

CONTROL-M/Agent for Unix Administrator Guide

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 - system hardware configuration
 - serial numbers
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- 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	xi
Chapter 1	Understanding CONTROL-M/Agent
	CONTROL-M/Agent Functions 1-3
	CONTROL-M/Agent Concepts 1-4
Chapter 2	Implementing CONTROL-M/Agent
	Starting and Stopping CONTROL-M/Agent 2-2
	Modifying Configuration Parameters 2-3
	Modifying Authorized CONTROL-M/Server Host Names 2-5
	Generating and Viewing Diagnostic Messages 2-7
	Generating and Viewing the Daily Log File 2-8
	Generating the Communication Diagnostic Report 2-9
	Language Capabilities 2-10
	Western European Languages 2-10
	Japanese 2-11
	Working with CONTROL-M/Server Behind a Firewall 2-11
	Effects on Performance and Functionality 2-12
	How to Work with CONTROL-M/Server Behind a Firewall ... 2-13
Chapter 3	Writing Scripts
	Specifying the Shell Type 3-2
	Support for REXX-Language Scripts 3-4
	Run-Time Environment 3-5
	On Statement/Code Parameter 3-6
	Utilization of Exit Codes by CONTROL-M 3-8
	Use of Reserved Variable \$0 3-8

Chapter 4

Utilities

Timeout Intervals	4-2
Specifying Utility Parameters	4-2
Utility Parameter Syntax	4-3
Special Utility Parameter Formats	4-4
Enabling Other Users to Run Agent Utilities	4-5
Utility Descriptions	4-6
ag_diag_comm Utility	4-7
ag_ping Utility	4-8
ctmagcfg Utility	4-8
ctmfw Utility (File Watcher)	4-12
ctmunixcfg Utility	4-13
shagent Utility	4-14

Appendix A

Configuration Parameters

Index

Figures

Figure 1-1	CONTROL-M Scheduling Solution	1-2
Figure 4-1	CONTROL-M/Server Utility Workflow	4-1

Tables

Table 1-1	CONTROL-M Products	1-2
Table 1-2	CONTROL-M/Agent Information	1-4
Table 2-1	Authorized CONTROL-M/Server Host Name Menu Options	2-6
Table 2-2	Effects on Performance and Functionality	2-12
Table 3-1	Shell Paths	3-2
Table 3-2	Shell Parameters	3-2
Table 4-1	Utilities That Support the -input_file Parameter	4-3
Table 4-2	CONTROL-M/Agent Utilities	4-6
Table 4-3	ctmagcfg Utility Parameters	4-9
Table 4-4	Locale Settings for Unix	4-11
Table A-1	Unix Agent – CONFIG.dat Parameters	A-1
Table A-2	CM for Unix – OS.dat Parameters	A-4

About This Book

This book describes CONTROL-M/Agent administration and provides information about parameters and utilities.

This book contains:

Chapter 1	Understanding CONTROL-M/Agent Introduces CONTROL-M/Agent functions and concepts.
Chapter 2	Implementing CONTROL-M/Agent Describes how to start and stop CONTROL-M/Agent, maintain CONTROL-M/Agent, and make a Communication Diagnostic report.
Chapter 3	Writing Scripts Describes how to write CONTROL-M scripts.
Chapter 4	Utilities Describes CONTROL-M/Agent utilities and how to use them.
Appendix A	Configuration Parameters Describes the parameters in the CONFIG.dat and OS.dat configuration files.
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/Enterprise Manager Administrator Guide** describes tasks that the CONTROL-M/EM administrator must perform to define, monitor, and maintain the CONTROL-M/EM environment.
- **CONTROL-M/Enterprise Manager Utility Guide** describes command-line utilities that can be used to perform various CONTROL-M/EM tasks in batch mode.
- **CONTROL-M/eTrigger Administrator Guide** describes how to trigger job submission and tracking activities using a web-based (HTML) interface.

Notational 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
NIS	Network Information System

The following conventions are used in this guide:

Convention	Description
<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.
italic	An italic font is used for the name of publications.

Understanding CONTROL-M/Agent

This guide describes concepts and tools required by the administrator to set up and manage CONTROL-M/Agent on Unix computers.

CONTROL-M/Agent for Unix is a component of the CONTROL-M scheduling solution. The integration of these products is illustrated in [Figure 1-1 on page 1-2](#).

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 output files. The completion status of jobs and the results of post-processing analysis are transmitted back to CONTROL-M/Server.

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

Figure 1-1 CONTROL-M Scheduling Solution

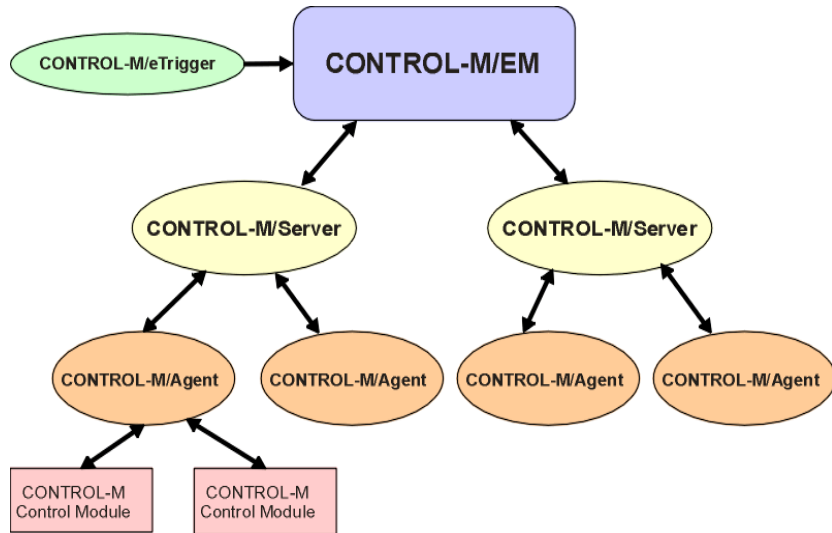


Table 1-1 CONTROL-M Products

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 kill jobs that are currently executing.

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

CONTROL-M/Agent Concepts

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

Table 1-2 CONTROL-M/Agent Information

Item	Description
Installation	Information about installing and upgrading CONTROL-M/Agent for Unix is described in the <i>CONTROL-M Installation Guide</i> .
Configuration Parameters	CONTROL-M/Agent configuration parameters are assigned values during the installation procedure. <ul style="list-style-type: none">• Table A-1 on page A-1 lists these parameters and their default values.• These parameters are stored in the CONFIG.dat file.• You can use the <code>ctmagcfg</code> utility (see page 4-8) to modify these parameters after installation.
Command-Line Utilities	Many CONTROL-M tasks can be implemented from a Unix command-line using utilities. For more information, see Chapter 4, "Utilities."
Control Modules	A Control Module (CM) is a DLL component (Microsoft Windows) or shared object (Unix) 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. <ul style="list-style-type: none">• The CONTROL-M/Agent installation procedure installs a Control Module for Unix operating systems and assigns values to its configuration parameters.• Table A-2 on page A-4 lists these parameters and their default values.• These parameters are stored in the OS.dat file.• You can use the "ctmunixcfg Utility" (see page 4-13) to modify most of these parameters after installation.

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 chapter:

- Starting and Stopping CONTROL-M/Agent
- Starting the Maintenance Program
- Modifying Configuration Parameters
- Modifying Authorized CONTROL-M/Server Host Names
- Generating and Viewing Diagnostic Messages
- Generating and Viewing the Daily Log File
- Generating the Communication Diagnostic Report
- Configuring Languages
- Working with CONTROL-M/Server Behind a Firewall

Starting and Stopping CONTROL-M/Agent

Summary: The CONTROL-M/Agent and Tracker can be started automatically and started/stopped manually.

Automatically Starting CONTROL-M/Agent and Tracker

CONTROL-M/Agent is automatically started by the **inetd** process.

If the **START_TRACKER** parameter (see page A-4) is set to **Y**, CONTROL-M/Agent uses the **p_ctmat** process to test the Tracker and starts the Tracker if it is not running or has failed.

Manually Starting CONTROL-M/Agent and Tracker

Step 1 Log in to the Agent platform as **root**.

Step 2 Specify the following command from the Agent directory or run the command interactively:

```
<agent_path>ctm/scripts/start-ag -u <agent_username> -p ALL :
```

Manually Stopping CONTROL-M/Agent and Tracker

Step 1 Log in to the Agent platform as **root**.

Step 2 Specify the following command from the Agent directory or run the command interactively. This command will shut down the CONTROL-M/Agent Tracker process (**p_ctmat**) and remove the CONTROL-M/Agent related entry from the **inetd** configuration file (/etc/inetd.conf).

```
<agent_path>ctm/scripts/shut-ag -u <agent_username> -p ALL :
```

Modifying Configuration Parameters

Summary: Run the **ctmagcfg** utility to modify CONTROL-M/Agent configuration parameters or the **ctmunixcfg** utility to modify operating system related parameters for the CONTROL-M/Agent.

How to Modify Frequently Used Configuration Parameters

Run the **ctmagcfg** utility. A menu containing configuration parameters and their current values is displayed, for example:

```
Configuration Parameters
-----
Agent Directory: /home/ag613/ctm

1)  Server-to-Agent Port Number . . . : [7522]
2)  Agent-to-Server Port Number . . . : [7005]
3)  TCP/IP Timeout. . . . . : [120]
    For items 4 and 5 do not use IP address
4)  Primary CONTROL-M/Server Host . . : [TLVL2K300]
5)  Authorized CONTROL-M/Server Hosts : [TLVL2K300]
6)  Tracker Polling Interval. . . . . : [120]
7)  Diagnostic Level. . . . . : [0]
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 . . . : [120]
14) Locale. . . . . : [en_BW]
15) Common Event mechanism. . . . . : [Y]
16) Tracker Event Port. . . . . : [7010]

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

Please enter your choice:

To modify a parameter, specify its number. You are prompted to supply a new value for the parameter. All the parameters in this menu are described in Table A-1 on page A-1.

For more information about the **ctmagcfg** utility, see page 4-8.

How to Modify CONTROL-M/Agent Operating System Parameters

Run the **ctmunixcfg** utility. A menu containing CONTROL-M/Agent operating system parameters and their current values is displayed, for example:

```
Configuration Parameters
-----
Agent Directory: /home/ag613/ctm

1) Sysout Name. . .(MEMNAME|JOBNAME). : [MEMNAME]
2) Printer Name . . . . . : [lpr]
3) Korn Shell Flags. . . . .(-x|-v|n): []
4) Borne Shell Flags . . . .(-x|-v|n): []
5) Temporary scripts saving (YES|NO) : []
6) Replace $0 by file name . (Y/N). . : []

s) Save
q) Quit
```

Please enter your choice:

To modify a parameter, specify its number. You are prompted to supply a new value for the parameter. All of the parameters in this menu are described in Table A-2 on page A-4.

For more information about **ctmunixcfg** utility, see page 4-13.

Modifying Authorized CONTROL-M/Server Host Names

Summary: The host name of each CONTROL-M/Server that can send jobs to the CONTROL-M/Agent must be in the Authorized CONTROL-M/Server Host Name list. You can modify this list by using options in the Authorized CONTROL-M/Server Hosts menu.

How to Modify the Authorized CONTROL-M/Server Hosts Name

Run the **ctmagcfg** utility, select **Authorized CONTROL-M/Server Hosts**. The following menu is displayed. (Parameter values may differ from those below.)

The authorized CONTROL-M/Server Host Name parameters

- 1) Add new Host Name
- 2) Delete Host Name: [TLVL2K300]
- q) Quit

Please enter your choice:

To add or delete a host name, specify the appropriate option from the menu. You are prompted to supply the host name to add or delete. All of the parameters in this menu are described in Table 2-1.

For more information about the **ctmagcfg** utility, see page 4-8.

Table 2-1 Authorized CONTROL-M/Server Host Name Menu Options

Option	Description
Add new Host Name	Add a backup CONTROL-M/Server host name to the Authorized CONTROL-M/Server file.
Delete Host Name	Delete a CONTROL-M/Server host name from the Authorized CONTROL-M/Server file. All host names in the file (excluding the current host name) are listed next to this menu option.
Quit	Exit to the Configuration Parameters menu.

Note

The primary host name must be in the list of authorized host names.

CONTROL-M/Server Host Name

Only one CONTROL-M/Server can be active at any time. The CONTROL-M/Server Host Name parameter contains the host name of the current active Server. When CONTROL-M is started, the value of this parameter is the name of the primary Server host.

If the primary Server fails and a failover occurs, the mirror Server becomes the current active Server. The mirror Server sends a message to CONTROL-M/Agent identifying itself as the current active Server. The host name of the mirror Server is authenticated against the list of authorized servers. Afterwards, all jobs communicate with the new current active Server.

Generating and Viewing Diagnostic Messages

Summary: CONTROL-M/Agent can generate program and communication diagnostic messages. You can view these messages with any text editor.

How to Generate Diagnostic Messages

To generate program diagnostic messages

- set the Diagnostic Level parameter (see “DBGLVL” on page A-3) to a value from **1** to **4**.
- set the Communication Trace parameter to **1**.

You can do this by using the Configuration Parameters menu (see page 2-3) or the `ctmagcfg` utility (see page 4-6).

How to Not Generate Diagnostic Messages

To avoid generating diagnostic messages, set the values of the Diagnostic Level and Communication Trace parameters to **0**.

Where Diagnostic Messages are Stored

Diagnostic messages are contained in the **AG_<proc_id>.log**, **AM_<proc_id>.log**, and **AT_<proc_id>.log** files in the **PROCLOG** subdirectories under the CONTROL-M/Agent directory (for example, **/home/ctmag/ctm/proclog/**).

Retention Period for Log Files

CONTROL-M/Agent keeps log files for the number of days specified in system parameter **Maximum Days to Retain Log Files**. (For more information, see the *CONTROL-M/Server Administrator Guide*).

Generating and Viewing the Daily Log File

Summary: CONTROL-M/Agent can also generate a daily log file named **ctmag_<year><month><day>.log**. You can view this file with any text editor.

This file contains messages about:

- starting/stopping jobs
- copying/not copying the log file
- the New Day procedure
- success/failure of shout requests

How to Generate the Daily Log file

Use the following procedure to set the **AG_LOG_ON** parameter in the **CONFIG.dat** file to generate the daily log file:

- Step 1** Specify **ctmagfg** on the Unix command line. For more information see [“ctmagcfg Utility” on page 4-8](#).
- Step 2** Set menu option **12**, (Daily Log File Enabled), to **Y** (default).
- Step 3** Type **s**, (Save and Restart CONTROL-M/Agent Services) and press **<Enter>**.

Generating the Communication Diagnostic Report

Summary: CONTROL-M/Agent includes a 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

Specify `ag_diag_comm` on the Unix command line.

A report similar to the following is produced:

```
CONTROL-M/Agent Communication Diagnostic Report
-----
Agent User Name           : ctmagent
Agent Platform Architecture : Linux
FD Number                 : FD5449_AGENT
Agent Version             : 6.1.03
Agent Platform Name       : brandi
Server Host Name          : mustang
Authorized Servers Host Names : mustang
Server-to-Agent Port Number : 7522
Agent-to-Server Port Number : 7005
Server-Agent Comm. Protocol : tcp
Unix Ping to Server Platform : Succeeded
Agent Ping to Control-M/Server : Succeeded
NIS is                    : Running
NIS Service Name          : ctmagtrn2
NIS Protocol               : tcp
Service "ctmagtrn2" is    : Active
Netstat protocol          : tcp
Protocol consistency check : Ok
```

Language Capabilities

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 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>
Indications of which CONTROL-M/Server and CONTROL-M/Agent utilities do <i>not</i> support Western European Language special characters	The <i>CONTROL-M/Server Administrator Guide</i> and the <i>CONTROL-M/Agent Administrator 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.

Working with CONTROL-M/Server Behind a Firewall

The CONTROL-M/Server listening port is blocked to CONTROL-M/Agent when CONTROL-M/Server is located behind a firewall on your internal network, and CONTROL-M/Agent is on the other side of your firewall (on your internal network or on an external network). As a result, CONTROL-M/Server can connect to CONTROL-M/Agent, but CONTROL-M/Agent cannot connect to CONTROL-M/Server. For more information, see Chapter 1 of the *CONTROL-M/Server Administrator Guide*.

Effects on Performance and Functionality

Table 2-2 describes the effects on performance and functionality when the CONTROL-M/Server listening port is blocked to CONTROL-M/Agent.

Table 2-2 Effects on Performance and Functionality

Effects on Performance and Functionality	Description
Delay in updating the job status (after Executing) in CONTROL-M/Server.	The job status is no longer automatically sent to CONTROL-M/Server when the change in job status is detected by CONTROL-M/Agent. CONTROL-M/Server now fetches the job status from CONTROL-M/Agent after the amount of time specified in the Polling Interval parameter specified in CONTROL-M/Server.
Internal updates that are normally sent by CONTROL-M/Agent to CONTROL-M/Server while an ERP job is executing are lost.	Only the last update that occurred before CONTROL-M/Agent received the request from CONTROL-M/Server is sent.
CONTROL-M/Agent utilities cannot be executed.	Some CONTROL-M/Server utilities (such as <code>ctmcreate</code> , <code>ctmdefine</code> , and <code>ctmcontb</code>) are also on the CONTROL-M/Agent account and are known as CONTROL-M/Agent utilities. Normally, these utilities can be executed on CONTROL-M/Server after being invoked from the CONTROL-M/Agent account either manually from the command line, or automatically by a job. However, if CONTROL-M/Server's listening port is blocked behind a firewall, these utilities cannot establish communication with CONTROL-M/Server and therefore cannot be executed.

How to Work with CONTROL-M/Server Behind a Firewall

Summary: Perform this task to enable CONTROL-M/Agent Tracker service to perform all of its functions except returning the job's status to CONTROL-M/Server.

CONTROL-M/Agent Configuration

In the CONTROL-M/Agent **config.dat** file, add the key **AGENT_TO_SERVER_CONNECT** with the value data **NO**.

This enables the CONTROL-M/Agent Tracker service to perform all of its functions except returning the job's status to CONTROL-M/Server.

Writing Scripts

When writing a shell script to be run as a CONTROL-M job on an Agent computer, the following factors must be considered:

- Specification of the shell type under which the script will run.
- Run-time environmental factors affecting execution of the script.
- Usage of the **On Statement/Code** job processing parameter.

It is recommended that you run each script manually to validate the script syntax before running the script under CONTROL-M.

Note

Command type jobs must be in Bourne shell syntax only.

Specifying the Shell Type

To enable CONTROL-M to recognize the script shell type, specify the shell path (as listed in Table 3-1) on the first line of the script:

```
#! <shell path>
```

Table 3-1 Shell Paths

Shell Type	Shell Path	Default Switch	Other Switches
Bourne	/bin/sh	-x	-v/n
csh	/bin/csh	-v	
tcsh	/bin/tcsh	-v	
Korn	/bin/ksh	-x	-v/n

Table 3-2 describes the affect Shell parameter switches have on CONTROL-M/Agent processing.

Table 3-2 Shell Parameters (Part 1 of 2)

Parameter	Description
-x	This parameter causes CONTROL-M/Agent to submit the script as is. The script runs under the specified shell and prints commands and related arguments as they are executed. Each command is prefixed by the '+' sign. This sign is later used during an On statement post processing phase of the jobs output to distinguish between the different commands.

Table 3-2 Shell Parameters (Part 2 of 2)

Parameter	Description
-v	This parameter causes CONTROL-M/Agent to parse the script into a temporary file. The script commands are appended with an identifying string. This temporary script is then executed, where the -v switch causes the shell to print each shell input line as it is read. The added identifying string is later used during an On statement post processing phase of the script's output to distinguish between the different commands. When viewing the script's output from CONTROL-M screens, CONTROL-M/Agent strips the identifying string to simulate the output of the original script.
n	This CONTROL-M/Agent specific flag is used to indicate that no parsing and no on-statement post processing is to be performed on this script. The script is executed as is. If a post processing on-statement action has been defined for such a script, it will not be able to find a command in the output of the script.

Note

Arguments specified after the shell name are ignored by CONTROL-M/Agent with the following exception: **-x** is supported when running a script under the Bourne shell or Korn shell. If **-x** is specified as an argument after the shell name, it overrides any option set in the CTM_PRM_SH_FLAGS or CTM_PRM_KSH_FLAGS.

Example

The following is the first line of a script that runs under the C shell:

```
#!/bin/csh -x
```

In this example, argument **-x** is not supported.

Note

For Korn shells: To change the default switch from **-x** to **-v**, add the following line to the **OS.dat** file: **CTM_PRM_KSH_FLAGS -v**.

For Bourne shells: To change the default switch from **-x** to **-v**, add the following line to the **OS.dat** file: **CTM_PRM_SH_FLAGS -v**. You can specify additional switches for **CTM_PRM_SH_FLAGS**, but you must include **-x** or **-v**.

The **ctmunixcfg** utility can be used to switch flags from **-x** to **-v**.

Support for REXX-Language Scripts

On certain computers, job scripts to be run under CONTROL-M can be written using the REXX shell language. REXX job scripts are supported on the following computers: AIX, SunOS, and Solaris.

To activate a REXX script, the REXX product must first be installed on the Agent platform. The first line of the REXX script must specify the full path under which REXX is installed.

Example

```
#!/usr/local/bin/rxx
```

Run-Time Environment

CONTROL-M runs a job script under the environment specified for the job owner (that is, the user specified in the **Owner** parameter). The environment affects these factors in the execution of the script:

- User login process
- Shell script startup process
- Working directory

Each of these factors is described below.

User Login Process

As jobs are submitted for execution, CONTROL-M/Agent logs on as the user and executes the job (the shell script) using the following command:

```
su - <owner> -c <script name>
```

During the login process, the user environment is set according to the shell type specified in **/etc/passwd**.

Shell Script Startup Process

The startup process for running the script depends upon the type of shell under which the script will run.

- When a csh or tsh script is run, the **.cshrc** file of the job owner is executed as part of the startup process for the script.
- For all other shell types, the **.profile** file of the job owner is executed as part of the startup process for the script.

Note

The **.login** file is not executed as part of the startup process.

When CONTROL-M executes job scripts, there is no terminal associated with the job. Therefore, do not use commands in a script that query terminal characteristics or take input from a terminal.

The shell script startup process sets the environment variables that will be available when the script is run. The `#!` statement (see [“Specifying the Shell Type” on page 3-2](#)) indicates the shell under which the script is intended to run.

Working Directory

The working directory at the time the script runs is initially set to the home directory of the job owner (the home directory for each user is set by the Unix administrator in `/etc/passwd`).

When writing scripts that access files, the file name in the script should be specified with a full path or with a path relative to the home directory of the job owner.

On Statement/Code Parameter

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

- **Type of Script Statement**
Depending on the shell used, CONTROL-M/Agent does not process certain types of script statements for comparison with the text specified in the **Stmt** subparameter of the **On Statement/Code** parameter. Therefore, text contained in these script statements should not be specified in the **Stmt** subparameter:
 - For a Bourne shell, text in **if**, **for**, **while**, and **case** statements.
 - For a csh shell, text in **if** statements.

Example

No part of the following script line should be used in the **Stmt** subparameter of the **On Statement/Code** parameter:

```
if [ 'baseline' -eq 0 ]; then
```

- **Continuation Lines**
CONTROL-M/AGENT does not process continuation lines for comparison with text specified in the **Stmt** subparameter of the **On Statement/Code** parameter. Therefore, text on a continuation line in a script should not be specified in the **Stmt** subparameter.
- **Length of Script Statement**
CONTROL-M/Agent only processes the first 132 characters of a script statement for comparison with the text specified in the **Stmt** subparameter of the **On Statement/Code** parameter. Therefore, text that occurs after the first 132 characters of a script statement should not be specified in the **Stmt** subparameter.
- **HERE Documents**
The term HERE document refers to lines of text in a script that are passed to a command as input, but are not passed to the shell. The current version of CONTROL-M/Agent does not support the **On Statement/Code** job processing parameter for HERE documents.

Example

In the following script, **line 1** and **line 2** of a **HERE** document are passed to the specified **cat** command:

```
cat > /tmp/junk << EOF_EOF
line 1
line 2
EOF_EOF
echo "DONE"
```

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

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

```
COMPSTAT=<value>
```

<value> is the exit code of the script.

Example

Assume that a script exits with an exit code of 5.

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

```
Stmt: *
```

```
Code: COMPSTAT=5
```

Use of Reserved Variable \$0

The reserved variable **\$0** can be used in a script to retrieve information about the script path. This variable is automatically replaced by a file name before the script is run. This functionality can be disabled by setting the **TRANSLATE_\$0** configuration parameter to **N** in the CONTROL-M/Agent `~ctmagent/ctm/data/OS.dat` file. (See Chapter 5 in the *CONTROL-M/Server for Unix Administrator Guide*.)

CONTROL-M/Agent does not support the use of **\$0** in a subscript when the **-x** switch is not used. Instead, CONTROL-M/Agent reserves the variable **\$CTM0** to provide the same information that would be provided by **\$0**.

Example

Script **a** and subscript **b** demonstrate the usage of variables **\$0** and **\$CTM0** in scripts running under CONTROL-M/Agent:

Script a

```
#!/bin/sh
echo $0
. b
```

Subscript b

```
memname='basename $CTM0'
memlib='dirname $CTM0'
...
```

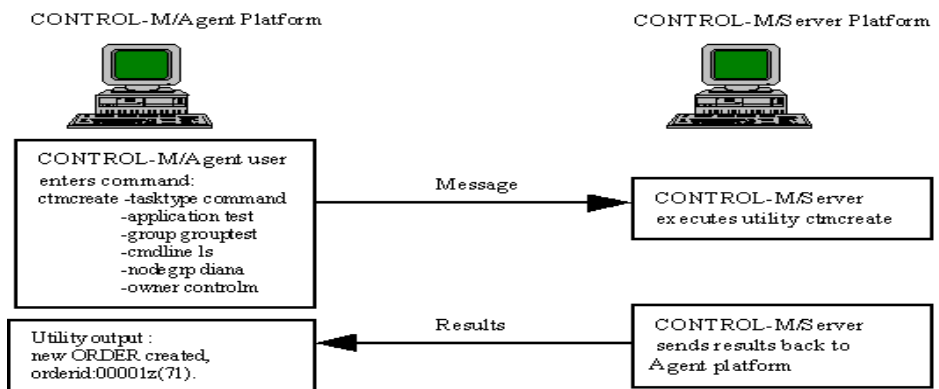
Utilities

The utilities in Table 4-2 on page 4-6 can be invoked on an Agent platform by the user or by a batch job running on the Agent platform.

Some of these utilities create jobs in the CONTROL-M/Server Active Jobs file. Their output is sent to the Agent computer. These utilities are described in Chapter 2 of the *CONTROL-M/Server Administrator Guide*. Their processing workflow is illustrated in [Figure 4-1 on page 4-1](#).

Most utilities that create a job in the CONTROL-M/Server Active Jobs file are interactive when invoked from the Server platform but not interactive when invoked from the Agent platform. When invoked from the Agent, they must be invoked with all the required parameters.

Figure 4-1 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 Agent-to-Server and Server-to-Agent communication timeout intervals are described on page 2-3. If the Agent requests a utility that runs on the Server, or the Server requests the Agent to order a job, and there is no response within the timeout interval, the requested action will fail.

You can use increase these timeout intervals by using the **ctmagcfg** utility described on page 4-8. However, increasing these timeout intervals tends to reduce CONTROL-M/Agent performance.

Specifying Utility Parameters

The command used to invoke a CONTROL-M utility is normally specified with all relevant parameters.

Note

When a utility is invoked from the command line, a maximum of 1000 characters can be entered on the command line. The number of characters can be increased by using the **-input_file** parameter.

The utilities in Table 4-1 allow you to place utility parameters in an input file. The **-input_file** parameter identifies the file that contains parameters for the utility. 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.

Using the **-input_file** parameter enables you to:

- prepare and save files of utility parameters that can be reused.
- exceed the number of characters allowed in the command line.

Table 4-1 Utilities That Support the -input_file Parameter

ctmcontb	ctmkilljob	ctmvar
ctmcreate	ctmorder	ecaqrtab
ctmdefine	ctmshout	

Example

```
ctmcreate -input_file <file_name>
```

where `file_name` is the name of a file that contains the `ctmcreate` parameters. For example:

```
-tasktype command  
-cmdline ls
```

Utility Parameter Syntax

Some utilities require special formatting for transmission to the Server platform. See [“Special Utility Parameter Formats”](#) below.

Values for utility parameters must not contain the apostrophe or single quote character.

When invoking these utilities from CONTROL-M/Agent, the presence of a special character in the argument values may cause problems. The following command contains a back-slash before the string DELETEME:

```
ctmcreate -tasktype COMMAND -jobname servertest -cmdline "ctmvar -action set
-var '%%#\DELETEME' -varexpr to_be_deleted"
```

When this command is invoked from CONTROL-M/Agent, the back-slash before DELETEME may be “eaten” by the shell. To avoid this problem, add a back-slash before the special character that causes the problem (in this case, the original back-slash).

When invoking the ctmcreate utility or ctmdefine utility from CONTROL-M/Agent with a **date_ref** of \$\$\$\$, put a back-slash before each \$ as shown here:

```
ctmcreate -tasktype command -cmdline ls -incond a '\$\$\$\$' AND ...
```

Special Utility Parameter Formats

Commands invoked from Unix Agent platforms are embedded in double quotes when sent to the Server platform. Therefore, use single quotes for command elements that must be within quotation marks. For example:

```
ctmcreate ...-cmdline "ls -l '$HOME'"
```

For a description of syntax rules when invoking the ctmcreate utility, see “ctmcreate” in Chapter 2, “Utilities,” of the *CONTROL-M/Server for Unix Administrator Guide*.

Directing Output From Utilities

Some utilities generate reports that can be directed to a file. These utilities have <Output_ parameters>.

- If output parameters are specified, the utility output is directed to a file on the Server platform.
- If output parameters are not specified, the output is routed to the default output device.

Output can be redirected to the Agent platform by specifying a full path name of the file after the redirection (>) character.

Enabling Other Users to Run Agent Utilities

To enable users other than the CONTROL-M/Agent user to invoke these utilities from CONTROL-M/Agent, add the following environment variables to **.cshrc** or **.profile**:

Add to **.cshrc** :

```
setenv IOA_HOME <ctmagent>/ctm
setenv CONTROLM <ctmagent>/ctm
```

[for AIX]

```
setenv LIBPATH "$LIBPATH : <ctmagent>/ctm/exe"
```

[for HP-UX]

```
setenv SHLIB_PATH "$SHLIB_PATH : <ctmagent>/ctm/exe"
```

[for other platforms]

```
setenv LD_LIBRARY_PATH "$LD_LIBRARY_PATH :
    <ctmagent>/ctm/exe"
```

Add to **.profile** :

```
export IOA_HOME="<ctmagent>/ctm"
set CONTROLM=<ctmagent>/ctm/
export CONTROLM
```

[for AIX]

```
export LIBPATH="$LIBPATH : <ctmagent>/ctm/exe"
```

[for HP-UX]

```
export SHLIB_PATH="$SHLIB_PATH : <ctmagent>/ctm/exe"
```

[for other platforms]

```
export LD_LIBRARY_PATH="$LD_LIBRARY_PATH :
    <ctmagent>/ctm/exe"
```

Utility Descriptions

Table 4-2 lists 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 4-2](#).

Utilities that are not described in this chapter are described in Chapter 2 of the *CONTROL-M/Server Administrator Guide*.

Table 4-2 CONTROL-M/Agent Utilities (Part 1 of 2)

Utility	Description
ag_diag_comm	Agent communication diagnostic utility. For more information, see page 4-7.
ag_ping	Verifies that CONTROL-M/Server is active on the Server platform that is connected to the Agent platform. For more information, see “ag_ping Utility” on page 4-8 .
ctmagcfg	Interactively configures parameters in the config table. For more information, see “ctmagcfg Utility” on page 4-8 .
ctmcontb	Performs operations on the Prerequisite Conditions table.
ctmcreate	Creates a job in the CONTROL-M/Server Active Jobs file.
ctmdefine	Defines a job in the CONTROL-M/Server database.
ctmfw	Detects completion of file transfer activity by checking file size. Signals when desired file size is achieved. Can be invoked from the <CONTROL-M/Agent>/exe directory. For more information, see page 4-12.
ctmkilljob	Terminates a CONTROL-M job and its associated processes.
ctmloadset	Updates a Quantitative resource in the Resources table.
ctmorder	Orders or forces one or more jobs from a Scheduling table contained in the CONTROL-M/Server database. Note: When this utility is invoked from CONTROL-M/Server, parameters can be specified in a fixed order without parameter tags or in any order with tags. When invoked from a CONTROL-M/Agent platform, each parameter must be preceded by its tag.
ctmshout	Issues a shout message to an indicated destination.
ctmstvar	Displays the current value of an AutoEdit variable or function.

Table 4-2 CONTROL-M/Agent Utilities (Part 2 of 2)

Utility	Description
ctmudly	Orders jobs for a specific User Daily name. Note: When this utility is invoked from CONTROL-M/Server, parameters can be specified in a fixed order without parameter tags or in any order with tags. When invoked from a CONTROL-M/Agent platform, each parameter must be preceded by its tag.
ctmunixcfg	Enables you to view and modify most of the configuration parameters in the OS.dat file. For more information, see page 4-13.
ctmvar	Maintains AutoEdit variables. Note: The value of parameter -filename is the full path and name of a file that is accessible to CONTROL-M/Server.
ecactlb	Lists the status of each Control resource in the Resources table.
ecaqrtab	Performs operations on quantitative resources in the Resources table. Syntax when invoked from the Agent: ecaqrtab LIST "*" [-OUTPUT <Output>]
shagent	Shows if an Agent and Tracker are running. Note: This utility can be invoked only from CONTROL-M/Agent.

Utilities that are not described on the following pages are executed in CONTROL-M/Server and are described in the utility chapter of the *CONTROL-M/Server Administrator Guide*.

ag_diag_comm Utility

This utility is used to verify the communication between CONTROL-M/Agent and CONTROL-M/Server.

From the operating system prompt, specify the following command:

```
ag_diag_comm
```

ag_ping Utility

This utility verifies that CONTROL-M/Server is active on the Server platform connected to the Agent platform. 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.
```

ctmagcfg Utility

The **ctmagcfg** utility can be used to maintain CONTROL-M/Agent configuration parameters in the **CONFIG.dat** file. This utility is located at **<installation_dir>/EXE/ctmagcfg**. It must be invoked from the shell. A window similar to the following is displayed:

Agent Configuration Utility

- 1) Server-to-Agent Port Number . . . : [7507]
- 2) Agent-to-Server Port Number . . . : [5566]
- 3) TCP/IP Timeout. : [120]
For items 4 and 5 do not use IP address
- 4) Primary CONTROL-M/Server Host . . : [fox]
- 5) Authorized CONTROL-M/Server Hosts : [fox|lola]
- 6) Tracker Polling Interval. : [120]
- 7) Diagnostic Level. : [4]
- 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 . . . : []
- 14) Locale. : []

- 15) Common Event mechanism. : [Y]
- 16) Tracker Event Port. : [7010]

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

Please enter your choice:

If you change any parameter in this menu (except lines 7, 11, 12, and 13), you must restart CONTROL-M/Agent to make the change effective.

Table 4-3 ctmagcfg Utility Parameters (Part 1 of 3)

Parameter	Attributes
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
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
TCP/IP Timeout	Communication timeout in seconds. Specify a numeric value greater than or equal to zero. Default: 120
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 box or select a host name from the list box. Default: Computer on which the installation was made. Note: Specify a name, not an IP address such as 173.19.6.14

Table 4-3 ctmagcfg Utility Parameters (Part 2 of 3)

Parameter	Attributes
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.
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: 120 (seconds).
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.
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.
Comm Trace	Flag that indicates whether to debug CONTROL-M/Agent–CONTROL-M/Server communications. Valid values: 0 = no. 1 = yes. Default: 0 This parameter can only be changed after completing the installation.
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.
Days To Retain Log Files	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.
Daily Log File Enabled	Indicates whether the ctmag_<year><month><day>.log file is generated (Y) or not (N). Default: Y . See “Generating and Viewing the Daily Log File” on page 2-8 for more data.

Table 4-3 ctmagcfg Utility Parameters (Part 3 of 3)

Parameter	Attributes
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
Locale	Indicates language compatibility. Valid values are listed in Table 4-4 on page 4-11 .
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.
Tracker Event 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

Table 4-4 Locale Settings for Unix

Language	AIX and Solaris	HP-UX
English (USA)	en_US.ISO8859-1	locales/en_US.iso88591
English (British)	en_GB.ISO8859-1	en_GB.iso88591
German	de_DE.ISO8859-1	de_DE.iso88591
French	fr_FR.ISO8859-1	fr_FR.iso88591
Spanish	es_ES.ISO8859-1	es_ES.iso88591

ctmfw Utility (File Watcher)

The File Watcher utility is used to detect the successful completion of a file transfer activity or the creation or deletion of a file. For a detailed description, see Chapter 2 in the appropriate *CONTROL-M/Server Administrator Guide*.

The File Watcher utility can be invoked from the command line of the <CONTROL-M/Agent>/exe directory.

Syntax

```
ctmfw FILE
  < mode (CREATE|DELETE)> Default: CREATE
  < minimum detected size (bytes) > Default: 0
  < interval between file searches (seconds) >
    Default: 60sec
  < interval between filesize comparison
    iterations (seconds) > Default: 10 sec
  < number of iterations while size is static >
    Default: 3 iterations
  < time limit for the process (minutes).
    Default: 0 (no time limit)
    Effective while the file does not exist or,
    the file size is static and the minimum size
    was not reached >
  < monitor file size when wildcard is used >
    Default: N
```

-or-

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

Sample input file

```
INTERVAL 3
MIN_SIZE 4
FROM_TIME 1423
# ON_FILEWATCH <filename> <CREATE/DELETE> <min_size>
  <min_detect> <wait_time> < monitor file size when
  wildcard is used >
  ON_FILEWATCH welcome_file CREATE
  THEN
    DO_COND aaa 1231 +
    DO_CMD ls
    DO_OK
  ELSE
    DO_COND aaa 0101 -
  END_ON
#
```

Any File Watcher command line option can be specified in the input file. All parameters must be delimited by the new line character.

Example

```
ctmfw -input /home/ctmagent/ctmfw_rule.dat
```

ctmunixcfg Utility

This interactive utility enables you to view and modify most of the configuration parameters in the **OS.dat** file. These parameters are listed in Table A-2 on page A-4. If the parameter you want to modify is not listed in Table A-2, see the [“ctmagcfg Utility” on page 4-8](#).

The `ctmunixcfg` utility is at `<installation_dir>/EXE/ctmunixcfg`. It must be invoked from the shell. A prompt similar to the following is displayed:

```
OS Configuration Utility

1) Sysout Name. . .(MEMNAME|JOBNAME) : []
2) Printer Name . . . . . : [lpr]
3) Korn Shell Flags . . . .(-x|-v|n) : []
4) Borne Shell Flags. . . .(-x|-v|n) : []
5) Temporary scripts saving (YES|NO): []
6) Replace $0 by file name . . .(Y/N): []

s) Save
q) Quit
```

Please enter your choice:

To prevent Bourne and Korn shell script output from being included in system output (`sysout`), set Korn Shell Flags and Borne Shell Flags to **n**.

Specify values for the parameters you want to change, specify **s** after the prompt “Please enter your choice”, and press **<Enter>**. If you quit without saving, settings are not saved. If you save but do not quit, settings are saved anyway.

shagent Utility

The utility uses the `p_ctmag` and `p_ctmat` processes to test if the Agent service and Tracker service are running. It can be invoked only from the CONTROL-M/Agent platform. The utility has no parameters.

From the operating system prompt, specify the following command:

```
shagent
```

Sample Output

If the Tracker service is working, output similar to the following will be displayed:

```
root          17784  0:01 ./exe/p_ctmat
p_ctminetd running from inetd
```

Configuration Parameters

The CONTROL-M/Agent configuration parameters in Table A-1 are stored in the **CONFIG.dat** file. These parameters can be modified using the “[ctmagcfg Utility](#)” on [page 4-8](#). Some of these parameters are also described in Chapter 5 of the *CONTROL-M/Server for Unix Administrator Guide*.

Table A-1 Unix Agent – CONFIG.dat Parameters (Part 1 of 4)

Parameter	Description
AG_LOG_ON	Indicates if the ctmag_<year><month><day>.log file is generated (Y) or not (N). Default: Y . See “ Generating and Viewing the Daily Log File ” on page 2-8 .
AGCMNDATA	<Port number>/<Timeout> for the Server-to-Agent port. Port number specifies Agent platform port that receives data from the Server platform. Verify that this port is not used for any other purpose. Must match Server-to-Agent port number in CONTROL-M/Server. Must be between 1024 and 65533 inclusive. Default: 7006 . The timeout value is the COMTIMOUT communication job-tracking timeout in seconds. Mandatory. Example: 7006/30
AGENT_DIR	Location of files used by CONTROL-M/Agent.

Table A-1 Unix Agent – CONFIG.dat Parameters (Part 2 of 4)

Parameter	Description
ATCMNDATA	<Port number>/<Timeout> for the Agent-to-Server port. Port number specifies the Server platform port that receives data from the Agent platform. Verify that this port is not used for any other purpose. This value must match the Agent-to-Server Port Number in CONTROL-M/Server. The value must be a number between 1024 and 65533 inclusive. Default: 7005 . The Timeout value is the COMTIMOUT communication job-tracking timeout in seconds. Mandatory. Example: 7005/30 . Note: Increasing the Timeout value reduces Agent performance.h
AUTOEDIT_INLINE	Flag that indicates whether all AutoEdit variables will be set as environment variables in the script. Valid values: Y (yes), N (no). Default: N
CM_APPL_TYPE	<Back-end_config_table> Operating system Application Name. Default: OS
CMLIST	List of Control Modules. For internal use only.
COMM_TRACE	Flag indicating whether communication packets that CONTROL-M/Agent sends to and receives from CONTROL-M/Server are written to a file. Valid values: 1 (on), 0 (off). Default: 0 (off). If set to 1 , separate files are created for each session (job, ping, and so forth). This parameter can only be changed after completing the installation.
COMMON_EVENT	Flag 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: 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.
COMMRETSLP	Time in seconds (integer value) to wait between each attempt to attach to the CONTROL-M/Server. Default: 1

Table A-1 Unix Agent – CONFIG.dat Parameters (Part 3 of 4)

Parameter	Description
CTMPERMHOSTS	<p><one or more TCP/IP addresses or DNS names separated by >. Each value identifies an authorized CONTROL-M/Server host where a backup CONTROL-M/Server is installed. (This parameter was previously called Mirror CONTROL-M/Server Host Name.) Specify this parameter if one or more CONTROL-M/Servers have been designated as backups and can connect to this Agent in case of failover. See the <i>CONTROL-M/Server Administrator Guide</i> for information about backup server configuration. Mandatory. At least one primary host name should be specified. Example: 192.138.28.121 aristo.isr.bmc.com/mybksys1 192.138.28.123</p>
CTMS_ADDR_MODE	<p>{IP} 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.</p>
CTMSHOST	<p>CONTROL-M/Server host name. Name of the primary host running CONTROL-M/Server.</p>
DBGVLV	<p>CONTROL-M/Agent diagnostic level (for use by Technical Support). Determines types of diagnostic messages generated. This parameter is normally set to zero (no diagnostics). Range: 0 - 4. Default: 0</p>
EVENT_TIMEOUT	<p>Job Tracking Timeout. Tracker event timeout in seconds. Default: 120</p>
LOCALHOST	<p>Specifies a local Host Name other than the machine default Host Name.</p>
LOGKEEPDAYS	<p>Number of days to retain Agent proclog files. After this period, Agent proclog files are deleted by the New Day procedure. Default: 1 Note: This parameter is relevant only if CONTROL-M/Server does not pass a parameter that determines how many days to keep log files.</p>
PROTOCOL_VERSION	<p>Server-Agent communication protocol version. Default: 06</p>

Table A-1 Unix Agent – CONFIG.dat Parameters (Part 4 of 4)

Parameter	Description
START_TRACKER	{Y N} If this parameter is set to Y , CONTROL-M/Agent uses p_ctmat to test the Tracker process and starts the Tracker process if it is not running or has failed. Default: Y
TRACKER_EVENT_PORT	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.
UTTIMEOUT	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: 120
AGENT_TO_SERVER_CONNECT	Specifies the connection to CONTROL-M/Server. Valid values are: <ul style="list-style-type: none"> • Y – CONTROL-M/Agent attempts to connect to CONTROL-M/Server. Default. • N – CONTROL-M/Agent will not attempt to connect to CONTROL-M/Server.

The Control Module configuration parameters in Table A-2 are stored in the **OS.dat** file. These parameters can be modified by the “[ctmunixcfg Utility](#)” on page 4-13.

Table A-2 CM for Unix – OS.dat Parameters (Part 1 of 2)

Parameter	Description
CTM_SU_PATH	Alternative path that CONTROL-M/Agent will use to look for the su command. Default: /bin/su
CTM_PARM_ENC	Character used to enclose job processing parameters passed to jobs by CONTROL-M/Agent. Any character or string can be specified. A blank space (in single or double quotes) is valid.
CTM_PRM_DONT_DELETE	By default, temporary scripts generated from jobs are deleted at the end of job execution. If this value is set to YES , temporary scripts are not deleted.
CTM_PRM_KSH_FLAGS	Flags to include when running a job that is written in Korn Shell. Valid values: -x, -v, n . Default: -x

Table A-2 CM for Unix – OS.dat Parameters (Part 2 of 2)

Parameter	Description
CTM_PRM_SH_FLAGS	Flags to include when running a job that is written in Bourne Shell. Valid values: -x , -v , n . Default: -x
CTM_PRM_KSH_FLAGS	Flags to include when running a job that is written in Korn Shell. Valid values: -x , -v , n . Default: -x
PRINTER_NAME	Default printer for job output (sysout).
SYSOUT_MODE	Octal value indicating file access mode of the Sysout (output) file. 777 indicates the highest level of access.
SYSOUT_NAME	{JOBNAME MEMNAME} If set to JOBNAME , parameter Jobname is used in the sysout file instead of parameter Memname . Default: MEMNAME
TRANSLATE_\$0	If set to Y , reserved variable \$0 is replaced by a file name before a script is run. If set to N , this functionality is disabled. For more information, see “Use of Reserved Variable \$0” on page 3-8 .

Index

Symbols

\$0 reserved variable 3-8

A

Add new Host Name

Server Host Names menu 2-6

ag_diag_comm

summary 4-6

AG_LOG_ON configuration parameter A-1

ag_ping utility

summary 4-6

AGCMNDATA configuration parameter A-1

Agent configuration file

parameters 2-3

AGENT_DIR configuration parameter A-1

Agent-to-Server port number

ctmagecfg utility 4-9

ATCMNDATA configuration parameter A-2

Authorized CONTROL-M/Server Hosts

parameter

ctmagecfg utility 4-10

AutoEdit Inline parameter

ctmagecfg utility 4-10

AUTOEDIT_INLINE configuration

parameter A-2

B

backslash

utility parameters 4-4

batch mode utilities 4-3

C

CM_APPL_TYPE configuration parameter

A-2

CM_LIST configuration parameter A-2

COMM_TRACE configuration parameter

A-2

ctmagecfg utility 4-10

COMMON_EVENT configuration

parameter A-2

COMMRETSLP configuration parameter

A-2

communication

diagnostic report 2-9

CONFIG.dat file

parameters A-1

configuration parameters

Agent Configuration file 2-3

CONFIG.dat file A-1

modifying 2-3

- Control Module configuration parameters
 - A-4
- Control Module for operating system 1-4
- CONTROL-M/Agent
 - description 1-1
 - functions 1-3
- CONTROL-M/Control Module
 - Oracle 1-2
 - SAP 1-2
- cshrc environment variable 4-5
- CTM_PARM_ENC configuration parameter
 - A-4
- CTM_PRM_DONT_DELETE configuration parameter
 - A-4
- CTM_PRM_KSH_FLAGS configuration parameter
 - A-4
- CTM_PRM_SH_FLAGS configuration parameter
 - A-5
- CTM_SU_PATH configuration parameter
 - A-4
- ctmagcfg utility
 - description 4-8
 - summary 4-6
- ctmcontb utility
 - summary 4-6
- ctmcreate utility
 - summary 4-6
- ctmdefine utility
 - summary 4-6
- ctmfw utility
 - summary 4-6
- ctmkilljob utility
 - summary 4-6
- ctmloadset utility
 - summary 4-6
- ctmorder utility
 - summary 4-6
- CTMPERMHOSTS configuration parameter
 - A-3
- CTMS Address Mode parameter

- ctmagcfg utility 4-10
- CTMS_ADDR_MODE configuration parameter
 - A-3
- CTMSHOST configuration parameter
 - A-3
- ctmshout utility
 - summary 4-6
- ctmstvar utility
 - summary 4-6
- ctmudly utility
 - summary 4-7
- ctmunixcfg utility
 - summary 4-7
- ctmvar utility
 - summary 4-7

D

- Daily Log File Enabled parameter
 - ctmagcfg utility 4-10
- Days To Retain Log Files parameter
 - ctmagcfg utility 4-10
- DBGLVL configuration parameter
 - A-3
- Delete Host Name
 - Server Host Names menu 2-6
- diagnostic level
 - setting 2-7
- Diagnostic Level parameter
 - 4-10
- diagnostic report 2-9

E

- ECACTLTB utility
 - 4-6
- ecactltb utility
 - summary 4-7
- ECAQRTAB utility
 - 4-6
- ecaqrtab utility
 - summary 4-7
- environment
 - runtime 3-5

EVENT_TIMEOUT configuration
parameter A-3
exit codes
CONTROL-M scripts 3-8

F

format
utility parameters 4-3
functions
CONTROL-M/Agent 1-3

H

HERE documents
CONTROL-M scripts 3-7

I

inetd process 2-2
input_file parameter
batch mode utilities 4-3

J

Japanese 2-11
job handling requests 1-3
job output
sysout 1-3

L

languages
Japanese 2-11
LOCALHOST configuration parameter A-3
login process

scripts 3-5

LOGKEEPDAYS configuration parameter
A-3

O

On Statement/Code parameter 3-6
operating systemControl Module 1-4
Oracle
CONTROL-M/Control Module 1-2
OS.dat file
configuration parameters A-4
output parameters 4-4

P

p_ctmat process 2-2
parameters
backslash in 4-4
configuration 2-3, A-1
On Statement/Code 3-6
output 4-4
syntax 4-3
Primary Server Host parameter
ctmagecfg utility 4-9
PRINTER_NAME configuration parameter
A-5
profile environment variable 4-5
PROTOCOL_VERSION configuration
parameter A-3

Q

Quit
Server Host Names menu 2-6

R

- reserved variable \$0 3-8
- REXX-language scripts 3-4
- runtime environment 3-5

S

SAP

- CONTROL-M/Control Module 1-2
- scripts
 - exit codes 3-8
 - HERE documents 3-7
 - login process 3-5
 - On Statement/Code parameter 3-6
 - REXX-language 3-4
 - run-time environment 3-5
 - Shell type 3-2
 - startup process 3-5
 - working directory 3-6
- Server-to-Agent Port Number
 - ctmagcfg utility 4-9
- shagent utility
 - description 4-14
 - summary 4-7
- shell type
 - CONTROL-M scripts 3-2
- slash symbol
 - utility parameter syntax 4-4
- START_TRACKER configuration parameter
 - A-4
- START_TRACKER parameter 2-2
- starting
 - CONTROL-M scripts 3-5
- syntax
 - utility parameters 4-3
- sysout
 - job output 1-3

- SYSOUT_MODE configuration parameter
 - A-5
- SYSOUT_NAME configuration parameter
 - A-5

T

- TCP/IP Timeout parameter
 - ctmagcfg utility 4-9
- Timeout for Agent utilities
 - Agent configuration parameter A-4
- Tracker
 - start 2-2
 - stop 2-2
- Tracker Polling Interval parameter
 - ctmagcfg utility 4-10
- Tracker Port
 - Agent configuration parameter A-4
- TRANSLATE_\$0 configuration parameter
 - A-5

U

- utilities
 - backslash in parameters 4-4
 - batch mode 4-3
 - ctmagping 4-6
 - ctmcontb 4-6
 - ctmcreate 4-6
 - ctmfw 4-6
 - ctmloadset 4-6
 - ctmshout 4-6
 - directing output 4-4
 - ecactltb 4-6
 - ecaqrta 4-6
 - enabling other users to run 4-5
 - output parameter 4-4
 - special formats 4-4
 - workflow 4-1

- utility parameter syntax 4-3
- UTTIMEOUT parameter
 - configuration file A-4

W

- Western European language characters 2-10
- Western European languages
 - special characters 2-10
- workflow
 - utility 4-1
- Working directory
 - CONTROL-M scripts 3-6

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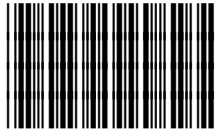
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