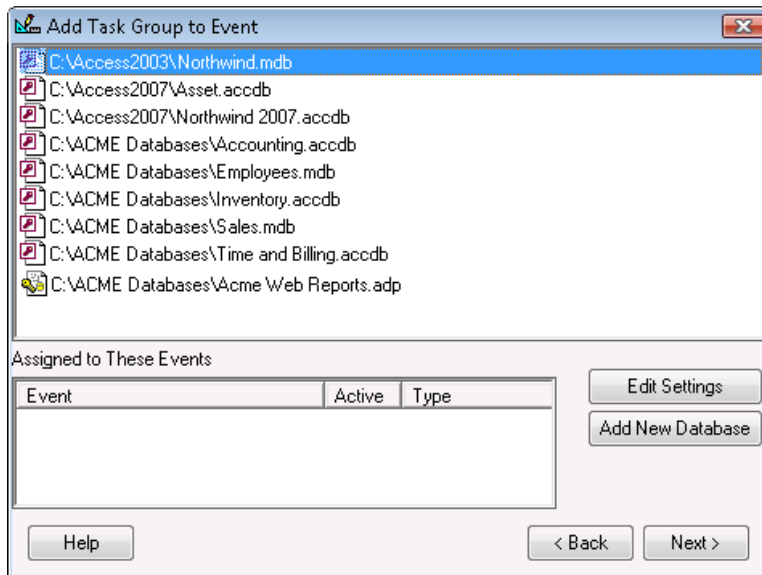
Adding a Task Group Item

A Task Group is a collection of databases or projects that share common Actions and settings. To add a new Task Group, choose “Add Task Group to Event” from the Schedule menu, or “Add Task Group” from the right-click shortcut menu:



Add Task Group

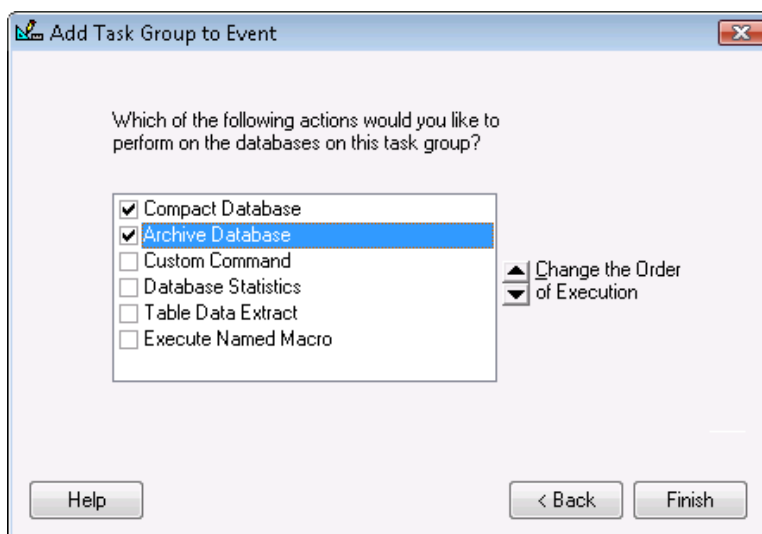
Specify the name of the Task Group, and optionally add comments, then click [Next] to go to the second page of the wizard:



Select Databases to Add to Task Group

This dialog is similar to the one you see when adding a database or project (see page 32), except that it lists Jet databases and ADPs together. If the database you want to add is not listed, click [Add New Database] to add it.

After selecting the database(s) to add to the Task Group, click [Next] to select the Actions to perform on the databases in the Task Group:

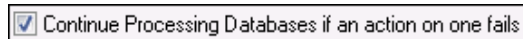


Select Actions for Databases on Task Group

Select the Actions for the Task Group, and optionally use the arrows to change the order in which the Actions are performed. Then click [Finish] to add the Item and Actions to the Event. After adding Items and Actions, review each Action and configure its settings to suit your needs. Actions are described in detail in **Chapter 6: Adding Actions to Event Items**.

Continue Processing Databases Option

When you select a Task Group in the treeview, one additional option is available. Check this box if you want Total Visual Agent to continue with the next database in the list if one database in the Task Group fails:

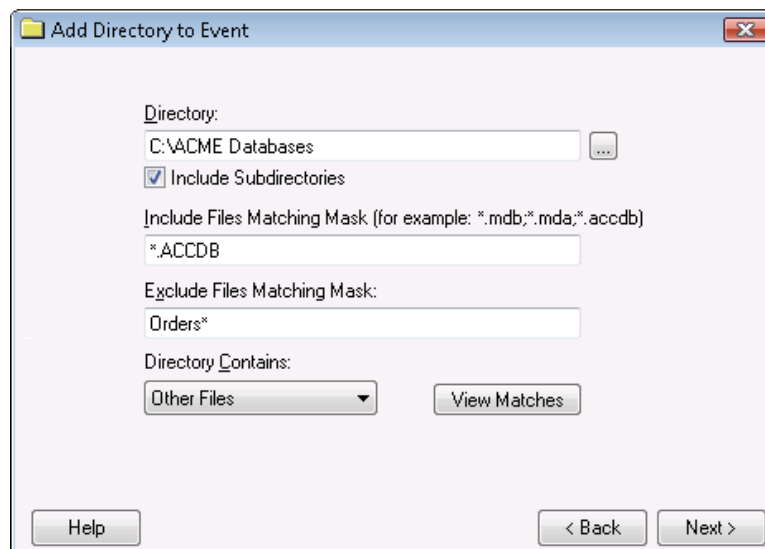


If you do not have this box checked, and Total Visual Agent encounters an error with one of the databases in the list, subsequent databases in the Task Group are skipped. If you do have this option checked, Total Visual Agent continues processing all other databases in the Task Group.

Note, however, that if one Action fails for a database, subsequent Actions for that database are not processed. For example, if you schedule a Compact Action and an Archive Database Action for your Sales database, and the Compact Action cannot run, the Archive Action is skipped.

Adding a Directory Item

A Directory is a folder on the network that is accessible to Total Visual Agent. To add a Directory, choose “Add Directory to Event” from the Schedule menu, or “Add Directory” from the right-click shortcut menu:



Add Directory to Event

The following options are available on this form:

Directory

Type the full path of the Directory to manage, or use the [...] button to browse for the directory. You can use either the UNC path (\\server\share), or the mapped drive letter. Note that if you use a mapped drive letter, the Service must be configured to log on as a user account with the same drive letter mappings in order to access the folder. See page 84 for details about configuring the Service settings.

Include Subdirectories

Check this box to include files in the subdirectories of the directory specified, as well as the directory itself. If this checkbox is left unchecked, only files in the specified directory will be included.

Include Files Matching Mask

This file specification mask filters the files in the directory to those matching the specification. The specification uses standard MS-DOS file name conventions, where “*” means any number of characters, and “?” means any single character.



Tip

More than one specification may be added by separating them by semicolons. Note that you should not have a space between the semicolon and the second file mask.

Examples of valid file specifications are:

.MDB;.ACCCDB	All files with the MDB or ACCDB extension.
AB*.*	All files beginning with AB, with any extension.
.MDB;AB.*;X*.MDE	All files with MDB extension, all files starting with AB, and all files beginning with X and having an MDE extension.

Exclude Files Matching Mask

Of the files satisfying the Include Files Matching Mask, you can exclude files matching this mask. The formatting of the Exclude specification is identical to the Include specification. Leaving this field blank excludes no files.

Directory Contains

This drop-down list box determines which file types to manage in the specified directory. The valid choices are:

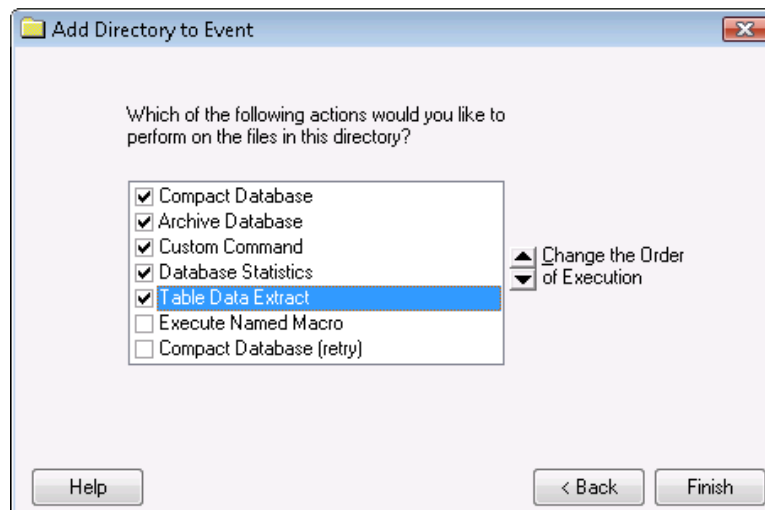
- Databases (MDB/ACCCDB)
- Projects (ADP)
- Other Files

This setting determines which Actions are valid for the files in the directory, and how those Actions are to be performed.



Total Visual Agent cannot determine the actual types of files that are selected based on the settings you choose. Be sure to set the “Directory Contains” and file specification masks so that only the correct files types are selected. Click [View Matches] to view the files that match the mask.

Click [Next] to select the Actions to perform on the files in the directory:

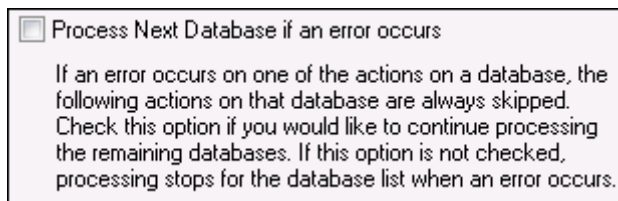


Add Directory to Event

Select the Actions for the Directory, and optionally use the arrows to change the order in which the Actions are performed. Then click [Finish] to add the Item and Actions to the Event. After adding Items and Actions, review each Action and configure its settings to suit your needs. Actions are described in detail in **Chapter 6: Adding Actions to Event Items**.

Process Next Database Option

When you select a Directory in the treeview, one additional option is available. Check this box if you want Total Visual Agent to continue with the next database if one database in the Directory fails:



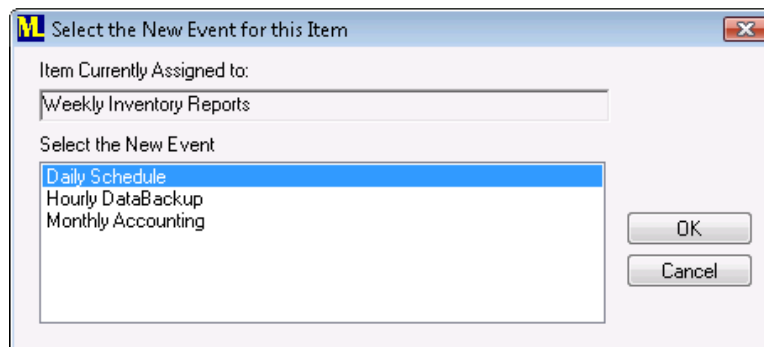
If you do not have this box checked, and Total Visual Agent encounters an error with one of the databases in the directory, subsequent databases in

the directory are skipped. If you do have this option checked, Total Visual Agent continues processing all other databases in the directory.

Note that if one Action fails for a database, subsequent Actions for that database are not processed. For example, if you schedule a Compact Action and an Archive Action for your Sales database, and the Compact Action cannot run, the Archive Action is skipped.

Moving Items to a Different Event

In some cases, you may want to move an Item to a different Event Group. Rather than deleting and re-creating the Item, you can move the Item to another Event. Select the Item in the Event treeview, and choose “Move Item to Different Event” from the Schedule menu or the right-click shortcut menu. When the dialog appears, select the target Event:



Select New Event for the Item

When you move the Item, all settings remain intact—only the Event Group it belongs to is changed.

Next Steps

After you add an Item to an Event Group, it's time to configure its Actions. See **Chapter 6: Adding Actions to Event Items** for details about adding and configuring Actions.

Chapter 6: Adding Actions to Event Items

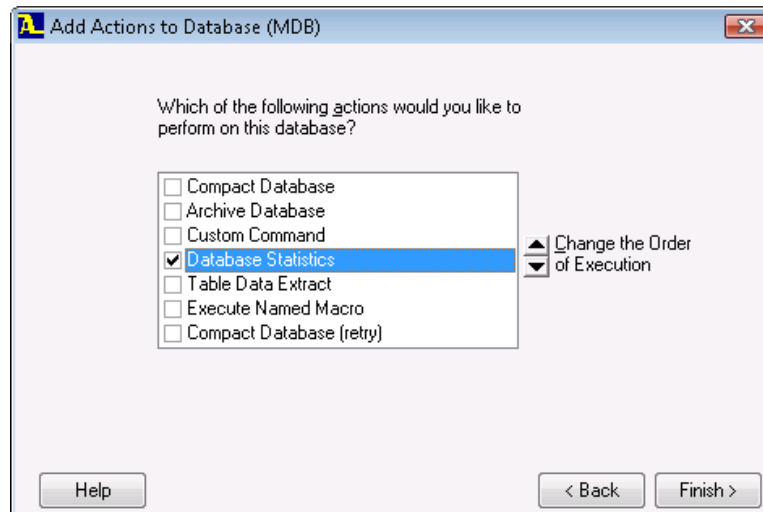
After adding the Event Items to manage, configure the Actions to perform. This chapter describes the Actions available for each Item type, and how to add and customize them.

Topics in this Chapter

- **Action Overview**
- **Archive Database Action**
- **Table Data Extract Action**
- **Compact Database Action**
- **Custom Command Action**
- **Database Statistics Action**
- **Execute Named Macro Action**
- **Testing a Scheduled Action**

Action Overview

When you add an Item (Jet database, ADP, Task Group, or Directory) to an Event, you can specify the Actions to perform. Additionally, you can add Actions to existing Items by selecting the Item in the treeview and selecting “Add Action” from the Schedule menu or the right-click shortcut menu. The Add Actions form displays the available Actions:



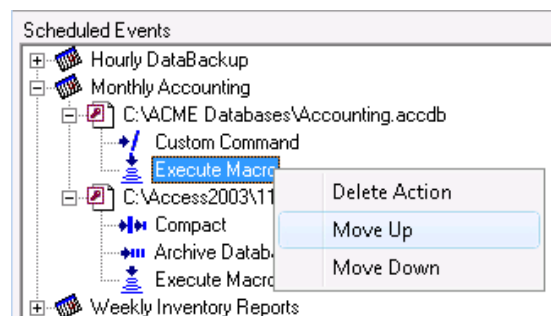
Select Action Dialog

Select the Actions you want to add, and optionally use the up and down arrow buttons to change the order the Actions run.



Note that not all Actions are available for each Item type. Details about the Actions available for each Item are provided in the remainder of this chapter.

After selecting the Actions to perform, click [Finish], and the Actions are added to the Item in the treeview. To change the order in which the Actions are run, choose “Move Up” or “Move Down” from the Schedule menu or the right-click shortcut menu:



Reorganizing Action Order

Available Actions

Total Visual Agent can perform the following Actions:

- **Archive Database:** Make a copy of an entire database, and optionally compress (zip) it. See page 47 for details.
- **Table Data Extract:** Copy table data into another database and optionally compress (zip) it. You can extract data from all tables, or only a subset of tables. See page 50 for details.
- **Compact Database:** Compact a database onto itself or into a new database file. See page 54 for details.
- **Custom Command:** Execute a DOS or Windows command, optionally using the file name as an argument. See page 57 for details.
- **Database Statistics:** Collect Database Statistics, including object counts, record counts, and database size. See page 60 for details.
- **Execute Named Macro:** Execute a macro contained in a Jet database or Data Project. See page 62 for details.

Each of the Actions has unique settings. The Actions available and the options for these Actions may vary based on the type of Event Item.

Archive Database Action

Total Visual Agent's Archive Database Action saves an entire copy of your database, ADP, or other files into a location you designate. You can save up to 99 copies (versions) of the same files. The files are named using the original file name, plus a two-digit addition to the file portion of the name.

For example, if you are archiving the database:

```
C:\MsOffice\Access\Samples\Solutions.ACCDB
```

Into the directory:

```
C:\Save
```

And you choose to save three copies of that database, after processing the Event three times Total Visual Agent would create files named:

```
C:\Save\Solutions01.ACCDB  
C:\Save\Solutions02.ACCDB  
C:\Save\Solutions03.ACCDB
```

When Total Visual Agent executes the Event enough times so that the maximum number of copies is created, the numbering starts over with one, overwriting the first copy. To keep more than 99 copies of your databases, move or rename the Archive files created by Total Visual Agent.



If a zip file with the same name exists in the specified directory, it is overwritten. Please ensure that the file does not already exist if you do not want to lose data.

Selecting an Archive Directory

By default, Total Visual Agent Archives files to the location you specified in the Configuration Options. To override the default, simply type the directory name where Total Visual Agent should store the archived copies of your files, or press the [...] button to browse for the folder.

If you choose to store Archived copies of more than one database in the same directory, be sure that the names of the databases are unique. The following two databases would generate the same Total Visual Agent archive names if archived to the same folder:

```
C:\MyDir\MyData.ACCDB  
C:\OtherDir\MyData.ACCDB
```

Archive each database to its own directory to resolve the problem. If you choose a directory that doesn't exist, Total Visual Agent creates it.

Compressing Archives

Total Visual Agent can optionally compress your databases into a compressed archive (ZIP) file. Depending on the contents of your database, you can save substantial amounts of hard disk space. Be aware that if you have encrypted your database using Access security, the database cannot be significantly compressed. The technique used to encrypt the database randomizes the data in such a way that the Zip compression tool cannot make the file significantly smaller than the original database.

For compressed archived copies, Total Visual Agent uses the naming convention discussed above with *.ZIP extensions.

Archive Database Suggestions

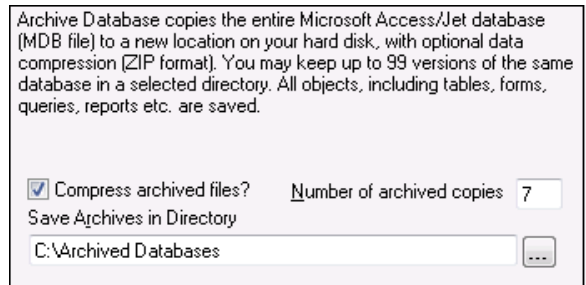
- Schedule archives for a time when no users are logged on to the database. Archives require exclusive use of the database by Total Visual Agent.
- To protect against hardware failure, save backups onto a different machine than the original database.
- For extra security, copy the saved archives to another location. Use the Custom Command Action (see page 57) to do this automatically.
- Copy the archive onto a backup tape.

Details by Event Item Type

When you select the Archive Action in the Treeview, The right side of the screen displays the Action's options. The options are similar for each Item type:

Microsoft Access/Jet Database

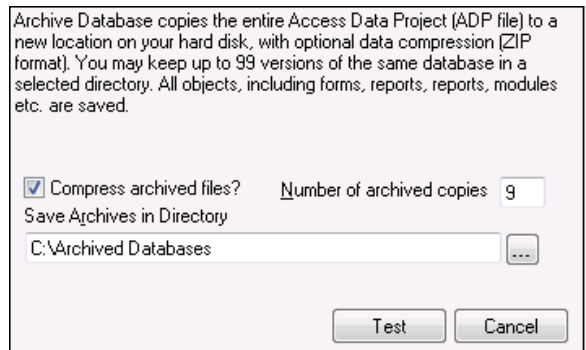
The Archive Action for Jet Databases copies the database to the specified location, with optional compression. You can also specify the number of Archived copies to keep, as explained on page 47.



Archive Settings for a Database

Microsoft Access Data Project

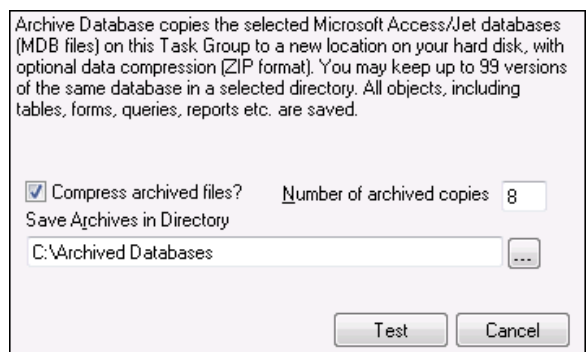
The same settings are available when running the Archive Action on an Access Data Project (ADP). Specify the location and number of Archived copies, and optionally choose to compress the file.



Archive Settings for an Access Data Project

Task Group

When you run the Archive Action on a Task group, the settings that you specify apply to each database or project in the Task Group.



Archive Settings for a Task Group

Directory of Databases/Access Data Projects

When you Archive Directory of Databases or ADPs, the settings that you specify apply to each file in the directory that matches your selection mask (as explained on page 42).

Archive Database copies the Microsoft Access/Jet databases (MDB files) found in the selected directory, which match the selection file specification, to a new location on your hard disk, with optional data compression (ZIP format). You may keep up to 99 versions of the same databases in a selected directory. All objects, including tables, forms, queries, reports etc. are saved.

Compress archived files? Number of archived copies:

Save Archives in Directory
 ...

Archive Settings for a Directory of Databases

Archive Database copies the Access Data Projects (ADP files) found in the selected directory, which match the selection file specification, to a new location on your hard disk, with optional data compression (ZIP format). You may keep up to 99 versions of the same databases in a selected directory. All objects, including forms, reports, reports, modules etc. are saved.

Compress archived files? Number of archived copies:

Save Archives in Directory
 ...

Archive Settings for a Directory of ADPs

Directory of Other Files

The Archive Action works slightly different for a Directory of Other Files. Every file in the directory that matches the selection mask is copied to the backup location, and is compressed into the same ZIP file. Unlike the other Directory Item types, the files are not copied individually.

By default, the base name of the ZIP file is the name of the source directory, but you can override the default using the “Base Name for Archive File” option.

Archive Database copies the Access Data Projects (ADP files) found in the selected directory, which match the selection file specification, to a new location on your hard disk, with optional data compression (ZIP format). You may keep up to 99 versions of the same databases in a selected directory. All objects, including forms, reports, reports, modules etc. are saved.

Compress archived files? Number of archived copies:

Save Archives in Directory
 ...

Archive Settings for a Directory of Other Files

Table Data Extract Action

In addition to archiving a complete copy of your database, Total Visual Agent can copy just the *data* from all or selected tables in your database. There are a couple of reasons to consider the Table Data Extract Action:

- Archiving the entire database may not be possible while users have it open. Archiving just the table data lets you create live backups even as users are changing the data.
- Your forms, reports, and module code only change when you create a new version of your application, and much of the table data is static (such as lookup tables and state codes). Archiving the entire database wastes time and disk space if you only need to back up the tables that change often.

The Archive Table Data feature in Total Visual Agent lets you extract just the table data, without indexes, properties, or security settings. The data is saved in a database in the directory you specify. This feature does not eliminate the need to archive the entire database. To recover from a catastrophic database corruption, follow these steps:

- Restore the last good Archive copy of your database.
- Empty the tables backed up by the Table Data Extract.
- Use the last saved Table Data Extract to append data into the empty tables.

Note that restoring individual tables may not work if your tables are in relationships with constraints such as cascading deletes.



Do not import the tables or else your table relationships, indexes, properties, validation rules, etc. will be lost.

Table Data Extract Settings

Saving copies of your table data with Total Visual Agent's Table Data Extract feature is similar to archiving an entire database. You can select the number of copies to save, and you can optionally compress the copies into compressed archive (ZIP) files. See page 48 for details about these options.



If a zip file with the same name exists in the specified directory, it is overwritten. Please ensure that the file does not already exist.

Table Data Extract Format

There are a few things to keep in mind about the format of the tables extracted by Total Visual Agent's Table Data Extract Action:

- All of the field names and data types are recreated in the archived database.
- Indexes and inter-table referential integrity settings are not recreated.
- Table or field level validation rules, captions, default values, etc. are not recreated.
- The archived database and tables are not secured.

Table Data Extract Suggestions

- Schedule table data extracts more frequently than full database backups. It takes less time and works while users are in the database. If there is significant data entry, consider running the Table Data Extract Action hourly or even multiple times per hour.
- Save backups to a different machine than the original database in case of hardware failure.
- Table data extracts are snapshots of your data at a particular point in time. If you have multi-table relationships, which must be preserved, it is up to you to ensure that all of the data in the required tables is extracted
- Total Visual Agent extracts table data one table at a time, so it is possible for extracts from more than one table to become “logically” out of sync with one another if data changes while the Action is processing.

Details by Event Item Type

When you select the Table Data Extract Action in the Treeview, the right side of the main form displays its options.

The Table Data Extract Action has slightly different options depending on the Event Item type. For example, only Jet databases allow you to select specific tables to extract; Task Groups and Directories only allow you to extract data from all tables. The Table Data Extract Action does not apply to ADPs.

Microsoft Access/Jet Database

Like the Archive Action, Table Data Extract lets you select the location of the Archive, the number of Archived copies, and optionally compress the file (as explained on page 47.)

Additionally, you can specify whether to archive all tables, or only selected tables. To extract the data from all the tables in the selected database, select “Copy All Local Tables.” Total Visual Agent copies all local Access tables except system tables. (Please note that attached or “linked” tables cannot be copied.)

Table Data Extract copies the data out of the tables in the selected database. You may either copy data for all tables in the database, or you may select individual tables.

Copy Selected

Copy All Local Tables Select Tables...

Number of database copies: 5 Compress copy?

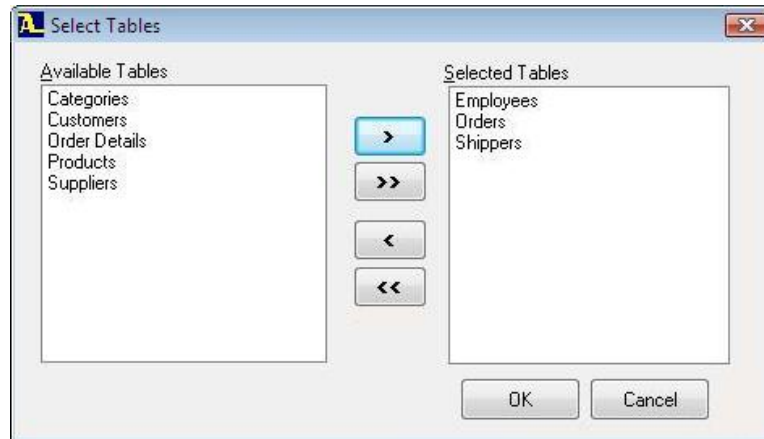
Save Archives in Directory

C:\TableDataExtract ...

Test Cancel

Table Data Extract Settings for a Database

To select a subset of tables to back up, click [Select Tables]:



Select Tables Dialog

All available tables appear in the list on the left. To select a table, double click on it (or select it and click the [>] button). Select all tables in the list by clicking [>>].

To remove a table, double click on it in the list of selected tables (or select it and click the [<] button). Click [<<] to remove all tables from the list.



Tip

Note that when you select a subset of tables, new tables that are added to the database are not included in the archive. To handle new tables, use the Copy All Local Tables option.

Microsoft Access Data Project

The Table Data Extract Action does not apply to ADPs, since ADPs store table data in a SQL Server database.

Task Group

For a Task Group, all tables in each database are copied to the backup location. You cannot select specific tables to extract from when using this Action on a Task Group—all non-system tables are copied.

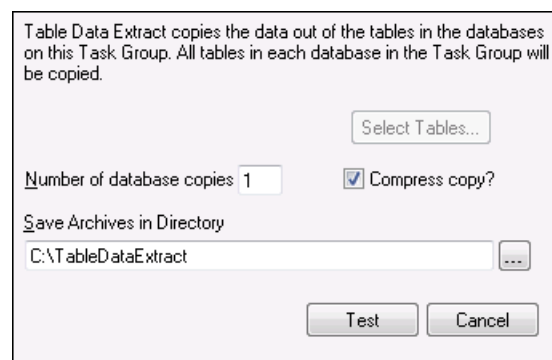


Table Data Extract Settings for a Task Group

Directory of Databases

For each database in the selected directory that matches the file selection mask, the Table Data Extract action copies all tables to the backup location. It is not possible to select specific tables when using this Action on a Directory Item—all non-system tables are copied.

Table Data Extract copies the data out of the tables in the databases in the selected directory. All tables in each database in the directory will be copied.

Select Tables...

Number of database copies: 1 Compress copy?

Save Archives in Directory: C:\TableDataExtract ...

Test Cancel

Table Data Extract Settings for a Directory of Databases

Directory of Access Data Projects

The Table Data Extract Action does not apply to directories of ADPs, since ADPs store table data in a SQL Server database.

Directory of Other Files

The Table Data Extract Action does not apply to directories of other files.

Compact Database Action

Microsoft Access/Jet databases require routine maintenance to ensure reliability, integrity, and efficiency. When you compact a database, Total Visual Agent invokes the Microsoft Jet Engine to:

- Consolidate and organize data pages, recovering space used by deleted or renamed objects.
- Update table and index statistics so the query optimizer can choose the most efficient query plan.
- Physically re-order the rows in the table in the order of the chosen clustered index on the table.
- Reset the next available number for Autonumber (or “identity”) fields so the next available number is one higher than the current highest value in the table.
- Repair the database if structural inconsistencies are found.

Unfortunately, you cannot compact and repair a database while it is in use, since performing these Actions requires exclusive access to the database. Scheduling Total Visual Agent Events during off-hours lets you perform these maintenance chores when users are not likely to have the database open.



Tip

Total Visual Agent invokes the Jet Engine's built-in repair function. If the database becomes corrupt to the extent that the Jet Engine is unable to repair it, Total Visual Agent cannot repair it either. Additionally, Total Visual Agent cannot tell you whether corruption was repaired, since the Microsoft Jet Engine does not provide that information.

With the Compact Action, you can either compact to a different file name/directory, or compact to the same file name. If you choose to compact the database to a different file name, you are essentially creating an optimized copy of the database, leaving the original database untouched. If the database specified in the "Compact To Name" field of the "Compact/Repair Database" Settings box already exists, it is overwritten.

If you choose to compact the database onto the original file name, Total Visual Agent performs the following steps:

1. Attempts to obtain exclusive access to the database.
2. Compacts the database to a temporary file in the Total Visual Agent directory.
3. Verifies that the temporary database was created.
4. Renames the original database to a temporary file.
5. Renames the temporary database to the original file.

Although every precaution is taken to ensure that your database can be safely compacted onto itself, it is always a good idea to perform a separate backup of the database prior to scheduling the compact operation.

Jet Databases versus Access Data Projects

Microsoft Access/Jet databases (MDBs/ACCDBs) are compacted directly by the Microsoft Jet database engine via the Total Visual Agent program. It is not necessary to run Microsoft Access to compact Jet databases.

For Access Data Projects (ADPs) however, Total Visual Agent must run Microsoft Access to perform the Compact Action. This is because the Jet database engine does not control ADPs—Total Visual Agent launches Access with a command line switch telling it to compact the file. To compact ADPs, be sure that you have the appropriate version(s) of Access configured on the Settings form (see page 16).

VBA Project Storage in Access 2007 and Later

Total Visual Agent performs the Compact Action directly via Microsoft DAO (Data Access Objects interface), and therefore does not use Microsoft Access. This is not a problem for versions of Access prior to Access 2000, where the compact operation is purely a Jet operation.

Beginning with Access 2000, however, the way the program stores its VBA project information (data about forms, reports, modules, and classes) changed. With the Access 2000, 2002, 2003, and 2007 VBA project storage scheme, compacting a database from DAO instead of Microsoft Access does not compact the VBA project. Table data is compacted and query statistics are updated, but the VBA project information is not fully compacted. In order to perform this extra level of compaction, use your copy of Microsoft Access.

For projects that are distributed to users, this should not be an issue, since the VBA project should be compiled and stable. This limitation generally only affects projects that are currently under development and seeing ongoing changes to the VBA project information.

To schedule Total Visual Agent to use your copy of Microsoft Access to perform this extra level of compaction, you can use the Total Visual Agent “Custom Command” feature to launch Microsoft Access using the /compact command line switch. The following is an example command line that you might use:

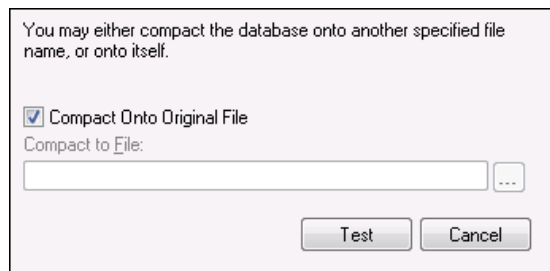
```
"C:\Program Files\Microsoft Office 2007\Office\Msaccess.exe" "#MDB#" /compact
```

Details by Event Item Type

When you select the Compact Action in the treeview, the right side of the main form displays its options. The options are very similar for each Item type.

Microsoft Access/Jet Database

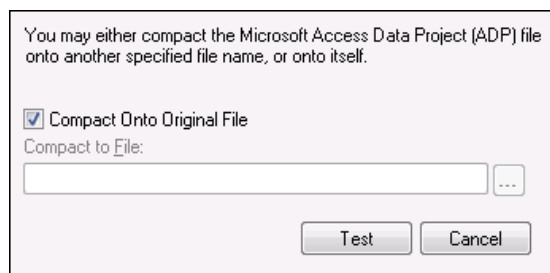
You can choose to compact Jet Databases to their original file, or to a specific named file.



Compact Settings for a Database

Microsoft Access Data Project

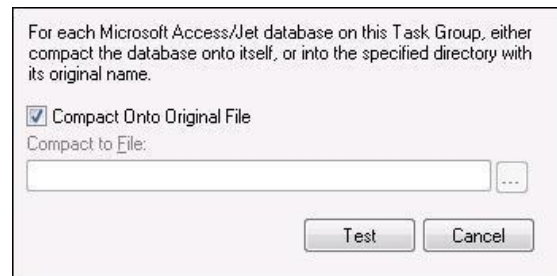
Likewise, you can compact Access Data Projects their original file or to a separate file. Remember that to compact ADPs, Total Visual Agent launches Access. Make sure that you have Access configured properly (see page 16).



Compact Settings for an Access Data Project

Task Group

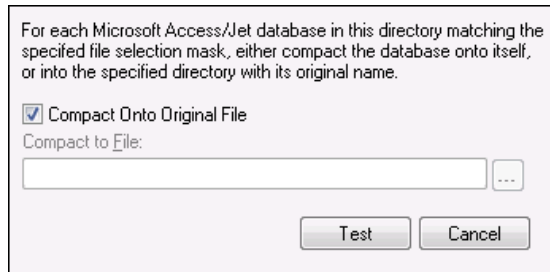
The Compact Action compacts each file in the Task Group onto itself, or into the specified directory. If you compact the databases into a different directory, the new file name is the same as the original. The settings apply to each database in the Task Group.



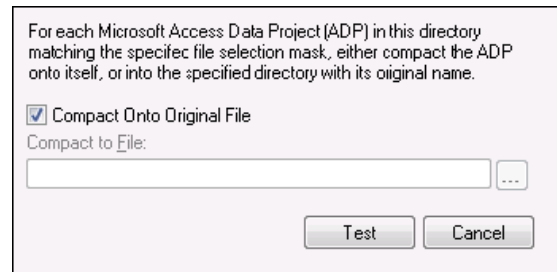
Compact Settings for a Task Group

Directory of Databases/Access Data Projects

When you run the Compact Action on a Directory of Databases or ADPs, the settings that you specify apply to each file in the directory that matches your selection mask (as explained on page 42).



Compact Settings for a Directory of Databases



Compact Settings for a Directory of ADPs

Directory of Other Files

The Compact Action does not apply Directories of Other Files.

Custom Command Action

With Total Visual Agent's Custom Command feature, you can schedule the execution of any valid DOS or Windows command. The command does not necessarily have to refer to the current database. For example, you can schedule a command that simply copies all files from one directory into another directory.

Total Visual Agent allows you to reference the current database in the Custom Command with one of the following special strings:

#MDB#	Full path and name of the Database Item (MDB or ACCDB file)
#ADP#	Full path and name of the Project (ADP file)
#FILE#	Full path and name of the File (in a directory of other files)

When Total Visual Agent finds the string #MDB#, #ADP# or #FILE# in the custom command line, it substitutes in the full path of the current database

or file. For example, for the database "Northwind.ACCDB" in the "c:\msoffice\samples" directory, the following Custom Command string:

```
xcopy #MDB# c:\access\backup\*.*
```

Is executed as:

```
xcopy c:\MSOffice\Samples\Northwind.ACCDB  
c:\access\backup\*.*
```

If the replaceable parameter refers to a database or file whose name contains spaces you might want to consider enclosing the parameter name in double-quote characters:

```
MSpaint "#FILE#"
```

Some internal DOS commands (such as DIR, COPY, RENAME) require that you start a separate copy of the command shell processor. In this case, the command line string would be:

```
command.com /c DIR
```

Pausing after Execution

Total Visual Agent cannot determine when your command ends. By default, Total Visual Agent executes the command, and then proceeds immediately to the next Action. You may, however, instruct Total Visual Agent to pause for one or more minutes before performing the next task. This can be important if you launch several memory-intensive custom commands.

Enter the number of minutes to pause in this text box:

Pause Minutes After Execution

Details by Event Item Type

When you select the Custom Command Action in the treeview, the right side of the main form displays its options. The options are similar for each Item type.

Microsoft Access/Jet Database

For the Jet database Item type, the Custom Command Action inserts the name of the Jet database when it finds the string #MDB#, and executes the command.

Enter a custom command line in the following text box. The action you specify will be performed on the Microsoft Access/Jet database (MDB or ACCDB file). Use the symbol #MDB# to indicate the location in the command line to insert the reference to the file.

Example: xcopy "#MDB#" c:\access\backup*.*

Note the use of quotes to enclose the file name.

command.com /c REM "#MDB#"

Pause Minutes After Execution

Test Cancel

Custom Command Settings for a Database

Microsoft Access Data Project

Similarly, the Custom Command Action for an ADP inserts the name of the project when it finds the string #ADP#, and executes the command.

Enter a custom command line in the following text box. The action you specify will be performed on the Microsoft Access Data Project (ADP file). Use the symbol #ADP# to indicate the location in the command line to insert the reference to the file.

Example: xcopy "#ADP#" c:\access\backup*.*

Note the use of quotes to enclose the file name.

Pause Minutes After Execution

Custom Command Settings for an Access Data Project

Task Group

A command line is created for each database in the Task Group, and each command is executed separately. The Custom Command Action inserts the name of the database when it finds the string #MDB#.

Enter a custom command line in the following text box. The action you specify will be performed once for each Microsoft Access/Jet database selected on this Task Group. Use the symbol #MDB# to indicate the location in the command line to insert the reference to the file.

Example: xcopy "#MDB#" c:\access\backup*.*

Note the use of quotes to enclose the file name.

Pause Minutes After Execution

Custom Command Settings for a Task Group

Directory of Databases/Access Data Projects

When you run the Custom Command Action on a Directory of Databases or ADPs, a command line is executed separately for each database in the directory that matches your selection mask. For a Directory of MDBs, the #MDB# string is replaced with the name of the database. For a Directory of ADPs, the #ADP# string is replaced with the name of the project.

Enter a custom command line in the following text box. The action you specify will be performed on the Microsoft Access/Jet database (MDB or ACCDB file). Use the symbol #MDB# to indicate the location in the command line to insert the reference to the file.

Example: xcopy "#MDB#" c:\access\backup*.*

Note the use of quotes to enclose the file name.

Pause Minutes After Execution

Custom Command Settings for a Directory of Databases

Enter a custom command line in the following text box. The action you specify will be performed on the Microsoft Access Data Projects (ADP's) found in this directory which match your file specification. Use the symbol #ADP# to indicate the location in the command line to insert the reference to the file.

Example: xcopy "#ADP#" c:\access\backup*.*

Note the use of quotes to enclose the file name.

Pause Minutes After Execution

Custom Command Settings for a Directory of ADPs

Directory of Other Files

For a Directory of other files, a command line is created for each file in the directory that matches the selection mask (as explained on page 42). The Custom Command Action inserts the name of the file when it finds the string #FILE#.

Enter a custom command line in the following text box. The action you specify will be performed on each file found in this directory which match your file specification. Use the symbol #FILE# to indicate the location in the command line to insert the reference to the file.

Example: xcopy "#FILE#" c:\access\backup*.*

Note the use of quotes to enclose the file name.

command.com /c REM "#FILE#"

Pause 0 Minutes After Execution

Test Cancel

Custom Command Settings for a Directory of Other Files

Database Statistics Action

The Database Statistics Action allows you to take periodic snapshots of your Microsoft Access/Jet databases. You can track the following information:

- Database size
- Table record count for all or selected tables
- Object counts for tables, queries, forms, reports, macros, modules, data access pages, and relations

To collect database object counts, select the “Include Object Counts” option. Note that if this option is not selected, Database Statistics reports a value of 0 for all object types.

To view the Database Statistics output, select the View, Database Statistics menu item (see page 72 for more information).

Details by Event Item Type

The Database Statistics Action applies only to Event Items that manage Microsoft Access/Jet databases. When you select the Action in the treeview, the right side of the main form displays its options.

Microsoft Access/Jet Database

For Access/Jet Databases, you can track Database Statistics for all tables, or select a subset of tables. You can also choose whether to collect database object counts using the “Include Object Counts” option.

To track Statistics for all tables, select the “Check All Tables” option.

Database Statistics checks the record counts for tables in the selected database. You may either check the record counts for all tables in the database, or you may select individual tables. In addition you may choose to create a count of the objects in your database, such as forms, reports, macros etc.

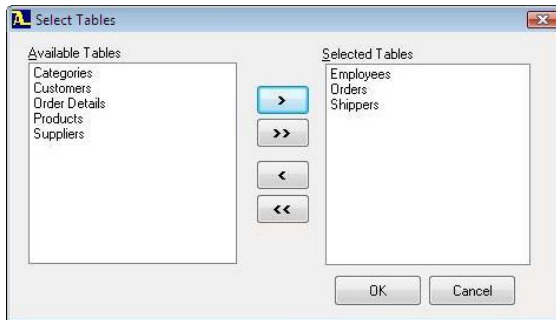
Check All Tables Select Tables...

Include Object Counts

Test Cancel

Database Statistics Settings for a Database

To select a subset of tables, click [Select Tables]:



Select Tables Dialog

All available tables appear in the list on the left. To select a table, double click on it (or select it and click the [>] button). Select all tables by clicking [>>]. To remove a table, double click on it in the list of selected tables (or select it and click the [<] button). Click [<<] to remove all tables.



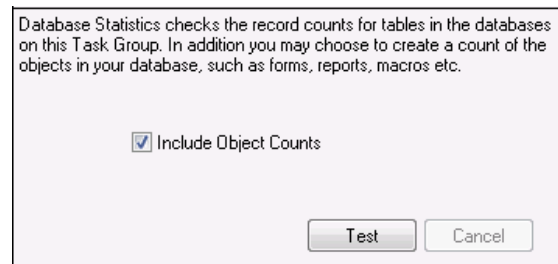
Note that when you select a subset of tables, Database Statistics are not tracked for new tables that are added to the database. To handle new tables, use the Copy All Local Tables option.

Microsoft Access Data Project

The Database Statistics Action does not apply to ADPs.

Task Group

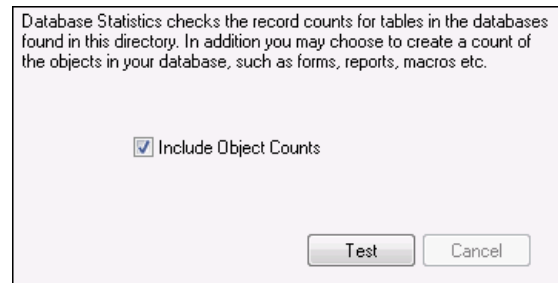
For a Task Group, Database Statistics are tracked separately for each database on the Task Group. You cannot select specific tables—all non-system tables are tracked.



Database Statistics Settings for a Task Group

Directory of Databases

For a Directory of Databases, Statistics are collected for each database in the selected directory that matches the file selection mask (see page 42). It is not possible to select specific tables—all non-system tables are tracked.



Database Statistics Settings for a Directory of Databases

Directory of Access Data Projects

The Database Statistics Action does not apply to directories of ADPs.

Directory of Other Files

The Database Statistics Action does not apply to directories of other files.

Execute Named Macro Action

The Execute Named Macro Action lets you schedule a macro to run at any time. You can specify a single macro name to execute, but that macro can perform multiple functions. It can also use the RunCode macro action to perform any function contained in an Access module function. For instance, you may have a macro that generates nightly reports, performs analysis, imports data, or resets settings.

Total Visual Agent launches your copy of Microsoft Access using the settings provided in the Configuration Options (as explained on page 16). If these settings are incorrect, Total Visual Agent cannot run the macro.

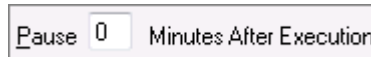
When using Total Visual Agent to run a macro, please note the following important information:

- The macro is launched in the version of Access specified in Database Settings (see page 34 for details).
- If you do not specify the name of a macro to execute, Total Visual Agent simply launches your copy of Access with the specified database loaded.
- If your database contains an Autoexec macro, it executes when Access opens, before the specified macro runs. Rename the Autoexec macro or make sure it does not interfere with your macro.
- Total Visual Agent simply launches your database and designated macro, and cannot respond to any prompts or other dialogs that appear (such as database password prompts, or Security Warnings in Access 2003). If Access displays a prompt, it remains open and does not complete your Macro Action. You should use the SetWarnings macro action to turn off the warning messages when update queries are run.
- Total Visual Agent cannot determine what your macro does or whether it runs properly. Ensure that the macro executes correctly by running Microsoft Access and the macro from the machine where Total Visual Agent runs. If Total Visual Agent runs a bad macro or a macro that does not exist, it still reports successful execution, since it cannot determine what the macro should do.
- If you want to close the copy of Microsoft Access, your macro must include the Quit macro action. Total Visual Agent does not close the launched copy of Microsoft Access after the specified Macro Action completes.

Pausing after Execution

Total Visual Agent cannot determine when your macro finishes executing. By default, Total Visual Agent executes the macro, and then proceeds immediately to the next Action. You may, however, instruct Total Visual Agent to pause to pause for one or more minutes before performing the next task. This can be important if you launch several macros that each require a separate copy of Access to run.

Enter the number of minutes to pause in this text box:

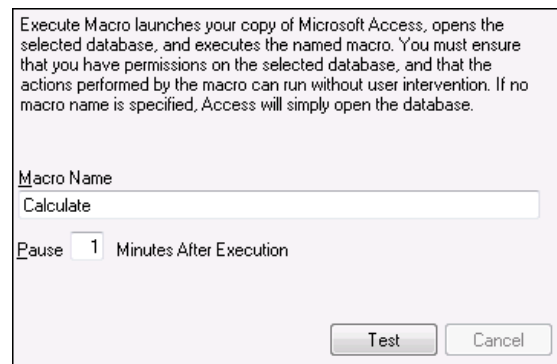
A small dialog box with a text input field containing the number '0' and the text 'Pause' to the left and 'Minutes After Execution' to the right.

Details by Event Item Type

When you select the Macro Action in the treeview, the right side of the main form displays its options. The options are similar for each Item type.

Microsoft Access/Jet Database

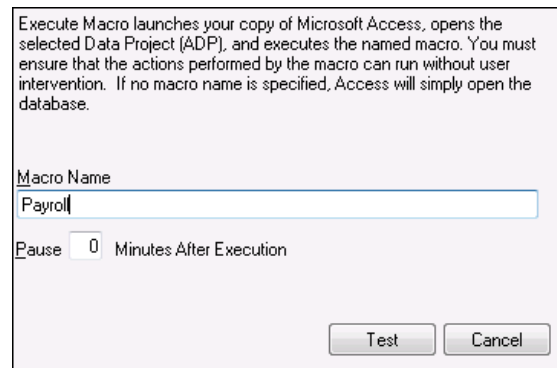
For the Jet database Item type, the Macro Action opens the selected database in Access, and runs the specified macro. You can optionally include a pause before Total Visual Agent continues with the next Action.

A dialog box titled 'Macro Settings for a Database'. It contains a text area with instructions: 'Execute Macro launches your copy of Microsoft Access, opens the selected database, and executes the named macro. You must ensure that you have permissions on the selected database, and that the actions performed by the macro can run without user intervention. If no macro name is specified, Access will simply open the database.' Below this is a text input field for 'Macro Name' containing 'Calculate'. At the bottom, there is a 'Pause' label, a text input field containing '1', and the text 'Minutes After Execution'. Two buttons, 'Test' and 'Cancel', are at the bottom right.

Macro Settings for a Database

Microsoft Access Data Project

Similarly, the Macro Action for an ADP opens the selected project in Access, and runs the specified macro. You can optionally include a pause before Total Visual Agent continues with the next Action.

A dialog box titled 'Macro Settings for an Access Data Project'. It contains a text area with instructions: 'Execute Macro launches your copy of Microsoft Access, opens the selected Data Project (ADP), and executes the named macro. You must ensure that the actions performed by the macro can run without user intervention. If no macro name is specified, Access will simply open the database.' Below this is a text input field for 'Macro Name' containing 'Payroll'. At the bottom, there is a 'Pause' label, a text input field containing '0', and the text 'Minutes After Execution'. Two buttons, 'Test' and 'Cancel', are at the bottom right.

Macro Settings for an Access Data Project

Task Group

For a Task Group, a separate instance of Microsoft Access is launched for each database, and the macro is executed for each. Note that the name of the macro must be identical in each Microsoft Access/Jet database in the Task Group.

Execute Macro launches your copy of Microsoft Access once for each database on this Task Group, and executes the named macro. You must ensure that you have permissions on the selected databases, and that the actions performed by the macro can run without user intervention. NOTE: You cannot specify a different macro name for each database in the Task Group. If no macro name is specified, Access will simply open the database.

Macro Name
CommonlyNamedMacro

Pause Minutes After Execution

Test Cancel

Macro Settings for a Task Group

Directory of Databases/Access Data Projects

When you run the Macro Action on a Directory of Databases or ADPs, a separate instance of Microsoft Access is launched for each database that matches the Item's file selection mask, and the macro is executed for each. Note that the name of the macro must be identical in each database/project in the directory.

For each Microsoft Access/Jet database found in the selected directory which matches your file specification, Execute Macro launches your copy of Microsoft Access, opens the selected database, and executes the named macro. You must ensure that you have permissions on each database, and that the actions performed by the macro can run without user intervention. NOTE: You cannot specify a different macro name for each database in the directory. If no macro name is specified, Access will simply open the database.

Macro Name
CommonlyNamedMacro

Pause Minutes After Execution

Test Cancel

Macro Settings for a Directory of Databases

For each Access Data Project (ADP) found in the selected directory which matches your file specification, Execute Macro launches your copy of Microsoft Access, opens the selected project, and executes the named macro. You must ensure that the actions performed by the macro can run without user intervention. NOTE: You cannot specify a different macro name for each project in the directory. If no macro name is specified, Access will simply open the database.

Macro Name
CommonlyNamedMacro

Pause Minutes After Execution

Test Cancel

Macro Settings for a Directory of ADPs

Directory of Other Files

The Macro Action is not available for Directories of Other Files.

Testing a Scheduled Action

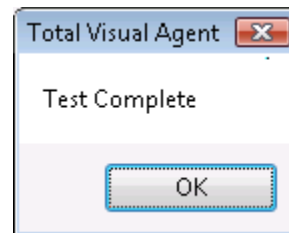
The first time you schedule an Action for Total Visual Agent to perform, you should use the Test function to verify that the Action can be performed successfully.

There are several reasons that an Action could fail, for example:

- Incorrect security settings or insufficient privileges to perform the Action
- Incorrect file settings, such as bad path information or specifying a file location with insufficient disk space
- A misspelled macro name or bad command line Action

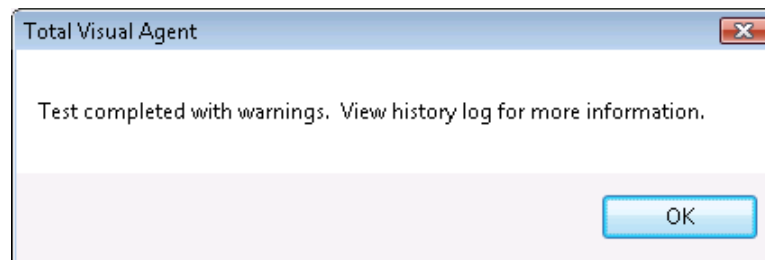
With the Action selected in the treeview, click [Test] to perform the Action. Regardless of the number of Actions assigned for this database, only the selected Action is tested. You can only test one Action at a time.

If the test is successful, the following message shows:



Test Completed Successfully

If there are warnings or errors, the following message shows:



Test Completed With Warnings

Click [OK] to open the History Log, which contains more information about the warning or error (see page 70 for details). Take the steps necessary to correct the problem and repeat the test.


Chapter 7: Other Management Features

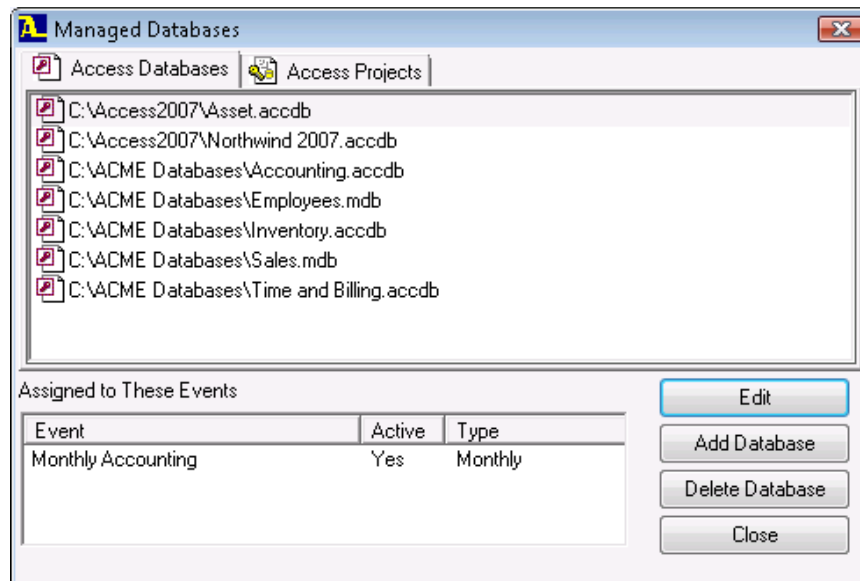
The Total Visual Agent Manager provides other features in addition to setting up and maintaining Event Groups. It allows you to maintain a high-level view of the databases being managed, as well as track historic activity and Database Statistics. This chapter explains the other features available in Total Visual Agent.

Topics in this Chapter

- **Managed Databases**
- **Monitor/Service Status**
- **Viewing History Log Files**
- **Viewing Database Statistics**

Managed Databases

Since a database may be used in more than one Event Group, there may be times that you want to see every place a particular database is assigned. To view this information, open the Managed Databases screen by selecting the “Managed Databases” from the View menu item, or by clicking the  button on the toolbar:



View Managed Databases Dialog

The top portion of this form lists the databases managed by Total Visual Agent. The lower portion lists the Event Groups where the selected database is used. Microsoft Access/Jet databases are listed on the “Access Databases” tab, and ADPs are listed on the “Access Projects” tab.

From this screen, you can perform maintenance functions without editing each scheduled Event. Be aware, however, that changes you make here affect all places where the database is referenced. If you delete a database from this screen, for example, it is removed from all Event Groups.

Edit

The Edit button takes you to the “Database Settings” form (see page 34).

Add Database

Normally, you add a new database to the list of managed databases by adding it to an Event Group. Sometimes, however, you may wish to a

database to the list of managed databases without immediately adding it to an Event Group.


This process is similar to adding a database through by adding it to an Event Group, as described on page 32.

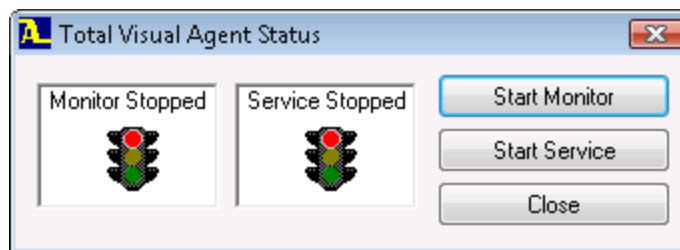
Delete Database

Click [Delete] to remove a database from the list of Managed Databases and from all Event Groups. History Log information and Database Statistics for the database are retained.

Monitor/Service Status

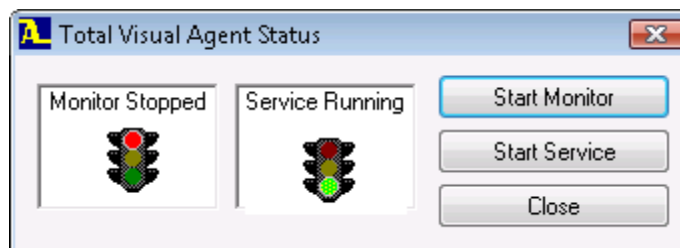
Total Visual Agent includes two components for processing scheduled Events: the Monitor and the Service. These components run in the background, waiting for the appropriate time to execute the scheduled Actions. See **Chapter 8: Running Scheduled Events** for more information.

To view the status of the Monitor and the Service, choose the “Monitor/Service Status” from the View menu, or click the  button on the toolbar. If the component is not currently running, the traffic light icon displays a red light and reads “Monitor Stopped” or “Service Stopped:”



Monitor/Service Dialog: Monitor and Service Stopped

Use the [Start Monitor] or [Start Service] button to start the appropriate component, and the traffic light icon changes to green and reads “Monitor Running” or “Service Running:”



Monitor/Service Dialog: Service Running



Tip


Note that both components cannot be running at the same time. Only one of the components needs to be running to execute the scheduled Events. Refer to **Chapter 8: Running Scheduled Events** for information about which component to use.

Hiding and Showing the Monitor/Service

You can hide or show the Total Visual Agent Monitor and Service Control Manager from the icon located in the Windows System Tray. Just right-click the **M** or the **S** icon, and select Hide or Show appropriately.

Additionally, the Monitor includes a [Hide Monitor] button to hide the Monitor.

Viewing History Log Files

Select the View, History menu item, or click the  button on the toolbar to show the Event Log Inquiry form:

Log Level	Event Name	Database	Action	
Event	Event 'Daily Schedul			4/9/2
Item	Event 'Daily Schedul	Group: Daily Maintenance		4/9/2
Action	Event 'Daily Schedul	C:\ACME Databases\Accounting.accdb	Archive Database	4/9/2
Action	Event 'Daily Schedul	C:\ACME Databases\Employees.mdb	Archive Database	4/9/2
Action	Event 'Daily Schedul	C:\ACME Databases\Inventory.accdb	Archive Database	4/9/2
Action	Event 'Daily Schedul	C:\ACME Databases\Sales.mdb	Archive Database	4/9/2
Action	Event 'Daily Schedul	C:\ACME Databases\Time and Billing.acc	Archive Database	4/9/2
Event	Event 'Daily Schedul			4/9/2
Item	Event 'Daily Schedul	Group: Daily Maintenance		4/9/2
Action	Event 'Daily Schedul	C:\ACME Databases\Accounting.accdb	Archive Database	4/9/2

Event Log Inquiry Form

Events are logged at one of three levels:

- **Event Group**
Tells when the Event begins and ends, and whether nor not all Actions for the Event were completed successfully.
- **Item**
Lists the name of the database, directory, or Task Group.
- **Action**
Shows each Action performed and its outcome.

The items of information that are available on the log file are:

Column	Description
Status	Whether or not the Item ran successfully. This displays the error that occurred during the processing, or is blank if processing was successful.
Log Level	The Event, Item or Action.
Event Name	The name of the Event Group.
Database/Dir	The full path of the database or directory being managed.
Action	The Action performed, such as "Compact."
Begin	The time the Action began.
End	The time the Action ended.
Comment	Any additional information, such as the name of an archive database copy.

Filtering History Data

By default, this form shows all activity ever performed by Total Visual Agent. You can filter the data so that only certain rows are displayed.

You can filter by a particular "Event," "Item," and "Action" by using the drop-down boxes at the top. Additionally, you can filter by date by entering a beginning and/or ending date in the "between" and "and" fields.

For example, to select all Events that were logged between April 7th and April 9th, enter:

Between	<input type="text" value="4/7"/>
and	<input type="text" value="4/9"/>

If you leave the first text box blank, no beginning time limit is assumed. If you leave the second text box blank, no ending time limit is assumed.

To only show errors, check the box labeled "Errors Only":

Errors Only	<input checked="" type="checkbox"/>
-------------	-------------------------------------

Deleting History Data

The [Delete] button lets you delete the data that is displayed. If you have a filter on, only the filtered data is deleted.

Generating Log File Reports

Total Visual Agent stores log file history data in the table named "tblEventLog" in the configuration database (TVAGENT12.MDB). You can use Microsoft Access (or another database reporting tool) to create reports based on the Total Visual Agent log file table. Several example reports are

provided in the database for your use, and you can add, copy, and modify reports to suit your needs.

Access Reports

The Total Visual Agent configuration database contains several sample reports which you can run as-is, or modify with your copy of Microsoft Access. The configuration database is found in the Total Visual Agent installation directory.

TVAGENT12.MDB is a Jet 4.0 database, which may only be opened with Microsoft Access 2000 or later.




Tip

Be careful not to alter or delete any tables or queries contained in the Total Visual Agent Configuration database. These queries are required for proper execution of Total Visual Agent. To be safe, consider copying the reports into another database, and linking the required tables from the Total Visual Agent Configuration database.

Viewing Database Statistics

The Database Statistics Action (explained on page 60) collects statistics (record counts and object counts) about your databases. Keeping track of this type of information is important for capacity management and application performance reasons. Over time, the statistics you collect can be a valuable management tools in gauging the growth of your databases, usage levels during the day, and future capacity needs.

To view the statistics collected by Total Visual Agent, choose “Database Statistics” from the View menu, or press the  button on the toolbar. The Snapshot Inquiry form provides three ways to view the data collected:

- **Snapshot View**
Displays all detail data for each snapshot.
- **Table View**
Displays record counts for a selected table over time (multiple snapshots).
- **Object View**
Displays object counts for a database over time.

Snapshot View

The screenshot shows the 'Database Statistics Snapshot Inquiry' window. The 'Search By' dropdown is set to 'Database' with the path 'C:\ACME Databases\Sales.mdb'. The 'Snapshot Taken' list shows two entries: '4/9 10:06 AM' and '4/10 10:06 AM'. The '4/10 10:06 AM' entry is selected. The 'Object Counts' section displays the following data:

Forms	21	Reports	14	Macros	8	Tables	20
Queries	21	Modules	3	Indexes	50	Relations	7
Total	149	DAPs	5	Database Size	2334720KB		

Below the object counts is a table showing the record counts for various tables:

Table	Record Count
Categories	8
Customers	91
Employees	9
Order Details	2155
Orders	830
Products	77
Shippers	3

Database Statistics Snapshot Inquiry Form—Snapshot View

Each time a statistical snapshot is taken for a particular database, a new entry is made into the “Snapshot Taken” list. You can scroll through the list, or select a particular snapshot by clicking on it. When you select a snapshot from the list, the corresponding detail information displays on the right side of the screen. The right side of the screen also displays the database name and path.

Object Counts

If you select the option to include object counts in your snapshots, the “Object Counts” section of the form displays counts of the various types of objects in the database when the snapshot was taken. Object counts include:

- Tables
- Forms
- Macros
- Data Access Pages
- Indexes (number of primary and secondary indexes)
- Relations (number of links between pairs of tables and/or queries)
- Database Size (size of the database in bytes)
- Queries
- Reports
- Modules



If you did not select the option to include object counts, the Database Statistics form shows a 0 for each object type.

Table Details

For each selected table, this form displays the table name and the number of records it contained when the snapshot was taken.

	Table	Record Count
▶	Categories	8
	Customers	91
	Employees	9
	Order Details	2155
	Orders	830
	Products	77
	Shippers	3

Table Record Snapshot

Filtering Database Statistics Snapshot Data

By default, this form shows all statistics collected by Total Visual Agent, however options are available to filter the data to display specific Events, databases, or date ranges.

Type the name of the database in the combo box, or select it from the list to display a subset of the Database Statistics. To display all Statistics, choose the entry "<ALL>."

Additionally, you can narrow down the statistics to those collected between certain dates. Specify the beginning and ending date range in the text boxes captioned "between" and "and."

For example, to select all snapshots taken between April 7th and April 9th, enter:

Between	4/7
and	4/9

Table View

	Snap Shot Taken	Table	Records
▶	4/9 10:06 AM	Orders	385
	4/10 10:06 AM	Orders	500
	4/11 10:06 AM	Orders	651
	4/12 10:06 AM	Orders	830

Database Statistics Snapshot Inquiry Form—Table View

The Table View of the Database Statistics Snapshot Inquiry form displays statistics for a database's tables over time. As with Snapshot View, you can filter by database and by date. The "<ALL>" choice for database, however, is not valid for Table View, since you can only view one database at a time.

You can filter the results further by selecting a particular table to view. This can be useful in determining how tables grow over time. To filter for one table, select the table name from the combo box:

The image shows a dropdown menu with the label 'Table' on the left and 'Orders' selected in the dropdown box.

Table Selection

Object View

The screenshot shows the 'Database Statistics Snapshot Inquiry' window with the 'Objects' tab selected. The table below displays the data shown in the screenshot.

	Taken On	Forms	Reports	Macros	Modules	Queries	Tables	Indexes
▶	4/9 10:06:24 AM	21	14	8	3	21	12	50
	4/10 10:06:22 AM	21	14	8	3	21	12	53
	4/11 10:06:21 AM	24	16	8	6	21	20	53
	4/12 10:06:24 AM	24	16	8	7	21	21	50

Database Statistics Snapshot Inquiry Form—Object View

The Object View of the Database Statistics Snapshot Inquiry form displays object count statistics for a database over time.

As with Snapshot View, you can filter by database and by date. The "<ALL>" choice for database, however, is not valid for Object View, since you can only view one database at a time.

Generating Statistical Snapshot Reports

Total Visual Agent stores Database Statistics snapshot entries in a table called "tblSysStatSnapShot" in the Total Visual Agent configuration database named TVAGENT12.MDB. This table stores one record for each snapshot that was taken. A related table named

“tblSysStatSnapShotTableDetail” stores one row for each table that was checked when the snapshot was taken.

You may use Microsoft Access, or another database reporting tool to create reports based on the Total Visual Agent Database Statistics tables. Several Access reports are provided in the database for your use. Feel free to modify or copy these reports. See page 72 for more information about using this database and the included reports.

Chapter 8: Running Scheduled Events

After scheduling events and actions through the Manager, you're ready to let Total Visual Agent perform the work. Two components are available for performing the work: the Monitor and the Service. Select the most appropriate component for your situation, and it waits in the background for the next scheduled Event. This chapter describes the Total Visual Agent Monitor and Service components, and how to decide which to use.

Topics in this Chapter

- **Running Scheduled Events**
- **Using the Total Visual Agent Monitor**
- **Using the Total Visual Agent Service**

Running Scheduled Events

In order for scheduled events and actions to run, either the Total Visual Agent Monitor or the Total Visual Agent Service must be running. When deciding to use the Monitor or the Service, consider the benefits and drawbacks of each. After determining which component to use, refer to the appropriate section in this chapter for details about that component.

When to Use the Monitor

The Monitor is ideal if Total Visual Agent is running on a machine that always has a user logged on. Since a user is logged on, they are able to see and react to any warnings or prompts that occur when Total Visual Agent executes external programs (macros, custom commands, and compacting ADPs).

The Monitor performs its processing in the background without disrupting any other activities in the foreground, and can be shown or hidden as desired. However, a user must be logged onto the Total Visual Agent computer for the Monitor to execute scheduled events. If the computer is rebooted and a user does not log on, the Monitor cannot run.

When to Use the Service

The Total Visual Agent Service runs as a Windows Service, and executes scheduled events with or without a user logged on. Since the Service does not require a user to be logged on, it is more secure than the Monitor. The Service can also be configured to start automatically when the computer is rebooted, so you can be confident that it's always running.

For the Service to run, however, Total Visual Agent must be installed on a Windows Server, such as Windows NT Server, Windows 2000 Server, Windows XP, Windows 2003, or Windows Vista.

Additionally, using the Service to launch external programs is potentially dangerous. If the external program fails for any reason, the program may remain open in memory with no feedback shown on screen. This can cause your computer to stop responding, and may potentially cause database corruption.

See page 81 for details about using the Service to launch external programs.

Using the Total Visual Agent Monitor

The Total Visual Agent Monitor runs in the background to execute scheduled Actions at the specified time. Generally, you should use the Monitor component if the machine running Total Visual Agent will always have a user logged on. If you are running Total Visual Agent on a server, and cannot ensure that a user will be logged on, consider using the Service instead of the Monitor (see page 78 for more information).

Starting the Monitor

For the Total Visual Agent Monitor to execute scheduled Events, it must be running at the scheduled time. In general, you should leave the Monitor running around the clock, or be sure to start it prior to the scheduled event time.

There are several options for starting the Total Visual Agent Monitor:

- **Launch it Automatically**
If Total Visual Agent Monitor is in your system's startup group, it is loaded every time your machine reboots. See **Adding Total Visual Agent Monitor to Startup** on page 79 for more information.
- **Launch it from the *Total Visual Agent Manager***
You can start and stop the Monitor through the Monitor/Service Status form in the Manager. See **Monitor/Service Status** on page 69 for more information.
- **Launch it from the Start menu**
From the Windows Start menu, choose Programs, FMS, Total Visual Agent, Total Visual Agent Monitor.

Adding Total Visual Agent Monitor to Startup

Once you set up Total Visual Agent to manage your databases, you may want to have the Monitor running at all times. Add the Monitor to your Startup folder to have it start automatically every time your machine reboots.

To have Total Visual Agent automatically create a shortcut for the Total Visual Agent Monitor in your Startup folder, select Tools, Add Monitor Shortcut to Startup Menu from the main Total Visual Agent Manager form. This instructs the Total Visual Agent Monitor to automatically start the next time you restart and log onto your machine.

Total Visual Agent Monitor Form

When the Total Visual Agent Monitor is launched, it displays the following form:

Current Processing Activity	
Processing Event	None
Database	None
Action	None

Next Scheduled Activity	
Event	Daily Schedule
Scheduled	4/11 10:12:00 AM

Buttons: Hide Monitor, Refresh, Help

Total Visual Agent Monitor

The “Current Processing Activity” section at the top of the form displays information about what the Monitor is currently doing. When the Monitor processes an Event, this section displays the Item it is working on as well as the Action it is performing on that Item.

The “Next Scheduled Activity” section at the bottom of the form displays the name and time of the next Event that the Monitor is scheduled to perform.

Updating the Schedule

Normally, the Monitor rechecks the schedule at two times:

- When it is first launched.
- When it finishes processing an Event.

Once your schedule is established, that is really all that needs to be done. Total Visual Agent Monitor keeps track of which Events it needs to perform, and when to perform them.

If you update the schedule through Total Visual Agent Manager, but do not shut down and restart Total Visual Agent Monitor, it is not aware of any changes you made.

To have the Monitor recheck the latest schedule information prior to executing the next Event, press the [Refresh] button. The Monitor immediately re-checks the Event Schedule, and resets the Next Scheduled Activity settings.

Running the Monitor

Normally, you do not need to do anything while Total Visual Agent Monitor is running in the background. You can minimize it so its form does not take up screen space or hide it altogether by clicking the [Hide Monitor] button, or right-clicking the System Tray icon and choosing “Hide Monitor” (see page 70 for details).

Total Visual Agent can perform its processing in the background without disturbing any other activities in the foreground. If you are using a machine with a slow processor or limited memory, however, we suggest running Total Visual Agent on a dedicated machine that is not used for other tasks.

Shutting Down the Monitor

To stop the Monitor and suspend Event processing, close the Monitor form. Remember to restart the Monitor prior to the next scheduled Event. When you restart the Monitor, any Events that were skipped are logged as errors, and new Events are scheduled.



If the Monitor form is hidden, you will need to show it prior to shutting it down. To show the Monitor, right-click the icon in the System Tray and select “Show Monitor” (see page 70 for details).

Using the Total Visual Agent Service

Total Visual Agent includes a Windows NT Service, which can be used instead of the Monitor to process Events.

Like the Monitor, the Service runs in the background, waiting for the appropriate time to execute scheduled Actions. However, since it is a Windows NT Service, it does not require that a user be logged on in order to run its scheduled Events. Use the Service instead of the Monitor if Total Visual Agent is installed on a server, and you cannot ensure that a user will be logged on when an Event is scheduled to be processed.



Warning!

Important Note about Launching External Programs using the Service

Certain events require Total Visual Agent to launch external programs, including:

- Executing Macros
- Compacting ADP files
- Executing Custom Commands

Executing these actions from an unattended or a non-interactive user account is risky, and can cause the computer to stop responding, leave programs open in memory, and possibly corrupt data.

If you understand these risks and still determined that you want to launch external programs using the Service, Microsoft has a few suggestions. Refer to the following Microsoft KnowledgeBase articles for more information:

Article ID	Article Title
257757	“Considerations for Server-Side Automation of Office”
259971	“How to Dismiss a Dialog Box Displayed by an Office Application with Visual Basic”

Links to these articles are available from the Total Visual Agent FAQs page on www.fmsinc.com.



Microsoft KnowledgeBase articles can currently be found at:

<http://support.microsoft.com/kb/ArticleID>

However, the location, ID, and title are subject to change at any time.

Starting the Service

For the Total Visual Agent Service to execute scheduled Events, it must be running at the scheduled time. To handle this, you should generally set the Service Startup Type to “Automatic” (see page 85), and leave it running at all times.

There are several options for starting the Total Visual Agent Service:

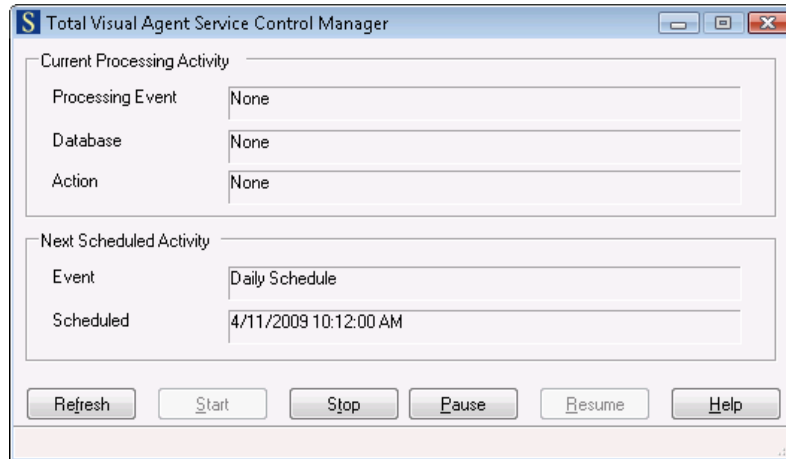
- **Launch it from the Total Visual Agent Manager**
You can start and stop the Service through the Monitor/Service Status form in the Manager. See **Monitor/Service Status** on page 69 for more information.
- **Launch it from the Service Control Manager**
Total Visual Agent includes a Service Control Manager that allows you to start and stop the Service, refresh the schedule, and more. See page 83 for details.
- **Launch it from MMC Services**
You can start, stop, and manage the Total Visual Agent Service using Microsoft Management Console (MMC) Services. See page 84 for details.
- **Launch it Automatically**
Through MMC Services, you can configure the Service to start automatically when Windows starts. See page 85 for details.

Using the Service Control Manager

Total Visual Agent includes a Service Control Manager to help you manage the Service. Open the Service Control Manager from the Windows Start menu:

Programs, FMS, Total Visual Agent, Total Visual Agent Service Control Manager

The Service Control Manager displays the following form:



Current Processing Activity	
Processing Event	None
Database	None
Action	None

Next Scheduled Activity	
Event	Daily Schedule
Scheduled	4/11/2009 10:12:00 AM

Buttons: Refresh, Start, Stop, Pause, Resume, Help

Total Visual Agent Service Control Manager

The “Current Processing Activity” section displays information about the Service’s current activity. When the Service processes an Event, this section displays the Item and Action that is being processed.

The “Next Scheduled Activity” section displays the name and time of the next Event that the Service is scheduled to perform. If the Service is not currently running, the fields show as “Idle.”

The buttons along the bottom of the form allow you to control the Service:

Refresh

The Service rechecks schedule information when it first starts and when it completes processing for an Event. If you update the schedule while the Service is running, press the Refresh button to recheck the latest schedule information. See page 80 for more information.

Start

Starts the Service, allowing it to process scheduled Events.

Stop

Stops the Service and prevents it from processing scheduled Events. When you restart the Service, any Events that were skipped are logged as errors, and new Events are scheduled.

Pause

Temporarily suspends processing.

Resume

Restarts the Service after it has been paused.

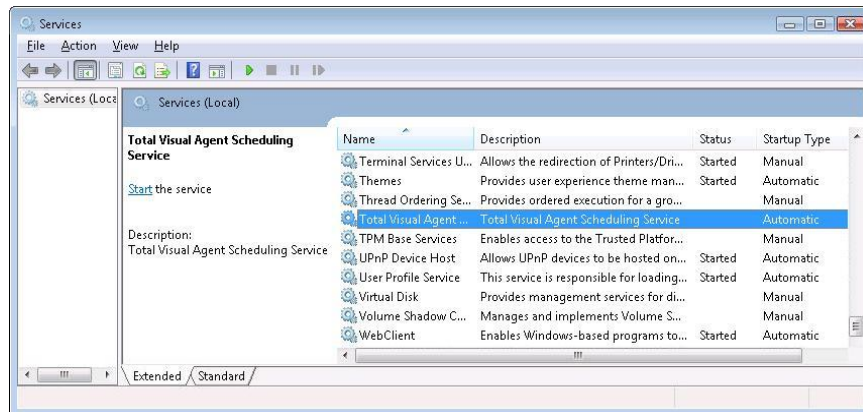
Help

Opens context-sensitive help about the Service Control Manager.

Managing the Service through MMC Services)

The Total Visual Agent Service is a standard NT Service, and like other services, can be managed through Microsoft Management Console (MMC) Services. MMC includes more advanced management options than the Service Control manager, and should be used if you are familiar with NT Services.

To open MMC Services, select Control Panel, Administrative Tools, Services from the Windows Start Menu:



Microsoft Management Console (MMC) Services

Locate the service named “Total Visual Agent 2007 Service,” and select “Properties” from the Action menu, or double click on the service to open the Properties window.



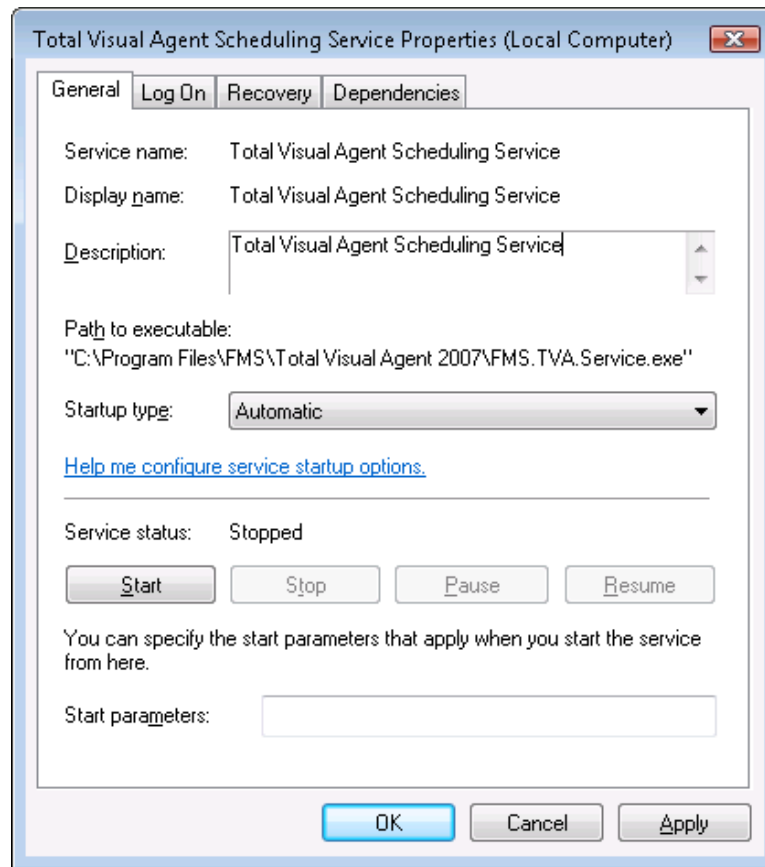
Tip

The Properties Window is standard across all Windows NT Services. This manual does not document standard Windows NT Service properties; instead, it only lists information specific to the Total Visual Agent Service.

Refer to the MMC help file for more information about the settings on this form. For context-sensitive help, put the cursor in the appropriate field, and press [F1] on your keyboard.

General Tab

The General tab provides options for starting and stopping the Service:



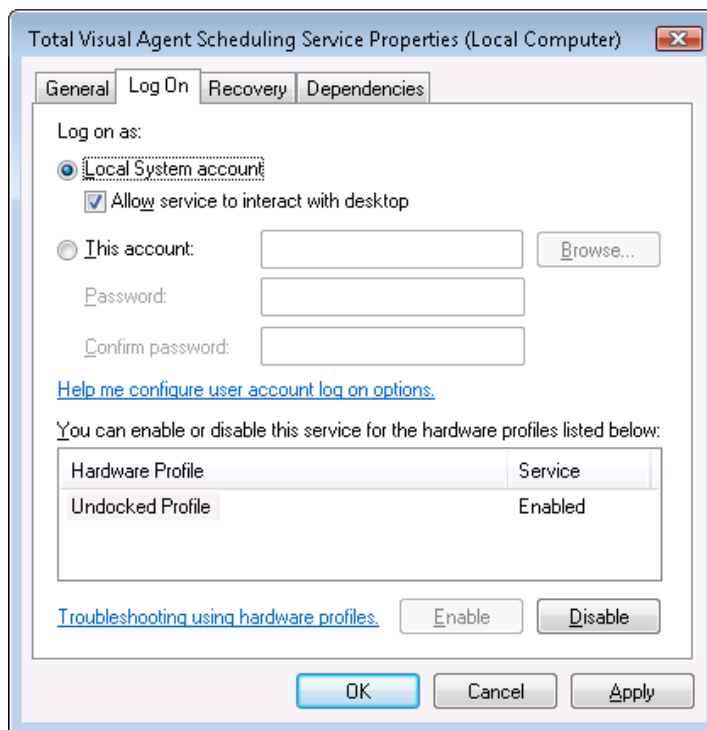
Total Visual Agent Service, General Properties

From this tab, you can control the startup type for the Service. We recommend that you set the Startup Type to "Automatic" so the Service automatically starts when Windows is rebooted. You can also manually start, stop, pause, and resume the Service.

The Total Visual Agent Service does not have any applicable parameters, so the "Start parameters" field should always be blank.

Log On Tab

The Log On tab provides options for how the Service logs on to the system:



Total Visual Agent Service, Log On Properties

Select “Local System Account” to specify that the Service logs on to the local system account, or “This Account” to specify a particular user account. Generally, you should use the “Local System Account” option; however, if Total Visual Agent accesses protected files and folders, you may need to specify a specific user account.



Tip

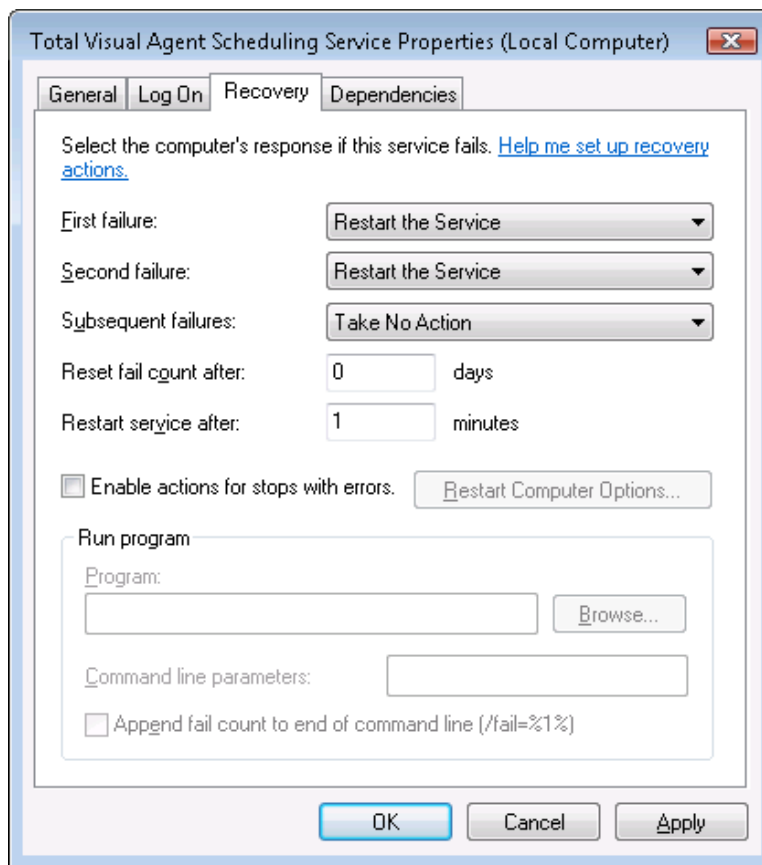
Allow Service to Interact with Desktop

If you choose “Local System Account,” you have the option to “Allow service to interact with Desktop.” This option lets the Service provide a user interface to the user who is logged on when the service is started. This includes any prompts or dialogs that may be shown when Total Visual Agent launches external programs.

Remember that using the Total Visual Agent Service to launch external programs is potentially dangerous (see page 81). Additionally, the “Allow service to interact with Desktop” option is only useful if a user is logged on to Windows and available to respond to prompts. It is not useful when the Service is running unattended, or with no user logged on.

Recovery Tab

The Recovery tab provides options for how the Service behaves if it fails:



Total Visual Agent Service, Recovery Properties

If the Service fails to start, consider restarting it, or running another program to notify you of the failure.



Tip

Make sure you periodically monitor whether the Service is running properly. Scheduled Events will not be processed if the Monitor and the Service are not running.

Dependencies Tab

The Dependencies tab displays dependency information for the Service. The Total Visual Agent Service has no dependencies, so this tab is not applicable.

Chapter 9: Product Support

This chapter provides information about troubleshooting problems that arise and obtaining support for Total Visual Agent.

Topics in this Chapter

- **Support Resources**
- **Web Site Support**
- **Technical Support Options**
- **Contacting Technical Support**

Support Resources

There are many resources available to help you resolve issues you may encounter. Please check the following:

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 care and time to make sure the Total Visual Agent 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.

Web Site

The FMS web site is located at:

www.fmsinc.com

News and important announcements are posted here.

Support Site

The main support page is located at:

www.fmsinc.com/support

From this page, you can quickly locate the other support resources.

Product Updates

FMS takes product quality very seriously. When bugs are reported and we can fix them, we make the updates available on our web site. If you are encountering problems with our product, make sure you are using the latest version.

Product updates can also be checked using the update wizard. See **Using the Update Wizard** on page 11 for details.

Frequently Asked Questions (FAQs)

Common questions and additional information beyond what is in the manual is often available from our FAQs.

Blog and Newsgroups

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

www.fmsinc.com/blog

Visit our newsgroups at:

www.fmsinc.com/support/newsgrp.htm

Or see our web site for additional instructions.

Microsoft Patches

Our support site also includes links to Microsoft patches that are related to our products. Make sure you're using the latest versions by checking here or visiting the Microsoft 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	✓	✓	
Major Upgrades for Current Version (not between Access versions)	✓	Additional fee	Additional fee
Cost	Annual Fee	Fee Per Incident	Included
<ol style="list-style-type: none"> 1. Response generally within two business days. Actual resolution may take longer depending on complexity of the issue reported. 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. 			

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 Visual Agent.

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 Visual Agent. 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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