

CONTROL-M/Agent for UNIX and Microsoft Windows Windows Administrator Guide



Supporting

CONTROL-M/Agent for Windows version 6.2.01

September 15, 2005



Contacting BMC Software

You can access the BMC Software website at <http://www.bmc.com>. From this website, you can obtain information about the company, its products, corporate offices, special events, and career opportunities.

United States and Canada

Address	BMC SOFTWARE INC 2101 CITYWEST BLVD HOUSTON TX 77042-2827 USA	Telephone	713 918 8800 or 800 841 2031	Fax	713 918 8000
----------------	--	------------------	---------------------------------	------------	--------------

Outside United States and Canada

Telephone	(01) 713 918 8800	Fax	(01) 713 918 8000
------------------	-------------------	------------	-------------------

Copyright 2005 BMC Software, Inc., as an unpublished work. All rights reserved.

BMC Software, the BMC Software logos, and all other BMC Software product or service names are registered trademarks or trademarks of BMC Software, Inc.

Oracle is a registered trademark, and the Oracle product names are registered trademarks or trademarks of Oracle Corporation.

All other trademarks belong to their respective companies.

BMC Software considers information included in this documentation to be proprietary and confidential. Your use of this information is subject to the terms and conditions of the applicable End User License Agreement for the product and the proprietary and restricted rights notices included in this documentation.

Restricted rights legend

U.S. Government Restricted Rights to Computer Software. UNPUBLISHED -- RIGHTS RESERVED UNDER THE COPYRIGHT LAWS OF THE UNITED STATES. Use, duplication, or disclosure of any data and computer software by the U.S. Government is subject to restrictions, as applicable, set forth in FAR Section 52.227-14, DFARS 252.227-7013, DFARS 252.227-7014, DFARS 252.227-7015, and DFARS 252.227-7025, as amended from time to time. Contractor/Manufacturer is BMC SOFTWARE INC, 2101 CITYWEST BLVD, HOUSTON TX 77042-2827, USA. Any contract notices should be sent to this address.

Customer support

You can obtain technical support by using the Support page on the BMC Software website or by contacting Customer Support by telephone or e-mail. To expedite your inquiry, please see “Before Contacting BMC Software.”

Support website

You can obtain technical support from BMC Software 24 hours a day, 7 days a week at http://www.bmc.com/support_home. From this website, you can

- read overviews about support services and programs that BMC Software offers
- find the most current information about BMC Software products
- search a database for problems similar to yours and possible solutions
- order or download product documentation
- report a problem or ask a question
- subscribe to receive e-mail notices when new product versions are released
- find worldwide BMC Software support center locations and contact information, including e-mail addresses, fax numbers, and telephone numbers

Support by telephone or e-mail

In the United States and Canada, if you need technical support and do not have access to the web, call 800 537 1813 or send an e-mail message to support@bmc.com. Outside the United States and Canada, contact your local support center for assistance.

Before contacting BMC Software

Before you contact BMC Software, have the following information available so that Customer Support can begin working on your problem immediately:

- product information
 - product name
 - product version (release number)
 - license number and password (trial or permanent)
- operating system and environment information
 - machine type
 - operating system type, version, and service pack or other maintenance level such as PUT or PTF
 - system hardware configuration
 - serial numbers
 - related software (database, application, and communication) including type, version, and service pack or maintenance level
- sequence of events leading to the problem
- commands and options that you used
- messages received (and the time and date that you received them)
 - product error messages
 - messages from the operating system, such as file system full
 - messages from related software

Contents

About This Book	11
Related Publications	12
Conventions	13
Chapter 1 Understanding CONTROL-M/Agent	15
CONTROL-M/Agent Functions	16
CONTROL-M/Agent Concepts	18
Server and Agent Communication	19
Communicating With a Specific CONTROL-M/Agent	19
Agent to Server Connection Models	20
Chapter 2 Implementing CONTROL-M/Agent	23
Maintaining CONTROL-M/Agent Services	24
CONTROL-M Listener and Tracker Services	24
Configuring Agent and Tracker Service Properties	25
CONTROL-M Router Service	26
CONTROL-M FileWatcher Service	26
Starting and Stopping Listener and Tracker Services	26
Determining the Owner of Jobs Run on the Agent	27
How to Assign User Rights to Agent Users	28
Verifying Communication with the Server	29
Generating the Communication Diagnostic Report	29
Sending a Shout Message to an E-mail Address	30
Language Capabilities	31
Western European Languages	31
Japanese	32
Chapter 3 Writing Scripts	33
Basic Guidelines	34
On Statement/Code Parameter	34
Utilization of Exit Codes by CONTROL-M/Server	35
Script Utilities	35
_exit	36
_sleep	37
Translating DOS Files and REXX Scripts to UNC	38

Chapter 4	Utilities	41
<hr/>		
Timeout Intervals		42
Specifying Utility Parameters		42
Format for Command Lines With Spaces		43
Directing Output From Utilities		43
Invoking A Utility On A Computer With Multiple Agents		43
Utility Descriptions		44
ag_ping Utility		46
Agent Configuration Utility		47
ctmfw Utility (File Watcher)		55
ctmpwd Utility		66
Agent Check utility		69
Chapter 5	Defining Microsoft Windows Jobs	75
<hr/>		
Creating a Job Skeleton for Microsoft Windows Jobs		75
Defining the CM in CONTROL-M		77
Creating a Microsoft Windows Job		78
Setting Job Object Limits for a Microsoft Windows Job		80
Microsoft Windows Job Object Parameters		81
Viewing a Job Object		83
Appendix A	Configuration Parameters	85
<hr/>		
CONTROL-M/Agent Configuration		85
CONTROL-M Control Module Configuration		88
CONTROL-M Agent Services Configuration		90
Index		91
<hr/>		



Figures

CONTROL-M Scheduling Solution	16
CONTROL-M/Server Utility Workflow	41
Sample Rull.dat file	57
Sample Trace File Output	58
Sample Rule file	62
Agent Check Utility Window	70
Print window	72
WIN Panel	80

Tables

CONTROL-M Products	16
CONTROL-M/Agent Information	18
Determining the Default CONTROL-M/Agent	20
CTMBAT2UNC Utility Parameters	38
Scripts Before and After Running CTMBAT2UNC	38
Utilities That Support the -input_file Parameter	42
CONTROL-M/Agent Utilities	44
ctmag Utility Parameters	48
ctmag (Advanced tab) - Utility Parameters	50
ctmfw – Parameters	59
Rule file Global Parameters	62
ctmfw – Valid Actions	63
ctmfw – Return Codes	66
ctmpwd utility – parameters	68
Report Parameters	70
Command line parameters	73
Microsoft Windows Job Object Parameters	82
CONTROL-M/Agent Configuration Parameters	85
Control Module Configuration Parameters	88
System Configuration for CONTROL-M/Agent Services	90

About This Book

This book describe how to implement and administer CONTROL-M/Agent for Microsoft Windows. The following table describes the chapters of this book:

Chapter /Appendix	Description
Chapter 1	Understanding CONTROL-M/Agent Introduces key features and concepts of Product Name.
Chapter 2	Implementing CONTROL-M/Agent Describes how to <ul style="list-style-type: none"> ■ maintain CONTROL-M/Agent Services ■ Set user rights ■ Register users and passwords ■ Use the CONTROL-M/Agent GUI ■ Send messages to an e-mail address Modify and repair the CONTROL-M/Agent program
Chapter 3	Writing Scripts Describes how to write CONTROL-M/Agent scripts.
Chapter 4	Utilities Describes CONTROL-M/Agent command-line utilities.
Chapter 5	Defining Microsoft Windows Jobs Describes how to set job object limits for a CONTROL-M job.
Appendix A	Configuration Parameters Describes how to set and modify configuration parameters.
Index	

Related Publications

- **CONTROL-M Installation Guide** describes the installation of CONTROL-M components.
- **CONTROL-M/Server Administrator Guides** each describe setup, maintenance, security, and utilities for CONTROL-M/Server on a specific type of computer.
- **CONTROL-M Job Parameter and Variable Reference Guide** describes syntax and usage for all parameters and variables that are included in CONTROL-M job processing definitions.
- **CONTROL-M/Desktop User Guide** describes how to define and manage CONTROL-M job processing definitions, Scheduling tables, and Calendars.
- **CONTROL-M/Enterprise Manager User Guide** describes CONTROL-M/EM concepts, features, facilities, and operating instructions.
- **CONTROL-M/eTrigger Administrator Guide** describes how to trigger job submission and tracking activities using a web-based (HTML) interface.

Conventions

The following abbreviations are used in this guide:

Abbreviation	Description
CM	CONTROL-M/Control Module A product library for a specific application or operating system used by CONTROL-M/Agent to support that application or operating system.
CONTROL-M/EM	CONTROL-M/Enterprise Manager

The following conventions are used in this guide:

key	When describing keystrokes, angle brackets are used to enclose the name of a key (for example, F1). When two keys are joined with “+” as in Shift+F1 , hold down Shift while pressing F1 .
Menu => Option	This represents an option selection sequence. For example: Users and Groups => Groups => Add means that you first select Users and Groups from the menu bar; then select the Groups option from the submenu. Finally, select the Add option from the Groups submenu.
{Option A Option B}	The vertical bar is used to separate choices. For example, when used as part of a parameter, {AND OR} means that you specify either AND or OR.
[Parameter]	Square brackets are used to enclose parameters that are optional.
variable	In commands and parameters, angle brackets are used to enclose variable information. For example, the command: cd <controlm_path> means that you specify cd followed by the path of CONTROL-M.
<i>italic</i>	An italic font is used for the name of publications.

Understanding CONTROL-M/Agent

This guide describes concepts and tools required to set up and manage CONTROL-M/Agent on Microsoft Windows computers.

CONTROL-M/Agent is a component of the CONTROL-M scheduling solution. The integration of these products is illustrated in [Figure 1 on page 16](#).

CONTROL-M/Server handles production control and scheduling, and submits and tracks jobs across your network.

CONTROL-M/Agent submits jobs for execution on the Agent computer, monitors the jobs, and performs post-processing analysis of sysout files. The completion status of jobs and the results of post-processing analysis are transmitted back to CONTROL-M/Server.

Other CONTROL-M products are described in the documents listed in [“Related Publications” on page 12](#).

Figure 1 CONTROL-M Scheduling Solution

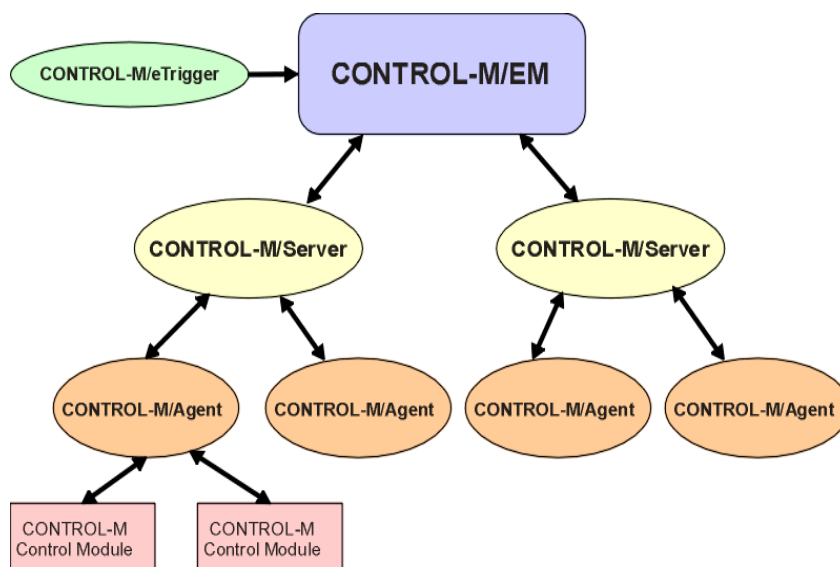


Table 1 CONTROL-M Products

Product	Description
CONTROL-M/EM	GUI-based control center from which you can manage all scheduling and workflow activities.
CONTROL-M/Server	Engine (on a UNIX or Microsoft Windows computer) used to drive scheduling in a data center. Each CONTROL-M/Server can manage multiple CONTROL-M/Agents on various computers.
CONTROL-M/Agent	Software responsible for job submission and execution. An Agent must exist on each computer that is used to execute CONTROL-M jobs.
CONTROL-M/eTrigger	Web-based product that creates and runs jobs under CONTROL-M using input from a web page.
CONTROL-M/Control Modules	CONTROL-M Control Modules enable CONTROL-M/Agents to interface with other applications (for example SAP and Oracle Applications).

CONTROL-M/Agent Functions

Job handling requests managed by CONTROL-M/Agent can consist of any of the following:

- instructions to submit a job on the Agent computer
- requests for information about jobs on the Agent computer that have been submitted, are currently executing, or have recently completed

- requests to view or edit job script statements
- requests to view job output (sysout) or job documentation
- requests to stop jobs that are currently executing

In addition, CONTROL-M/Agent can handle job output (sysout) and issue Shout messages according to job processing parameters that are supplied with a job submission request.

CONTROL-M/Agent Concepts

Additional information about CONTROL-M/Agent is contained in the following table.

Table 2 CONTROL-M/Agent Information

Item	Description
Installation	Information about installing and upgrading CONTROL-M/Agent for Microsoft Windows is described in the <i>CONTROL-M Installation Guide</i> .
Configuration Parameters	<p>CONTROL-M/Agent configuration parameters are assigned values during the installation procedure.</p> <ul style="list-style-type: none"> ■ Table 18 on page 85 lists these parameters and their default values. ■ BMC Software recommends using the Agent Configuration utility (described on page 47) to modify these parameters.
Command-Line Utilities	Many CONTROL-M tasks can be implemented from a DOS command line using utilities. For more information, see Chapter 4, “Utilities.”
Control Modules	<p>A Control Module (CM) is a DLL component that enables CONTROL-M/Agent to interface with other applications in your data center. For example, the CM for SAP interfaces between CONTROL-M/Agent and SAP.</p> <ul style="list-style-type: none"> ■ The CONTROL-M/Agent installation procedure installs a Control Module for Microsoft Windows operating systems and assigns values to its configuration parameters.
	<p>Note: Control Modules are installed only on the default CONTROL-M/Agent.</p>
	<ul style="list-style-type: none"> ■ Table 19 on page 88 lists these parameters and their default values. ■ BMC Software recommends using the Agent Configuration utility (described on page 47) to modify these parameters.

Server and Agent Communication

More than one CONTROL-M/Agent can reside on a computer. This enables more than one CONTROL-M/Server to communicate with different Agents on the same computer. For example, a CONTROL-M/Server can submit a job to an Agent in a test environment while another CONTROL-M/Server can send an accounts payable job to the same computer, using a different Agent.



NOTE

If more than one agents is installed, each agent must have different server_to_agent ports. For more information, refer to the “[Agent Configuration Utility](#)” on page 47.

CONTROL-M/Agent can be configured to work with a primary and backup CONTROL-M/Servers. In such a configuration, if the primary server fails and reverts to a backup server, the agent will revert to the same backup server.

Communicating With a Specific CONTROL-M/Agent

Each CONTROL-M/Agent that resides on the same computer has a different Server-to-Agent listening port. CONTROL-M/Server communicates with a specific CONTROL-M/Agent by referring to its listening port.

The `-agent <agent name>` parameter is used in CONTROL-M/Agent utilities to specify which CONTROL-M/Agent will handle that utility. The `<agent name>` variable represents the name of the CONTROL-M/Agent specified during the installation procedure.

For most utilities if the `-agent` parameter is not specified, the default CONTROL-M/Agent for that computer is used. However, if a configuration utility is run without specifying the `-agent` parameter, the user is prompted to select the CONTROL-M/Agent. For more information about invoking CONTROL-M/Agent utilities, see “[Invoking A Utility On A Computer With Multiple Agents](#)” on page 43.

The default CONTROL-M/Agent is determined by upgrading an earlier version of CONTROL-M/Agent, or during the installation procedure, as described in the [Table 3](#).

Table 3 Determining the Default CONTROL-M/Agent

Method	Description
Upgrade	When upgrading CONTROL-M/Agent from an earlier version, that Agent is automatically set as the default.
Installation Procedure	During installation of the first CONTROL-M/Agent, the user can select the Agent as default. <ul style="list-style-type: none"> ■ If selected, this CONTROL-M/Agent is set as Default. If the user specifies a name for the Agent, the Agent must be referred to by that name when specifying the -agent parameter. For more information about the -agent parameter, see Chapter 4, “Utilities”.
	Note: The name Default (not case sensitive) is a reserved name.
	<ul style="list-style-type: none"> ■ If not selected, a subsequent CONTROL-M/Agent can be selected as default.

After the default CONTROL-M/Agent is installed on a computer, the installation procedure prompts for a name (free text, not case sensitive) for each subsequent CONTROL-M/Agent that is installed on the same computer.

NOTE

Control Modules can be installed only on the default CONTROL-M/Agent.



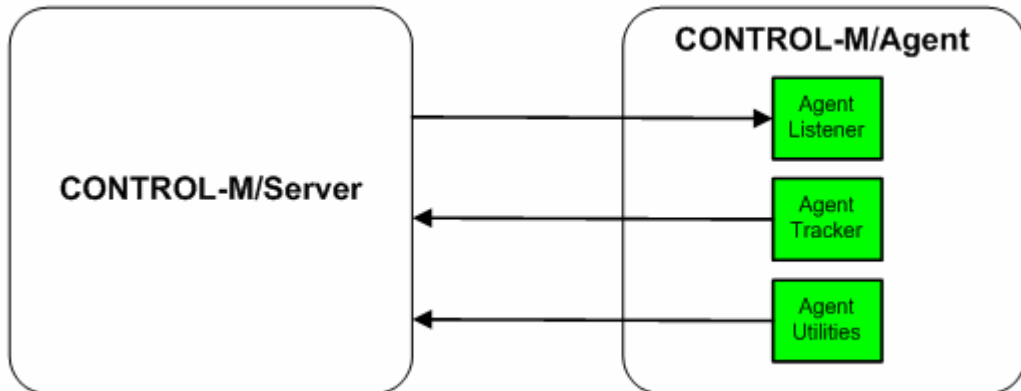
Agent to Server Connection Models

The following are the models with which you can connect to CONTROL-M/Server.

- Transient connection - default model used with new and upgrade installations. For more information, see [“Transient connection model” on page 21](#).
- Persistent connection model - optional model with improved connectivity between the Server and Agent. For more information, see [“Persistent connection model” on page 21](#).

For more information about the connection model parameters, see [Table 8 on page 48](#).

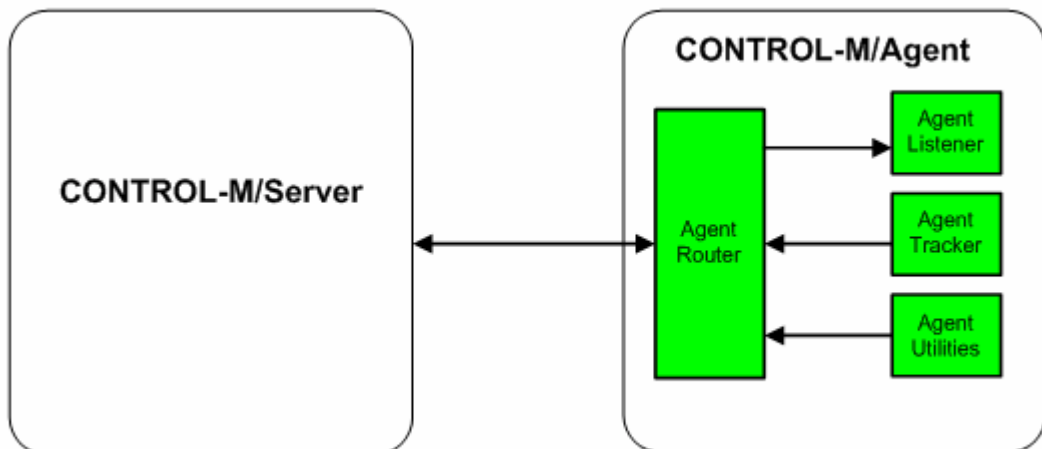
Transient connection model



In the transient connection model, CONTROL-M/Server initiates a connection with the CONTROL-M/Agent Listener process to submit jobs and other action requests. In contrast, the Agent Tracker and Agent Utilities only open a connection to CONTROL-M/Server when they need it. Once the purpose for opening these connections is finished, the connection terminates.

However, if CONTROL-M/Server sits behind a firewall, the Agent Tracker and Agent Utilities are not able to open a connection to the server. As a result, Agent Utilities cannot be run and job statuses are updated only upon server request, approximately once every 15 minutes.

Persistent connection model



In the persistent connection model, the connection between the server and agent is constant and can be initiated by both the server and agent. Upon startup of the Agent, the Agent Router process is started and acts as a broker between the other Agent components and the Server.

The Agent Router process enables CONTROL-M/Server to maintain a constant connection with the Agent. However, when CONTROL-M/Server sits behind a firewall, the Agent Router cannot initiate the connection with the server. Once the server creates the connection to the Agent Router, the Agent Tracker and Agent Utilities processes use this connection to communicate freely with the Server.

Implementing CONTROL-M/Agent

The procedures and facilities described in this chapter enable you to keep CONTROL-M/Agent running efficiently.

The following topics are discussed in this section:

- [Maintaining CONTROL-M/Agent Services](#)
- [Determining the Owner of Jobs Run on the Agent](#)
- [Verifying Communication with the Server](#)

Maintaining CONTROL-M/Agent Services

The following CONTROL-M/Agent services are installed during the CONTROL-M/Agent installation procedure:

- CONTROL-M Listener Service
- CONTROL-M Tracker Service
- CONTROL-M Router Service
- CONTROL-M FileWatcher Service

CONTROL-M Listener and Tracker Services

The CONTROL-M Listener and Tracker services can run as Microsoft Windows background processes that are transparent to the user. These services remain active as long as Microsoft Windows is running. For more information, see [“Starting and Stopping Listener and Tracker Services”](#) on page 26.

Specifying the Agent Service and Tracker Service User Account

The **Log On** panel prompts you to select **Local System account** or **This Account**. For more information, see [“Configuring Agent and Tracker Service Properties”](#) on page 25.

- If **Local System account** is selected, the service will run in the administrative group and in the native system account environment. By installation default, the following options are selected:
 - (Log on as:) “Local System Account”
 - “Allow service to interact with desktop”

These options enable the Agent service and Tracker service to open windows in the Microsoft Windows desktop. However, the Local System Account cannot access files across a network and cannot send a Shout message to an e-mail destination.

- If the owner of any jobs run by CONTROL-M/Agent has a “Roaming Profile”, select **This Account** mode. If **This Account** is selected, specify an Administrators group user and password. The service will run in the specified user environment. The format for the value in the **This Account** text box is `<Domain>\<User>`. For more information, see [“Support for Roaming Profile”](#) on page 25.



NOTE

The administrator selected as part of This Account, must have the following permissions in the Local Security Settings window:

- Act as part of the operating system (Windows 2000 users, only)
 - Increase quotas
 - Replace a process level token
 - Log on as a service
-

The service's log on account must be a member of the **Local Administrative Group**.

On Windows 2000, the **Act as part of operating user** privilege is granted to the account.

Support for Roaming Profile

CONTROL-M/Agent support for Roaming Profile requires the following:

- The profile must reside on the network. If the network path includes the environment variable, CONTROL-M/Agent expands the path and loads the User Profile from the expanded path.
- After loading the user profile, CONTROL-M/Agent sets all environment variables from the roaming profile:
 - Logs into a different computer with the roaming user
 - Changes/adds the private environment variable
 - Logs out
 - Runs the CONTROL-M job on the original computer
- New environment variables or updated variables performed by the roaming user on any computer will be detected by the CONTROL-M job.

Configuring Agent and Tracker Service Properties

You can modify Agent service and Tracker service properties in the **Log On** panel of the CONTROL-M Agent (or Tracker) Properties window. BMC that the same properties be specified for both the Agent service and the Tracker service.

Before You Begin

Default values for Agent and Tracker service properties were set during the CONTROL-M/Agent installation. You can modify these properties.

**NOTE**

If the owner of any CONTROL-M jobs has a “roaming profile”, the Logon mode must be set to **This Account**. Otherwise, the **Local System Account** logon mode is recommended.

How to Display and Modify CONTROL-M Agent (or Tracker) Properties

- 1 Choose **Start => Settings => Control Panel => Administrative Tools => Services**.
- 2 The Services window is displayed. Right-click **CONTROL-M Agent** or **CONTROL-M Tracker** and choose **Properties**.
- 3 The **CONTROL-M Agent (or Tracker) Properties (Local Computer)** window is displayed. Click the **Log On** tab.
- 4 The **Log On** panel is displayed. Select the desired properties, and click **OK**.

CONTROL-M Router Service

The Router service acts as a broker between different agent components and CONTROL-M/Server. For more information, refer to “[Persistent connection model](#)” on page 21.

CONTROL-M FileWatcher Service

BMC Software recommends that you do not make any changes to this service.

Starting and Stopping Listener and Tracker Services

The Listener and Tracker services operate as background processes that are not visible to the user. When the computer is turned on or rebooted, these services start automatically if the Startup Type configuration parameter is set to **Automatic**. (See “[Startup Type](#)” on page 90.) These services remain active as long as Microsoft Windows is running.

If you stop these services, you can restart them manually (as described below), or you can reboot the system (if Startup Type is **Automatic**). If the Startup Type is set to **Manual**, you must start these services manually (as described below).

You can modify the Startup Type value. BMC Software recommends that the Agent service and the Tracker service be treated the same way. The recommended Startup Type is **Automatic**.

Starting CONTROL-M Agent and Tracker Services

- 1 Select **Start => Settings => Control Panel => Administrative Tools**.
- 2 In the Administrative Tools window, click **Services**.
- 3 Select the **CONTROL-M Agent** service and click **Start**.
- 4 Select the **CONTROL-M Tracker** service and click **Start**.

Stopping CONTROL-M Agent and Tracker Services

- 1 Select **Start => Settings => Control Panel => Administrative Tools**.
- 2 In the Administrative Tools window, click **Services**.
- 3 Select the **CONTROL-M Agent** service and click **Stop**.
- 4 Select the **CONTROL-M Tracker** service and click **Stop**.

Determining the Owner of Jobs Run on the Agent

CONTROL-M/Agent runs a job in the environment of the owner of the job with the permissions granted to that owner.

The owner of a CONTROL-M/Agent job is determined by the value of the **Logon As User** configuration parameter. This parameter can be set either during the installation (see the *CONTROL-M Installation Guide*) or after the installation, as described in the Agent Configuration utility on [page 47](#)).

- If **Logon As User** is set to **Y**, the owner of the job is the owner specified in the CONTROL-M job definition.

- If **Logon As User** is set to **N**, the owner of the job is the user account for the CONTROL-M/Agent service:
 - **Local System**
 - **This Account**

For more information, see “[Specifying the Agent Service and Tracker Service User Account](#)” on page 24.

The following requirements must be satisfied:

- If a user with a “Roaming Profile” will be the owner of a job, specify **This Account** (and not **Local System Account**) in the CONTROL-M/Agent Service Definition window.
- To enable a specific user to run (be the owner of) CONTROL-M jobs, the password of the user must be entered into CONTROL-M using the `ctmpwd` utility.
- The owner must have access rights to the network and the **Log on as a batch job** user right.

For information about how to assign user rights, see [page 28](#).

NOTE



To eliminate the need to assign user rights to every job owner on every Microsoft Windows computer running CONTROL-M/Agent, BMC Software recommends that you define a domain-level group for all job owners. You can name this group CONTROL-M Job Owners. Assign network access rights and the **Logon as a batch job** user right to this group.

How to Assign User Rights to Agent Users

You can use this procedure to assign the user rights listed on [page 28](#) to each user who needs them.

Assigning User Rights

- 1 Log on to the CONTROL-M/Agent computer as a local administrator.
- 2 Choose **Start => Settings => Control Panel => Administrative Tools => Local Security Policy**.
- 3 In the displayed tree structure, select **Local Policies**.

- 4 In the displayed panel, double-click **User Rights Assignments** to display the list of user rights.
- 5 Double-click the user right you want to assign. The **Local Security Policy Settings** window for that user right is displayed.
 - A If the user who should have the selected user right is not listed in this window, click **Add**.
 - B In the bottom panel, enter the `<domain>\<user_name>` of the user and click **OK**.
 - C When the specified user is displayed in the lower panel, click **OK** again.
- 6 Restart the Agent service to make the user rights effective.

Verifying Communication with the Server

BMC Software recommends that you verify the ability of the Microsoft Windows Agent computer to communicate with the primary Server computer and with all other authorized Server host computers.

Generating the Communication Diagnostic Report

CONTROL-M/Agent includes a diagnostic program that checks parameters and environmental conditions relevant to communication between the Agent and Server computers. This program is typically used at the request of Technical Support to determine the cause of a communication problem.

How to Generate the Communication Diagnostic Report

- 1 Navigate to the `<CONTROL-M Agent>\exe` directory.

- 2 Enter the `ag_di ag_comm` command. After several seconds, the CONTROL-M/Agent Communication Diagnostic Report is displayed.

```
Control -M/Agent communication Diagnostic Report
-----
Agent User Name           : ctmagent: ** Not Administrator **
Agent Directory           : C:\Program Files\BMC
Software\CONTROL-M Agent\Default\
Agent Platform Architecture : Windows-NT 5.1 (Build: 2600)
Agent Version            : 6.2.01
Agent Host Name          : WINSRV003
Server Host Name         : sunsrv001
Authorized Servers Host Names : sunsrv001
Server-to-Agent Port Number : 7006
Agent-to-Server Port Number : 7005
Server-Agent Protocol Version : 06
Server-Agent Comm. Protocol : TCP
Server-Agent Connection mode : Transient
System ping to Server Platform : Succeeded
Agent ping to Control -M/Server : Succeeded

Agent services status:
=====
Agent Router              : Not Running
Agent Listener           : Running
Agent Tracker            : Running
Agent FileWatcher        : Not Running

DNS Translation of Server : 211.133.31.20 (In 0 seconds)
--- End of Report ---
```

Sending a Shout Message to an E-mail Address

The CONTROL-M Shout facility sends messages to recipients based on specified logical destinations. For more information, see the administrator guide for CONTROL-M/Server.

CONTROL-M/Server can request CONTROL-M/Agent to send a message to an e-mail destination. If the destination is not a standard e-mail address, CONTROL-M/Agent will try to resolve the destination to an e-mail address using the **Address Book** of the default Windows Messaging Component (for example, Microsoft Outlook).

Requirements for Sending Shout Messages to E-mail Destinations

- The CONTROL-M/Agent service must run under the user specified in the **This Account** field of the **Log On** panel. See “[Specifying the Agent Service and Tracker Service User Account](#)” on page 24.
- The default Windows Messaging component must be installed and running on the Microsoft Windows Agent platform. *This component is not installed by the CONTROL-M installation procedure.*
- The user specified in the **Mailbox** field of the Windows Messaging Component and the user specified in the **This Account** field of the **Log On** panel must be identical.

To view or change the user in the **This Account** field, see “[Configuring Agent and Tracker Service Properties](#)” on page 25.

How to Configure the Mailbox Field in Microsoft Outlook

To view or change the user in the **Mailbox** field, close Microsoft Outlook, right-click the Microsoft Outlook icon, and choose **Properties => Services** (tab) => **Microsoft Exchange Server => Properties**.

Language Capabilities

This section provides information about CONTROL-M/Agent language support.

Western European Languages

CONTROL-M/EM, CONTROL-M/Desktop, CONTROL-M/Server, CONTROL-M/Agent, and CONTROL-M/eTrigger, support Western European language characters (the Latin-1 character set). These products can accept characters in English, German, Spanish, and French from the Latin-1 character set (ISO 8859-1) in almost all text fields and parameters.

For additional information, see the following guides.

Task	Topic and Guide
Indications of which parameters do <i>not</i> support Western European Language special characters	Individual parameter descriptions in the <i>CONTROL-M/Enterprise Manager Parameter and Variable Reference Guide</i>
Indications of which CONTROL-M/Server and CONTROL-M/Agent utilities do <i>not</i> support Western European Language special characters	Individual utility descriptions in the <i>CONTROL-M/Server Administrator Guide</i> and the <i>CONTROL-M/Agent Administrator Guide</i>
Indications of which dialog boxes support Western European Language special characters	Individual descriptions of the various dialog boxes in the <i>CONTROL-M/Enterprise Manager User Guide</i> and the <i>CONTROL-M/Desktop User Guide</i>
Language configuration instructions	<i>CONTROL-M Installation Guide</i>
Upgrade and migration instructions	<i>CONTROL-M Upgrade Guide</i>
CONTROL-M/eTrigger customization instructions	“Use Locale” topic in Chapter 4 of the <i>CONTROL-M/eTrigger Administrator Guide</i>

Japanese

CONTROL-M can run on Japanese operating systems.

The CONTROL-M components, such as the EM GUI and CONTROL-M/Desktop, do not accept Japanese characters in any free text fields or parameters and display values only in English. For example, Japanese job sysouts do not display correctly. Therefore, in these cases, job sysout analysis is not possible.

No additional customization is necessary after installation or upgrade to run CONTROL-M components with Japanese operating systems.

Writing Scripts

When operating in the Microsoft Windows environment, CONTROL-M/Agent supports the use of the following types of job scripts:

- DOS batch files (suffix.**bat**).
- REXX-language scripts (suffix.**cmd**).

CONTROL-M/Agent can use the **On Statement/Code** job processing parameters to perform post-processing analysis of the sysout of jobs submitted using these scripts.

The following topics are discussed in this chapter:

- [Basic Guidelines](#)
- [Script Utilities](#)
- [Translating DOS Files and REXX Scripts to UNC](#)

Basic Guidelines

Scripts analyzed by CONTROL-M/Server as part of the post-processing of a job should comply with the following requirements:

- Begin the script with the **echo on** command. This ensures that job script statements will be written to the sysout file.
- End each prompt with a > or] character. These characters and embedded spaces should not be used inside the prompt text string.

On Statement/Code Parameter

The following items describe how the **On Statement/Code** job processing parameter interprets script lines:

- **Analysis of the Sysout for On Statement/Code**

Text in a sysout file that follows a > prompt or] prompt is treated by CONTROL-M/Server as part of the job script. All other text is treated as part of the operating system response.

When specifying an **On Statement/Code** statement (format 1) in a job processing definition, place text that follows either of these prompts in the **Stmt** parameter. Place other text in the **Code** parameter.

- **Continuation Lines**

CONTROL-M/Server does not process continuation lines for comparison with text in a **Stmt** subparameter. Therefore, do not specify script continuation line text in the **Stmt** subparameter.

- **Length of Script Statement**

CONTROL-M/Server compares the first 512 characters of a script statement with the text in subparameter **Stmt**. Text after the first 512 characters of a script statement should not be in subparameter **Stmt**.

The maximum length of the **On Code** parameter is 1024 characters.

For more information about the **On Statement/Code** parameter, see Chapter 7 of the *CONTROL-M Job Parameter and Variable Reference Guide*. Job processing parameters are described in Chapter 5 of the *CONTROL-M/Enterprise Manager User Guide*.

Utilization of Exit Codes by CONTROL-M/Server

Both DOS `.bat` scripts and REXX `.cmd` scripts can return an exit code to CONTROL-M/Server upon completion. The `_exit` utility described below is used by `.bat` scripts.

CONTROL-M/Server can distinguish between exit codes by using the following expression in the **Code** subparameter of the **On Statement/Code** job processing parameter:

```
COMPSTAT=<value>
```

Example

In this example, a REXX script exits with an exit code of 5, as shown below:

```
exit 5
```

This condition can be detected by defining the following **On Statement/Code** parameter:

```
Stmt: *
Code: COMPSTAT=5
```

Script Utilities

The `_exit` and `_sleep` script utilities can be accessed from within job scripts. These utilities are located in the `<CONTROL-M/Agent>\EXE` directory under the Product directory, for example:

```
c:\Program Files\BMC Software\CONTROL-M Agent\<agent name>\EXE
```

If this directory is not defined as part of the operating system search path, specify the full path when using one of these utilities.

_exit

This utility is similar to the UNIX **exit** built-in shell function.

The utility is located in the <CONTRL-M/Agent>\EXE directory path that was created during the installation procedure.

Format

```
_exit [<exit code>]
```

The variable <exit code> is any whole number ≥ 0 Default: **0**

The program exits with %errorlevel% = <exit code>

Examples

_exit 0 in a script causes the job to end with %errorlevel% **0**.

```
ctmcreate -tasktype command -cmdline "_exit 0"
```

_exit 1 in a script causes the job to end with %errorlevel% **1**.

```
ctmcreate -tasktype command -cmdline "_exit 1"
```

_sleep

This utility is similar to the UNIX **sleep** built-in shell function.

The utility is located in the <CONTRL-M/Agent>\EXE directory path that was created during the installation procedure.

Format

```
"... _sleep" <seconds>
```

The <seconds> variable is any whole integer number ≥ 0

If `_sleep` is specified, you must specify a whole integer number.

Example

Suspend execution of the script for 5 seconds.

```
ctmcreate -tasktype command -cmdline "_sleep 5"
```

Translating DOS Files and REXX Scripts to UNC

The CTMBAT2UNC utility translates DOS batch files (.bat) and REXX-language (.cmd) scripts containing mapped path names into scripts that use Universal Naming Convention (UNC) equivalents, to reference remote disk resources. These translated scripts enable CONTROL-M/Agent to execute multiple scripts simultaneously. The owners of the jobs do not have to be logged on to provide the drive mappings for the scripts.

The CTMBAT2UNC utility can be invoked using the following command:

```
ctmbat2unc.exe <batch_file_to_translate> <output_file_name>
```

Table 4 describes the CTMBAT2UNC utility parameters.

Table 4 CTMBAT2UNC Utility Parameters

Item	Description
<batch_file_to_translate>	Original .bat or .cmd script
<output_file_name>	New script after translation

Example

Two job owners, A and B, are executing ScriptA.bat and ScriptB.bat, respectively. Owner A has drive M mapped to \\nt-A\share. Owner B has drive M mapped to \\nt-B\share.

Table 5 describes these scripts before and after executing the CTMBAT2UNC utility.

Table 5 Scripts Before and After Running CTMBAT2UNC

Owner	Original Script	Translated Script
A	@echo off dir M:\jobs	@echo off REM Following line was changed by CTMBAT2UNC dir \\nt-A\share\jobs
B	@echo off dir M:\jobs	@echo off REM Following line was changed by CTMBAT2UNC dir \\nt-B\share\jobs

As shown above, every line changed by the CTMBAT2UNC utility is marked by a REM comment inserted before the translated line.



NOTE

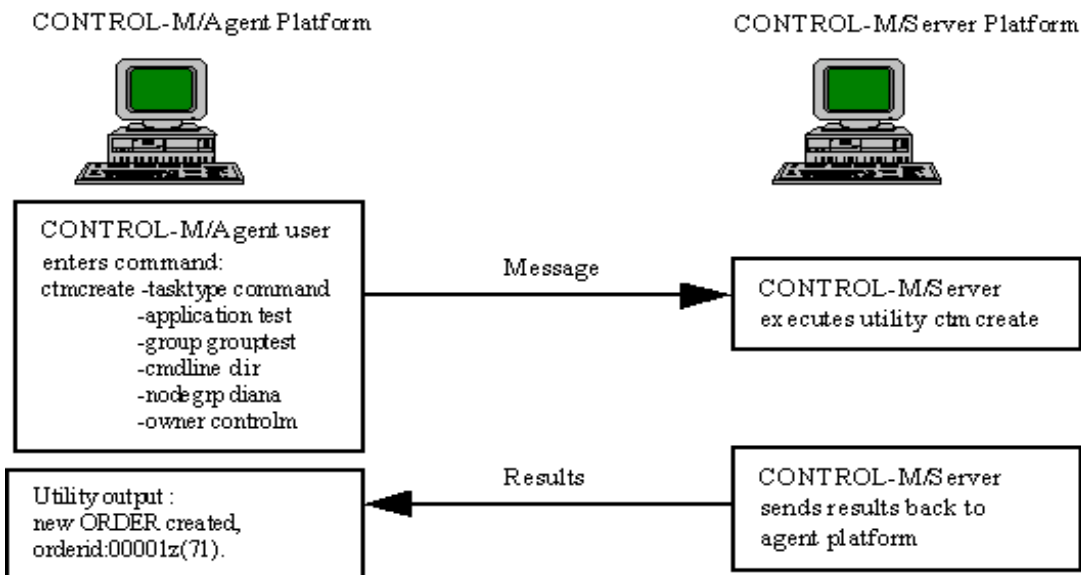
Under the current version of Microsoft Windows, command interpreters do not change a current directory to a UNC path (for example, `cd \\nt-A\share\jobs` will not be executed). BMC Software recommends that you review the translated script after invoking the `ctmbat2unc` utility.

Utilities

Utilities are special programs that perform job definition, scheduling, and maintenance functions. These utilities can be invoked from a command line or by the **Command** parameter in a job processing definition.

Most of these utilities are executed in CONTROL-M/Server (see [Figure 2](#)) and are documented in the *CONTROL-M/Server Administrator Guide*. The remaining utilities are documented in this chapter.

Figure 2 CONTROL-M/Server Utility Workflow



NOTE



If the primary CONTROL-M/Server does not respond to a CONTROL-M/Agent request to execute a utility (other than ag_ping), the request is automatically redirected to the first non-primary Server listed in the Authorized CONTROL-M/Server Hosts parameter. If the redirection is successful, that Agent continues to work with the replacement Server.

Timeout Intervals

The Timeout for Agent utilities parameter is described on [page 87](#). If the Agent invokes a utility that runs on the Server and there is no response within the timeout interval, the requested action will fail.

The **Agent Configuration** utility (see [page 47](#)) can modify this timeout interval. But, increasing this interval reduces CONTROL-M/Agent performance.

Specifying Utility Parameters

The command used to invoke a CONTROL-M utility is normally specified with all relevant parameters, for example:

```
ctmdefine -table cmmnds -jobname cml s13 \
-tasktype command -group ecs -application test \
-month ALL Y -cmdline "dir \etc\passwd"
```

The total maximum length for all these parameters is 1000 characters. Using an input file enables you to:

- prepare and save files of utility parameters that can be reused.
- specify utility input longer than 1000 characters.

The utilities in [Table 6](#) enable you to place utility parameters in an input file. In this file, each parameter and its values (if any) are on a separate line with the same syntax they would have on a command line.

Table 6 Utilities That Support the -input_file Parameter

ctmcontb	ctmorder
ctmcreate	ctmshout
ctmdefine	ctmvar
ctmkilljob	ecaqrta
ctmstvar	

Format for Command Lines With Spaces

If a command invoked from the Agent computer contains embedded spaces, add `\` after the first quote at the beginning of the command, *and* add `\` at the end of the command (but prior to any parameters).

Example

```
"\d:\program files\bmc software\control -m agent\exe\_sleep\" 200"
```

Directing Output From Utilities

Some utilities generate reports that can be directed to a file.

- If output parameters are specified, the utility output is directed to the specified file.
- If output parameters are not specified, the output is routed to the default output device (for example, the logical name of a disk).

Invoking A Utility On A Computer With Multiple Agents

All CONTROL-M/Agent utilities now support the `-agent <agent name>` parameter. The variable `<agent name>` represents the name of the CONTROL-M/Agent specified during the installation procedure.

Where multiple CONTROL-M/Agents reside on a computer, the `-agent` parameter determines which CONTROL-M/Agent will handle the utility. If a configuration utility is run without specifying the `-agent` parameter, the user is prompted to select the CONTROL-M/Agent. For all other utilities, if the `-agent` parameter is not specified, the default CONTROL-M/Agent is used. For more information, see [“Communicating With a Specific CONTROL-M/Agent”](#) on page 19.

Example

Assume a computer has two Agents, **Default** and **Saturn**. To add a user to **Default**, use the following command:

```
ctmpwd -action add -user user2 -password 123456 -agent Default t
```

-or-

```
ctmpwd -action add -user user2 -password 123456
```

To add a user to **Saturn**, use the following command:

```
ctmpwd -action add -user saturn_user2 -password 123456 -agent Saturn
```

Utility Descriptions

Table 7 provides a short description of the utilities that can be invoked from CONTROL-M/Agent. Some of these utilities can use the **-input_file** parameter. For more information, see “[Specifying Utility Parameters](#)” on page 42.

Table 7 CONTROL-M/Agent Utilities (Part 1 of 2)

Utility	Description
_exit	Sets the completion status for a job run from a .bat file. Exit code 0 is equivalent to Ended OK . Any other exit code is equivalent to Ended NOTOK . For more data, see page 36 .
_sleep	Determines the sleep time for all CONTROL-M/Server processes or for a specific process. For more information, see page 37 .
ag_diag_com m	<ul style="list-style-type: none"> ■ Verifies that the primary CONTROL-M/Server host is active by pinging the host through the CONTROL-M port. ■ Displays CONTROL-M system information. <p>For more information, see “Generating the Communication Diagnostic Report” on page 29</p>
ag_ping	Tries to communicate with CONTROL-M/Server and indicates whether the attempt succeeded or failed. For more information, see page 46 .
ctmag	Invokes the Agent Configuration utility enabling you to interactively modify CONTROL-M/Agent configuration parameters. For more information, see “ Agent Configuration Utility ” on page 47.
ctmcontb	Performs operations on the Prerequisite Conditions table. For more information, refer to the administrator guide for CONTROL-M/Server.
ctmcreate	Creates a job in the Active Jobs file. For more information, refer to the administrator guide for CONTROL-M/Server.
ctmdefine	Creates job processing definitions. For more information, refer to the administrator guide for CONTROL-M/Server.
ctmfw	Detects completion of file transfer activity. For more information, see page 55 .

Table 7 CONTROL-M/Agent Utilities (Part 2 of 2)

Utility	Description
ctmkilljob	Terminates an executing CONTROL-M job and all of its associated processes. For more information, refer to the administrator guide for CONTROL-M/Server.
ctmloadset	Updates a Quantitative resource in the Resources table. You must provide all the required parameters on the command line. For more information, refer to the administrator guide for CONTROL-M/Server.
ctmnodegrp	Views and maintains node groups. For more information, see the utilities chapter in the administrator guide for CONTROL-M/Server.
ctmorder	Orders or forces one or more jobs from a CONTROL-M scheduling table. For more information, see the <i>CONTROL-M/Server Administrator Guide</i> .
ctmpsm	The ctm <code>psm</code> utility is invoked silently to display the CONTROL-M Production Support menu. For more information, refer to the administrator guide for CONTROL-M/Server.
ctmpwd	Maintains CONTROL-M user and password information. For more information, see page 66 . (This utility replaces the <code>ctm<code>cp</code>t</code> utility in earlier versions.)
ctmshout	Issues a shout message to a specified destination. For more information, see the administrator guide for CONTROL-M/Server.
ctmstvar	Displays the current value of an AutoEdit variable or function.
ctmudly	Orders jobs for a specific User Daily name. For more information, see the administrator guide for CONTROL-M/Server.
ctmvar	Maintains AutoEdit variables. For more information, see the administrator guide for CONTROL-M/Server. Note: The value of parameter <code>-filename</code> is the full path and name of a file that is accessible to CONTROL-M/Server.
ctmwincfg	Interactively maintains Control Module configuration parameters. For more information, see page 47 .
ecactltb	Displays a list of Control resources and the status of each one. For more information, see the administrator guide for CONTROL-M/Server.
ecaqrtab	Performs operations on the Quantitative resources table. You must provide all the required parameters on the command line. For more information, see the administrator guide for CONTROL-M/Server.

ag_ping Utility

This utility verifies that CONTROL-M/Server is active on the Server computer connected to the Agent computer. From the operating system prompt, specify the following command:

```
ag_ping
```

The utility attempts to communicate with CONTROL-M/Server and indicates whether the attempt succeeded or failed. If the attempt succeeds, you will receive the message:

```
Output:  
Server is alive.  
Result: Success.
```

Agent Configuration Utility

The Agent Configuration utility is a Java application used to maintain CONTROL-M/Agent configuration parameters, and to view and modify most of the operating system parameters. This utility replaces the `ctmagcfg` and `ctmwincfg` utilities.

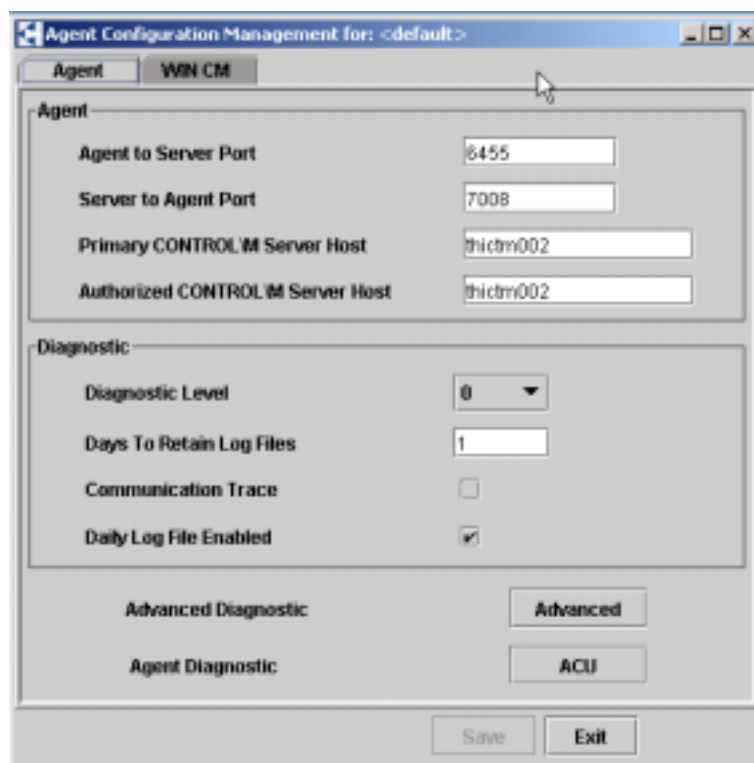
NOTE



For information about running the Agent Configuration utility as command line utilities, refer to “Command Line Utilities” on page 53.

There are additional tabs that represent each of the Control Modules (CMs) installed on the agent.

This utility is located at `<CONTROL-M Agent>\EXE\ctmag` and can be run from either the command prompt or Windows Explorer. A window similar to the following is displayed:



NOTE



If more than one agent is installed, use the `ctmag <agent name>` command when opening the Agent Configuration utility from the command line.

Agent tab

Table 8 lists the parameters displayed in the Agent tab and their descriptions.

NOTE



Right-clicking on a field label and selecting Help About provides context sensitive help for that field.

Table 8 ctmag Utility Parameters (Part 1 of 2)

Parameter	Attributes
Agent-to-Server Port Number	CONTROL-M/Server and CONTROL-M/Agent communicate by means of two TCP/IP ports. This parameter specifies the port in the Server platform that receives data from the Agent platform. The value specified must match the value assigned to the Agent-to-Server Port Number parameter on the Server platform. Verify that the specified port number is not used for any other purpose in the Agent. Specify a numeric value from 1025 to 65535, inclusive. Default: 7005
Server-to-Agent Port Number	CONTROL-M/Server and CONTROL-M/Agent communicate by means of two TCP/IP ports. This parameter specifies the port in the Server platform that sends data to the Agent platform. The value specified must match the value assigned to the Server-to-Agent Port Number parameter on the Server platform. Verify that the specified port number is not used for any other purpose in the Agent platform. Specify a numeric value from 1025 to 65535, inclusive. Default: 7006
Primary CONTROL-M/Server Host	Host computer for the CONTROL-M/Server that handles this Agent. Type the name of the primary CONTROL-M/Server host in the field or select a host name from the drop-down list. Default: Computer on which the installation was made. Note: Do not use a numeric IP address, such as 173.19.6.14 , to specify the name of the server.
Authorized CONTROL-M/Server Hosts	Names of all CONTROL-M/Servers authorized to handle this Agent (including the primary Server). Specify the host names separated with the “ ” symbol. Do not include spaces between host names. The host name of the primary CONTROL-M/Server is automatically included in this field. Default: Name of the primary CONTROL-M/Server host. Note: Specify names, such as UNIX_HOSTNAME. Do not specify IP addresses.
Diagnostic Level	Flag that indicates whether to generate diagnostic messages. Valid values: 0–4 . Level 0 generates no diagnostics. Level 4 generates maximum diagnostics. This parameter can only be changed after completing the installation.

Table 8 ctmag Utility Parameters (Part 2 of 2)

Parameter	Attributes
Communication Trace	<p>Flag that indicates whether to debug communications between CONTROL-M/Agent and CONTROL-M/Server. Valid values are:</p> <ul style="list-style-type: none"> ■ 0 = No. Default. ■ 1 = Yes. <p>This parameter can only be changed after completing the installation.</p>
Days To Retain Log Files	<p>Numbers of days that Agent proclog files are retained. After this period, all Agent proclog files are deleted by the New Day procedure. Default: Same as the Max. Days to Retain Sysout Files system parameter.</p>
Daily Log File Enabled	<p>Indicates whether the ctmag_<year><month><day>.log file is generated. Valid values are:</p> <ul style="list-style-type: none"> ■ Y - Yes. Default ■ N - No.

Changes to the Diagnostic Level parameter are saved and take effect immediately. If you change any other parameter, the configuration parameters are saved and CONTROL-M/Agent is restarted.

Agent tab (Advanced)

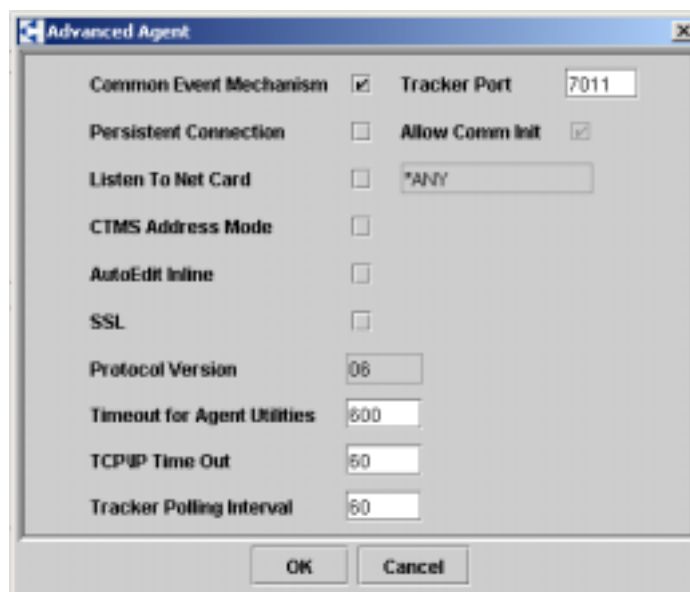


Table 9 lists the parameters found under the Advanced Agent window of the Agent tab and their descriptions.

NOTE



Right-clicking on a field label and selecting Help About provides context sensitive help for that field.

Table 9 ctmag (Advanced tab) - Utility Parameters (Part 1 of 2)

Parameter	Attributes
TCP/IP Timeout	Communication timeout in seconds. Specify a numeric value greater than or equal to zero. Default: 60
Tracker Polling Interval	Time in seconds that the Tracker waits after starting the job status checking process before re-starting that process. This parameter can only be changed after completing the installation. Default: 60 (seconds).
AutoEdit Inline	Flag that indicates whether AutoEdit variables defined in a CONTROL-M job are set as Environment variables in the user job environment. This parameter can only be changed after completing the installation. Valid values: Y = AutoEdit variables are set. N = AutoEdit variables are not set. Default.
CTMS Address Mode	If this parameter is set to IP , the IP address instead of the host name is saved in CTMS_HOSTNAME. Use this parameter when CONTROL-M runs on a platform with more than one network card.
Timeout for Agent utilities	Maximum time (in seconds) the Agent waits after sending a request to CONTROL-M/Server. This timeout interval should be longer than the TCP/IP Timeout. Recommended value and default: 600
Persistent Connection	Determines in what mode the agent will run. Default: No
Allow_Comm_Init	Determines whether the Agent Router can initiate a session with the server. Default: Yes If the server sits behind a firewall, this parameter should be set to No.
Common Event Mechanism	Flag for specifying if all control modules, not just the default control module, should be able send messages to the Tracker process without waiting for the tracker polling interval. Messages are sent using the port specified in the Tracker Port parameter to inform the Tracker that a job status changed. Valid values are: Y = Use the Common Event Mechanism. Default. N = Do not use the Common Event mechanism. Only the default control module can send messages directly to the Tracker process. Note: When CONTROL-M/Agent is upgraded from a prior version, the default is N for backward compatibility.

Table 9 ctmag (Advanced tab) - Utility Parameters (Part 2 of 2)

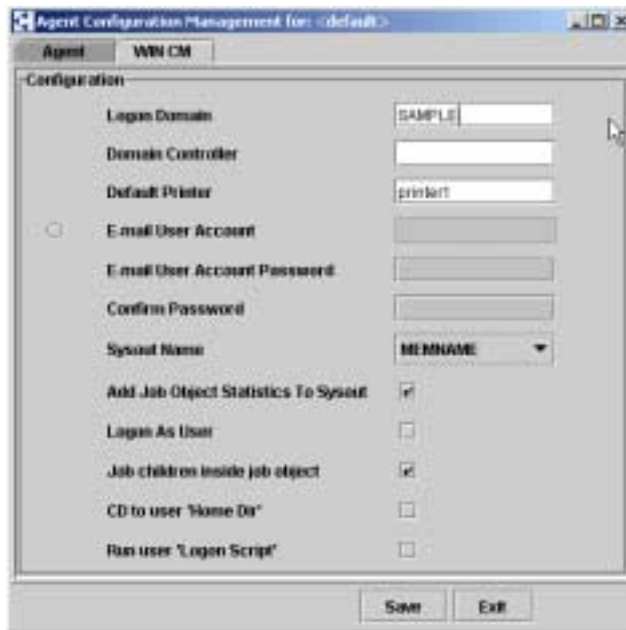
Parameter	Attributes
Tracker Port	Number of the port for sending messages to the Tracker process when jobs status changes. The tracker event port enables CONTROL-M/Agent to receive updates regarding job status from all Control Modules associated with the current CONTROL-M/Agent. This parameter is used in conjunction with the Common Event Mechanism parameter. Default: 7009
Listen to Net Card	The network name or IP address for CONTROL-M/Agent for Microsoft Windows 2000 support of multiple IP interfaces (network cards) for a single computer. Valid values are: <ul style="list-style-type: none"> ■ The network name or IP address of a specific card. ■ The reserved value *ANY for all network cards. This helps ensure that CONTROL-M/Agent will receive requests regardless of which IP interface is used to send those requests.
SSL	SSL support for CONTROL-M/Agent for Microsoft Windows. When SSL support is implemented in CONTROL-M/Server it makes a one-time request to set this parameter automatically for each associated Agent. This request requires 2 to 5 minutes for each Agent. Setting this parameter manually can save time if a large number of Agents work with CONTROL-M/Server. For more information about setting this parameter manually, see “Agent Configuration Utility” on page 47 .
Protocol version	Server-Agent communication protocol version. Default: 06

NOTE

You can also access the ACU application by clicking on the ACU button located at the bottom of the Agent tab. For more information about ACU, refer to [“Agent Check utility” on page 69](#).

Win CM tab

The parameters in the Win CM tab are described in Appendix A. If the parameter you want to modify is not listed, see the [“Agent Configuration Utility” on page 47](#).



Specify values for the parameters you want to change. If you quit without saving, settings are not saved. If you save but do not quit, settings are saved anyway.

NOTE



Right-clicking on a field label and selecting Help About provides context sensitive help for that field.

CM tab

In the past, to configure a CM, you had to run the management applications for each CM separately. In the Agent Configuration utility, you can manage all of the applications using the relevant CM's tab.

When you install a CM, a *cm_name.xml* data file is placed in the **DATA\GUI** directory. The Agent Configuration utility reads each data file and creates a tab for the CM with each of the CM management applications.

For information about each of the CM management applications, refer to the relevant CM documentation.

Command Line Utilities

This section describes the agent configuration command line utilities.

ctmagcfg

This section provides information about running the ctmagcfg utility from the command line.



NOTE

This utility can also be accessed as a Java application. For more information, refer to the “Agent tab” on page 48.

To access the ctmagcfg utility, enter **ctmagcfg** from a command prompt.

```

Agent Configuration Utility

Agent Name: Default

1) Agent-to-Server Port Number . . . . : [7666]
2) Server-to-Agent Port Number . . . . : [7890]
3) TCP/IP Timeout. . . . . : [60]
   For items 4 and 5 do not use IP address
4) Primary CONTROL-M/Server Host . . . : [martini]
5) Authorized CONTROL-M/Server Hosts : [martini]
6) Tracker Polling Interval. . . . . : [60]
7) Diagnostic Level. . . . . : [1]
8) AutoEdit Inline. . . . . (Y|N): [N]
9) Comm Trace. . . . . (0-OFF|1-ON) : [0]
10) CTMS Address Mode . . . . . (IP|) : []
11) Days To Retain Log Files. . . . . : [1]
12) Daily Log File Enabled. . . . . (Y|N): [Y]
13) Timeout for Agent utilities . . . . : [600]
14) Protocol version. . . . . : [06]
15) Listen to Net Card . (*ANY for all): [*ANY]
16) SSL . . . . . (Y|N): [N]
17) Common Event mechanism. . . . . (Y|N): [Y]
18) Tracker Port. . . . . : [7009]
19) Persistent Connection. . . . . (Y|N): [Y]
20) Allow Comm Init. . . . . (Y|N): [Y]

s) Save and Restart CONTROL-M/Agent Services

q) Quit

Enter your choice: q
    
```

For an explanation of the parameters in the `ctmagcfg` utility, refer to [Table 8](#) and [Table 9](#).

ctmwincfg

This section provides information about the `ctmwincfg` utility.

NOTE



This utility can also be accessed as a Java application. For more information, refer to the “Win CM tab” on page 51.

To access the `ctmwincfg` utility, enter `ctmwincfg` from a command prompt.

```

Agent Configuration Utility
Agent Name: Default

      CM Name : WIN
      CM Type : WIN2K

1)      Logon As User (Y/N) . . . . . : [N]
2)      Logon Domain. . . . . : []
3)      Domain Controller . . . . . : []
4)      Default Printer . . . . . : []
5)      E-mail User Account . . . . . : []
6)      E-mail User Account Password. . . . . : [*****]
7)      Add Job Object statistics to Sysout (Y/N) . . : [Y]
8)      Sysout Name. . . . . (MEMNAME|JOBNAME) . . : [MEMNAME]
9)      Job children inside job object . . . (Y/N) . . : [Y]
10)     Wrap parameters with double quotes . (1-4) . . : [4]
11)     Run user 'Logon Script' (Y/N) . . . . . : [N]
12)     CD to user 'Home Dir' (Y/N) . . . . . : [N]

s)      Save and Restart CONTROL-M/Agent Services
q)      Quit

Enter your choice:

```

For a description of the parameters in the `ctmwincfg` utility, refer to Appendix A. If the parameter you want to modify is not listed, see the “[Agent Configuration Utility](#)” on page 47.

ctmfw Utility (File Watcher)

The File Watcher utility, `ctmfw`, can be used to detect the

- successful completion of a file transfer activity
- creation of a file
- deletion of a file

`ctmfw` can be used before activating a job or before performing a task (for example, sending a shout message or adding and deleting conditions) that is dependent upon creation or deletion of a file.

The `ctmfw` utility runs as a process on a client machine. The process waits for the creation or deletion of specified files.

- For a file transfer activity, when the file is detected, the job continues to monitor the size of the file. When the file reaches a specified minimum size and does not increase in size for a specified period of time, the File Watcher utility either completes with a status of **OK** or executes a specified **DO** action. **DO** actions can consist of adding or deleting conditions or executing a command.
- For file creation, file size is ignored if a wildcard is specified as part of the filename unless the `mon_size_wildcard` parameter is set to **Y**.
- For file deletion, `ctmfw` must first detect the existence of the file before it can detect its deletion.

The `ctmfw` utility can also be run from the command line, or be invoked to detect either a single file or multiple files.

Usage as a Service

As a service, `ctmfw` takes its parameters (rules) during startup from the `rull.dat` file whose full path name is specified in `<CONTROL-M/Agent>\data\ctmfw.cfg`.

To change one or more rules, change the contents of the `rull.dat` file or specify the full path name of a different file.

NOTE



The `rull.dat` file provided with CONTROL-M/Agent is a sample file and should be changed to reflect your requirements.

The full path name to the `ctmfw.cfg` configuration file must be specified under the following Microsoft Windows registry key that is generated automatically by the installation script:

```
HKEY_LOCAL_MACHINE\SOFTWARE\BMC Software\
CONTROL-M/FileWatcher\SYSPRM\File Watcher
Configuration File
```

The default value for this key is

```
<CONTROL-M/Agent_install_directory>\DATA\ctmfw.cfg
```

NOTE



BMC Software recommends that this default value not be changed.

The configuration file must contain the following line:

```
-input <rule_file_name>
```

The variable **<rule_file_name>** is the full path name of a rule file containing the File Watcher rules. The following is a sample rule file.

Figure 3 Sample Rull.dat file

```
INTERVAL 5
FROM_TIME 0001
MIN_SIZE 50
MIN_DETECT 5
WAIT_TIME 2
ON_FILEWATCH NONEXIST CREATE 10 3 1
THEN
DO_CMD "BAD FILE WAS CREATED IN 1 MINUTE"
DO_COND ON_2 0101 +
ELSE
DO_CMD "GOOD FILE WAS NOT CREATED IN 1 MINUTE"
DO_CMD ctmshout -USER ECS -MESSAGE "Running the Filewatcher on with
default configuration!"
END_ON
```

Network Resources

The FileWatcher service running under the local system account cannot detect network resources (files located on remote systems). If you want the File Watcher to detect network resources, configure the FileWatcher Service to run under a regular user account.

FileWatcher Service Trace

When running as a service, **ctmfw** generates an execution log file. This file is saved in the CONTROL-M/Agent **prolog** directory under the following name:

```
U_CTMFW_<process_id>.log
```

By default, logs in the **prolog** directory are retained for 3 days. If the “maximum days to retain sysout” parameter is set to a number higher than 3, logs are retained for the number of days specified in that parameter.

Sample trace file

Figure 4 Sample Trace File Output

```

2002/03/10 13:04:24 182 FW: set
INTERVAL=3
2002/03/10 13:04:24 182 FW: set
MIN_SIZE=4
2002/03/10 13:04:24 182 FW: set
FROM_TIME=0909
2002/03/10 13:04:24 182 FW: ctmfw: command line 'ON_FILEWATCH tst CREATE' (arg#=3).
id=1.
2002/03/10 13:04:24 182 FW: ctmfw: command line 'ON_FILEWATCH prd CREATE 0 0 1 NOW
10' (arg#=8) id=2
2002/03/10 13:04:24 182 FW: ctmfw: command line 'ON_FILEWATCH abc DELETE 0 0 1 NOW
10' (arg#=8) id=3
2002/03/10 13:04:24 182 FW: File 'test' exists, its current size is 265.
id=1.
2002/03/10 13:04:24 182 FW: File 'test' has reached the minimum size of 4.
size=265 bytes id=1.
2002/03/10 13:04:24 182 FW: File 'abc' does not exist.
id=3.
2002/03/10 13:04:36 182 FW: File transfer was completed. The size of file 'test'
is 265. id=1.
2002/03/10 13:04:36 182 FW: Executing: <ctmcontb add 'aaa'
'0101' >
2002/03/10 13:05:09 182 FW: Executing: <dir
>
2002/03/10 13:05:27 182 FW: File 'prd' was not CREATED within the time limit.
id=2.
2002/03/10 13:05:27 182 FW: File prd will be scanned at 1315.
id=2.
2002/03/10 13:05:27 182 FW: File 'abc' was not DELETED within the time limit.
id=3.
2002/03/10 13:05:27 182 FW: File abc will be scanned at 1315.
id=3.
2002/03/10 13:05:30 182 FW: File prd, is out of time window. next time: 1315,
id=2.
2002/03/10 13:05:30 182 FW: File abc, is out of time window. next time: 1315,
id=3.
2002/03/10 13:15:01 182 FW: File prd, entered the time window from '1315' for
monitoring, id=2.
2002/03/10 13:15:01 182 FW: File abc, entered the time window from '1315' for
monitoring, id=3.

```

Usage as a Utility

When running as a utility, ctmfw is invoked from the command line. Rules can be provided on the command line or by a rule file.

To watch a single file

The syntax of the ctmfw utility is

```
ctmfw FILE (absolute path)
  < mode (CREATE|DELETE)> Default: CREATE
  < minimum detected size <number>
  [' ' |Bytes(B)|Kilo(K)|Mega(M)|Giga(G)] >Default: 0
  < interval between file search (seconds) > Default: 60sec
  < interval between filesize comparison iterations (seconds) >
  Default: 10sec
  < number of iterations while the size is static > Default: 3 iterations
  < time limit for the process (minutes). Default: 0 (no time limit)
  Effective while the file does not exists or,
  the file size is static and the minimum size
  was not creached >
  < monitor file size when wildcard is used > Default: N
  < starting time for detecting files (HHMM or YYYYMMDDHHMM >
  Default: NOW
  < absolute stop time (HHMM or YYYYMMDDHHMM > Default: 0 ( No stop time )
  < minimal age of file ( modified time )
  format: xxxxYxxxxMxxxxDxxxxHxxxxMi n > Default: 0
```

The parameters of the ctmfw utility are described in [Table 10](#).

All parameters have to be assigned a value, even if that value is zero. If only six values are specified, the default value for **mon_size_wildcard** is used. If five parameters are specified, default values for **wait_time** and **mon_size_wildcard** are used, and so forth.

— EXAMPLE —

```
ctmfw c:\watchedfile.txt CREATE 100 10
```

is resolved using default values for **mon_int**, **min_detect**, **wait_time**, and **mon_size_wildcard** as follows:

```
ctmfw c:\samplefile.txt CREATE 100 10 10 3 0 N
```

Table 10 ctmfw – Parameters (Part 1 of 3)

Parameter	Description
FILE	Path of the file to be detected. The file name can include mask character * to represent any number of characters (including no characters) or ? to represent any one character.

Table 10 ctmfw – Parameters (Part 2 of 3)

Parameter	Description
mode	CREATE Detects creation of a file. Default. File size is ignored if the filename parameter contains wildcards (unless the monitor file size when wildcard is used parameter is set to Y). Note: If a mask is specified for the filename, and the monitor file size when wildcard is used parameter is set to <ul style="list-style-type: none"> ■ N, the ctmfw utility will end OK after detection of the first file that matches the specified mask. ■ Y, the ctmfw utility will end OK after detection of the first file that matches the filename and file size.
	For more information about monitor file size when wildcard is used , see below.
	DELETE Detects deletion of a file. When the ctmfw utility is run in this mode, it first checks for files that match the specified name. After a specified file is detected, the ctmfw utility checks at the specified interval for deletion of that file.
	Note: If a mask is specified as the filename, the ctmfw utility will end successfully only after all detected files that match the specified mask have been deleted.
minimum detected size	Minimum file size in bytes. This parameter is ignored if the FILE parameter contains wildcards (unless the monitor file size when wildcard is used parameter is set to Y) or if the mode parameter is set to DELETE . Default: 0 (any size detected).
interval between file searches	Interval between successive attempts to detect the existence/deletion of a file (in seconds). Default: 60
interval between filesize comparison iterations	Interval between attempts to monitor the size of a file after it is detected (in seconds). This parameter is ignored when using wildcards in FILE or when using DELETE mode. Default: 10
number of iterations while size is static	Number of attempts to monitor file size where the size remains static and greater than or equal to minimum detected size (indicating successful creation of the file). This parameter is ignored when using wildcards in FILE or when using DELETE mode. Default: 3
time limit for the process	Maximum time (in minutes) to run the process without detecting the file at its minimum size (CREATE) or detecting its deletion (DELETE). If the file is not detected/deleted in this specified time frame, the process terminates with an error return code, as described in Table 13 . Default: 0 (no time limit).
monitor file size when wildcard is used	Indicates whether file size should be monitored if the filename contains wildcards. This parameter is ignored if the filename does not contain a wildcard. Valid values: N – do not monitor file size. Default. Y – monitor the file size. If this parameter is set to Y and more than one file matches the specified mask, the ctmfw utility randomly selects one matching file, monitors its file size, and ignores all other matching files.

Table 10 ctmfw – Parameters (Part 3 of 3)

Parameter	Description
start_time	Indicates an absolute time at which the utility starts monitoring the file. For example, 200512061400, would mean that at 2 PM on December 6th, 2005 the FileWatcher utility will stop watching the file. Alternatively, you can use the HHMM format, in which case the current date is used.
stop_time	Indicates an absolute time at which the utility is no longer watches the file. For example, 200102061400, means that at 2 PM on December 6th, 2005 the FileWatcher utility will stop watching the file. Alternatively, you can use the HHMM format, in which case the current date is used.
min_age	Indicates the minimum amount of time that must have been passed since the file you want to watch was last modified. For example, 2y3d5h means that 2years, 3 days, and 5 hours must pass before the file will be watched. Entering a value of 2H10Min, means that 2 hours and 10 minutes must pass before the file will be detected. This parameter is ignored if the mode parameter is set to DELETE . Default: 0

To watch multiple files

Use the following command to invoke the ctmfw utility for multiple files

```
ctmfw -input <rule_file_name>
```

The variable **<rule_file_name>** is the complete path name of the file containing the definitions for each file to be detected.

Sample Rule File

Figure 5 displays a sample rule file. In this sample:

- # indicates comments.
- Default values are shown for all global parameters.
- **<action>** refers to any of the actions described in [Table 12](#).

Figure 5 Sample Rule file

```

#*****
# Global Parameters
INTERVAL <60> # Sleep interval (seconds)
MIN_SIZE 4Kilo
MIN_AGE 3M24D4h5min
FROM_TIME <0000> # Starting time for all files (hhmm)
MIN_SIZE <0> # Minimum size for all files (bytes)
MIN_DETECT <3> # Number of iterations for all files
WAIT_TIME <0> # Time limit for all files (minutes)

# ON_FILEWATCH statements
ON_FILEWATCH <filename>(absolute path) [CREATE/DELETE] [min_size] [min_detect]
[wait_time]
[start_time] [cyclic_interval] [wildcards] [minimal_file_age]
THEN
<action>
ELSE
<action>
END_ON
#*****

```

NOTE

All global parameters must be delimited by the new line character.

The rule file contains two sections:

- Global parameters, whose default values apply to all the files in the rule file.
- **ON_FILEWATCH** statements identifying which files to detect, specific criteria for each file, and the action to take upon detection or non-detection. Any number of **ON_FILEWATCH** statements can appear in a rule file.

NOTE

All keywords must be entered in uppercase.

Table 11 Rule file Global Parameters (Part 1 of 2)

Parameter	Description
INTERVAL	Sleep interval (in seconds) between successive scans for all the files. This parameter replaces individual sleep_int and mon_int parameters for each file. Default: 60
MIN_SIZE	Minimum file size in bytes. This parameter is ignored if the FILE parameter contains wildcards (unless the monitor file size when wildcard is used parameter is set to Y) or if the mode parameter is set to DELETE . Default: 0 (any size detected).

Table 11 Rule file Global Parameters (Part 2 of 2)

Parameter	Description
MIN_AGE	Indicates the minimum amount of time that needs to have passed since the file you want to watch was last modified. For example, 2y3d5h means that 2years, 3 days, and 5 hours must pass before the file will be detected. This parameter is ignored if the mode parameter is set to DELETE . Default: 0
FROM_TIME	Starting time for detecting all the files (default FROM_TIME). Used with WAIT_TIME to identify the time frame for detecting and monitoring the files. This parameter is expressed in 24-hour, hhmm format. Default: 0000 or Now
STOP_TIME	Indicates an absolute time at which the file is no longer watched. For example, 200502061400, means that at 2 PM on February 6th, 2005 the FileWatcher utility will stop watching the file. You can also use the HHMM format, which uses the current date, plus the HHMM entered. Default: 0 (meaning, no stop time) Note: STOP_TIME can only be used as a global parameter.
CYCLIC_INTERVAL	Indicates the interval between multiple operations of detecting the file (in minutes). This interval must be greater than the value for WAIT_TIME. If the cyclic_interval is 0, only one attempt to detect the file will be performed. Default: 0
MON_SIZE_WILDCARD	Indicates whether file size should be monitored if the filename contains wildcards. This parameter is ignored if the filename does not contain a wildcard. Valid values: N – do not monitor file size. Default. Y – monitor the file size. If this parameter is set to Y and more than one file matches the specified mask, the ctmfw utility randomly selects one matching file, monitors its file size, and ignores all other matching files.

NOTE

For a description of the ON_FILEWATCH parameters, refer to [Table 10 on page 59](#).

If any mandatory parameter is omitted from a rule file, the default value for that parameter is used. Parameters entered for **ON_FILEWATCH** statements override the default values. If entered, they must appear in the order shown in [Figure 5](#).

Table 12 ctmfw – Valid Actions

Action	Description
DO_COND <condition name> <condition date> <+ ->	Add (+) or delete (-) a condition.
DO_CMD <command>	Execute a valid command under the command interpreter. Full path names are required for files.

Table 12 ctmfw – Valid Actions

Action	Description
DO_OK	Terminate ctmfw with status OK . If there is more than one file in the Rule file, the result displayed is that of an AND algorithm.
DO_NOTOK [exit code]	Terminate ctmfw with status NOTOK . Exit code is optional and replaces the standard return code, as described in Table 13 .

- If the file is detected and the size remains static within the time frame (**CREATE**) or the file has been deleted (**DELETE**), the **DO** commands in the **THEN** block are executed.
- If the file is not detected or deleted within the time frame, the statements following the **ELSE** block are executed.
- ctmfw terminates when all the files in the rule file have been processed.

NOTE



If an ON_FILEWATCH statement contains a **cyclic_interval** parameter, ctmfw will only stop monitoring a file on a DO_OK or DO_NOTOK action.

Example 1

The ctmfw utility is invoked to watch multiple conditions. The definitions the ctmfw utility uses for watching each file are contained in a rule file.

The following instructions are defined in the rule file:

- The sleep interval between succeeding scans must be 10 seconds.
- If the ctmfw utility detects that the file **datafile.txt** in directory **c:\controlm** is created in the specified time interval, then:
 - condition **datafile** dated 1 January must be added.
 - The command interpreter must execute the command to move the contents of the **c:\ctm\datafile.,txt** to **c:\ctm\workfile.txt** file.
- If the ctmfw utility detects that the **datafile.txt** file in the **c:\controlm** directory is not created in the specified time interval, then condition **datafile** dated 1 January must be deleted.
- When the ctmfw utility detects that the **c:\ctm\tempfile.txt** file is deleted, condition **tempfile** dated 1 January must be deleted.

```

#*****
INTERVAL 10
ON_FILEWATCH \ctmsrv\datafile.txt CREATE
THEN
DO_COND datafile 0101 +
DO_CMD move \ctm\datafile.txt \ctm\workfile.txt
ELSE
DO_COND datafile 0101 -
END_ON
ON_FILEWATCH \ctm\tempfile.txt DELETE
THEN
DO_COND tempfile 0101 -
END_ON
#*****

```

Example 2

A job processing definition is created to implement a File Watcher job. The file must arrive between 19:00 and 22:00, and be created in the **\tmp** directory under the name **trans.dat**. The minimum file size is 100 bytes. The detection process should be performed each minute. The file size monitored every 10 seconds, and the number of intervals where the file size remains static is 5. If the file is not detected by 22:00, an alert should be sent to CONTROL-M/Enterprise Manager.

Parameter	Value
Job Name	FileWatch
Mem Name	FileWatch
Owner	<control_m_user>
From Time	1900
Command line	ctmfw "\tmp\trans.dat" CREATE 100 60 10 5 180
On Statement/Code processing:	
Stmt	*
Code	COMPSTAT=0
Do Cond	file_trans_dat_ok Date: ODAT Sign: +
Stmt	*
Code	COMPSTAT=1
Do Shout	To: CONTROL-M/Enterprise Manager Text: "File trans.dat did not arrive on time"

The ctmfw utility processes On Statement/Code combinations in the following order:

1. On Statement/Code combinations related to sysout, for example:
ON "*cp aaa bbb*" "*not found*"
2. On Statement/Code combinations based on the state {OK | NOTOK} of the job, for example:
ON "*" "NOTOK"

Return Codes

The return codes listed in [Table 13](#) are issued by the ctmfw utility after detecting if a file is created or deleted in the specified time frame.

Table 13 ctmfw – Return Codes

Return Code	Description
0	File successfully created or deleted (file arrived in the specified time frame and file size is above or equal to the minimum specified size).
1	<ul style="list-style-type: none"> ■ Utility failed. For example, because of a syntax error. ■ A DO_NOTOK statement occurred, but no user-defined exit code was provided for the DO_NOTOK statement.
7	Indicates that the ctmfw request timed out. That is, the file was not detected in the specified time frame.

File Watcher Silent Mode Registry Key

The FileWatcher service does not open an additional window during execution. If you want visual feedback while running the service, the following registry key setting must be changed to **N**.

```
HKEY_LOCAL_MACHINE\SOFTWARE\BMC_Software\
CONTROL-M\FileWatcher\SYSPRM\Silent_Mode
```

ctmpwd Utility

This utility adds, updates, and deletes CONTROL-M/Agent users and passwords. In addition, it changes security settings for the agent directories and cmd.exe. It also lists all users in the CONTROL-M/Agent password file. (This utility replaces the **ctmcpd** utility in earlier versions.)

To run ctmpwd, you must be an administrator on the computer. In addition, Windows 2000 users user running the utility must have the proper privileges defined in the **Act as part of operating system** parameter of the Local Security Settings application on the target machine.

NOTE



You must manually give **Logon as a batch job** rights to a new user. (See “[How to Assign User Rights to Agent Users](#)” on page 28.)

Syntax

```
CTMPWD -ACTION ADD|UPDATE|DELETE|LIST [-USER <user name>] [[-OLD_PASSWORD  
<val ue>] -PASSWORD <val ue>] [-ADMIN_PASSWORD <val ue>]] -AGENT <agent name> -GROUP  
<group name>
```

Examples

add a user and password

```
ctmpwd -action add -user user1 -password 12345
```

add the administrator user

```
ctmpwd -action add -user admin -password abcde
```

update a password

```
ctmpwd -action update -user user1 -old_password 12345 -password 67890  
or  
ctmpwd -action update -user user1 -admin_password abcde -password  
67890
```

delete a user

```
ctmpwd -action delete -user user1 -password 12345  
or  
ctmpwd -action delete -user user1 -admin_password abcde
```

list all users

```
ctmpwd -action list
```

add a user to Agent Saturn

```
ctmpwd -action add -user user3 -password 654321 -agent Saturn
```

Table 14 ctmpwd utility – parameters

Parameter	Description
action	Function to be executed. Valid values: add , update , delete , and list .
user	Name of the user.
old_password	Current password for the update function.
password	Current password for the delete function. New password for the add and update functions.
admin_password	Password for the CONTROL-M/Agent administrator when executing the update or delete function if the old_password is not known.
verify	Verifies that the user and password. Valid values are: <ul style="list-style-type: none"> ■ Y (default) ■ N - Does not verify that the user and password are correct.
group	Adds the group SID (instead of the user SID) to cmd.exe and the agent directories.
agent	Name of the Agent that the utility is designated to run on. For more information, see “Invoking A Utility On A Computer With Multiple Agents” on page 43 .

- In the following example, the ctmpwd utility enables the CONTROL-M/Agent administrator to modify passwords for users who have forgotten their password.

EXAMPLE

```
-admin_password
```

BMC Software recommends that the administrator first use the following command to establish a password for user ADMIN:

```
ctmpwd -action add -user ADMIN -password <user_admin_password>
```

- In the following example, the user is added but the group’s SID is registered.

EXAMPLE

```
ctmpwd -action add -user user1 -password user1 -group Everyone
```

Agent Check utility

The CONTROL-M Agent Check Utility (ACU) is a tool that collects information and diagnostic data about the CONTROL-M Agent installation, execution state, and target environment. The data collected by the ACU is designed to assist CONTROL-M/Agent administrators and BMC technical support engineers to troubleshoot, fine-tune, and maintain the CONTROL-M/Agent.

With this tool, you can send generated reports to interested parties using e-mail or FTP to BMC Software (<ftp://ftp.bmc.com/incoming>). You can then print the report to a hierarchical XML file, or save the report as a text file.

This utility is located at `<agent_directory>\EXE\` and can be run from either the command prompt or Windows Explorer.

To start the ACU application:

- 1 Open a command prompt window by typing `cmd` in **Start > Run**.
- 2 Enter the command `acu_gui` to run the Java application

or

`acu` to run the application from the command line.

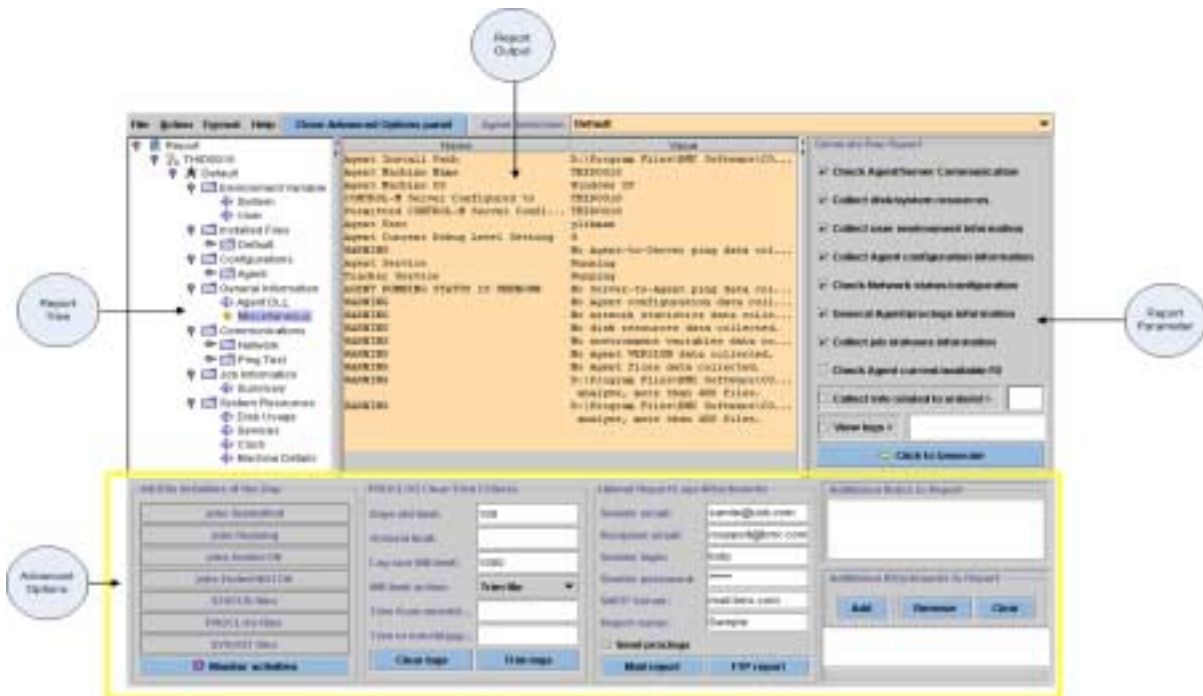
For information about running ACU from the command line, refer to “[Command line usage](#)” on page 72.

Using ACU

The ACU is divided into the following panels:

- Report tree
- Report output
- Report parameters selection
- Advanced Options panel

Figure 6 Agent Check Utility Window



Report Parameter selection

The right-most panel of the ACU is used to select the data that you want to include in your report.

Table 15 Report Parameters

Parameter Name	Description
Check Agent/Server Communication	Selecting this option runs the ag_ping utility. This utility verifies that CONTROL-M/Server is active on the Server computer connected to the Agent computer.
Check Network status/configuration	Selecting this option provides information about the network configuration and statistics using the netstat and ipconfig commands.
Collect Agent configuration information	Selecting this option provides information about the agent on which you ran the report. This runs the ctmagcfg and ctminwcfg utilities, checks the dll versions and configurations for the agent and CMs installed, and lists the files installed.
Collect disk/system resources	Selecting this option provides system information about the memory in use, free disk space, number of processes running, and so on.
Collect info related to orderid	Selecting this option collects information from files with names containing the specified orderid or information related to the specified orderid.

Table 15 Report Parameters

Parameter Name	Description
Collect job statuses information	Selecting this option provides you with information about the number of jobs processed since the last NewDay procedure, their status, job start time, job end time, and so on.
Collect user environment information	Selecting this option provides Java-applications system information and user specific information, such as root directories, domain, path, and so on.
General Agent/proclogs information	Selecting this option enables you to activate the newly configured debug level and start collecting the log files from the PROCLOG directory. The logs can then be transferred through e-mail or ftp (if it is a large size zip file) in zipped format.
View logs	Selecting this option opens a browser window from which you can select log files to attach to the generated report. You can then view the content of the attached log files in the output panel.

Report tree

Once you select the areas for which you want to collect data and generate the report, a report tree appears on the left side of the screen. This tree lets you drill down into the various report parameters and select them for viewing in the Output panel.

Output panel

The Output panel is where the data of the selected parameters is displayed. You can save, print, or e-mail the information for further analysis.

Advanced Options

The Advanced options panel enables you to view additional information about the day's activities, define parameters by which the PROCLOG files are saved, enter mail and FTP information for sending and uploading reports, and so on.

Printing

You can print a generated or uploaded report or save it as a text file using the **File > Print** menu option.

Figure 7 Print window

To print the report, click **Print**. To save to a text file, click **Save** and enter a file name in the Save window.

Command line usage

To run ACU as a command line utility, enter the command **acu** with the relevant parameters. When ACU runs as a command line utility, a report of the ACU output is automatically saved to the `\<agent_directory>\temp` directory.

NOTE



If you are not using the default agent, you must write the agent name as the first parameter in the command line.

Syntax

```

acu [agent/<name>] [all] [silent] [system] [environment]
    [configuration] [ping] [analyze] [jobinfo] [network]
    [orderid/<orderid num>]
    [ftpls/<ftp_server> ftpdir/<ftpdir> filename/<filename>]
    [mailreport/<from>/<to>/<id>/<pwd> mailsmtp/<smtp server>
    [maillog]]
  
```

Table 16 lists the command line parameters and their descriptions.

Table 16 Command line parameters

Parameter	Description
agent <name>	Used to specify an agent when more than one agent installation exists. When used, this parameter must be first.
all	Collects information for all options, including ping, environment, system, network, configuration, and analyze.
analyze	Analyzes the Agent logs and provides information about the possible symptom and its solution.
configuration	information about the agent on which you ran the report.
environment	Collects system information and user specific information, such as root directories, domain, path, and so on.
filename	The name of the ZIP file you are uploading to the BMC Software ftp site.
ftkdir	Specify the directory into which the ZIP file is uploaded.
ftplogs	Zip the Agent PROCLOG directory and upload it to the BMC ftp server.
jobinfo	Provides information about the number of jobs processed since the last NewDay procedure, their status, job start time, job end time, and so on.
maillog	Zip the Agent PROCLOG directory and attach it to the e-mail.
mailreport	Output the report to a specific e-mail address.
mailsmtp	Specify the smtp server of the corresponding e-mail address.
network	Collects information about the network configuration and statistics.
orderid	Collects information from the files with names containing the specified orderid or information related to the specified orderid.
ping	Checks the connection between CONTROL-M/Agent and CONTROL-M/Server.
silent	Run the utility with no on-screen output.
system	Collects information about system resources.

Command line examples

- In the following example, ACU collects all the information about a specific agent and outputs it to your screen and to the `/<agent_directory>/temp` folder.

— EXAMPLE —

```
>acu all
```

- In the following example, ACU checks the connection between the Agent and Server and collects information about the system, environment, and agent configurations.

— **EXAMPLE** —

```
>acu ping network configuration system environment
```

- In the following example, ACU collects all the information about a specific agent and sends the information, including all the logs from the `\<agent_directory>\proclog` directory, to a specific e-mail address using the corresponding smtp server.

— **EXAMPLE** —

```
>acu all mailreport/user@domain.com/support@bmc.com  
mailsmtp/mail.domain.com maillog
```

- In the following example, ACU collects all the information about a specific agent and uploads the information to the BMC ftp site.

— **EXAMPLE** —

```
>acu all ftplogs/ftp.bmc.com ftpdir/incoming filename/case_4684
```

Defining Microsoft Windows Jobs

You can define CONTROL-M jobs with the CONTROL-M/Desktop Job Editing form or with the CONTROL-M/Server `ctmdefine` and `ctmcreate` utilities.

The Job Editing form contains a series of panels. Each panel contains parameters whose value you can specify using this form. A job skeleton (template) determines the parameters that are included in the job.

When a job skeleton is designed for Microsoft Windows jobs, a special WIN panel is present in the Job Editing form. You can use this panel to define optional job object parameters that can be used for a Microsoft Windows job.

The following tasks are described in this chapter:

- “Creating a Job Skeleton for Microsoft Windows Jobs” on page 75.
- “Creating a Microsoft Windows Job” on page 78.
- “Setting Job Object Limits for a Microsoft Windows Job” on page 80
- “Viewing a Job Object” on page 83

Microsoft Windows Job Object Parameters are described on page 81.



NOTE

For more information about the Job Editing form and Job parameters, see the *CONTROL-M/Desktop User Guide* and the *CONTROL-M Job Parameter and Variable Reference Guide*.

Creating a Job Skeleton for Microsoft Windows Jobs


Use this procedure to prepare a skeleton (template) for Microsoft Windows jobs in CONTROL-M/Desktop.

Before You Begin

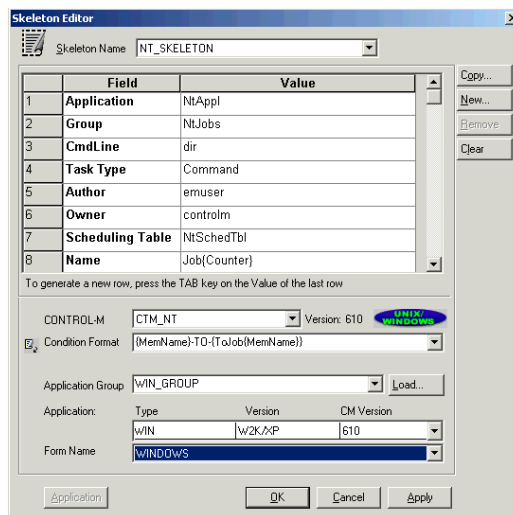
- Ensure that the **windows.xml** file was imported on computers where CONTROL-M/EM client components are installed. For instructions, see the section that deals with Importing WIN Panel Functionality in the *CONTROL-M Installation Guide*.
- Look for a skeleton that resembles the skeleton you want to define. If you find one, you can use it as a template.

Creating or Modifying a Skeleton

1 Open the Skeleton Editor using one of these methods:

- Choose **Tools => Skeleton**.
- Click **Edit Skeleton**  on the toolbar.
- Click **Edit Skeletons** in the **Mass Create Form** dialog box.

A window similar to the following is displayed:



- 2 Choose the required CONTROL-M from the drop-down list.
- 3 Click **Application**. An additional section of the Skeleton Editor is displayed.
- 4 In the **Application Group** field, you can specify either
 - the name of the CONTROL-M/Agent, or
 - the Node Group

To specify an Agent, manually enter the name of the Agent.

To specify a Node Group, manually enter the name of the Node Group, or click Load to generate a list of Application Node Groups.

Select the required Node Group, and click OK. If the required Node Group is not displayed in this list, the `ctmgetcm` utility was not run properly. For information, refer to [“Creating a CM Definition in CONTROL-M” on page 78](#).

5 In the application field:

- If you specified the Application Node Group field manually, you must specify an applicable set of values from the list.
- If you chose the Application Node Group field from the Load list, this field is automatically specified according to your selection.

NOTE



If CONTROL-M/Desktop is not connected to CONTROL-M/EM, enter the Application Type, Version, and CM Version information manually.

6 In the **Form Name** field, select **WINDOWS**, then click **OK**.

Where to Go from Here

Subject	Location
Defining a Skeleton	For more information about defining a skeleton, see Chapter 5 of the <i>CONTROL-M/Desktop User Guide</i> .
Defining a Job	For information about defining a job, see “Creating a Microsoft Windows Job” on page 78 . Also see Chapter 3 of the <i>CONTROL-M/Desktop User Guide</i> .

Defining the CM in CONTROL-M

Use this procedure to define the CM in CONTROL-M and install the Job Editing form using `ctmgetcm`.

Before you Begin

- Ensure that the `windows.xml` file was imported on computers where CONTROL-M/EM client components are installed. For instructions, see *Importing WIN Panel Functionality* in Chapter 13 of the *CONTROL-M Installation Guide*.
- Create a job skeleton. For more information, see [“Creating a Job Skeleton for Microsoft Windows Jobs” on page 75](#).

Creating a CM Definition in CONTROL-M

In CONTROL-M/Server

- 1 Define a group name with application type **WIN**.
- 2 Specify the CONTROL-M/Agent as a node ID in the node group.
- 3 Define the <agent_name> in a node group of type WIN (WIN must be in capital letters).
- 4 Specify `ctmgetcm` to collect application server information from CONTROL-M/Agent using the following command

```
ctmgetcm -nodeid <agent_name> -appl type WIN -action get
```

In CONTROL-M/EM

- 1 Install the CONTROL-M/Agent for Microsoft Windows form. For more information, see [“Creating a Job Skeleton for Microsoft Windows Jobs” on page 75](#).
- 2 Modify the skeleton according to your requirements. Click **Application** in the Skeleton Editor. See [page 75](#).
- 3 Click **Load**. The node groups available from CONTROL-M/Server are displayed. Select the required node group.

Where to Go from Here

Subject	Location
Defining a Skeleton	For more information about defining a skeleton, see Chapter 5 of the <i>CONTROL-M/Desktop User Guide</i> .
Defining a Job	For information about defining a job, see “Creating a Microsoft Windows Job” on page 78 . Also see Chapter 3 of the <i>CONTROL-M/Desktop User Guide</i> .

Creating a Microsoft Windows Job

Use this procedure to create a new CONTROL-M job processing definition for a Microsoft Windows job.

Before you Begin


- Ensure that the **windows.xml** file was imported on computers where CONTROL-M/EM client components are installed. For instructions, see *Importing WIN Panel Functionality* in Chapter 13 of the *CONTROL-M Installation Guide*.
- Ensure that a job skeleton was defined for Microsoft Windows jobs. For more information, see “[Creating a Job Skeleton for Microsoft Windows Jobs](#)” on page 75.
- The job name of the Windows job you want to create must contain only characters (letters, digits, underscore) that can be used in a Microsoft Windows file name.

NOTE



When CONTROL-M/Agent handles a large number of jobs on a computer with Microsoft Windows 2000 Professional, the following message may be displayed "**Application error 142**".

Creating a Microsoft Windows Job

- 1 Select a skeleton for Microsoft Windows jobs from the **Current Skeleton** drop-down list in CONTROL-M/Desktop.
- 2 Choose one of the following:
 - **Edit => Job => New** from the menu bar
 - Press **Ctrl + J**
 - Click 

NOTE



For descriptions of all panels in the Job Editing form, see Chapter 3 of the *CONTROL-M/Desktop User Guide*.

- 3 Click the **WIN** tab of the Job Editing form.

The WIN panel is used to set parameter values for some Microsoft Windows jobs. This process is described in “[Setting Job Object Limits for a Microsoft Windows Job](#)” on page 80.

NOTE



For more information about the Job Editing form and Job Editing parameters, see the *CONTROL-M/Enterprise Manager User Guide* or the *CONTROL-M/Desktop User Guide*.

Setting Job Object Limits for a Microsoft Windows Job

Use this procedure to specify values for job object limitation parameters in the WIN panel of the Job Editing Form. If a value is not specified for a parameter, that parameter does not limit the job in any way.

Before you Begin

The **WIN2K** skeleton is used for defining job object limitations. If this skeleton does not exist, see [“Creating a Job Skeleton for Microsoft Windows Jobs”](#) on page 75.

To view the characteristics of the job object whose attributes are to be specified, see [“Viewing a Job Object”](#) on page 83.

NOTE

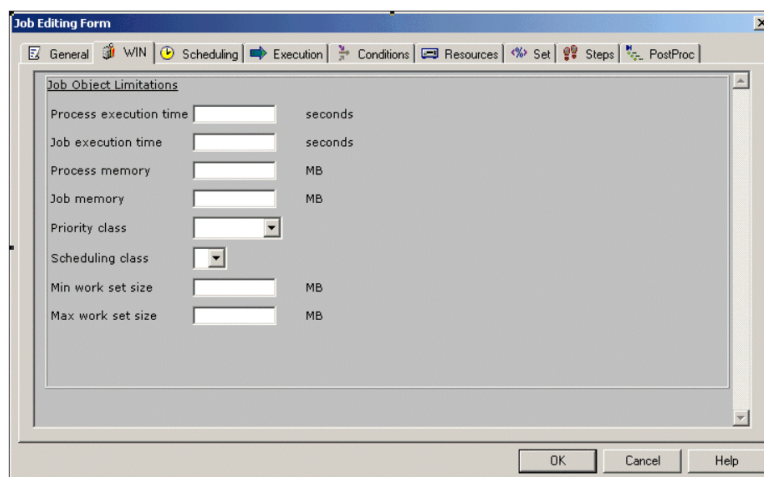


In messages, “job object” may be abbreviated as **JO**.

Setting Job Object Limits for a Microsoft Windows Job

- 1 Click the **WIN** tab of the Job Editing form. The WIN Panel is displayed.

Figure 8 WIN Panel



WIN panel parameters are described in [Table 17](#) on page 82. All these parameters are optional.

- 2 Specify new data or modify existing data in the WIN Panel.

- 3 When you are satisfied with the data in the WIN panel, click **Save to Draft** to save the parameter specifications.

Where to Go from Here

The following table describes where you might find information about tasks that are related to this one.

Subject	Location
Defining additional Microsoft Windows jobs	You can now define additional Microsoft Windows jobs by clicking the WIN tab of the Job Editing form.
Viewing jobs you have created or modified	Click Cancel to exit the WIN Panel and go to the Active environment to view the jobs you have created or modified.
Defining jobs	For information about defining jobs, see Chapter 3 of the <i>CONTROL-M/Desktop User Guide</i> .

Microsoft Windows Job Object Parameters

WIN panel parameters are described in [Table 17](#). This table also contains the names of the corresponding AutoEdit variables that can be included on the command line or in a parameter input file when invoking the CONTROL-M/Server `ctmcreate` or `ctmdefine` utilities. For example,

```
-autoedit %%WIN2K-PRIORITY_CLASS = "ABOVE_NORMAL_PRIORITY_CLASS"
```



NOTE

Values entered in WIN panel fields are validity checked. Values entered on the command line or in a parameter input file are not validity checked.

Except for Priority class and Scheduling class, all of these parameters can have decimal values (real numbers). Unless stated otherwise, maximum and minimum values are machine dependent.

Table 17 Microsoft Windows Job Object Parameters

WIN Panel Parameter	Definition and AutoEdit Variable for CONTROL-M/Server
Process execution time	Maximum CPU time, in seconds, for each process in a job. Minimum: 0.1 . Maximum: 1.8 x 1012 . %%WIN2K-PER_PROCESS_USER_TIME_LIMIT
Job execution time	Maximum CPU time, in seconds, for entire job. Min: 0.1 . Max: 1.8 x 1012 %%WIN2K-PER_JOB_USER_TIME_LIMIT
Process memory	Maximum memory, in megabytes, allowed for each process in a job. Minimum: 0.1 . Maximum: 4200.0 . %%WIN2K-PROCESS_MEMORY_LIMIT
Job memory	Maximum memory, in megabytes, allowed for job. Min: 0.1 . Max: 4200.0 %%WIN2K-JOB_MEMORY_LIMIT
Priority class	Highest priority class the job and its “children” can receive. Valid values: <ul style="list-style-type: none"> ■ IDLE_PRIORITY_CLASS ■ BELOW_NORMAL_PRIORITY_CLASS ■ NORMAL_PRIORITY_CLASS ■ ABOVE_NORMAL_PRIORITY_CLASS ■ HIGH_PRIORITY_CLASS ■ REALTIME_PRIORITY_CLASS %%WIN2K-PRIORITY_CLASS
Scheduling class	Scheduling class for all processes of a job. Valid values: 0 – 9 . <ul style="list-style-type: none"> ■ 0 - provides the minimum resources ■ 9 - provides the maximum resources. %%WIN2K-SCHEDULING_CLASS
Minimum Working set size	Minimum RAM, in megabytes, for all processes of the job. Increasing the value of this parameter reduces page swapping for this process but reduces the RAM available for other processes. Min.: 0.1 . Max.: 4200.0 %%WIN2K-MINIMUM_WORKING_SET_SIZE
Maximum Working set size	Maximum RAM, in megabytes, for all job processes. Decreasing this value reduces the likelihood that this job will interfere with other jobs but may increase the execution time for this job. Min.: 0.1 . Max.: 4200.0 %%WIN2K-MAXIMUM_WORKING_SET_SIZE



NOTE

You can determine the amount of memory and CPU time required for a job by viewing job object statistics in the job sysout. If a job exceeds job object limitations, the job will end NOTOK and the same error message will appear in the sysout and in the CONTROL-M/Server message log. WIN panel parameters are used in CONTROL-M/Agent by the SetInformationJobObject API. For more information, see Microsoft documentation for the SetInformationJobObject API.

Viewing a Job Object

This Microsoft Windows procedure enables you to determine job object characteristics of any CONTROL-M job. You can use these characteristics to decide what job object limits should be specified.

Before you Begin

You can only view Job Object details for a job that is currently running. Use the Order or Force option to run the job you want to evaluate.

How to View a Job Object

- 1 Choose ... => **Administrative Tools** => **Performance**.
- 2 The **Performance** window (including its graph panel) is displayed. Click the large + button.
- 3 The **Add counters** dialog box is displayed.
 - A In the **Performance object** drop-down list, select **JobObject**.
 - B Choose **All instances** to display all existing job object instances.
or
 Choose **Select instances from list** and select one or more of the displayed instances.

The job instance format is <job_name> <order_number> <run_number>. These elements are separated by a blank.
 - C Choose **Select counters from list**. Then, select the characteristic in the displayed list that you want to analyze.

To view objects on other Microsoft Windows computers, select counters from <name_of_computer> in the Add counters dialog box.

D Click Add.

- 4** Data for the selected “counter” is displayed in the **Performance** graph. Analyze this data to determine whether to specify a related job object limit and, if so, the limiting value to specify.

Where to Go from Here

The following table describes where to find information about tasks that are related to this one.

Subject	Location
Viewing a Job Object	If you need to view other characteristics for the same job object or view the characteristics of other job objects, repeat Steps 3 and 4 of this procedure.
Setting Job Object limits	Use the procedure on page 80 to specify values for the parameters in the WIN tab of the Job Editing form.
Defining additional Microsoft Windows jobs	You can create additional Microsoft Windows jobs by clicking the WIN tab of the Job Editing form. For information about defining jobs, see Chapter 3 of the <i>CONTROL-M/Desktop User Guide</i> .
Viewing jobs you have created or modified	Click Cancel in the WIN tab the Job Editing form to go to the Active environment to view the jobs you have created or modified.

Configuration Parameters

Configuration parameters can be modified using the utilities described in this chapter, or using the Agent Configuration utility.

CONTROL-M/Agent Configuration

The CONTROL-M/Agent configuration parameters in [Table 18](#) can be modified by using the `ctmagcfg` utility. For information about this utility, see “[Agent Configuration Utility](#)” on page 47.

Table 18 CONTROL-M/Agent Configuration Parameters (Part 1 of 3)

Parameter	Description
Agent-to-Server Port Number	<p>CONTROL-M/Server and CONTROL-M/Agent communicate by means of two TCP/IP ports. This parameter specifies the port in the Server computer that receives data from the Agent computer.</p> <ul style="list-style-type: none"> ■ The value specified must match the value assigned to the Agent-to-Server Port Number parameter on the Server computer. ■ Verify that the specified port number is not used for any other purpose. ■ Specify a numeric value from 1025 to 65535, inclusive. Default: 7005
Authorized CONTROL-M/Server Hosts	<p>Names of all CONTROL-M/Server hosts authorized to send requests to this Agent. The primary CONTROL-M/Server host must be included.</p> <ul style="list-style-type: none"> ■ Use the “ ” symbol to separate host names. ■ Do not include spaces between host names. ■ Default: Name of the primary CONTROL-M/Server host. <p>Note: Specify names, not IP addresses.</p>

Table 18 CONTROL-M/Agent Configuration Parameters (Part 2 of 3)

Parameter	Description
AutoEdit Inline	<p>Flag that indicates whether AutoEdit variables defined in a CONTROL-M job are set as Environment variables in the user job environment. Valid values are:</p> <p>Y = AutoEdit variables are set.</p> <p>N = AutoEdit variables are not set. Default.</p> <p>This parameter can only be changed after completing the installation.</p>
Comm Trace	<p>Flag that indicates whether CONTROL-M/Agent – CONTROL-M/Server communication packets are written to a file. Valid values: 1 (on), 0 (off). Default: 0. If set to 1, log files are created for analysis by support staff.</p>
Common Event Mechanism	<p>Flag for specifying if all control modules, not just the default control module, should be able send messages to the Tracker process without waiting for the tracker polling interval. Messages are sent using the port specified in the Tracker Port parameter to inform the Tracker that a job ended. Valid values are:</p> <p>Y = Use the Common Event Mechanism. Default.</p> <p>N = Do not use the Common Event mechanism. Only the default control module can send messages directly to the Tracker process.</p> <p>Note: When CONTROL-M/Agent is upgraded from an earlier version, the default is N for backward compatibility.</p>
CTMS Address Mode	<p>This flag enables you to handle situations in which the Agent can contact the Server by IP address but not by name. Valid values: null and IP. If set to IP, a “track all” request from an authorized Server causes the value of the Primary CONTROL-M/Server host configuration parameter to be set to the IP address of the Server that sent the request.</p>
Daily Log File Enabled	<p>Valid values: Y, N. Default: Y</p> <p>If set to Y, a daily Log file with the name daily_PROCLOG_<YYYYMMDD>.log is created in directory <CONTROL-M/Agent home>\DATA. Job begin, job end, New Day procedure, and sysout copy messages are written to this log file.</p>
Days to Retain Log Files	<p>Number of days to retain programmer debug, communication trace, and Daily log files in the proclog directory. Default: 1</p>
Diagnostic Level	<p>Flag that indicates whether to generate diagnostic messages. Valid values: 0–4 Level 0 generates no diagnostics. Level 4 generates maximum diagnostics. This parameter is for systems support use and can only be changed after completing the installation.</p>
Primary CONTROL-M/Server Host	<p>Host computer for the CONTROL-M/Server that receives and executes requests from this Agent. Default: Computer on which the installation was made.</p>
Protocol version	<p>Server-Agent communication protocol version. Default: 06</p>

Table 18 CONTROL-M/Agent Configuration Parameters (Part 3 of 3)

Parameter	Description
Listen to Net Card	<p>The network name or IP address for CONTROL-M/Agent for Microsoft Windows 2000 support of multiple IP interfaces (network cards) for a single computer. Valid values are:</p> <ul style="list-style-type: none"> ■ The network name or IP address of a specific card. ■ The reserved value *ANY for all network cards. <p>This helps ensure that CONTROL-M/Agent will receive requests regardless of which IP interface is used to send those requests.</p>
Server-to-Agent Port Number	<p>CONTROL-M/Server and CONTROL-M/Agent communicate by means of two TCP/IP ports. This parameter specifies the port in the Server computer that sends data to the Agent computer.</p> <ul style="list-style-type: none"> ■ The value specified must match the value assigned to the Server-to-Agent Port Number parameter on the Server computer. ■ Verify that the specified port number is not used for any other purpose. ■ Specify a numeric value from 1025 to 65535, inclusive. Default: 7006
SSL	<p>SSL support for CONTROL-M/Agent for Microsoft Windows. When SSL support is implemented in CONTROL-M/Server it makes a one-time request to set this parameter automatically for each associated Agent. This request requires 2 to 5 minutes for each Agent. Setting this parameter manually can save time if a large number of Agents work with CONTROL-M/Server. For more information about setting this parameter manually, see “Agent Configuration Utility” on page 47.</p>
TCP/IP Timeout	<p>Communication timeout in seconds. Specify a numeric value greater than or equal to zero. Default: 60</p>
Timeout for Agent utilities	<p>Maximum time (in seconds) the Agent waits after sending a request to CONTROL-M/Server. Default: 600</p>
Tracker Polling Interval	<p>Time in seconds that the Tracker waits for a message from a running job before it examines the status of all jobs for which no message was received. This parameter can only be changed after completing the installation. Default: 60</p>
Tracker Port	<p>Number of the port for sending messages to the Tracker process when jobs end. This parameter is used in conjunction with the Common Event Mechanism parameter.</p>
Tracker Report to Server	<p>Report the status of the job to CONTROL-M/Server. Use this parameter when CONTROL-M/Server is working behind a firewall. Valid values are:</p> <ul style="list-style-type: none"> ■ Y – Report the job status. If the Agent is not able to send this report, the job remains in executing status. ■ N – Do not report the job status. The job status changes to FINISHED when the job has completed execution.

CONTROL-M Control Module Configuration

The Control Module configuration parameters in [Table 19](#) can be modified by using the `ctmwincfg` utility. For information about this utility, see “[Agent Configuration Utility](#)” on page 47.

Table 19 Control Module Configuration Parameters

Parameter	Description
Add Job Object Statistics to Sysout	Flag that indicates how to handle job object processing statistics. <ul style="list-style-type: none"> ■ Selected – Statistics are added to the end of the sysout file. Default. ■ Not selected – Statistics are not added to the sysout file.
CD to user 'Home Dir'	Indication if CONTROL-M/Agent should change the directory to the user home directory as defined in the user profile before the user job runs. Valid values: <ul style="list-style-type: none"> ■ Y – The directory is changed. ■ N – The directory is not changed.
Default Printer	Default printer for job sysout files. Type a printer name in the field box or select a name from the list box. Default: Blank
Domain Controller	Name of server managing access to resources and the database. Specify the name of the server in the field box. Default: Blank
E-mail User Password	Password for the e-mail user account. This parameter can only be changed after completing the installation.
E-mail User Account Profile (MAPI profile)	User e-mail account which the Agent uses to send e-mail. See the appropriate <i>CONTROL-M/Server Administrator Guide</i> for information about the Shout utility. This parameter can only be changed after completing the installation.
Job children inside job object	Flag that specifies if procedures invoked by a job can be run outside the Job Object. If so, this prevents a situation in which the original job remains in executing mode until the invoked procedure completes. <ul style="list-style-type: none"> ■ N – All procedures invoked by the job are run outside the job object. ■ Y – All procedures invoked by the job are run inside the job object. Default.
Logon As User	Flag that specifies which user account is used for the services to log on to. <ul style="list-style-type: none"> ■ Selected – Jobs are submitted with the permissions and environment variables of the specified user. ■ Not selected – Jobs are submitted with the permissions and environment variables of the local system account. Default. <p>See “Determining the Owner of Jobs Run on the Agent” on page 27.</p>

Table 19 Control Module Configuration Parameters

Parameter	Description
Logon Domain	<p>The domain is determined by the value of this parameter if <domain> is not specified in <domain>\<username> in the owner parameter of the job definition. If the domain is not specified in the owner parameter or this parameter, the user profile is searched in the trusted domains.</p> <p>Note: BMC Software recommends that you do not specify a value for Logon Domain.</p>
Run user 'Logon Script'	<p>Indication if a user-defined logon script should be run by the CONTROL-M/Agent before running the standard user logon script. Valid values:</p> <ul style="list-style-type: none"> ■ Y – The user-defined logon script is run, if it exists. ■ N – The user-defined logon script is not run.
Sysout Name	<p>Flag that determines the prefix for the Sysout file name. Valid values:</p> <ul style="list-style-type: none"> ■ MEMNAME – The Sysout file prefix is the MEMNAME of the job. ■ JOBNAME – The Sysout file prefix is the JOBNAME of the job. <p>This parameter can only be changed after completing the installation.</p>
Wrap parameters with double quotes	<p>Indication of how parameter values (%%PARMn...%%PARMx) are handled in by CONTROL-M/Agent for Microsoft Windows. Valid values are:</p> <p>1 – If a parameter value contains a blank, it is passed to the operating system enclosed in double quotes. If no blank is in the parameter value, no quotes are included.</p> <p>2 – Parameter values are always passed to the operating system without quotes. If quotes were specified in the job definition, they are removed before the parameter is passed onward by the agent. This option is compatible with the way that these parameters were handled in version 6.0.0x, or 6.1.01 with Fix Pack 1, 2, 3, or 4 installed. In this case, if a parameter value contains a blank, the operating system may consider each string as a separate parameter.</p> <p>3 – All parameters are passed to the operating system enclosed in double-quotes. This causes the operating system to treat all parameter values as strings (not numbers). This option is compatible with the way that parameters were handled by version 6.1.01 with no Fix Pack installed.</p> <p>4 – Parameters are passed to the operating system in exactly the same way that they were specified in the job definition. No quotes are added or removed in this case. This option is compatible with the way that parameters were handled by version 2.24.0x.</p>

CONTROL-M Agent Services Configuration

These parameters affect the operation of the following CONTROL-M/Agent services:

- Agent service
- Tracker service
- FileWatcher service

Table 20 System Configuration for CONTROL-M/Agent Services

Parameter	Description
Log on as	<p>User account under which CONTROL-M Agent and CONTROL-M Tracker services will run.</p> <p>Valid values: Local System Account, This Account.</p> <ul style="list-style-type: none"> ■ Local System Account – Service will log on as the system account. Default. Subparameter: <p>Allow Service to Interact with Desktop – This option can be selected only if the service is running as a local system account. See “Maintaining CONTROL-M/Agent Services” on page 24.</p> <ul style="list-style-type: none"> ■ Selected – the service provides a user interface on a desktop that can be used by whoever is logged in when the service is started. Default. ■ Unselected – The service does not provide a user interface. ■ This Account – User account under which CONTROL-M Agent and CONTROL-M Tracker services will run. See “Logon As User” on page 88. <p>Note: If the owner of any CONTROL-M jobs has a “roaming profile” or if job output (sysout) will be copied to or from other computers, the Logon mode must be set to This Account.</p>
Startup Type	<p>How to install CONTROL-M/Agent and CONTROL-M Tracker services. Valid values: Automatic, Manual, Disabled. Recommended value: Automatic.</p> <ul style="list-style-type: none"> ■ Automatic – Services should start when the system starts. Default. ■ Manual – User or a dependent service can start services. ■ Disabled – User or a dependent service cannot start services.

Index

Symbols

%errorlevel%
 exit code 36
 _exit script
 utility summary 44
 _exit utility 36
 _sleep script
 utility summary 44
 _sleep utility 37

A

Add Job Object Statistics to Sysout
 Control Module configuration parameter 88
 Address Book
 e-mail destination 30
 ag_diag_comm utility
 summary 44
 ag_ping utility
 summary 44
 Agent services
 Startup Type parameter 26
 Agent-to-Server port number
 Agent configuration parameter 85
 ctmagcfg utility 48
 Authorized CONTROL-M/Server Hosts parameter
 ctmagcfg utility 48
 AutoEdit Inline
 Agent configuration parameter 86
 AutoEdit Inline parameter
 ctmagcfg utility 50

B

batch mode utilities 42
 BMC Software, contacting 2

C

Comm Trace
 Agent configuration parameter 86
 COMM_TRACE configuration parameter
 ctmagcfg utility 49
 communication

diagnostic report 29
 verifying 29
 configuration parameters 85, 88
 Control Module
 configuration parameters 88
 CONTROL-M/Agent
 configuration parameters 85
 description 15
 functions 16
 starting 27
 stopping 27
 CONTROL-M/Agent Service Properties dialog box 26
 CONTROL-M/EM
 client components 77
 ctmag utility
 summary 44
 ctmagcfg utility
 description 47
 ctmcontb utility
 summary 44
 ctmcreate utility
 summary 44
 ctmdefine utility
 summary 44
 CTMFW utility
 execution log file 57
 ctmfw utility
 description 55
 summary 44
 ctmgetcm utility 78
 ctmkilljob utility
 summary 45
 ctmloadset utility
 summary 45
 ctmnodegrp utility
 summary 45
 ctmorder utility
 summary 45
 ctmpsm utility
 summary 45
 ctmpwd utility
 summary 45
 CTMS Address Mode parameter
 ctmagcfg utility 50
 ctmshout utility
 summary 45

ctmstvar utility
 summary 45
 ctmudly utility
 summary 45
 ctmvar utility
 summary 45
 ctmwincfg utility
 summary 45
 customer support 3

D

Daily Log File Enabled parameter
 ctmagcfg utility 49
 Days To Retain Log Files parameter
 ctmagcfg utility 49
 Default
 CONTROL-M/Agent 20
 Default Printer
 Control Module configuration parameter 88
 defining
 Windows 2000 jobs 75
 destination, e-mail 30
 Diagnostic Level parameter 48
 diagnostic report 29
 Diagnostics Level
 Agent configuration parameter 86
 Domain Controller
 Control Module configuration parameter 88
 DOS batch files
 scripts 33

E

ecactltb utility
 summary 45
 ecaqtab utility
 summary 45
 e-mail
 Shout facility 30
 E-mail User Account Password 88
 E-mail User Account Profile 88
 exit codes
 %errorlevel% 36
 distinguishing between 35
 scripts 35
 exit utility 36

F

file monitor
 ctmfw utility 55
 file transfer monitor
 ctmfw utility 55
 File Watcher utility

description 55
 service trace 57
 files
 windows.xml 77
 FileWatcher service
 recommendation 26
 functions
 CONTROL-M/Agent 16

I

installing
 Windows Messaging component 31

J

Japanese 32
 JO
 job object 80
 job definition
 Windows 2000 75
 Job Editing form
 OS panel 79
 overview 75
 Job execution time parameter
 Windows 2000 jobs 82
 Job memory parameter
 Windows 2000 jobs 82
 job object
 JO 80

L

languages
 Japanese 32
 Local System account option
 CONTROL-M Agent service 24
 Log On tab
 Service Properties dialog box 26
 Logon As
 Agent configuration parameter 90
 Logon As User
 Control Module configuration parameter 88
 Logon Domain
 Control Module configuration parameter 89

M

mailbox field
 Windows Messaging Component 31
 Max work set size parameter
 Windows 2000 jobs 82
 messages
 JO 80

- job object 80
- Microsoft Outlook
 - e-mail destinations 30
- Min work set size parameter
 - Windows 2000 jobs 82
- multiple agents
 - agent parameter 43
 - installing 20

O

- On code parameter scripts 34
- On statement parameter scripts 34
- OS panel
 - parameters 80
 - Windows 2000 jobs 80
- output parameters 43

P

- parameter scripts
 - On code 34
 - On statement 34
- parameters
 - agent 43
 - output 43
 - Windows 2000 jobs 80
- permission
 - user rights 27
- Primary CONTROL-M/ Server Host
 - Agent configuration parameter 86
- Primary Server Host parameter
 - ctmagcfg utility 48
- Priority class parameter
 - Windows 2000 jobs 82
- Process execution time parameter
 - Windows 2000 jobs 82
- Process memory parameter
 - Windows 2000 jobs 82
- product support 3

R

- REXX language scripts 33

S

- Scheduling class parameter
 - Windows 2000 jobs 82
- scripts
 - DOS batch files 33
 - exit codes 35
 - guidelines for writing 34
 - length 34

- On code 34
- On statement 34
- REXX language 33
- utilities 35
- security
 - user rights 27
- server platform
 - verifying communication 29
- Server-to-Agent Port Number
 - Agent configuration parameter 87
- Service Properties dialog box 26
- service trace
 - File Watcher utility 57
- Service user accounts 24
- setting user rights 28
- Shout facility
 - e-mail 30
- skeleton
 - Windows 2000 jobs 75
- Skeleton Editor 76
- sleep utility 37
- starting
 - CONTROL-M/Agent 24, 26, 27
- Startup Type
 - Agent configuration parameter 90
- Startup Type configuration parameter 26
- stopping
 - CONTROL-M/Agent 24, 26
- support, customer 3
- Sysout Name
 - Control Module configuration parameter 89

T

- TCP/IP Timeout
 - Agent configuration parameter 87
- TCP/IP Timeout parameter
 - ctmagcfg utility 50
- technical support 3
- template
 - Windows 2000 jobs 75
- This Account field
 - Shout to e-mail 31
- Timeout for Agent utilities
 - Agent configuration parameter 87
- trace file
 - File Watcher utility 57
- Tracker Polling Interval
 - Agent configuration parameter 87
- Tracker Polling Interval parameter
 - ctmagcfg utility 50
- Tracker Port
 - Agent configuration parameter 87

U

- UNC
 - description [38](#)
- user rights
 - CONTROL-M/Agent [27](#)
 - description [27](#)
 - setting [28](#)
- utilities
 - batch mode [42](#)
 - ctmfw [57](#)
 - directing output [43](#)
 - output parameter [43](#)
 - parameter formats [43](#)
 - scripts [35](#)
 - summary [44](#)
 - workflow [41](#)

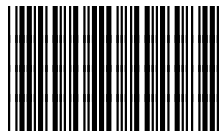
V

- verifying communication
 - server platform [29](#)

W

- Western European language characters [31](#)
- Western European languages
 - special characters [31](#)
- WIN2K skeleton
 - Windows 2000 jobs [80](#)
- Windows 2000 jobs
 - creating [78](#)
 - defining [75](#)
 - parameters [80](#)
 - skeleton [75](#)
- Windows Messaging Component
 - Shout to e-mail [30](#)
- windows.xml file [77](#)
- workflow utility [41](#)

Notes



52365