Tina Command Line Documentation

Tina 4.6.9

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CHAPTER 1 - Introduction

Command Line Interface enables to use some functions of the application without resorting to the graphical interface. The main interest of this mode is to integrate Tina into existing procedures or into control applications of the system administration.

Conventions

This documentation uses conventions to make information easy to access and understand.

Command Syntax

The command syntax is presented as follows:

- Square brackets `[ ]` indicate an option.
- The `-` sign refers to a parameter. The parameter is either followed by the type of information to provide, or is self-sufficient.
- The `|` sign indicates a choice between several parameters.

Windows

To use the command line with Windows, select Start › All Programs › Tina › Utilities › Command Line Interface. This opens a command prompt window preset to use Tina environment variables.

For all commands that require administrator permission, if UAC is enabled, right click Start › All Programs › Tina › Utilities › Command Line Interface and select Run as administrator.

Missing Parameters

For each command entered, an application searches for its settings at different places. The search is always performed in this order:

- First the program verifies if the parameter is specified on the command line.
- If not, it looks in the environment variables.
- If the parameters are still not available at this level, it looks in the parameters file.
- Next the program uses the default settings.
- If the parameter is not defined and is compulsory, the program ends on error.

CHAPTER 2 - Command Syntax

This topic presents a summary of all the commands along with their options, in alphabetical order.

> **Note**: Although commands may be written on several lines in the document, they must be entered on a single line.

Command	Options
tina	tina [-catalog catalog] [-target_host host] [-target_appl application] [-language language] [-identity user:passwd] [-secure] [-help]
tin@	tin@ -initrest -user user -password password [-target_host machine|-target_appl application] [-folder folder] [-file file] [-keep_alive_dtime seconds] tin@ -initarch -user user -password password [-target_host machine] [-file file] [-keep_alive_dtime seconds] tin@ -operator contents|list_inst|info|add2bag|show_bag|rem_from_bag|empty_bag|set_date|get_date|set_depth|get_depth|restore|stat_rest|abort_rest|archive|stat_arch|abort_arch|home_dir|reset|close tin@ -get user|target_host|folder|target_appl|sess_type [-catalog catalog]
tina_acct	tina_acct [-customer_id customer_id] [-host host1 [host2]...] [-platform platform1 [platform2]...] [-volume_unit kilo|mega|giga] [-back_hour hours]|[-start_date yyyymmddhhmm] [-end_date yyyymmddhhmm] [-v_classes] [-v_report_date] [-v_period] [-v_catalog] [-v_platform] [-v_vm_name] [-v_folder] [-v_jobtype] [-v_status] [-v_user] [-v_description] [-v_dates] [-v_elapsed] [-v_jobid] [-v_volume] [-v_expected_volume] [-v_objects] [-v_cart] [-v_barcode] [-v_properties] [-v_father_jobid] [-v_duplicated_job_id] [-v_priority] [-output_format text|xml|csv] [-csv_separator csv_separator] [-xml_stylesheet_file file] [-xml_stylesheet_type stylesheet_type] [-file file] [-display_active_jobs_only] [-skipped_jobs] [-catalog catalog] [-identity user:password] [-help]
tina_adm	tina_adm [-catalog catalog] [-language language] [-identity user:passwd] [-help]
tina_alarm	tina_alarm -text "text" -severity severity_level [-host host]|[-application application]|[-drive drive]| [-library library]|[-jobid id]|[-label label] [-alarm_id id] [-catalog catalog][-class event_class][-help]
tina_alpha	tina_alpha [-language language] [-catalog catalog] [-identity user:passwd]
tina_archive	tina_archive

Command	Options
tina_archive_control	tina_archive_control [-folder folder_name] [-archive archive_name] -create|-edit|-remove|-list|-statistic|-view [-force] [-description description] [-type] [-keywords keyword1 [keyword2]...] [-remove_keywords] [-protected_size] [-outptut_format text|csv] [-csv_separator csv_separator] [-permission permission1 [permission2]...][-os_user user_name] [-os_group group_name][-cartridge_format format] [-file_format format1 [format2]...] [-through_link yes/no] [-pool pool_name1 [pool_name2]...] [-host host_name] [-manage_acl yes/no] [-prolog file_path] [-epilog file_path] [-lanfree yes/no] [-remove_archived_file yes/no] [-use_empty_archive yes/no] [-sync_cart yes/no] [-continue_on_error yes/no] [-keyword_on_archive yes/no] [-propagate] [-identity identity] [-catalog catalog] [-help]
tina_backup	tina_backup -strat A|B|C|D [-full]|[-incr] [-host host]|[-application application] [-date yyyymmddhhmm] [-path path1 [path2]...]|[-file_list file_path]|[-parallel_file_list file_path1 [file_path2]...] [-user user] [-password password] [-encode] [-compress] [-sync_cart] [-v_jobid] [-identity user:passwd] [-catalog catalog] [-help]
tina_cache	tina_cache [-purge] [-job_queue <queue_type>] [-jobid jobid] [-scan] [-once] [-incl job_type1 [job_type2]...]|[-excl job_type1 [job_type2]...][-interval <freq>] [-jobs_to_stderr] [-info] [-path <p>] [-move <n>] [-rename <n>] [-display_states] [-catalog catalog] [-help]
tina_cart	tina_cart -type dev_type -list|-extract -device device_descriptor [-skip number] [-source_data_os_type Windows|Unix|MacOS|Netware] [-old_format] [-verbose] [-offset offset value] [-set_size] [-files file1 [file2]...] [-format TiNa|TiNa2|TiNa3|TiNa4|TiNa5|tar|cpio|raw] [-all] [-no_decode] [-raw_data] [-block_size Size] [-crypt_password password] [-key Key file] [-event_to_console]
tina_cart_control	tina_cart_control [-label label] [-pool pool_label] [-pool_dest pool_label] [-drive drive] -close|-reopen|-recycle|-new_spare|-erase|-delete|-status|-create|-duplicate|-read|-chgpath|-list [-depth valueUNIT] [-before]|[-after]|[-all] [-no_empty] [-online_ready] [-nbcart nbcart] [-force]|[-range valueUNIT] [-barcode barcode1 [barcode2]...] [-number number] [-output_format text|csv] [-csv_separator separator] [-short]|[-long] [-do_not_check_data_integrity] [-retention valueUNIT] [-status_filter status_filter1 [status_filter2]...] [-catalog catalog] [-path path] [-path_dest new_path] [-v_name] [-v_barcode] [-v_volume] [-v_unit] [-v_tape_file] [-v_status] [-v_recycling] [-v_location] [-v_rule] [-v_description] [-v_creation_date] [-v_backup_date] [-v_format] [-v_wear_level] [-v_recyclable] [-v_recycle_age] [-v_type] [-v_pool_label] [-v_close_status] [-v_fill_status] [-identity identity] [-help]
tina_catalog_ctrl	tina_catalog_ctrl -start|-suspend|-stop|-maintenance|-status [-catalog catalog] [-identity user:password] [-help]

Command	Options
tina_cert	tina_cert [-language language]
tina_clone_catalog	tina_clone_catalog [-disable] [-size size_MB] [-boot boot_file] [-file file] [-index index1 [index2]...] [-catalog_name catalog_name] [-pipe pipe] [-folder folder1 [folder2]...]|[-skip_folder folder1 [folder2]...] [-boot_restore_index] [-file_size file_size] [-max_catalog_size max_catalog_size] [-help]
tina_cod	tina_cod [-codec codec_list1 [codec_list2]...]|[-decode][-file_list file_list1 [file_list2]...] [-stdio] [-pipe_in pipe] [-pipe_out pipe] [-list] [-test] [-crypt_password password] [-compress_rate compress_rate] [-quiet] [-help]
tina_config	tina_config [-encode file]|[-decode file] [-html] [-catalog catalog][-identity user:password] [-help]
tina_daemon	tina_daemon [-reset][-tina][-tina_service_name][-tina_service_tcp_num][tina_service_udp_num]
tina_del	tina_del -path_folder path [-folder folder] [-r]|[-i] [-strat A|B|C|D] [-catalog_only] [-catalog catalog] [-identity user:passwd] [-help]
tina_drive_control	tina_drive_control -drive drive_name [-host_access host_name] [-test] [-catalog catalog] [-identity identity]
tina_event	tina_event [-v_development] [-v_ad_cell_obj] [-v_class] [-v_pid][-v_job_id] [-v_program] [-v_host] [-v_user] [-v_catalog] [-v_server][-v_log_date] [-_severity_full] [-f_date YYYYMMDDHHmm YYYYMMDDHHmm][-f_pid pid] [-f_job_id jobid1 [jobid2]...] [-f_program program][-f_host hostname] [-f_user username] [-f_catalog catalog] [-f_server server] [-f_severity alarm_critical alarm_major alarm_minor fatal error warning info acct debug] [-f_log_date YYYYMMDDHHmm YYYYMMDDHHmm] [-all_event] [-output_format text|csv] [-csv_separator csv_separator] [-file file] [-output_file output_file] [-split_by_catalog][-max_line number_line] [-catalog catalog] [-target_host hostname] [-help]
tina_event_viewer	tina_event_viewer [-catalog catalog] [-file file] [-language language] [-no_refresh] [-jobid id] [-all_events] [-help]
tina_export	tina_export -folder folder [-path_folder path1 [path2]...] [-date yyyymmddhhmm] [-date_dest date] [-strat A|B|C|D] [-catalog_dest catalog] -folder_dest folder [-update] [-strat_dest A|B|C|D] [-path_folder_dest archive_path] [-full]|[-incr] [-catalog catalog] [-help]
tina_folder_control	tina_folder_control [-end_folder_maintenance folder1 [folder2]...]| [-import_folder folder1 [folder2]...] [-file catalog_backup] [-keep_platform_disabled] [-catalog catalog][-list_folder][-list_maint_folder][-help]

Command	Options
tina_find	tina_find [-path_folder search_path] [-pattern "pattern"][-host host1 [host2]...]|[-application application1 [application2]...]|[-folder archive_folder] [-depth valueUNIT] [-lost_files] [-strat A|B|C|D] [-all] [-long] [-display_cart] [-nfs] [-date yyyymmddhhmm] [-no_r] [-outptut_format text|csv] [-catalog_only]|[-user user]| [-password password] [-csv_separator csv_separator] [-catalog catalog] [-identity user:passwd] [-help]
tina_help	tina_help [-alarm_id ID] [-parameter_list] [-parameter tunable_name] [-envvar_list] [-envvar envvar_name] [-app_type appli_type] [-alarm_list]
tina_init	tina_init [-disable] [-config]|[-folder folder1 [folder2]...]| [-skip_folder folder1 [folder2]...]|[-maintain_folder folder] [-close_cart] [-size size_MB] [-nb_instance number] [-boot boot_file] [-file file] [-index index1 [index2]...] [-memory_cache_only cache_size (MB)] [-pipe pipe] [-path path] [-force_reinit]|[-no reinit] [-catalog_name catalog_name] [-boot_restore_index] [-file_size file_size] [-max_catalog_size max_catalog_size] [-help] [-create]|[-edit] [-property_file parameter_file]
tina_job	tina_job [-catalog catalog] [-language language] [-identity user:passwd] [-job_polling_period period] [-help]
tina_job_control	tina_job_control -jobid job_id -cancel|-pause|-restart|-duplicate|-change_priority top|up|down|bottom [-no_wait] [-pool pool_name] [-close_cart] [-empty_cart] [-continue_on_error] [-view] [-catalog catalog] [-identity user:passwd] [-help]
tina_library	tina_library [-catalog catalog] [-library library] [-language language] [-identity user:passwd] [-help]
tina_library_control	tina_library_control -library library -reinit_status|-reinit_read_label|-reinit_barcode|-reinit_full_inventory|-offline|-online|-list|-content[-retry_mbox_full] [-label cartridge_label]|[-barcode bar_code]|[-pool pool_label] [-output_format text|csv] [-short]|[-long] [-do_not_check_data_integrity] [-offline_ready] [-csv_separator csv_separator] [-no_wait] [-retention valueUNIT] [-status_filter status_filter1 [status_filter2]...] [-known_cart][-catalog catalog] [-help]
tina_listcart	tina_listcart -label label [-outptut_format text|csv] [-csv_separator csv_separator] [-listjob] [-v_type] [-v_path] [-v_backup_date] [-v_modification_date] [-v_info_cart] [-v_folder] [-v_default] [-data_integrity_check] [-catalog catalog] [-identity user:password] [-help]
tina_listjob	tina_listjob -jobid jobid [-force] [-max_obj max_obj] [-all] [-output_format Format] [-csv_separator separator] [-v_size] [-volume_unit unit] [-v_path] [-v_type] [-v_backup_date] [-v_last_access_date] [-v_modification_date] [-v_info_cart] [-v_barcode] [-v_host] [-v_strat] [-v_sess] [-v_default] [-catalog catalog] [-help]

Command	Options
tina_odbcheck	tina_odbcheck [-reset] [-opcode opcode] [-catalog catalog] [-help]
tina_odbfree	tina_odbfree [-folder folder1 [folder2]...] [-dedup_strat strat_num] [-keep_full n] [-invert] [-label label] [-retention days] [-jobid jobid] [-batch] [-catalog catalog] [-help]
tina_odbgc	tina_odbgc [-purge] [-hss_sync] [-sync] [-catalog catalog] [-help]
tina_odbsave	tina_odbsave [-no_compress] [-dir_dest destination_directory]| [-check] [-maintain_folder folder1 [folder2]...]|[-folder folder1 [folder2]...]|[-skip_folder folder1 [folder2]...]|[-config] [-no_job] [-prefix prefix][-file odbsave_file] [-pipe odbsave_pipe] [-index_dir index_directory] [-catalog catalog] [-help]
tina_operator	tina_operator [-catalog catalog] [-language language][-identity user:passwd] [-help]
tina_ping	tina_ping -host host [-tina_service_tcp_num tcp_port_number|-tina_service_name service_name] [-bonjour] [-no_icmp_ping] [-register_bonjour] [-verbose] [-help]
tina_report	tina_report [-customer_id customer_id] [-start_date YYYYMMDDHHmm] [-end_date YYYYMMDDHHmm] [-simple_invoice]|[-detailed_invoice] [-v_archives][-volume_unit kilo|mega|giga|tera] [-output_format text|xml|csv] [-csv_separator csv_separator] [-xml_stylesheet_file file] [-xml_stylesheet_type stylesheet_type] [-file file] [decode]| [-encode] [-catalog catalog] [-identity identity] [-help]
tina_restore	tina_restore -path_folder path1 [path2]...|-file_list file_path [-file_list_dest file_path] [-behavior_on_missing_file continue|continue_with_error_code|abort] [-ex_path_folder path1 [path2]...]|[-ex_file_list file_path] [-folder folder] [-path_dest path] [-folder_dest folder] [-drive drive] [-strat A|B|C|D] [-mode restore_mode] [-date yyyymmddhhmm	yyyymmddhhmmss] [-depth valueUNIT] [-no_rewind] [-silent] [-offline_mode offline_mode] [-all_vers] [-user user] [-password password] [-v_jobid] [-error_mode continue|abort|replace_after_reboot][-test_mode test_mode] [-do_not_restore_security_attributes] [-secure_interactive_password]|[-secure_session_password_id] [-xml_restore_parameters_file] [-file_mode_interactive_user] [-restore_chronological_order] [-catalog catalog] [-identity user:passwd] [-help]
tina_scm	tina_scm [-catalog catalog] [-language language][-identity user:passwd]
tina_scm_control	tina_scm_control [-catalog catalog]

Command	Options
tina_sched	tina_sched [-catalog catalog] [-historic_hours hours][-scheduled_hours hours] [-estimation number] [-language language][-help]
tina_sendmail	tina_sendmail -server smtp_server -to email_address_1 [email_address_2]...|-tofile file [-cc email_address_1 [email_address_2]...] [-from email_address] [-subject subject] [-body body_text]|[-body_file body_file] [-attach attachment_list1 [attachment_list2]...] [-charset charset] [-port port] [-user username] [-pass password] [-help]
tina_shell	tina_shell [-file script_file] [-catalog catalog] [-identity user:password][-help]
tina_sidf	tina_sidf [-type "dev_type"] [-list]|[-scan]|[-extract][-scan_nb_obj_to_list nb_objects] [-scan_skip_size size_MB] [-device device_descriptor] [-skip n] [-range [device,skip,count] [...]] [-files file1 [file2]...] [-format sidf|raw] [-all] [-no_decode] [-raw_data] [-block_size size] [-force_ask_type] [-crypt_password password] [-key key_file] [-host host_name] [-catalog] [-event_to_console]
tina_start_backup	tina_start_backup -host host|-application application -strat A|B|C|D [-full]|[-incr] [-sync] [-v_jobid] [-identity user:password][-catalog catalog] [-help]
tina_stop	tina_stop [-host host1 [host2]...]
tina_stream	tina_storage_ctrl [-list_pool_content]|[-list_pools]|[-erase_pool_content] [-pool pool_name] [-application application_name] [-object object_name] [-start_date yyyymmddhhmmss] [-end_date yyyymmddhhmmss] [-force] [-catalog catalog] [-help]
tina_synchvds	tina_synchvds [-catalog catalog] [-identity identity] [-catalog_id UUID] [-list_clients]|[-client UUID]|[-synchronize mode] [-path_to_remove full_path]|[-remove] [-config_name config_name]|[-hvds_server server_name]|[-hvds_port port_num]|[-hvds_user user_name]|[-hvds_password Password] [-console] [-help]
tina_tunable_ctrl	tina_tunable_ctrl [-verbose] [-catalog catalog] [-identity user:password] [-file file] [-hosts hosts] [-name name] [-comment comment] [-catalogs catalogs] [-binaries binaries] [-values values] [-disabled] [-force] [-merge] [-remove] [-help]
tina_user_info_cmd	tina_user_info_cmd [-output_format text|csv] [-csv_separator csv_separator] [-start_eub]|[-abort_eub] [-catalog catalog] [-help]

CHAPTER 3 - Command Line

This topic presents all the commands in alphabetical order. It details their syntax and illustrates their use through examples.

> **Note**: The default values of the graphical interfaces commands options can be edited through environment variables or in the `parameters` file.

Prerequisites

Windows

To open Command Line Interface, click Start › All Programs › Tina › Utilities › Command Line Interface. This automatically positions you in the `$TINA_HOME\Bin` directory and display a prompt for you to enter the command.

Unix

On Linux and Unix, it is no more required to load `.tina.sh` prior to launch Tina commands. Execute directly the Tina commands.

Each command is now in fact a wrapper script that computes automatically the TINA_HOME and loads `.tina.sh`, then starts the real command. This mechanism is transparent and does not affect existing scripts and procedures you use. If the environment is already set, the commands still work as expected.

macOS

With MacIntosh operating systems, as with Windows, the Tina services are normally automatically launched on startup and the environment is set when you click on the Command Line Interface icon under the Utilities tab of the Launcher.

Specific Parameters

These parameters have a specific function or are identical for all or part of the Tina binaries or commands:

-version

The `-version` parameter allows you to display the version number of the application currently used and is common to all commands. To find out an application version number, enter the `-version` parameter on the command line.

This parameter cannot be defined in the environment, nor in the `parameters` file and has no default value. Its status is particular: it does not start the binary, unlike other parameters.

-long_version

The `-long_version` parameter is used in the same way as `-version` but provides more information, such as the build number and the revision number.

-help

The `-help` parameter displays the command help. It shows the list of the accepted parameters for the command.

> **Note**: The `-help` parameter is valid for every command excepted. on Windows systems, the binaries which open a graphical interface (`tina`, `tina_adm`, `tina_user_info`, ...).

-language

The `-language` parameter specifies the working language of the binary or command.

The parameter possible values are:

- `Chinese`
- `English`
- `French`
- `German`
- `Japanese`
- `Korean`
- `Spanish`

This parameter acts on the graphical interfaces, the messages displayed on the command line and the events logged by Tina.

By default, Tina is displayed in English.

-identity

The `-identity` parameter allows you to specify a username and password to connect to the Tina catalog with an identity different from that of the user launching the command. The format of the value given to this parameter is `username:password`.

This parameter is mandatory if the user launching the command does not have the necessary permission to access the catalog functionalities required to use the command.

For instance, with the `tina_catalog_ctrl` command, used to access a remote catalog, the `-identity` parameter must provide the distant catalog administrator login.

For the commands that launch a graphical interface, if this parameter is not used, the catalog connection identity is requested when the application starts.

> **Note**: If the password value is an empty string then both `username:` and `username` values are accepted for the `-identity` parameter.

While the `-identity` parameter allows greater access security, it can be omitted. In that case, the associated command is unsecured.

> **Note**: If root has administration rights to the catalogs, the `-identity` parameter is not necessary to run tina_report. For more information on tina_report, see tina_report.

-no_console_output

The `-no_console_output` parameter prevents the messages from Command Line programs to be displayed on the console. This can be useful for commands launched when a console is not available, to prevent the logging of errors.

Commands

This topic lists the commands.

tina

The `tina` binary opens Restore & Archive Manager, used to restore and archive data.

Syntax

```
tina [-catalog catalog] [-target_host host] [-target_appl application] [-language language] [-identity user:passwd] [-secure] [-help]
```

[-catalog catalog]	Specifies the working catalog.
[-target_host host]	Specifies the target host.
[-target_appl application]	Specifies the target application.
[-identity user:passwd]	See -identity.
[-secure]	The secure mode allows the Tina catalog administrator to restore files on any platforms of the catalog. When the `secure` mode is activated, all the catalog client machines are accessed with the administrator (Windows) or root (Unix) permissions. As a consequence, you do not need to provide an operating system login to connect to a platform any longer. To open `tina` in secure mode, you must imperatively provide the catalog administrator name and password, either using the `-identity` option or via the catalog login window that appears when you launch the `tina` command.
-run_local	This option is for Unix systems only. It allows to open Restore & Archive Manager with the login of the user that launched the `tina` command. As a result, no additional login is required when the interface opens. This option cannot be use with -secure.

Example. tina use

In this example, `tina` is running in French with the catalog `Demo`.

```
tina -catalog Demo -language French
```

In this example, `tina` is running in English with the catalog `Demo` on the application `ora7`.

```
tina -catalog Demo -target_appl ora7
```

In this example, the application is running in Spanish with the catalog `Demo`with the `bjr:passwd` identity.

Unix
tina -catalog `Demo` -language `Spanish -identity bjr:passwd`

Windows
tina -catalog `Demo` -language `Spanish -identity DOMAINE1\bjr:passwd`

tin@

The `tin@` command allows you to restore and archive data. To use this command, proceed as follows:

- Create a restore (`-initrest` option) or an archiving (-initarch option) session.
- Use the `-operator` option to specify the operation to perform.
- In addition, you can use the `-get` option to retrieve the information concerning the current session.

> **Note**: Users performing restore or archiving operations must have the corresponding Tina permissions. See the Tina Restore Documentation for details.

-initrest and -initarch options

Syntax

```
tin@ -initrest -user user -password password [-target_host machine|-target_
appl application] [-folder folder] [-file file] [-keep_alive_dtime seconds]
tin@ -initarch -user user -password password [-target_host machine] [-file
file] [-keep_alive_dtime seconds]
```

-initrest	Creates a restore session. Displays the session id to be used by other options.
-initarch	Creates an archiving session. Displays the session id to be used by other options.
-user user	Name of the user accessing the host. On Windows the user name must be in the form `<domain name>\<user name>`.

-password password	Authentication password.
-folder folder	Folder of the host, application or archive to browse or restore. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]`
-target_host machine	Name of the host where the restore or archiving takes place.
-target_appl	Name of the application where the restore takes place.
-file file	Specifies a file name where the session id is written.
-keep_alive_ dtime seconds	Specifies, in seconds, the session lifespan. The default is 300, minimum is 60, maximum is 1800
-catalog catalog_name	Name of the catalog
-help	Displays help for the tin@ command
-help -option	Displays help for the specified option. The option can be: -operator, -initarch, `-initrest` or `-get`.

-operator option

The operator option allows you to perform various operations once a restore or archive session has been created.

> **Note**: The `-operator` option can only be used for one operation at a time. If you want to perform several operations you must run the `-operator` option as many times as you have operations to perform.

Syntax: -operator

```
tin@ -operator contents|list_inst|info|add2bag|show_bag|rem_from_bag
|empty_bag|set_date|get_date|set_depth|get_depth|restore|stat_rest|abort_
rest|
archive|stat_arch|abort_arch|home_dir|reset|close
```

Summary of the operations available with the -operator option:

Operation	Description
contents	Lists the contents of a directory

Operation	Description
list_inst	Lists the backup versions of an object
info	Provides information concerning a specific version
add2bag	Adds an object to the list of object to restore or archive
show_bag	Displays the list of object to restore or archive
rem_from_bag	Removes an object from the list of object to restore or archive
empty_bag	Empties the list of object to restore or archive
set_date	Sets the navigation date (restore sessions only)
get_date	Gets the navigation date (restore sessions only)
set_depth	Sets the time navigation period
get_depth	Gets the time navigation information
restore	Restores the list of objet selected (restore sessions only)
archive	Archives the list of objet selected
stat_rest	Displays the restoration status (restore sessions only)
stat_arch	Displays the archiving status
abort_rest	Cancels the restore (restore sessions only)
abort_arch	Cancels the archiving
home_dir	Gets the home directory of the user (if any)
reset	Resets the current session
close	Closes the current session

List of the parameters of the operations

Parameters are required in order to specify the operation to perform. This is the list of the parameters used by the operations.

Parameter	Description
-abs_path abs_path	Specifies object absolute path in UTF8. Used only with -operator contents|add2bag|rem_from_bag|list_inst. Write paths using Unix syntax, regardless of the host's OS.

Parameter	Description
-type type_code	Specifies the object type code. Possible values are: Code: Object: Applies to: "." file host, application, archive "c" char host, archive "b" block host, archive "d" directory host, application, archive "l" link host, application, archive "p" pipe host, archive "s" socket host, archive "o" door host, archive The type option is useful to differentiate two objects with the same absolute path but of different types.
-obj_id obj_id	Specifies the object id. This information is returned by the commands: `-operator contents`, `-operator list_inst` or `-operator info`.
-sess_id sess_id	Specifies the session id where the operation takes place. The session id is provided by `-initrest` or `-initarch`. It is required for all `-operator` operations.
-date YYYYMMDDHHmm [ss]	Specifies the new date value. Used only with `-operator set_date`.
-depth value unit|infinite	Specifies the new time navigation value and unit. Used only with `-operator set_depth`. The value is an integer, the possible values for the unit are: S (second), m (minute), H (hour) D (day), W (week), M (month), Y (year) Instead of providing a value and a unit, you can use the keyword "`infinite`".
-jobid job_id	Specifies the job identifier. Used only with `-operator stat_rest|stat_arch`.
-mode mode	Specifies the restore behavior if a file to restore already exists. Used only with `-operator restore`. The default value is `replace`. Possible values are: `rename|replace|ignore|ignore_recent|ignore_same`

Parameter	Description
-path_dest path_ dest	Specifies the restore or archive destination path. Used only with `-operator restore|archive`. The syntax for writing paths depends on the destination type. Use: - Unix syntax for a destination host running Unix OS - Windows syntax for a destination host running Windows OS - Unix syntax for a Tina archive Write paths in Latin-1 format.
-all	Specifies to restore all versions of the selected objects. Used only with `-operator restore`.
-full	Specifies a full archive (default value). Used only with `-operator archive`.
-incr	Specifies an incremental archive. Used only with `-operator archive`.
-folder_dest folder_ dest	Specifies the archive destination folder. Used only with `-operator archive`.

Details of the -operator operations

1. `-operator contents`
   This operation generates a list of the contents of the specified directory. The list consists of 11 columns separated by a tabulation (see Column Description below).

Usage

```
tin@ -operator contents -abs_path abs_path [-type code_type] [-obj_
id obj_id] -sess_id sess_id
```

See List of the parameters of the operations for details.

Column Description

Column Name	Description
Object Type	The object type is coded on three characters. The first character represents the main type. The second character represents the secondary type. The third character represents the status and concerns applications only. Possible values are:

Column Name	Description
	Main type Code Object: Applies to: "." file host, application, archive "c" char host, archive "b" block host, archive "d" directory host, application, archive "l" link host, application, archive "p" pipe host, archive "s" socket host, archive "o" door host, archive

Column Name	Description
	Secondary type Code Object: Applies to: "A" archive archive "d" OBJ_GRAPHIC_DB_TYPE_NODE application "a" OBJ_GRAPHIC_DB_TYPE_BLOB_RO application "f" OBJ_GRAPHIC_DB_TYPE_SPACE, OBJ_GRAPHIC_DB_TYPE_SPACE_RO application "t" OBJ_GRAPHIC_DB_TYPE_LOG application "B" OBJ_GRAPHIC_DB_TYPE_BLOB application "." OBJ_GRAPHIC_DB_TYPE_FILE application "l" OBJ_GRAPHIC_DB_TYPE_LINK application "p" OBJ_GRAPHIC_DB_TYPE_PIPE application "g" OBJ_GRAPHIC_DB_TYPE_GUTTER, OBJ_GRAPHIC_DB_TYPE_MOUNT_GUTTER application "e" OBJ_GRAPHIC_DB_TYPE_ENV_ERR, OBJ_GRAPHIC_DB_TYPE_ERROR application "i" OBJ_GRAPHIC_DB_TYPE_ENV_INFO, OBJ_GRAPHIC_DB_TYPE_INFO, OBJ_GRAPHIC_DB_TYPE_INFO_DIR application "w" OBJ_GRAPHIC_DB_TYPE_ENV_WARNING, OBJ_GRAPHIC_DB_TYPE_WARNING application "x" OBJ_GRAPHIC_DB_TYPE_EXEC application "y" OBJ_GRAPHIC_DB_TYPE_SYNC, OBJ_GRAPHIC_DB_TYPE_SYNC_DIR application "m" OBJ_GRAPHIC_DB_TYPE_MOUNT_LOCAL application "n" OBJ_GRAPHIC_DB_TYPE_MOUNT_NET application "r" OBJ_GRAPHIC_DB_TYPE_REST_OPTION application
	Application Status Status Description: Applies to: "f" offline application "n" online application "z" transit application
Owner	Owner of the object

Column Name	Description
	Size of the object in bytes
Last Modification Date	Date of the object last modification. Format: yyyymmddhhmmss
Backup Date	Date of the object last backup. • In the present, "unknown". • In the past, yyyymmddhhmmss or "unknown".
Disappeared Status	Indicates whether the object has been deleted (`dis`) or not (`---`)
Bag Status	Indicates whether or not the object is contained in the bag. Possible values are: • `out,` not in the bag, • `in,` in the bag • `anc`, in the bag because the parent object is in the bag
Object ID	The ID appears only if the object has been backed up, otherwise the value is 0.
Path size	Number of character of the object absolute path
Object Path	Object absolute path (UTF8)
Object name	Relative name of the object in HTML/UTF8 format

Example. `-operator contents` in the present

```
tin@ -sess_id $sess_id -operator contents -abs_path /tmp/testjean/
d jdr 0 20040723092900 unknown --- out 7867936 18
/tmp/testjean/test test
l jdr 0 20040723093113 unknown --- out 7867472 18
/tmp/testjean/link link -> /tmp/testjean/test
p root 0 20040723092947 unknown --- out 7867408 18
/tmp/testjean/pipe pipe
. jdr 393216 20040715130345 unknown --- out 7894496 19
/tmp/testjean/testj testj
. jdr 393216 20040715130354 unknown --- out 7894848 20
/tmp/testjean/testje testje
. jdr 393216 20040715130356 unknown --- out 7895008 21
/tmp/testjean/testjea testjea
. jdr 393216 20040715130358 unknown --- out 7894448 22
/tmp/testjean/testjean testjean
. jdr 393216 20040715130400 unknown --- out 7894784 23
/tmp/testjean/testjeann testjeann
```

```
. jdr 393216 20040723093752 unknown --- out 7867696 24
/tmp/testjean/testjeanne testjeanne
```

Example. `-operator contents` in the present with the time navigation period activated (lost files detected)

```
tin@ -sess_id $sess_id -operator contents -abs_path /tmp/testjean/
d jdr 0 20040723092900 unknown --- out 7867936 18
/tmp/testjean/test test
l jdr 0 20040723093113 unknown --- out 7867472 18
/tmp/testjean/link link -> /tmp/testjean/test
p root 0 20040723092947 unknown --- out 7867408 18
/tmp/testjean/pipe pipe
. jdr 393216 20040715130345 20040723094358 dis out 7894496
19 /tmp/testjean/testj testj
. jdr 393216 20040715130354 unknown --- out 7894848 20
/tmp/testjean/testje testje
. jdr 393216 20040715130356 unknown --- out 7895008 21
/tmp/testjean/testjea testjea
. jdr 393216 20040715130358 unknown --- out 7894448 22
/tmp/testjean/testjean testjean
. jdr 393216 20040715130400 unknown --- out 7894784 23
/tmp/testjean/testjeann testjeann
. jdr 393216 20040723093752 unknown --- out 7867696 24
/tmp/testjean/testjeanne testjeanne
```

Example. `-operator contents` in the past

```
burma2.tina_ff(205) [Src] tin@ -sess_id $sess_id -operator contents -abs_
path
/tmp/testjean/
d jdr 0 20040723092900 20040723094358 --- out 7867936
18 /tmp/testjean/test test
l jdr 0 20040723093113 20040723094358 --- out 7867472
18 /tmp/testjean/link link -> /tmp/testjean/test
p root 0 20040723092947 20040723094358 --- out 7867408
18 /tmp/testjean/pipe pipe
. jdr 393216 20040715130345 20040723094358 --- out 7894496
19 /tmp/testjean/testj testj
. jdr 393216 20040715130354 20040723094358 --- out 7894848
20 /tmp/testjean/testje testje
. jdr 393216 20040715130356 20040723094358 --- out 7895008
21 /tmp/testjean/testjea testjea
. jdr 393216 20040715130358 20040723094358 --- out 7894448
22 /tmp/testjean/testjean testjean
. jdr 393216 20040715130400 20040723094358 --- out 7894784
23 /tmp/testjean/testjeann testjeann
. jdr 393216 20040723093752 20040723094358 --- out 7867696
24 /tmp/testjean/testjeanne testjeanne
```

1. `-operator -list_inst`
   This operation generates a list of all the backup versions of the specified object. The list is similar to the result of the `ls -ld` command on Unix systems. The information provided includes: the number of backup versions, and the information also found in the `contents` option, see Column Description for details.

Usage

`tin@ -operator list_inst -abs_path abs_path [-type type_code] [-obj_id obj_id] -sess_id sess_id`
See List of the parameters of the operations for details.

Example. `-operator list_inst`:

```
tin@ -sess_id $sess_id -operator list_inst -abs_path
/usr/vollocal/tmp_people/jdr/Test
3
d       jdr     0       20040726143746  20040728091435  ---     out
7867024
33      /usr/vollocal/tmp_people/jdr/Test       Test
d       jdr     0       20040726143746  20040728091254  ---     out
7867024
33      /usr/vollocal/tmp_people/jdr/Test       Test
d       jdr     0       20040726143746  20040728090309  ---     out
7867024
33      /usr/vollocal/tmp_people/jdr/Test       Test
info
```

1. `-operator info`
   This operation provides information concerning the specified backup version. `info` is useful for instance to find out if the specified object exist at a date previously set with the `set_date` operation, or to find out the target of a symbolic link. If no date has been previously set, the information provided is that of the object in the present. The information provided is the same as the `contents` option, see Column Description for details.

Usage

`tin@ -operator info -abs_path abs_path [-type type_code] [-obj_id obj_id] -sess_id sess_id`
See List of the parameters of the operations for details.

Example. -operator info

```
tin@ -sess_id $sess_id -operator info -abs_path /tmp | more
d root 0 20040728085224 unknown --- out 0 4
/tmp tmp
```

Example. -operator info

```
tin@ -sess_id $sess_id -operator info -abs_path /tmp/testj
. jdr 393216 20040715130345 unknown --- out 0 10
/tmp/testj testj
```

1. `-operator add2bag`
   This operation allows you to add the specified object to the list of object to restore or archive. If the object is a directory, the entire contents of the directory including sub-directories are added to the restore or archive list.

Usage

`tin@ -operator add2bag -abs_path abs_path [-type type_code] [-obj_id -obj_id] -sess_id sess_id`
See List of the parameters of the operations for details.

Example. `-operator add2bag`

```
tin@ -sess_id $sess_id -operator add2bag -abs_path
/usr/vollocal/tmp_people/jdr/Test/ff
```

1. `-operator show_bag`
   This operation allows you to view the list of object selected in the restore or archive list. The information provided is the same as the `contents` option, see Column Description for details.

Usage

`tin@ -operator show_bag -sess_id sess_id`
See List of the parameters of the operations for details.

Example. `-operator show_bag`

```
tin@ -sess_id $sess_id -operator show_bag
3
. jdr 233472 20040610144024 20040728091435 --- in 7868048
36 /usr/vollocal/tmp_people/jdr/Test/ff ff
. jdr 0 20040610144000 20040728091435 --- in 7868096
38 /usr/vollocal/tmp_people/jdr/Test/foo1 foo1
. jdr 6660096 20040610171047 20040728091435 --- in 7867328
38 /usr/vollocal/tmp_people/jdr/Test/fozz fozz
```

1. `-operator rem_from_bag`
   This operation allows you to remove an object from the restore or archive list.

Usage

`tin@ -operator rem_from_bag -abs_path abs_path [-type type_code] [-obj_id obj_id] -sess_id sess_id`
See List of the parameters of the operations for details.

Example. `-operator rem_from_bag`

```
tin@ -sess_id $sess_id -operator rem_from_bag -abs_path
/usr/vollocal/tmp_people/jdr/Test/ff
```

1. `-operator empty_bag`
   This operation allows you to clear the list of object to restore or archive.

Usage

`tin@ -operator empty_bag -sess_id sess_id`
See List of the parameters of the operations for details.

1. `-operator set_date`
   This operation allows you to set a date in the past to navigate through backed up objects. `set_date` is available only for restore sessions. `set_date` returns the date you choose in

the format yyyymmddhhmmss, and a code that indicates whether or not the restore list was modified due to the date change:

– "bu" if the list is the same (bag unchanged)
– "bc" if the list is different (bag changed)

Usage

```
tin@ -operator set_date -date date -sess_id sess_id
```

See List of the parameters of the operations for details.

Example. `-operator set_date`

```
tin@ -sess_id $sess_id -operator set_date -date 200407280914
20040728091435 bu
```

1. `-operator get_date`
   This operation allows to retrieve the navigation date. It is available for restore sessions only. `get_date` returns the date in the format yyyymmddhhmmss. In addition if the date is the present, the keyword "present" is displayed.

Usage

```
tin@ -operator get_date -sess_id sess_id
```

See List of the parameters of the operations for details.

Example. `-operator get_date`

```
tin@ -sess_id $sess_id -operator get_date
20040728091435
```

1. `-operator set_depth`
   This operation allows to set a new time navigation period. It is available for restore sessions only. `set_depth` returns the time navigation value in seconds and a code that indicates whether or not the restore list was modified due to the time navigation change:
   – "bu" if the list is the same (bag unchanged)
   – "bc" if the list is different (bag changed)

Usage

```
tin@ -operator set_depth -depth value_unit|infinite -sess_id sess_id
```

See List of the parameters of the operations for details.

Example. `-operator set_depth`

```
tin@ -sess_id $sess_id -operator set_depth -depth 4M
9676800 bu
```

Example. `-operator set_depth`

```
tin@ -sess_id $sess_id -operator set_depth -depth infinite
infinite bu
```

Example. `-operator set_depth`

```
tin@ -sess_id $sess_id -operator set_depth -depth 0
0 bu
```

1. `-operator get_depth`
   This operation allows to retrieve the time navigation information for the session. `get_depth` returns a value in seconds.

Usage

`tin@ -operator get_depth -sess_id sess_id`
See List of the parameters of the operations for details.

Example. `-operator get_depth`

```
tin@ -sess_id $sess_id -operator get_depth
9676800
```

1. `-operator restore`
   This operation allows to restore the objects selected in the restore list.It returns the restore job number. If the destination path is not specified, the object is restored in the original location.

Usage

`tin@ -operator restore -sess_id sess_id [-path_dest path_dest] [-mode rename|replace|ignore|ignore_recent|ignore_same][-all]`
See List of the parameters of the operations for details.

Example. `-operator restore`

```
tin@ -sess_id $sess_id -operator restore -mode rename
103
```

1. `-operator stat_rest`
   This operation allows to get information concerning the restore session at any time.
   Possible information returned by the operation:
   - `Browsing` with the number of items in the restore list when the user is selecting object to restore.
   - `Restoring ,job progression percentage, restore job number, object currently restored` when the restore operation is in progress.
   - `Restore status` (`partial`, `complete` or `error`), `restore job number` when the restore operation is finished.
   - `No active session` when the restore session is closed.
   - `Session closing in progress` when the restore session is being closed.

Usage

`tin@ -operator stat_rest -sess_id sess_id`
See List of the parameters of the operations for details.

Example. `-operator stat_rest`

```
tin@ -sess_id $sess_id -operator stat_rest
Browsing 9
```

Example. `-operator stat_rest`

```
tin@ -sess_id $sess_id -operator stat_rest
Restoring 0% 104 /tmp/foo
```

Example. `-operator stat_rest`

```
tin@ -sess_id $sess_id -operator stat_rest
Restoration complete 104
```

Example. `-operator stat_rest`

```
tin@ -sess_id $sess_id -operator stat_rest
No active session
```

Example. `-operator stat_rest`

```
tin@ -sess_id $sess_id -operator stat_rest
Restoration complete 103
```

1. `-operator abort_rest`
   This operation allows to cancel the restore job. The job id is provided by the `-operator restore` operation.

Usage

`tin@ -operator abort_rest -sess_id sess_id -jobid job_id`
See List of the parameters of the operations for details.

1. `-operator archive`
   This operation allows to archive the objects selected in the archiving list.It returns the archiving job number. The archiving destination must be specified with the `-path_dest` parameter, in an existing archive.

Usage

`tin@ -operator archive -sess_id sess_id -path_dest path_dest -folder_dest folder_dest [-full|-incr]`
See List of the parameters of the operations for details.

Example. `-operator archive`

```
tin@ -sess_id $sess_id -operator archive -folder_dest archi
-path_dest /arch1
103
```

1. `-operator stat_arch`
   This operation allows to get information concerning the archiving session at any time.
   Possible information returned by the operation:
   - `Browsing` with the number of items in the archive list when the user is selecting object to archive.
   - `Archiving ,job progression percentage, archiving job number, object currently archived` when the archiving operation is in progress.
   - `Archiving status` (`complete` or `error`), `archiving job number` when the restore operation is finished.
   - `No active session` when the archiving session is closed.
   - `Session closing in progress` when the archiving session is being closed.

Usage

`tin@ -operator stat_arch -sess_id sess_id`
See List of the parameters of the operations for details.

Example. `-operator stat_arch`

```
tin@ -sess_id $sess_id -operator stat_arch
Browsing 9
```

Example. `-operator stat_arch`

```
tin@ -sess_id $sess_id -operator archive -folder_dest arch -path_dest /test
-full
```

Example. `-operator stat_arch`

```
108
tin@ -sess_id $sess_id -operator stat_arch
Archiving 0% 108 /tmp/foo
```

Example. `-operator stat_arch`

```
tin@ -sess_id $sess_id -operator stat_arch
Archive complete 108
```

Example. `-operator stat_arch`

```
tin@ -sess_id $sess_id -operator stat_arch
No active session
```

1. `-operator abort_arch`
   This operation allows to cancel the archiving job. The job id is provided by the `-operator archive` operation.

Usage

`tin@ -operator abort_arch -sess_id sess_id -jobid job_id`
See List of the parameters of the operations for details.

1. `-operator home_dir`
   This operation displays the session user home directory.

Usage

`tin@ -operator home_dir -sess_id sess_id`
See List of the parameters of the operations for details.

1. `-operator reset`
   This operation resets the current session to allows the user to browse. `reset` can be used when the restore or archiving is finished, not while they are in progress. It empties the restore or archiving list and resets the date and time navigation period.

Usage

`tin@ -operator reset -sess_id sess_id`
See List of the parameters of the operations for details.

1. `-operator close`
   This operation closes the current session.

Usage

`tin@ -operator close -sess_id sess_id`
See List of the parameters of the operations for details.

Examples

Archiving with the tin@ command on Windows

```
@echo off
rem @echo on

rem # Script DOS

set TINA_SESS_ID=

echo tin@ -operator init -user DOMAIN\user_name -password password -archive
tin@ -operator init -user DOMAIN\user_name -password password -archive >
sess_id.bat
echo status = %ErrorLevel%

rem # extract sess_id from file to env
FOR /F "delims==" %%i IN (sess_id.bat) DO set TINA_SESS_ID=%%i

echo tin@ -operator contents -abs_path /d/tmp
tin@ -operator contents -abs_path /d/tmp
echo status = %ErrorLevel%

rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause

echo tin@ -operator add2bag -abs_path /d/tmp/foo
tin@ -operator add2bag -abs_path /d/tmp/foo
echo status = %ErrorLevel%

echo tin@ -operator add2bag -abs_path /d/tmp/bar
tin@ -operator add2bag -abs_path /d/tmp/bar
echo status = %ErrorLevel%

echo tin@ -operator add2bag -abs_path /d/tmp/ff
tin@ -operator add2bag -abs_path /d/tmp/test
echo status = %ErrorLevel%

echo tin@ -operator show_bag
tin@ -operator show_bag
echo status = %ErrorLevel%

rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause

echo tin@ -operator archive -folder_dest archiwin -path_dest /test -full
tin@ -operator archive -folder_dest archiwin -path_dest /test -full
echo status = %ErrorLevel%
```

```
rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause
echo tin@ -operator stat_arch
tin@ -operator stat_arch
echo status = %ErrorLevel%
rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause
echo tin@ -operator stat_arch
tin@ -operator stat_arch
echo status = %ErrorLevel%
rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause
echo tin@ -operator stat_arch
tin@ -operator stat_arch
echo status = %ErrorLevel%
Archiving with the tin@ command on Unix systems
#!/bin/csh -f
setenv TINA_SESS_ID
echo 'tin@ -initarch -user user_name -password password'
tin@ -initarch -user user_name -password password > /tmp/iti$$
echo "status=$status"
set ck=`cat /tmp/iti$$`
setenv TINA_SESS_ID $ck
rm /tmp/iti$$

echo tin@ -operator contents -abs_path ${HOME}/arbotest
tin@ -operator contents -abs_path ${HOME}/arbotest
echo "status = $status"
echo "type ^D to continue, ^C to halt"
cat -

echo tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj*
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj0
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj1
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj2
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj3
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj4
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj5
echo "status = $status"

echo tin@ -operator show_bag
tin@ -operator show_bag
echo "status = $status"

echo ready for tin@ -operator archive -folder_dest archiunix -path_dest
/test -full
echo "type ^D to continue, ^C to halt"
```

```
cat -
tin@ -operator archive -folder_dest archiunix -path_dest /test -full

echo ready for tin@ -operator stat_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator stat_arch

echo ready for tin@ -operator stat_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator stat_arch

echo ready for tin@ -operator stat_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator stat_arch

echo ready for tin@ -operator stat_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator stat_arch

echo "New abort attempt"
echo 'tin@ -initarch -user user_name -password password'
tin@ -initarch -user user_name -password password > /tmp/iti$$
echo "status=$status"
set ck=`cat /tmp/iti$$`
setenv TINA_SESS_ID $ck
rm /tmp/iti$$

echo tin@ -operator contents -abs_path ${HOME}/arbotest
tin@ -operator contents -abs_path ${HOME}/arbotest
echo "status = $status"
echo "type ^D to continue, ^C to halt"
cat -

echo tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj*
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj0
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj1
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj2
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj3
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj4
tin@ -operator add2bag -abs_path ${HOME}/arbotest/testj5
echo "status = $status"

echo tin@ -operator show_bag
tin@ -operator show_bag
echo "status = $status"
```

```
echo ready for tin@ -operator archive -folder_dest archiunix -path_dest
/test -full
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator archive -folder_dest archiunix -path_dest /test -full

echo ready for tin@ -operator stat_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator stat_arch

echo ready for tin@ -operator stat_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator stat_arch

echo ready for tin@ -operator stat_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator stat_arch

echo ready for tin@ -operator abort_arch
echo "type ^D to continue, ^C to halt"
cat -
tin@ -operator abort_arch
```

Restoring with the tin@ command on Windows

```
@echo off
rem @echo on

rem # Script DOS

set TINA_SESS_ID=

echo tin@ -initrest -user DOMAIN\user_name -password password
tin@ -initrest -user DOMAIN\user_name -password password > sess_id.bat
echo status = %ErrorLevel%

rem # extract sess_id from file to env
FOR /F "delims==" %%i IN (sess_id.bat) DO set TINA_SESS_ID=%%i

echo tin@ -operator contents -abs_path /d/tmp
tin@ -operator contents -abs_path /d/tmp
echo status = %ErrorLevel%

rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause
```

```
echo tin@ -operator add2bag -abs_path /d/tmp/foo
tin@ -operator add2bag -abs_path /d/tmp/foo
echo status = %ErrorLevel%

echo tin@ -operator add2bag -abs_path /d/tmp/bar
tin@ -operator add2bag -abs_path /d/tmp/bar
echo status = %ErrorLevel%

echo tin@ -operator add2bag -abs_path /d/tmp/ff
tin@ -operator add2bag -abs_path /d/tmp/test
echo status = %ErrorLevel%

echo tin@ -operator show_bag
tin@ -operator show_bag
echo status = %ErrorLevel%

rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause

echo tin@ -operator restore -mode rename
tin@ -operator restore -mode rename
echo status = %ErrorLevel%
rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause
echo tin@ -operator stat_rest
tin@ -operator stat_rest
echo status = %ErrorLevel%
rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause
echo tin@ -operator stat_rest
tin@ -operator stat_rest
echo status = %ErrorLevel%
rem # pause
echo press SPACE BAR to continue, Ctrl+C to halt
pause
echo tin@ -operator stat_rest
tin@ -operator stat_rest
echo status = %ErrorLevEl%
```

Restoring with the tin@ command on Unix systems

```
#!/bin/csh -f
setenv TINA_SESS_ID

echo 'tin@ -initrest -user user_name -password password'
tin@ -initrest init -user user_name -password password > /tmp/iti$$
echo "status=$status"
```

```
set ck=`cat /tmp/iti$$`
setenv TINA_SESS_ID $ck
rm /tmp/iti$$

echo tin@ -operator contents -abs_path /usr/vollocal/tmp_people/Test
tin@ -operator contents -abs_path /usr/vollocal/tmp_people/Test
echo "status = $status"
echo "type ^D to continue, ^C to halt"
cat -

echo tin@ -operator add2bag -abs_path '/usr/vollocal/tmp_people/Test/....'
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/fozz
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/foo1
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/foo2
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/foo3
echo "status = $status"

echo tin@ -operator show_bag
tin@ -operator show_bag
echo "status = $status"

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator restore -path_dest /tmp -mode rename
tin@ -operator restore -path_dest /tmp -mode rename

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator close
tin@ -operator close
```

```
echo 'Recovery to same location'
echo 'tin@ -initrest -user user_name -password password'
tin@ -initrest -user user_name -password password > /tmp/iti$$
echo "status=$status"
set ck=`cat /tmp/iti$$`
setenv TINA_SESS_ID $ck
rm /tmp/iti$$

echo tin@ -operator contents -abs_path /usr/vollocal/tmp_people/Test
tin@ -operator contents -abs_path /usr/vollocal/tmp_people/Test
echo "status = $status"
echo "type ^D to continue, ^C to halt"
cat -

echo tin@ -operator add2bag -abs_path '/usr/vollocal/tmp_people/Test/....'
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/fozz
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/foo1
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/foo2
tin@ -operator add2bag -abs_path /usr/vollocal/tmp_people/Test/foo3
echo "status = $status"

echo tin@ -operator show_bag
tin@ -operator show_bag
echo "status = $status"

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator restore -mode rename
tin@ -operator restore /tmp -mode rename

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest

echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator stat_rest
tin@ -operator stat_rest
```

```
echo "type ^D to continue, ^C to halt"
cat -
echo tin@ -operator close
tin@ -operator close
```

-get option

Syntax: -get

```
tin@ -get user|target_host|folder|target_appl|sess_type [-catalog catalog]
```

The `-get` option is used to retrieve information concerning the current session. Only one information at a time can be retrieved.

For a description of the syntax, see -initrest and -initarch options.

tina_acct

The `tina_acct` command allows you to generate a job accounting report of Tina (backups, archivings, restores, duplications, exports).

Rights

Users with these rights in Tina can launch this command:

- General Supervision Tasks (Use Web Administration, Supervision Console...)

  Or
- Job Operator (cancel, restart, etc.)

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_acct [-customer_id customer_id] [-host host1 [host2]...] [-platform
platform1 [platform2]...] [-volume_unit kilo|mega|giga] [-back_hour hours]|
[-start_date yyyymmddhhmm] [-end_date yyyymmddhhmm] [-v_classes] [-v_report_
date] [-v_period] [-v_catalog] [-v_platform] [-v_vm_name] [-v_folder] [-v_
jobtype] [-v_status] [-v_user] [-v_description] [-v_dates] [-v_elapsed] [-v_
jobid] [-v_volume] [-v_expected_volume] [-v_objects] [-v_cart] [-v_barcode]
[-v_properties] [-v_father_jobid] [-v_duplicated_job_id] [-v_priority] [-
output_format text|xml|csv] [-csv_separator csv_separator] [-xml_stylesheet_
file file] [-xml_stylesheet_type stylesheet_type] [-file file] [-display_
active_jobs_only] [-skipped_jobs] [-catalog catalog] [-
identity user:password] [-help]
```

In anticipation of a transfer of the data contained in the report to a spreadsheet type application, the reports headings are sent toward the standard error file, whereas the actual data is sent to the standard output file. Fields are separated by a tabulation and records by a carriage return.

[-customer_id customer_id]	Specifies the client identification number for each job displayed. Only available with the `-output_format xml` option.
[-host [host 1] [host 2]]	Specifies the host to be included in the report. By default, all hosts present in the catalog are displayed.
[-platform platform1 [platform2]]	Specifies the backed up platforms (hosts and/or applications) to be included in the report. By default, all platforms present in the catalog are displayed.
[-volume_unit giga|mega|kilo]	Specifies the unit to use for the volume of backed up, restored, archived or duplicated data. Use this parameter if the unit is not the default unit, i.e., a byte.
[-back_hour hours]	Specifies a number of hours the past to view the performed jobs. By default, the jobs performed within the last 24 hours are displayed.
[-start_date yyyymmddhhmm [-end_date yyyymmddhhmm]]	Specifies the start date and the end date in the past to view the performed jobs. If the end date is not specified, the jobs between the start date and the present will be displayed. If no start date is specified the default time of the last 24 hours will be applied.
[-outptut_format text|xml|csv]	Specifies the format of the command output, `text`, `XML` ou `CSV`.
[-csv_separator csv_separator]	This option is useful if the -output_format option has been set to csv. It allows to set the character or character string to be used as a separator. The default value is the semicolon";".
[-xml_stylesheet _file file]	Name of the stylesheet that will be used to display the XML document.
[-xml_stylesheet _type stylesheet_ type]	Type of the stylesheet that will be used to display the XML document.
[-file file]	Specifies the absolute path of a file in which to write the report. (The path must contain the file name)
[-display_active_ jobs_only]	Displays only the active jobs located in the period ranging between the -start_date and -end_date options

[-skipped_jobs]	Indicates that the jobs that were scheduled but not started (due for instance to a stopped server or catalog) over the specified time period, are also displayed in the report, in addition to the jobs normally included. These jobs do not have an ID. They appear in the report with the status "`skipped`". `-show_all` displays jobs that were not started within one hour of their scheduled start time. Some jobs that may have actually been performed more than one hour late still appear as non started jobs. This option was previously known as `-show_all` . `-show_all` remains as an alias of `-skipped_job`.
[-catalog catalog]	Specifies the working catalog.
[-identity user:password]	See -identity.

[-v_classes]	Displays the backup selections scanned through by a job execution.
These options only apply with the `-output_format csv` option. The sorting order of the options in the CSV input matches the order of the options on the command line. If none of these options is specified, all the information is displayed.	
[-v_report_date]	Displays the report creation date.
[-v_period]	Displays two columns containing the Start and End dates of the processed period.
[-v_catalog]	Displays three columns containing the number of catalogs and, the name and status of the catalog requesting the job.
[-v_platform]	Displays the platform onto which the job is executed.
[-v_vm_name]	Displays the name of the virtual machine backed up by the job.
[-v_folder]	Displays the name of the backup folder.
[-v_jobtype]	Displays two columns containing the job type (backup, restore, archiving, duplication or maintenance) and the job mode (full or incremental).
[-v_status]	Displays two columns containing the job status (`OK`, `error`, `paused`, `in progress`, `stopped, not started`) and the job alarm, if any.
[-v_user]	Displays the user who initiated the job.

[-v_description]	Displays the contents of the description field found in Job Manager.
[-v_dates]	Displays three columns containing the job submit date, running date and end date.
[-v_elapsed]	Indicates the job duration.
[-v_jobid]	Displays the job identification number.
[-v_volume]	Displays two columns containing the volume of backed up, restored, archived or duplicated data, and the volume unit. By default, the volume is in bytes.
[-v_expected_volume]	Displays two columns containing the expected volume of processed data and the volume.
[-v_objects]	Displays the number of processed objects (files or directories).
[-v_cart]	Displays three columns containing the media format; the cartridge and drive name and the tape file number; and the number of cartridges written by the job.
[-v_barcode]	Displays the cartridge barcodes.
[-v_properties]	Displays the job property, e.g. "Snapshot" or "Replication".
[-v_father_jobid]	Displays the father job identification number
[-v_duplicated_job_id]	Displays two columns containing the ID of the duplicated job and the ID of the original job. For a first duplication, the two columns contain the same information.
[-v_priority]	Displays the job priority.

Example. Creating a default job accounting report

If you want to use the default accounting report, just execute the `tina_acct` command without any options. This will generate a standard accounting report that will list all the jobs, sorted by type, that took place within the last 24 hours. The report will list this information:

- The platform name,
- The job type,
- The job status,
- The user name,
- A job description (backup type, archiving folder name...etc),
- The date and time the job was submitted, began, ended,
- The job ID,
- The job volume (amount of processed data) in bytes,
- The job objects (number of processed objects),

– Cartridges and drives involved as well as backup format (Tina, Tar, Cpio) and tape file number.

> **Note**: If you are working in a multi-catalog environment and do not specify a catalog name using the `-catalog` option, all catalogs will be taken into account.

```
Sample Default Accounting Report


T i m e N a v i g a t o r

 Accounting Report (Thu Aug 03 16:59:11 2000)

 catalog gaston
 ************************************************


--------------------------------------------------------------------------------
----
BACKUP "aria"
--------------------------------------------------------------------------------
----

Full Strategy A OK
--------------------------------------------------------------------------------
----

Submit :02 Aug 17:00
Running:02 Aug 17:00
End :02 Aug 17:32

Id:113 Volume:744,540,635 Objects:8816

Backup format: Tina
Cartridges:
 P100001@DocDrive / 3

Incremental Strategy B OK
--------------------------------------------------------------------------------
----

Submit :03 Aug 14:00
Running:*
End :03 Aug 14:00

Id:115 Volume:0 Objects:0


Incremental Strategy B OK
```

```
------------------------------------------------------------------------------
----

Submit :03 Aug 15:00
Running:*
End :03 Aug 15:00

Id:116 Volume:0 Objects:0


Incremental Strategy B OK
------------------------------------------------------------------------------
----

Submit :03 Aug 16:00
Running:*
End :03 Aug 16:00

Id:117 Volume:0 Objects:0


------------------------------------------------------------------------------
----
BACKUP "aria.cat"
------------------------------------------------------------------------------
----

Full Strategy A OK
------------------------------------------------------------------------------
----

Submit :02 Aug 17:00
Running:*
End :02 Aug 17:00

Id:114 Volume:0 Objects:0
```

XML Reports

You can create an XML report with the `tina_acct` commands, using stylesheets. There are two ways to use stylesheets:

1. Generate an HTML page using an XSLT processor like Xalan from the Apache Group. Go to the http://xml.apache.org/xalan-c/index.html address.
2. Open the XML file directly in a browser that supports XSL Transformations. You must remove the comments concerning the reference to the stylesheets in the XML reports.

> **Note**: If you use Internet Explorer, you need the msxml3.dll.

Generating an XML report

Use these options:

- `-output_format xml`
- `-xml_stylesheet_file file`: you can either use your own stylesheet file or use the `tina_acct.xsl` sample stylesheet located in the `Tools/Tina/xsl` directory of the **Tina** installation directory.
- `-xml_stylesheet_type stylesheet_type`: use this option only if your stylesheet is of a format other than .xsl, to specify the file extension of the stylesheet.

Sample XML files

Along with the sample stylesheet files, you will find this file in the `Tools/Tina/xsl` directory:

- `tina_xsl_conf.xml`
  Parameter file that contains the language parameter for the stylesheet
  `<language xml:lang="en"/>`
  It specifies the language used to display the data with an ISO639 tag. Go to the http://lcweb.loc.gov/standards/iso639-2/langhome.html address.
- `tina_xsl_messages.xml`
  XML Dictionary for the stylesheets. Each message is defined as follows:

```
<message id="message_id">
<language xml:lang="en">English translation of the message</language>
<language xml:lang="fr">French translation of the message</language>
<language xml:lang="es">Spanish translation of the message</language>
</message>
```

  If you need to display your data in another language, you can translate each message and specify this language in the `tina_xsl_conf.xml` file.
  Messages must be written using UTF8 encoding. It allows for unicode character display.

DTD for the tina_acct report

```
<!DOCTYPE accounting [
 <!ELEMENT accounting (report_parameters, report)>
 <!ATTLIST accounting version CDATA #REQUIRED>
 <!-- Parameters of this report -->
 <!ELEMENT report_parameters (customer_code, report_date, period_start_date,
period_end_date, catalog_number)>
 <!-- Customer Identifier -->
 <!ELEMENT customer_code (#PCDATA)>
 <!-- Date when the report was made -->
 <!ELEMENT report_date (#PCDATA)>
 <!ATTLIST report_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
 <!-- Beginning and ending of the analyzed time period -->
 <!ELEMENT period_start_date (#PCDATA)>
 <!ATTLIST period_start_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
 <!ELEMENT period_end_date (#PCDATA)>
 <!ATTLIST period_end_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
```

```
 <!ELEMENT catalog_number (#PCDATA)>
 <!ELEMENT report (catalog_report+)>
 <!ELEMENT catalog_report (job*)>
 <!ATTLIST catalog_report name CDATA #REQUIRED status (active | unreachable
| forbidden) #REQUIRED>
 <!-- Description of a job -->
 <!ELEMENT job (mode?, strategy?, platform?, folder?, description?, user?,
status, alarm?, class*, submit_date, run_date?, end_date?, id?, processed_
volume?, expected_volume?, processed_objects?, tile_format?, data_
location*)>
 <!ATTLIST job type (backup | synthetic | archiving | restore | duplicate |
export_source | export_target | catalog) #REQUIRED>
 <!ELEMENT mode EMPTY>
 <!ATTLIST mode value (incremental | full) #REQUIRED>
 <!ELEMENT strategy EMPTY>
 <!ATTLIST strategy value (A | B | C | D) #REQUIRED>
 <!ELEMENT platform (#PCDATA)>
 <!ELEMENT folder (#PCDATA)>
 <!ELEMENT description (#PCDATA)>
 <!ELEMENT user (#PCDATA)>
 <!ELEMENT status EMPTY>
 <!ATTLIST status value (running | paused | error | stopped | ok | not_
started) #REQUIRED>
 <!ELEMENT alarm EMPTY>
 <!ATTLIST alarm value (minor | major | critical) #REQUIRED>
 <!ELEMENT class (#PCDATA)>
 <!ELEMENT submit_date (#PCDATA)>
 <!ATTLIST submit_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
 <!ELEMENT run_date (#PCDATA)>
 <!ATTLIST run_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
 <!ELEMENT end_date (#PCDATA)>
 <!ATTLIST end_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
 <!ELEMENT id (#PCDATA)>
 <!ELEMENT processed_volume (#PCDATA)>
 <!ATTLIST processed_volume unit (B | KB | MB | GB | TB) #REQUIRED>
 <!ELEMENT expected_volume (#PCDATA)>
 <!ATTLIST expected_volume unit (B | KB | MB | GB | TB) #REQUIRED>
 <!ELEMENT processed_objects (#PCDATA)>
 <!ELEMENT tile_format EMPTY>
 <!ATTLIST tile_format value (tina | tar | cpio | sidf | unknown) #REQUIRED>
 <!-- Description of the data location -->
 <!ELEMENT data_location (cartridge, tile, drive)>
 <!-- Cartridge where lie the data -->
 <!ELEMENT cartridge (#PCDATA)>
 <!-- Tile where lie the data on the cartridge -->
 <!ELEMENT tile (#PCDATA)>
 <!-- Drive used to write the data on the cartridge -->
 <!ELEMENT drive (#PCDATA)>
]>
```

tina_adm

The `tina_adm` binary opens Web Administration. It allows you to configure the application and to perform all administration operations required for its good performance.

Syntax

```
tina_adm [-catalog catalog] [-language language] [-identity user:passwd]
[-help]
```

[-catalog catalog]	Specifies the working catalog.
[-identity user:passwd]	See -identity.

Example. `tina_adm` use

In this example, Web Administration is running in French with the catalog `Demo`.

```
tina_adm -catalog Demo -language French
```

tina_alarm

The `tina_alarm` command allows you to send an alarm to the Tina server. The alarm is written in the `event` file and saved in the catalog. In addition, the critical, major and minor alarms are displayed in Web Administration according to the object they are attached to.

> **Note**: Any user can execute this command.

Syntax

```
tina_alarm -text "text" -severity severity_level [-host host]|[-
application application]|[-drive drive]| [-library library]|[-jobid id]|[-
label label] [-alarm_id id] [-catalog catalog][-class event_class][-help]
```

[-text "text"]	Specifies the alarm text.
[-severity severity_level]	Specifies the alarm severity level. The severity levels are: critical, major, minor, fatal, error, warning, info, acct, audit, and debug
[-host host]	Specifies the name of the host you want the alarm attached to. Only critical, major or minor severity alarms are displayed. Other severities only appear in the events.

[-application application]	Specifies the name of the application you want the alarm attached to. Only critical, major or minor alarms are displayed. Other severities only appear in the events.
[-drive drive]	Specifies the name of the drive you want the alarm attached to. Only critical, major or minor alarms are displayed. Other severities only appear in the events.
[-library library]	Specifies the name of the library you want the alarm attached to. Only critical, major or minor alarms are displayed. Other severities only appear in the events.
[-jobid id]	Specifies the identification number of the job with which the alarm is associated. Can be used only if the `-severity` option is set to critical, major or minor.
[-label label]	Specifies the label of the media for which you want to create an alarm.
[-alarm_id id]	Specifies the identification number of the alarm. The alarm ID can range from `1` to `9999`. The default value is `1`.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-class event_class]	Specifies one or several classes: standard, obj_not_rest, io_error, vmstat, fuzzy_object, secure, obj_not_decoded, end_user, obj_not_backed_up. Default value is standard

> **Note**: This command can be useful in archiving scripts in case of error with `tina_archive`.

> **Note**: The `logs` file may be used to redirect this alarm to another destination by using the severity filter.

For more information on the file `logs`, see Tina Installation Documentation, topic 2.

Example. `tina_alarm` use

In this example, a major alarm regarding a folder archiving operation is sent to the Tina server. Its identification number is 17.

```
tina_alarm -text "archiving error on folder X" -severity major -alarm_id 17
```

For more information on alarm presentation and visualization, see the "Alarms" and "Events" topics of Tina Administration Documentation.

tina_alpha

The `tina_alpha` command allows you to navigate in space and time through the Tina file tree and restore objects (directories and/or files) in text mode.

Time Navigation and object selection follow the same principles as those of Restore & Archive Manager.

The user can navigate in space and time in the file tree to view the catalog contents. You can define a time navigation period in order to display objects that have disappeared since the viewing date.

These are the default values when starting the application:

- The folder corresponds to the machine backup folder.
- The directory is the user working directory.
- The viewing date is the present.
- The time navigation value is null.
- The strategy is that corresponding to the user's profile.
- The Going through NFS Mount Points option is activated.

Rights

Any user can navigate in the file tree and restore objects depending on his rights and his user profile.

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_alpha [-language language] [-catalog catalog] [-identity user:passwd]
```

[-language language]	Specifies the language.
[-catalog catalog]	Specifies the working catalog. This parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity.

The shell `tina_alpha` is displayed and the user can enter the commands described below.

Commands

Commands can be abbreviated. A single letter is enough if there is only one command beginning by that letter.

For example, you can enter `q` instead of `quit` to quit the application, but you must enter at least two letters for the command `context` (`co`) because the command `cd` also begins by the letter `c`.

If the argument is into square brackets `[ ]`, the user can enter the command alone. The displayed information then corresponds to the last current value.

Working Environment

`context`

This command displays the working context:

- The current folder (backup or archive folder).
- The current directory.

- The visualization date.
- The time navigation period.
- The strategy.
- The filters.
- Whether the Going through NFS Mount Points option is activated or not.
- The name of the drive used for restoring local archive folders.
- The restoration mode: in case of name conflicts, objects can be renamed, replaced, ignored, etc.

`drive drive_name`

This command allows you to specify the name of the drive used for restoring local archive folders (ex: `/dev/rmt0.1` under Unix or `\\.\Tape0` under Windows).

The drive must be declared in Web Administration on the local host running the command.

`folder [folder_name]`

This command allows you to select the backup or archive folder. Used without argument, it displays the current folder name.

When selecting a backup folder, you must specify if the folder belongs to a host `[host.<host_name>]` or to an application `[appl.<application_name>]`.

`help`

This command displays the list of all available commands and gives a definition of each command.

`line [number]`

This command allows you to specify a line number in the window in order to display lists (using commands `ll`, `ls` and `instance file_name`). Used without argument, it displays the current line number.

By default, the displayed line number corresponds to a standard window of 22 lines.

`nfs`

This command allows you to enable or disable the Going through NFS Mount Points option.

`pwd`

This command displays the current directory path.

`target_folder [folder_name]`

This command allows you to specify the folder where you will restore your data.

When defining a target folder, you must specify if the folder belongs to a host `[host.<host_name>]` or to an application `[appl.<application_name>]`. You may also specify the credentials with `[-identity user:passwd]` so as to connect to the target.

`target_folder [folder_name]` must be specified before `folder [folder_name]` and before launching the restore.

Example. Restore of the first instance of the file `aaa_save3`, from the host `kucek` to the `/tmp` directory of the host `freddy`.

```
target_folder host.freddy
folder host.kucek
cd /usr/people/rpt/tmp_toute_ptite_arbo/
instance aaa_save3
synchronize 1
add aaa_save3
restore /tmp
```

Filtering Methods

> **Note**: You can filter files in using the `fselect` command or out using the `freject` command.

> **Note**: Filtering commands apply to files only, no filtering operation can be made on directories.

`filter`

This command displays all active filters.

`fselect [filename type][filename type]`

`fselect` selects all file objects.

Example. `fselect A* B*`

This command selects all files beginning by a or b, and displays them on the screen.

`freject[filename][filename]`

`freject` filters files out.

`fadate [date]`

The date format is `YYYYMMDDHHMM` (year/month/day/hour/minute).

`fadate` specifies a limit access date. The limit date value can only be understood with the `fafterdate` command.

`fmdate [date]`

Specifies a limit modification date.

`fafteradate [0/1]` `(wrong/right)`

Specifies if the filter must be apply before or after the limit access date previously indicated.

`faftermdate [0/1]`

Specifies if the filter must be apply before or after the limit modification date previously indicated.

Example. `fadate 200101151200`

January 15, 2001 at 12 p.m is the limit access date.

`fafteradate 1`

All dates after the limit date are filtered. All files whose date is superior to the limit date are filtered, all files with dates inferior to the limit date remain.

`fsize` `[number in kilo-bytes]`

Specifies a limit volume.

Note: the volume is converted into bytes.

`flesssize [0/1] (wrong/right)`

Same mechanism as for dates: this filter specifies if files that are smaller or not than the limit size are filtered.

Space Navigation in the File Tree

`cd directory_name`

This command allows you to access a directory content. Relative and absolute paths are accepted.

If you use relative paths, you must specify a single directory level at a time.

For instance, to go into the `Bin/test` directory, you must first enter `cd Bin`, then `cd test`.

`instance file_name`

This command allows you to view all the versions of the same file. Versions are numbered to allow you to synchronize with one of them.

The first version corresponds to the file on disk and the other versions to the different versions of the backed up file.

> **Note**: The numbers displayed correspond to an order in the list of versions and are not related to those displayed in Restore & Archive Manager Versions in Time window (Tree-Selection-Versions menu).

> **Note**: On an macOS platform, the file names specified with the command `instance` are case sensitive.

For more information on synchronization, see the command synchronize later in this topic.

`ll [special_characters]`

This command displays the current directory contents in line form.

`ls [special_characters]`

This command displays the current directory contents in column form.

You can specify a list of special characters after the commands `ll` and `ls` to filter the display of the directory contents. For instance, if you enter `ll a*`, the command only displays the files whose name begins with `a`. The number of displayed files followed by the total number of files located in the directory is indicated at the end of the list (ex: `2/15`).

Conventions:

- The S symbol is displayed to the left of selected objects (`S object name`). In Restore & Archive Manager, selected objects appear with a black background.
- The * symbol is displayed to the left of deleted objects when a time navigation period is activated (`* object name`). In Restore & Archive Manager, icons of disappeared objects are striped.

`strategy [A|B|C|D|standard]`

This command allows you to display catalog objects according to their strategies. Used without argument, it displays the current strategy.

For example, if you enter `strategy A`, the command displays only the files backed up in strategy A. If you enter `strategy standard`, the command displays objects backed up by all the defined strategies.

> **Note**: If you enter a specific strategy, make sure you have enabled the permission on the strategy in your access rights. For more information on users and access rights, see the Tina Administration Documentation.

Time Navigation in the File Tree

`date [yyyymmddhhmm|present]`

This command allows you to choose any viewing date to view the file tree. Used without argument, it displays the current visualization date.

If the viewing date is the present, the file tree displays objects located on the disk.
If the viewing date is the past, the file tree displays objects located in the catalog.

`sfu [minute|hour|day|week|month]`

This command allows you to specify the time unit of the time navigation period (minute, hour, day, week and month). Used without argument, it displays the current time unit.

`sfv [value]`

This command allows you to specify the value of the time navigation period. By default, the time navigation value is null. Used without argument, it displays the current value.

To enable the time navigation period, just specify a value different from zero.
To disable the time navigation, just specify a value equal to zero.

The symbol `*` is displayed to the left of objects deleted within the time interval selected.

`synchronize file_index`

This command allows you to synchronize with one of the file versions, provided that you have first entered the command `instance` to obtain the list of numbered versions.

The new viewing date is the backup date of the selected version.

`delete object_name`

This command allows you to delete the backed up version of the selected object.

For more information on how to view file versions, see the command instance earlier in this topic.

Manipulating the Selection List

`add special_characters`

This command allows you to add a new object into the selection list in order to perform restoration.

The argument `special_characters` can be:

- An object name (directory or file).
- A list of object names.

- Special characters specifying objects.

For example, if you enter `add name t*`, the command adds the object `name` and all the objects beginning with the letter `t` into the selection list.

The symbol `S` is displayed to the left of the selected object.

`sub special_characters`

This command allows you to subtract an object from the selection list in order to perform restoration.

The argument `special_characters` can be:

- An object name (directory or file).
- A list of object names.
- Special characters specifying objects.

For example, if you enter `sub t*.c`, the command removes all objects beginning with the letter `t` and having the extension `.c` from the selection list.

The symbol `S` located to the left of the object that was selected is removed.

> **Note**: On an macOS platform, the object names specified with the command `add` and `sub` are not case sensitive.

Recovering Objects

`mode [rename|abort|replace|ignore|ignore_same|ignore_recent]`

This command allows you to choose objects restore mode.
`rename` : renames the object if it already exists.

abort : stops the restore if the object already exists.

replace : deletes the object if it already exists.

ignore : keeps the disk object if it already exists.

ignore_same : keeps the disk object if it already exists and is identical.

ignore_recent : keeps the disk object if it already exists and is more recent.

`restore [destination_directory]`

This command allows you to restore all the objects listed in the selection list into a disk directory.

For an archive folder, the destination directory is mandatory.
For a backup folder, the destination directory is optional: if it is not specified, restoration is performed in the source directory.

Restoration can be interrupted at any time pressing the ctrl c keys.

In case of a name conflict during restoration, old files are replaced.

Quitting the Application

`quit`

This command allows you to quit the `tina_alpha` application.

Example. `tina_alpha` use

`tina_alpha` is a non-graphical interactive program.

In this example, two types of restoration are illustrated:

- Restoring disappeared files using the time navigation period: the files beginning with the letter `p` and belonging to the backup folder `olive`.
- Restoring an archived file: the file `doc` of the local archive folder `ALOC`.

To recover data from an archive folder, you must absolutely specify:

- The destination directory.
- The drive name in case of a local archive folder.

To restore with tina_alpha

To restore the "profil" file

1. Enter `tina_alpha` on the command line.
   Specify the working catalog with the option `[-catalog catalog]` if the application is multicatalog. The shell of `tina_alpha` is displayed.

```
olive.tina(1) [Bin] tina_alpha
Alphanumeric Tina
--------------------------
```

2. Display the working context:

```
tina_alpha > context
Folder : host.olive (backup)
Target folder : host.olive
User : None
Password : None
Current directory : /usr/tina
Visualization Date: Present
Navigation Period : 0 hour(s)
Strategy : standard
Nfs : yes
Drive name : none
Restore mode : rename
```

The visualization date is the present and the depth of field (time navigation) value is null.

3. Go to the directory `/usr/tina/tl` and display the contents of the current directory in line form:

```
tina_alpha > cd tl
tina_alpha > ll
directory tina atempo 0 Fri Jan 19 14:44:14 2001 AcyToolKit
file tina atempo 62 Tue Jan 23 11:40:20 2001 KeyOlive
file tina atempo 7712 Fri Jan 12 15:34:50 2001 binary
file tina atempo 3912 Tue Jan 23 14:10:27 2001 doc
file tina atempo 396 Thu Feb 1 14:09:03 2001 givetune
file tina atempo 1385 Fri Feb 2 14:48:15 2001 helpvi
file tina atempo 1310 Tue Jan 30 13:54:17 2001 link
file tina atempo 345 Tue Jan 23 11:39:09 2001 packexe
file tina atempo 3480 Wed Jan 31 15:43:48 2001 profil
directory tina atempo 0 Fri Jan 12 15:34:50 2001 rep1
```

```
file tina atempo 14463 Thu Feb 1 14:53:51 2001 tunables
file tina atempo 19847 Thu Feb 1 10:50:40 2001 v_getenv
Total : 12
```

4. Define a time navigation period to search for the disappeared files beginning with the letter `p` by specifying:
   - The time unit of the time navigation period.
   - The value of the time navigation period.

```
tina_alpha > sfu week
tina_alpha > sfv 2
```

   A two-week time navigation period is activated.

5. Display the contents of the current directory in line form to view the files disappeared in the selected time interval:

```
tina_alpha > ll
directory tina atempo 0 Fri Jan 19 14:44:14 2001 AcyToolKit
file tina atempo 62 Tue Jan 23 11:40:20 2001 KeyOlive
file tina atempo 7712 Fri Jan 12 15:34:50 2001 binary
file tina atempo 349 Thu Feb 1 08:43:58 2001 * dcl_tunables
file tina atempo 3912 Tue Jan 23 14:10:27 2001 doc
file tina atempo 396 Thu Feb 1 14:09:03 2001 givetune
file tina atempo 1385 Fri Feb 2 14:48:15 2001 helpvi
file tina atempo 1310 Tue Jan 30 13:54:17 2001 link
file tina atempo 345 Tue Jan 23 11:39:09 2001 packexe
file tina atempo 3480 Wed Jan 31 15:43:48 2001 profil
directory tina atempo 0 Fri Jan 12 15:34:50 2001 rep1
file tina atempo 3912 Thu Feb 1 08:43:58 2001 * trutt
file tina atempo 14463 Thu Feb 1 14:53:51 2001 tunables
file tina atempo 19847 Thu Feb 1 10:50:40 2001 v_getenv
Total : 14
```

   The files `dcl_tunables` and `trutt` have disappeared in the selected time interval. The symbol `*` is displayed to the left of their names.

6. Display the number of versions of the file `dcl_tunables`:

```
tina_alpha > instance dcl_tunables
(1) file tina atempo 349 Thu Feb 1 08:43:58 2002 * dcl_tunables
```

   There is only one version of the file `dcl_tunables` numbered `1`.

7. Synchronize with the version `1` of the file `dcl_tunables`:

```
tina_alpha > date
Visualization date : present
tina_alpha > synchronize 1
tina_alpha > date
Visualization date : Thu Feb 1 08:43:58 2002
```

   The new visualization date is the backup date of the selected version.

8. Add the files beginning with the letter `p` in the selection list in view of restoring it:

```
tina_alpha > add p*
profil : selected
packexe : selected
tina_alpha > ll
directory tina atempo 0 Fri Jan 19 14:44:14 2002 AcyToolKit
file tina atempo 62 Tue Jan 23 11:40:20 2002 KeyOlive
```

```
file tina atempo 7712 Fri Jan 12 15:34:50 2002 binary
file tina atempo 349 Thu Feb 1 08:43:58 2002 dcl_tunables
file tina atempo 3912 Tue Jan 23 14:10:27 2002 doc
file tina atempo 1385 Fri Feb 2 14:48:15 2002 helpvi
file tina atempo 1310 Tue Jan 30 13:54:17 2002 link
file tina atempo 345 Tue Jan 23 11:39:09 2002 S packexe
file tina atempo 3480 Wed Jan 31 15:43:48 2002 S profil
directory tina atempo 0 Fri Jan 12 15:34:50 2002 rep1
directory tina atempo 3912 Thu Feb 1 08:43:58 2002 trutt
file tina atempo 14463 Thu Feb 1 14:53:51 2002 tunables
Total : 12
```

The files `profil` and `packexe` are selected. The symbol `S` is displayed to the left of their name.

9. Recover the files `profil` and `packexe`:

```
tina_alpha > restore
Restoring... (please wait)
Restoration complete
```

If you do not specify a destination directory, data is recovered in the source directory. The message `"Restoration complete"` is displayed.

Recovering the doc file

10. Change folder and select the `ALOC` local archive folder:

```
tina_alpha >
tina_alpha > folder ALOC
```

11. Check that you are in the selected folder and display the folder contents:

```
tina_alpha > folder
Folder : ALOC (local archive)
tina_alpha > ll
directory tina atempo 0 Thu Feb 1 08:45:27 2002 ar1
directory tina atempo 0 Thu Feb 1 08:54:27 2002 ar2
Total : 2
```

The current folder is the `ALOC` local archive folder. It contains two archives: `ar1` and `ar2`.

12. Go to the directory `tl` of the archive `ar1` and display its contents:

```
tina_alpha > cd ar1/tl
tina_alpha > ll
directory tina atempo 0 Fri Jan 19 14:44:14 2001 AcyToolKit
file tina atempo 62 Tue Jan 23 11:40:20 2001 KeyOlive
file tina atempo 7712 Fri Jan 12 15:34:50 2001 binary
file tina atempo 3912 Tue Jan 23 14:10:27 2001 doc
file tina atempo 1385 Fri Feb 2 14:48:15 2001 helpvi
file tina atempo 1310 Tue Jan 30 13:54:17 2001 link
file tina atempo 345 Tue Jan 23 11:39:09 2001 packexe
file tina atempo 3480 Wed Jan 31 15:43:48 2001 profil
directory tina atempo 0 Fri Jan 12 15:34:50 2001 rep1
file tina atempo 14463 Thu Feb 1 14:53:51 2001 tunables
Total : 10
```

13. Add the `doc` file in the selection list in order to restore it:

```
tina_alpha > add doc
doc : selected
```

14. Recover the `doc` file of the local archive folder by specifying:
    - The drive name.
    - The destination directory.

```
tina_alpha > drive /dev/DON
tina_alpha > restore /usr/tina/resto
Restoring... (please wait)
Restoration complete
```

The message `"Restoration complete"` is displayed.

15. Quit the `tina_alpha` application:

```
tina_alpha > quit
quit tina_alpha now ? ((y)es)/n(o)) y
olive.tina(2) [Bin]
```

Alphabetical List of the Commands Used in tina_alpha

Commands	Arguments	Definition
add	special_characters	Adds objects into the selection list.
cd	directory_name	Changes the directory.
context		Displays the working context.
date	[yyyymmddhhmm|present]	Changes the visualization date.
delete	object_name	Deletes the backed up version of the specified object.
drive	drive_name	Changes the drive name in case of local archive folders.
filter		Displays the list of all current filters.
fadate	[yyyymmddhhmm]	Specifies a limit access date.
fafteradate	0/1	Specifies if the filter is put before or after the limit date.
faftermdate	0/1	Specifies if the filter is put before or after the limit size.
flesssize	0/1	Specifies if the filter is put before or after the reference size.
fmdate	[yyyymmddhhmm]	Specifies a limit modification date.
freject	special_characters	Filters files out like special characters.
fselect	special_characters	Filters files in like special characters.

Commands	Arguments	Definition
fsize	number_of_kilo_bytes	Specifies a reference size.
folder	[folder_name]	Changes the working folder.
help		Displays the help window.
instance	file_name	Displays file versions.
line	[number]	Specifies a line number in the window to display lists.
ll	[special_characters]	Displays directory contents in line form.
ls	[special_characters]	Displays directory contents in column form.
mode	[rename|abort|replace|ignore| ignore_same|ignore_recent]	Specifies the object restore mode.
nfs		Enables or disables the Going through the NFS Mount Points option.
password	[password]	Specifies the user password.
pwd		Displays the current directory path.
quit		Quit the application tina_alpha.
restore	[destination_directory]	Restores the selection list.
sfu	[minute|hour|day|week|month]	Specifies the time unit of the time navigation period.
sfv	[value]	Specifies the value of the time navigation period.
strategy	[A|B|C|D|standard]	Specifies the visualization strategy.
sub	special_characters	Subtracts objects from the selection list.
synchronize	file_index	Takes the file backup date as the visualization date.
user	[username]	Specifies the user who connects to the folder.

tina_archive

The `tina_archive` command allows you to perform archiving operations through the command line.

Rights

This command can be launched by users with the following rights in Tina:

- Archive Files

  Or

- Create archives (if you want to use the `-create_archive` option)

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_archive -path path1 [path2]...|-file_list file_path [-file_list_
dest file_path] [-behavior_on_missing_file continue|continue_with_error_
code|abort][-host host]| [-application application] -folder_dest folder -
archive_dest archive_path [-create_archive] [-keywords keyword1
[keyword2]...] [-full]|[-incr] [-date yyyymmddhhmm] [-user user] [-
password password]
[-pool p1 [p2]...] [-drive drive] [-sync_cart] [-no_r][-v_jobid] [-error_
mode continue|abort] [-catalog catalog] [-identity user:passwd] [-help]
```

-path path1 [path2]...	Specifies absolute paths of objects (directories and/or files) to be archived. The syntax follows the Operating system syntax for archive folders (ex: `/usr` or `c:\tmp`).
-file_list file_path	Specifies the absolute path of a file containing the absolute paths (one path per line) of all objects to be archived. If you specify the path of a directory, all the objects contained in this directory will be archived. This file accepts that lines remain empty between each path specified. This parameter is very useful when the number of objects to archive is high. Regular expressions are not allowed.

[-file_list_dest file_path]	This option can only be used with `-file_list`. It specifies the new names of the objects to archive that are listed in the file you specified for the `-file_list` option. The list of object names must correspond to the list specified with `-file_list`, i. e., one name per line, and the same number of entries in both files.
[-behavior_on_missing_file continue|continue_with_error_code|abort]	This sub-option can only be used with `-file_list` when the sub-option `-file_list_dest` is used. It specifies the behavior of `tina_archive` if a file in the file list does not exist at the indicated location. The default behavior is `continue`, where the process ignores missing files and returns the value `0 (OK)`. The `continue_with_error_code` option also skips missing files, but returns the value `18 (FileNotFound)`. Finally, the `abort` option ends the process and returns the value `40 (Abort)`.
[-host host]	Specifies the host onto which the archiving is initiated. If the option is not specified, the archiving is started on the local host.
[-application application]	Specifies the application onto which the archiving is initiated. If the option is not specified, the archiving is started on the local host.
-folder_dest folder	Specifies the destination archive folder.
-archive_dest archive_path	Specifies the absolute path of the archive in the destination folder. The syntax follows the Unix syntax (ex: /usr for Unix or /c/users for Windows).
[-create_archive]	Specifies the creation of the destination archive if it does not exist.
[-keywords keyword1 [keyword2]...]	Specifies the keywords to use with the archive. Can be used only with the `-create_archive` option.
[-full/incr]	Specifies the archiving mode (full or incremental). By default, if none of the options is selected, a full archiving is started.
[-date yyyymmddhhmm]	Specifies the archiving date (year, month, day, hour and minute). The option allows you to preset the archiving date. If it is not specified, the default date is the machine one.
[-user user]	Specifies the user performing the operation.
[-password password]	Specifies the user password.

[-pool p1 [p2]...[p4]]	Specifies a list of media pools. The list is limited to 4 pools. If it is not specified, the program searches for the pool name in the folder.
[-drive drive]	Specifies the drive of the local machine. This parameter applies to local archive folders and is mandatory.
[-sync_cart]	Specifies the end of archiving once data has been written on the media. If the option is not specified, the end of archiving is specified once data has been written in cache.
[-no_r]	Specifies that directory content should not be archived.
[-v_jobid]	Displays the job ID of the archiving job in CSV format.
[-error_mode continue|abort]	Allows to either continue or cancel the archiving when errors occur, making Command Line Interface the archiving of some files impossible. The default behavior is cancel.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity.

Example. `tina_archive` use

In this example, the directory `bin` is archived in the archive `/arch1` of the archive folder `folder` onto the drives belonging to the user of the media pool `pool`.

To archive files using tina_archive

1. Create a media pool named `pool` using the Storage-Media Pool-New menu in Web Administration.
   Associate a label (Label textbox) and drives (Associated Drives area) with the pool.
2. Pre-label one or several medias of the pool choosing the Storage-Media-Write Label menu.
3. Create an archive folder named `folder` choosing the Archiving-New menu.
4. Associate the `pool` media pool as the main media pool with the folder (Main button in the Media Pools area).
5. Create an archive named `/arch1` using the Archiving-Archives-New menu in Restore & Archive Manager.
6. Open a shell (Unix) -or- Go to the Start-Tina-Environment Reporter menu to open a command prompt window preset to use Tina environment variables (Windows).
7. Archive the `dir_path` directory in the `folder` folder by entering this command:
   ```
   tina_archive -folder_dest folder -archive_dest /arch1
   -path dir_path -pool pool
   ```

tina_archive_control

The `tina_archive_control` command allows you to perform operations on archive folders and archives through the command line:

- Creating, editing or removing archive folders and archives.
- Displaying the list of archive folders or archives.
- Viewing statistical information on archive folders and archives.

> **Note**: Only users with the Tina Archives permissions can execute this command.

For more information on user rights, see the Tina Administration Documentation.

Syntax

```
tina_archive_control [-folder folder_name] [-archive archive_name] -create|-edit|-remove|-list|-statistic|-view [-force] [-description description] [-type] [-keywords keyword1 [keyword2]...] [-remove_keywords] [-protected_size] [-outptut_format text|csv] [-csv_separator csv_separator] [-permission permission1 [permission2]...][-os_user user_name]
[-os_group group_name][-cartridge_format format] [-file_format format1 [format2]...] [-through_link yes/no] [-pool pool_name1 [pool_name2]...] [-host host_name] [-manage_acl yes/no] [-prolog file_path] [-epilog file_path] [-lanfree yes/no] [-remove_archived_file yes/no] [-use_empty_archive yes/no] [-sync_cart yes/no] [-continue_on_error yes/no] [-keyword_on_archive yes/no] [-propagate] [-identity identity] [-catalog catalog] [-help]
```

-[folder folder_name]	Specifies the name of the archive folder on which to perform the operation. Can be used only if options `-edit`, `-create`, `-remove`, `-list`, `-view` or `-statistic` are used.
[-archive archive_name]	Specifies the absolute path of the archive on which to perform the operation. Can be used only if options `-folder`, `-edit`, `-create`, `-remove`, `-list` or `-statistic` are used.
-create	Creates an archive folder if used with `-folder` only. Creates an archive in the specified archive folder if used with `-folder` and `-archive`. (the folder must exist). Can be used only if options `-folder`, `-host` and `-pool` are used.
-edit	Modifies the parameters of the specified archive folder or archive. If used with the `-folder` option, modifies the specified archive folder. If used with the `-folder` and `-archive` options, modifies the specified archive.

-remove	Removes an archive folder or an archive. If used with the `-folder` option, removes the specified archive folder. If used with the `-folder` and `-archive` options, removes the specified archive.
-list	Displays the list of archive folders present in the catalog. If used with the `-folder` option, displays the list of archives contained in this specific archive folder.
-statistic	Displays statistical information about objects. If used If used with the `-folder` option, displays information on the specified archive folder. If used with the `-folder` and `-archive` options, displays information on the specified archive in the specified folder.
-view	Displays the list of parameters set for the specified archive folder or archive. If used with the `-folder` option, displays the specified archive folder parameters. If used with the `-folder` and `-archive` options, displays the specified archive parameters.
[-force]	Specifies that the removal of the selected archive folder or archive will be forced, even though it still contains archived objects. Can be used only if option `-remove` is used.
[-description description]	Specifies the description of the archive folder or archive that is being created or edited. If the descrition contains spaces, it must be between quotes ("..."). Can be used only if options `-edit` or `-create` are used.
[-type]	Specifies the type of the archive folder. Possible values are: "standard", "db2", "rman", "sap", "sybase", "dfm".
[-keywords keyword1 [keyword2]...]	Specifies the keywords to be associated with the archive folder or archive that is being created or edited. Can be used only if options `-edit` or `-create` are used.
[-remove_ keywords]	Removes all the keywords associated to the archive folder or archive that is being edited. Can be used only if options `-edit` is used.
[-protected_size]	Allows users to declare the maximum amount of data that can be backed up in a folder. This option applies to "db2", "rman", "sap", and "sybase" application folders only.
[-outptut_format text|csv]	Specifies the output format of the archive information. The possible values are `text` or `csv`, the default value is `text`.

[-csv_separator csv_separator]	This option is useful if the -output_format option has been set to csv. It allows to set the character or character string to be used as a separator. The default value is the semicolon";".
[-permission permission1 [permission2]...]	Specifies the owner or group permissions to be associated with the archive folder or archive that is being created or edited. Values can be: `owner_read`, `owner_write`, `group_read`, `group_write`, `other_read` and `other_write`, used in a list. Can be used only if options `-edit` or `-create` are used. The default value is `owner_read` `owner_write` `group_read`
[-os_user user_ name]	Specifies the name of the archive folder or archive owner. The owner must be an operating system user. Can be used only if options `-edit` or `-create` are used. The default value is the name of the current user.
[-os_group group_name]	Specifies the name of the operating system group to which the archive folder or archive owner belongs. Can be used only if options `-folder` and `-edit` or `-create` are used. The default value is the group of the current user.
[-cartridge_format format]	Specifies the format of the medias where the data will be archived. Values can be `tina`, `tar`, `cpio`, `sidf` or `none`. Can be used only if options `-edit` or `-create` are used. The default value is `tina`.
[-file_format format1 [format2]...]	Specifies the format of the data that will be archived (compressed, encoded, or both). Values can be `compress` and `encode` used in a list. Can be used only if options `-edit` or `-create` are used.
[-through_link yes/no]	Specifies that the link target must be archived, and not the link itself. Can be used only if options `-edit` or `-create` are used. The default value is `no`.
[-pool pool_ name1 [pool_ name2]...]	Specifies the name of the media pools that will be used when archiving data in the specified archive folder. The first media pool defined will be the main pool. Other media pools will be multiple writing pools. Can be used only if options `-edit` or `-create` are used.
[-host host_ name]	Specifies the name of the host onto which the archive folder is created. Can be used only if options `-folder` , `-create` and `-password` are used.
[-manage_acl yes/no]	Specifies that the ACLs will be archived along with the actual data. Value can be `yes` or `no`. Can be used only if options `-edit` or `-create` are used. The default value is `no`.

[-prolog file_path]	Specifies the path of program or script that is run before the archiving operation is performed. Can be used only if options `-edit` or `-create` are used.
[-epilog file_path]	Specifies the path of program or script that is run when the archiving operation is complete. Can be used only if options `-edit` or `-create` are used.
[-lanfree yes/no]	Specifies that data is archived on medias without transiting via the Tina server. Value can be `yes` or `no`. Can be used only if options `-edit` or `-create` are used. The default value is `no`.
[-remove_ archived_file yes/no]	Specifies that source data is automatically removed from disk once it has been archived (copied onto a media). Value can be `yes` or `no`. Can be used only if options `-edit` or `-create` are used.
[-use_empty_ archive yes/no]	Specifies that data must always be archived in an empty archive. Value can be `yes` or `no`. Can be used only if options `-edit` or `-create` are used. The default value is `no`.
[-sync_cart yes/no]	Specifies that you want the "Archiving complete" message to appear only when data has actually been written on media. If this option is not selected, the message appears when data has been copied in the cache on the Tina server. Value can be `yes` or `no`. Can be used only if options `-edit` or `-create` are used. The default value is `no`.
[-continue_on_ error yes/no]	Specifies that you want the archiving operation to proceed even if an error occurs on one of the multiple writing sessions. Value can be `yes` or `no`. Can be used only if options `-edit` or `-create` are used. The default value is `no`.
[-keyword_on_ archive yes/no]	Specifies that all the archives contained in the specified archive folder must be assigned at least one keyword. Value can be `yes` or `no`.. Can be used only if options `-edit` or `-create` are used. The default value is `no`.
[-propagate]	Specifies that the archive folder keywords will be assigned to all its existing archives. Can be used only if options `-edit` and `keyword_on_archive` are used.
[-identity identity]	See -identity.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.

Example. `tina_archive_control` use

In this example, `tina_archive_control` creates an archive folder with these characteristics:

- The name is `legal_arch`.
- The description is administration documentation.
- The keywords are `library`, `drive`, `events`, `cartridge_pool`, `job` and `task_viewer`.
- The file format is comressed and encoded.
- The source files are removed once the archiving is complete.
- The archiving process is considered completes once the data has actually been written on media.

```
tina_archive_control -folder legal_arch -create -description "administration
guide" -keywords library drive events cartridge_pool job task_viewer -file_
format compress encode -remove_archived_file yes -sync_cart yes
```

tina_backup

The `tina_backup` command allows you to schedule backups without using the graphical interface. When you initiate a backup with `tina_backup`, all backup selections are taken into account (similarly to the Web Administration when you manually initiate a backup).

Rights

Users with these rights in Tina can launch this command:

- Platforms (create, modify, delete) AND the corresponding Allowed Strategies

  Or
- Platform use (start backups) AND the corresponding Allowed Strategies

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_backup -strat A|B|C|D [-full]|[-incr] [-host host]|[-application
application] [-date yyyymmddhhmm] [-path path1 [path2]...]|[-file_list file_
path]|[-parallel_file_list file_path1 [file_path2]...] [-user user] [-
password password] [-encode] [-compress] [-sync_cart] [-v_jobid] [-
identity user:passwd] [-catalog catalog] [-help]
```

-strat A|B|C|D	Specifies the backup strategy (`A`, `B`, `C`, or `D`).
[-full]	Specifies the full backup. The default session is the full backup.
[-incr]	Specifies the incremental backup. If the option is not specified, the default session is the full backup.
[-host host]	Specifies the host onto which the backup is initiated. If the option is not specified, the backup is started on the local machine.

[-application application]	Specifies the application onto which the backup is initiated.
[-date yyyymmddhhmm]	Specifies the backup date (year, month, day, hour and minute). The option allows you to preset the backup date. If it is not specified, the default date is that of the machine. The date defined with this option must never be prior to the catalog creation date. The backup would proceed correctly but no restore would be possible.
[-path path1 [path2]..]	Specifies absolute paths of objects (directories and/or files) to be backed up. The syntax follows the operating system syntax for backup folders (ex: `/usr` for Unix, `c:\users` for Windows). If you are using a Filesystem application for Windows, you need to specify the path of the application in POSIX format. Example: `/c/users`. Do not use this parameter when backing up an NDMP, SMS, or I5/OS application.

[-file_list file_path]	Specifies a file containing the absolute paths (one path per line) of all objects to be backed up. If you specify the path of a directory, all the objects contained in this directory are backed up. This option accepts that lines remain empty between each absolute path specified. This option is very useful when the number of objects to back up is high. The use of this parameter implies a shared lock on the strategy, i.e, several backup jobs can be launched at a time. If you are using a Filesystem application for Windows, you need to specify: - the path of the list file in the format corresponding to the OS where the command is launched. - the path of the files to back up defined within the list file in POSIX format. Example: `/c/files`. • You can specify the paths of both directories of files. However, you are not allowed to specify the path of a file AND the path of a directory containing this file. Otherwise, the error message “double archiving not permitted” displays. For instance, you can specify the `/usr/dir1` directory and the `/usr/dir2/file_to_back_up` but you cannot specify `/usr/dir1` and `/usr/dir1/file_to_back_up`. • Regular expressions are not allowed. Do not use this parameter when backing up an NDMP, SMS, or I5/OS application.

[-parallel_file_list file_path1 [file_ path2]...]	Each file path is an absolute name of the file which contains a list of files to be backed up. If you specify the path of a directory, all the objects contained in this directory are backed up. For each file path listed, a backup process is launched. You can thus perform several backups simultaneously. This option accepts that lines remain empty between each path specified. This option is very useful when the number of objects to back up is high. If you are using a Filesystem application for Windows, you need to specify: - the path of the list file in the format corresponding to the OS where the command is launched - the path of the files to back up defined within the list file in POSIX format. Example: `/c/files`. • You can specify the paths of both directories of files. However, you are not allowed to specify the path of a file AND the path of a directory containing this file. Otherwise, the error message “double archiving not permitted” displays. For instance, you can specify the `/usr/dir1` directory and the `/usr/dir2/file_to_back_up` but you cannot specify `/usr/dir1` and `/usr/dir1/file_to_back_up`. • Regular expressions are not allowed. Do not use this parameter when backing up an NDMP, SMS, or I5/OS application.
[-user user]	Specifies the user performing the operation.
[-password password]	Specifies the user password.
[-encode]	Active with `-path` or `-file_list`, this parameter specifies that the files are to be encoded during the backup.
[-compress]	Active with `-path` or `-file_list`, this parameter specifies that the files are to be compressed during the backup.
[-sync_cart]	Specifies the end of backup once data has been written on media. If the option is not specified, the end of backup is specified once data has been written in the cache.
[-v_jobid]	Displays the job ID of the backup job in CSV format.
[-identity user:passwd]	See -identity.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.

Example. `tina_backup` use

To back up files using tina_backup

1. Create a media pool using Web Administration (Storage-Media Pool-New menu). Associate the pool with a label (Label textbox) and with drives (Associated Drives area).
2. Define a backup strategy using Web Administration (Backup-Selected Platform-Strategy A-Properties menu) and a backup selections using Restore & Archive Manager (Backup-Backup Selection-Properties menu).
3. Perform a full backup by entering this command on the host to be backed up:
   `# ./tina_backup - full -strat A`
   Or
   Perform an incremental backup by entering this command on the host to be backed up:
   `# ./tina_backup -incr -strat A`

> **Note**: Consult the `event` file to make sure that no incident occurred during the operation.

tina_cache

The `tina_cache` command allows you to view the cache axis occupation and to edit the cache configuration.

> **Note**: Only the user `root` (Unix) or an administrator (Windows) can use this command.

Syntax

```
tina_cache [-purge] [-job_queue <queue_type>] [-jobid jobid] [-scan] [-once]
[-incl job_type1 [job_type2]...]|[-excl job_type1 [job_type2]...]
[-interval <freq>] [-jobs_to_stderr] [-info] [-path <p>] [-move <n>] [-
rename <n>] [-display_states] [-catalog catalog] [-help]
```

[-purge]	Purges cache containers for jobs in the history queue (for jobs that were not cancelled successfully).
[-job_queue <queue_type>]	Specifies a job queue (ACTIVE, ALL, or HISTORIC) for purge (default is HISTORIC), or scan (default is ACTIVE).
[-jobid jobid]	Purges cache containers for jobs with identifier `jobid` (for jobs that were not cancelled successfully).
[-scan]	Scans cache axis for all types of jobs (default). The cache is rescanned until the user hits CTRL+D to stop the scanning.
[-once]	Performs only one cache axis scanning. Can be used only if option "-scan" is used.

[-incl job_ type]	Specifies job type to be included: BCKP SYNT ARCH REST DUPL XSRC XDST (X stands for export)
[-excl job_ type]	Specifies job type to be excluded: BCKP SYNT ARCH REST DUPL XSRC XDST (X stands for export)
[-interval <freq>]	Specifies an interval of time in second between each display of cache scan
[-jobs_to_ stderr]	This option can only be used with the `-scan` option. It specifies to print the job information found by the `-scan` option to the error output.
[-info]	Cache axes and catalog information
[-path <p>]	Specifies the absolute path where to move or rename a cache file
[-move <n>]	Moves axis number <n>. Can be used only if option(s) "-path", "-type", "-size" is(are) used
[-rename <n>]	Renames axis number <n>. Can be used only if option(s) "-path", "-type", "-size" is(are) used
[-display_ states]	Displays all possible statuses of jobs, streams and sessions.
[-catalog catalog]	Specifies the working catalog name.

tina_cart

The `tina_cart` command allows you to list or extract the contents of media written by Tina in the TiNa, tar, or cpio format without the use of the catalog. This command can thus be used to recover some data, for instance a catalog backup, even if the catalog is not available or if you are unable to restore it. However it cannot read any tapes that have been written outside of Tina.

The cartridge containing the files to read or to extract is automatically rewound in order to position anywhere on the tape.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.
> This user is authorized to read media contents and can specify a list of tape files (including their paths).

The command must be entered on the host to which the drive is connected. When executing this command, no access to the catalog, nor connection to the server is involved.

Using tina_cart when Tina is not installed

Since it does not require access to the catalog, the `tina_cart` command can be used on a system where Tina is not installed. To ensure it works correctly in this case, you must:

- Set TINA_HOME to any value (a valid path such as /tmp)

- Find the library corresponding to your operating system, for instance libicu*, or libstdc++ (Linux).
- Set the path variable corresponding to your operating sytem, for instance PATH (Windows), DYLD_LIBRARY_PATH, or LD_LIBRARY_PATH (Linux) to the directory where the library needed is located.
- Use the `tina_cart` command located on the Tina Delivery DVD-ROM with the option -event_to_console.

Prerequisites

In order to use the `tina_cart` command to restore data, the drives that are going to read the cartridges must be configured to work with Tina.

See the Tina Installation Documentation for details concerning using the Configurator to configure drives automatically, or the Atempo-Tina Drivers Documentation for manual configuration information.

Restoring macOS data

Overview

macOS data backed up in TiNa or SIDF format, once extracted using the `tina_cart -extract` command, needs processing to be usable. This processing is necessary whether the data is restored to a MacOS, Unix or Windows machine. The MacExport tools performs this processing.

When used to restore MacOS data to MacOS machines, MacExport will restore data forks and resource forks.

When used to restore MacOS data to Windows and Unix machines, MacExport will restore data forks only.

MacExport is located in the Bin folder in the Tina home directory.

> **Important**: Only use MacExport in the case of data backed up in Tina or SIDF format. Data backed up in Tar or CPIO format is directly usable.

> **Note**: This tool can be replaced by the option `[-source_data_os_type Windows|Unix|Macos|Netware]`.

To restore MacOS data

1. Extract the data to an empty directory using the `tina_cart -extract` command.
2. Use the MacExport tool.

To use the MacExport tool

1. Open a terminal.
2. Change the current directory to the Bin folder in the Tina home directory.
3. Type `./MacExport`.
   The MacExport presentation is displayed.
4. Enter a command based on this syntax:
   `[-data_fork]` (path of source file or folder) (path of destination folder)

> **Note**: The `-data_fork` option allows you to restore only data forks (as opposed to resource fork and FinderInfo attributes). This option is only available when restoring data to MacOS machines.

5. Click Enter.
   The files and resource forks are restored.

Syntax

```
tina_cart -type dev_type -list|-extract -device device_descriptor [-skip
number] [-source_data_os_type Windows|Unix|MacOS|Netware] [-old_format] [-
verbose] [-offset offset value] [-set_size] [-files file1 [file2]...] [-
format TiNa|TiNa2|TiNa3|TiNa4|TiNa5|tar|cpio|raw] [-all] [-no_decode] [-raw_
data] [-block_size Size] [-crypt_password password] [-key Key file] [-event_
to_console]
```

-type "dev_type"

Specifies the type of drive used to read cartridges.

`"dev_type"` must be between double quotes and can take these values:

"DAT"

"Magneto-Optical": if you use `tina_cart` along with a magneto-optical drive, refer to Flipping Magneto-Optical disks.

"Exabyte 2GB"
"Exabyte 5GB"
"3480"
"Mag Tape 6250"
"Streamer QIC24"
"Streamer QIC150"
"CompactTape TK/TZ"
"Streamer QIC525"
"Exabyte 2GB-C"
"Exabyte 5GB-C"
"DAT-C"
"Disk Drive"
"Virtual Drive"
"DLT 2000"
"DLT 4000"
"Overland 3480"
"Exabyte Mammoth"
"DLT 7000"
"Tandberg SLR32"
"Tandberg SLR50"
"IBM Magstar MP"
"STK T9840"
"IBM 3590"
"Exabyte Mammoth 2"
"AIT (35GB)"
"Exabyte VXA-1 (ECRIX VXA)"
"DLT 8000"
"Raw File"
"Tandberg SLR100"
"AIT2 (50GB)"
"LTO HP Ultrium"
"LTO IBM Ultrium 1"
"LTO SEAGATE Ultrium 1"
"STK T9940"
"SuperDLT 220"
"EMC Tape Emulator"
"DLT1"

-type "dev_type" **(continued)**	"Sony DTF2" "Quantum DX series" "AIT3 (100GB)" "Exabyte VXA-2" "SuperDLT 320" "LTO HP Ultrium 2" "LTO IBM Ultrium 2" "VTL Disk Drive" "SAIT (500GB)" "SuperDLT 600" "Tandberg SLR140" "UDO" "DLT VS160" "LTO HP Ultrium 3" "LTO IBM Ultrium 3" "AIT4 (200GB)" "LTO TANDBERG LTO-2" “Fujitsu VTL Drive” "IBM 3592" "AITE Turbo" "AIT1 Turbo" "AIT2 Turbo" "LTO QUANTUM 3" "Exabyte VXA-320 (VXA-3)" "DLT-S4" "DLT-V4" "LTO QUANTUM 2" "DVD-RAM" "DLT VS80" "T10000A" "AIT5 (400GB)" "IBM Ultrium 4" "HP Ultrium 4" "IBM TS1120" "Null Disk Drive" "UDO2" "NearStor VTL Drive" "IBM TS1130" "TANDBERG LTO-3" "TANDBERG LTO-4" "HyperStream Server" "QUANTUM LTO4" "IBM Ultrium 5" "HP Ultrium 5" "QUANTUM LTO5"

	"IBM TS1140" "T10000B" "T10000C" "HP Ultrium 6"
-type "dev_type" **(continued)**	"IBM Ultrium 6" "QUANTUM LTO6" "TANDBERG LTO-5" "TANDBERG LTO-6" "T10000D" "IBM TS1150"
-list	Displays the list of backed up files.
-extract	Extracts the backed up files. Files are restored in the current directory.
-device device_descriptor **-skip n**	Specifies the drive used and the location of the tape file. The device descriptor must specify a "no rewind", "variable block" device. The first file on the tape corresponds to the label and is numbered 0 Examples: Unix: `/dev/tape -skip 4` with 4 = 4th backup (5th tape file) Windows: `cxbytzla -skip 3` with 3 = 3rd backup (4th tape file) If you use the option `[-all]` along with this parameter, the specified number of the tape file is that from which all the tape files on the cartridge are listed or extracted. When using a VTL Disk Drive, the device descriptor consists of the absolute path of the cartridge in POSIX format. ex: Unix: `/bck/DiskDrives/catalog/catalog_vls/full00041` Windows: `G:\bck\DiskDrives\catalog\catalog_vls\full00041` The -skip n option is mandatory except if the device is of type "raw file".
[-source_data_os_type Windows|Unix|Macos|Netware]	OS type of the source data to restore. This allows to restore locally data from a media that may contain files from another operating system. All combinations are available (Windows to Unix, macOS to Windows, etc.).

[-old_format]	To use when restoring files from previous versions of Unix (except macOS) that only managed one data stream. This option must be used when restoring backups performed by Tina versions prior to 4.3.
[-verbose]	Allows to view information on all the files in the tar file.
[-offset]	Allows to specify the offset in the tar file for the analysis start. The offset must be a module of 512 bytes. If you do not know the exact offset, you can enter an approaching value: `tina_cart` will skip extra data and synchronize on the first valid header.
[-set_size]	This option must be used when restoring backups performed by Tina versions prior to 4.3. The option adds 256 bytes to the registered size of the tar file if the size was badly registered in the tar header, to allow tina_cart to extract big files correctly. The `-set_size` option is used exclusively with the GNU Tar format, as it allows handling very big files.
[-files file1 [file2]...]	Specifies the files to list or extract either explicitely or using pattern matching characters, for instance: `*.doc`. If the option is not specified, all the files located on the specified tape file are listed or extracted. On macOS platforms, the option `-files` is case sensitive. You must use the exact case of the file names to list or extract when using this option.
[-format TiNa|TiNa2 |TiNa3|TiNa4|TiNa5| tar|cpio|raw]	Specifies the backup format of the files to list or extract. If the option is not specified, the default backup format is the current version of the TiNa format. TiNa5 is the current TiNa format since Tina version 3.0. You cannot restore segmented files in LAN Free format with the tina_cart command.

[-all]	Lists or extracts all the tape files located on the cartridge. This option can only be used with a "no rewind" device.
	The option, used with the parameter `-list`, is very useful when you want to list all or parts of the cartridge contents. It avoids repeating the required operations (rewind, label reading, media location, etc.).
	To list the cartridge contents, specify on the command line:
	`-list -device /dev/tape -skip 1 -all`
	To list data from the 7th tape file (6th backup) until the end of the cartridge, specify on the command line:
	`-list -device /dev/tape -skip 6 -all`

[-no_decode]	Specifies that the files extracted will not be uncompressed nor decoded.
[-raw_data]	For windows data only: this option must imperatively be used if the data you are extracting is segmented accross several tape files. See Segmentation Issues for details.
[-block_size size]	Specifies the size of a block: 128 KB by default, or 64 KB. This option must be used if a file backed up with a Unix machine (128 KB) is restored on a Windows machine (64 KB).
[-crypt_password password]	Specifies the password to use for coding/uncoding.
[-key key_file]	Specifies the name and path of the file containing the key to use for uncoding.
[-event_to_console]	Sends events to console.

> **Note**: Files backed up with the `tar` or `cpio` format can also be read respectively with the Unix commands `tar` or `cpio`. Do not forget to skip the first tape file corresponding to the label when reading with these commands.

> **Note**: If you use the `-all` parameter on a segmented SIDF backup, you may have errors in the logs at tape file change. Use `tina_sidf` instead with `-range` option.

Example. `tina_cart` use: Unix

In this example, `tina_cart` displays the Tina label, then the list of the files backed up with the TiNa format (default backup format) according to the specified tape file number (1 for the 1st backup = 2nd tape file).

```
# ./tina_cart -type "Exabyte 5GB-C" -list -device /dev/rmt -skip 1
Time Navigator Label :
Name : root00001
Creation Date : Wed Mar 27 09:39:07 2002
Text :
```

```
Owner : root

rwxr-xr-x 0/0 dir Sat Sep 6 14:50:18 2025 ./etc
rw-r--r-- 0/0 2 Sat Sep 6 14:50:51 2025 ./etc/.init.state
rw-rw-r-- 0/0 2689 Sat Jun 17 02:38:52 1995 ./etc/3270.keys
rw-rw-r-- 0/0 3977 Sat Jun 17 02:38:52 1995 ./etc/3270_arab_kyb.map
rw-rw-r-- 0/0 5537 Sat Jun 17 02:38:53 1995 ./etc/3270keys.hft
rwxrwxrwx 2/2 symb Mon Aug 28 16:54:54 1995 ./etc/XNSquery -> /usr/sbin
/XNSquery
rwxrwxrwx 2/2 symb Mon Aug 28 16:54:54 1995 ./etc/XNSrouted -> /usr/
sbin/XNSrouted
rwxr-xr-x 0/0 dir Mon Aug 28 16:55:02 1995 ./etc/acct
rw-rw---- 0/4 1100 Sat Jun 17 07:26:12 1995 ./etc/acct/holidays
rwxrwxrwx 0/4 symb Mon Aug 28 16:54:54 1995 ./etc/accton -> /usr/sbin/
acct/accton
rw-rw---- 0/0 910 Sat Jun 17 02:38:53 1995 ./etc/aliases
rwxrwx--- 0/0 dir Mon Aug 28 16:54:53 1995 ./etc/aliasesDB
rw-rw---- 0/0 0 Sat Jun 17 05:11:16 1995 ./etc/aliasesDB/DB.dir
rw-rw---- 0/0 1024 Sat Jun 17 05:11:16 1995 ./etc/aliasesDB/DB.pag
rw-rw---- 0/0 0 Sun Sep 7 09:32:26 2025 ./etc/aliasesDBl
rwxrwxrwx 2/2 symb Mon Aug 28 16:54:54 1995 ./etc/allocp -> /usr/sbin/
allocp
rwxrwxrwx 0/0 symb Mon Aug 28 16:54:54 1995 ./etc/arp -> /usr/sbin/arp
rwxrwxrwx 0/0 symb Mon Aug 28 16:54:54 1995 ./etc/asw -> /usr/lib/asw
rwxrwxrwx 0/10 symb Mon Aug 28 16:54:54 1995 ./etc/audit -> /usr/sbin/
audit
rwxrwxrwx 0/10 symb Mon Aug 28 16:54:54 1995 ./etc/auditbin -> /usr/
sbin/auditbin
rwxrwxrwx 0/10 symb Mon Aug 28 16:54:54 1995 ./etc/auditcat -> /usr/
sbin/auditcat
rwxrwxrwx 0/10 symb Mon Aug 28 16:54:54 1995 ./etc/auditpr -> /usr/
sbin/auditpr
rwxrwxrwx 0/10 symb Mon Aug 28 16:54:54 1995 ./etc/auditselect -> /usr/
sbin/auditlect
rwxrwxrwx 0/10 symb Mon Aug 28 16:54:54 1995 ./etc/auditstream -> /usr/
sbin/auditream
rwxrwxrwx 0/0 symb Mon Aug 28 16:54:54 1995 ./etc/backbyinode -> /usr/
sbin/backbnode
rwxrwxrwx 0/0 symb Mon Aug 28 16:54:54 1995 ./etc/backbyname -> /usr/
sbin/backbyname
```

If you want to extract the above files, enter this command:

```
#./tina_cart -type "Exabyte 5Go-C" -extract -device /dev/rmt0 -skip 1
```

Example. `tina_cart` use: Windows

```
C:\tmp>tina_cart -type "Exabyte Mammoth" -list -device c4b0t4l0 -skip 1

Label Time Navigator® Enterprise Edition :
Name : TOT_00001
```

```
Creation Date : Thu Jan 24 15:29:03 2002
Description : exploite
Label Format : V5
Recycling Date : Sat Mar 29 23:06:08 2003
Owner : TOT_


Listing segment #1

--{ 0/0 dir Thu Jan 01 01:00:00 1970 /d
--{ 0/0 dir Wed Jan 08 17:07:06 2003 /d/mail
--/ 0/0 dir Tue Mar 11 17:55:02 2003 /d/mail/Data
--{ 0/0 174428 Fri Mar 21 11:06:44 2003 /d/mail/Data/Appix et Support
--{ 0/0 88044 Fri Mar 21 11:06:53 2003 /d/mail/Data/Appix et Support.snm
--/ 0/0 2314945 Fri Mar 21 11:38:30 2003 /d/mail/Data/Casse Catalogue
--/ 0/0 65668 Fri Mar 21 11:38:32 2003 /d/mail/Data/Casse Catalogue.snm
--/ 0/0 675325 Fri Mar 21 11:38:36 2003 /d/mail/Data/CD request
--/ 0/0 36052 Fri Mar 21 11:38:39 2003 /d/mail/Data/CD request.snm
--{ 0/0 8560531 Fri Mar 21 10:05:05 2003 /d/mail/Data/CE
```

Segmentation Issues

If the files you are trying to extract, list or scan are segmented accross several tape files, you need to follow special procedures to restore your data.

A tape file consists of several files containing data backed up by Tina and corresponding to a backup session. The maximum size of a tape file is 1 GB. If the size of a backup is superior to 1 GB, several tape files of 1 GB each are written.

When restoring segmented tape files containing data in the TiNa format, each segment receives this suffix: `.SEGMENT_XX`, where `XX` is a two digit number incremented for each restored tape file. Thus, you have to extract the different parts and concatenate them to restore the original file.

To identify the tape files you need to extract, use the `-list` option that allows to identify the tape file contents.

To restore segmented files

1. Identify the tape files to be restored.
2. Extract both tape files.
3. Concatenate both parts of the segmented file.
   Unix: `cat file1 file2 > target_file`
   Windows: `copy file1/B+file2/B target_file`

To restore segmented files in tar format

1. Identify the tape files to be restored.
2. Extract both tape files.
3. Run the command `tar -extract` on both files.
4. Concatenate both parts of the segmented file.
   Unix: `cat file1 file2 > target_file`
   Windows: `copy file1/B+file2/B target_file`

To restore segmented files containing compressed data in the TiNa format

1. Identify the tape files to be restored.
2. Extract data from both tape files using the `-raw` option to avoid uncompressing files.
3. Concatenate both parts of the segmented file.
   Unix: `cat file1 file2 > target_file`
   Windows: `copy file1/B+file2/B target_file`
4. Rename all files with the `.cod` extension.
5. Run the `tina_cod -d -f *.cod` command to uncompress all files.
6. Delete the `.cod` files.

To restore segmented files backed up on a Windows platform

1. Identify the tape files to be restored.
2. Extract data from both tape files using the `-raw_data` option to avoid interpreting the file headers generated by Windows at backup time.
3. Concatenate both parts of the segmented file.
   Unix: `cat file1 file2 > target_file`
   Windows: `copy file1/B+file2/B target_file`
4. Run the `NTExport.exe <concatenated_file> <target_file>` command. The `NTExport.exe` command is available on the Tina delivery DVD-ROM.

tina_cart_control

The `tina_cart_control` command allows you to perform operations on cartridges:

- Reading, closing, unclosing, recycling, logically or physically deleting cartridges.
- Creating cartridges.
- Duplicating cartridges.
- Displaying lists of cartridges filtered according to certain criteria in order to detect the offline, external and recyclable cartridges that could be put online.

Important: When duplicating a cartridge, keep in mind that you can only make 4 copies of a given cartridge.

Note: Any user can execute this command.

Data Integrity issues

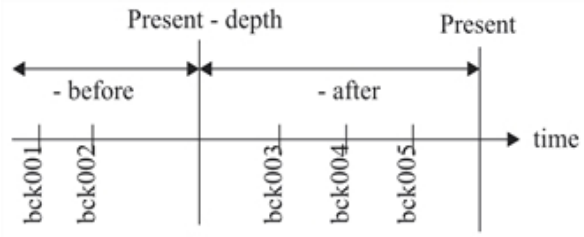
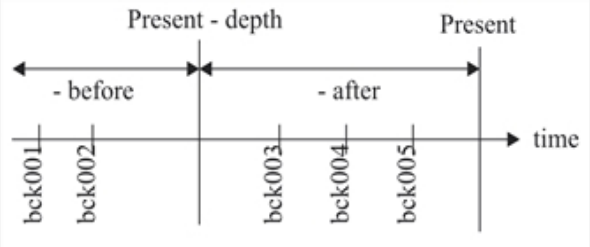
- When you `recycle`, `erase` or `delete` a cartridge, if the operation you are performing conflicts with the data integrity policy, i.e, the cartridge contains the last full backup of a backup folder for a given strategy, or any incremental backup performed after it, a warning message appears and the operation is not performed, unless you use the `-force` option. This ensures that the last backup version of a backup folder remains available at all times to be restored.
- In addition, be aware that you will also be performing the recycle, erase or delete operation on all the cartridges that contain objects that were backed up during the same backup job as the one you are recycling or erasing. This is to avoid keeping an incomplete backup.

Syntax

```
tina_cart_control [-label label] [-pool pool_label] [-pool_dest pool_label]
[-drive drive] -close|-reopen|-recycle|-new_spare|-erase|-delete|-status|-
create|-duplicate|-read|-chgpath|-list [-depth valueUNIT] [-before]|[-
after]|[-all] [-no_empty] [-online_ready] [-nbcart nbcart] [-force]|[-range
valueUNIT] [-barcode barcode1 [barcode2]...] [-number number] [-output_
format text|csv] [-csv_separator separator] [-short]|[-long] [-do_not_check_
data_integrity] [-retention valueUNIT] [-status_filter status_filter1
[status_filter2]...] [-catalog catalog] [-path path] [-path_dest new_path]
[-v_name] [-v_barcode] [-v_volume] [-v_unit] [-v_tape_file] [-v_status] [-v_
recycling] [-v_location] [-v_rule] [-v_description] [-v_creation_date] [-v_
backup_date] [-v_format] [-v_wear_level] [-v_recyclable] [-v_recycle_age] [-
v_type] [-v_pool_label] [-v_close_status] [-v_fill_status] [-identity
identity] [-help]
```

Cartridge selection parameters.

[-label label]	Selects a single cartridge using the label. This option is incompatible with the `-pool` option.
[-pool `pool_label`]	Specifies the label of the pool to be used. This option is incompatible with the `-label` option. Used without the option `[-depth hours -before|-after]`or `[-all]`, the parameter allows you to select the cartridge used for the latest backup. Used with the option `[-depth hours -before|-after]`, the parameter allows you to select a serties of cartridges, in the pool, used in a given time interval.
[-no_empty]	This option must be used with `-pool`. It avoids selecting empty cartridges. `-no_empty` can be used with `-all`, `-depth`, `-after` or `-before`.
[-drive drive]	Selects the cartridge located in the drive to perform the specified operation. The user who initiates the command `tina_cart_control` with the parameter `-drive` must belong to a cartridge pool authorized to use the dedicated drive.
[-list]	Displays the list of the cartridges known to the catalog (name, barcode, volume, status, location, retention period and possibly the corresponding security rule). If used with options, the cartridge list can be filtered. By default, the cartridges are sorted by recycling date, the cartridges that will be sooner recycled coming first. You can use the `-depth` option to limit the number of cartridges displayed.

[-depth valueUNIT]	Specifies a time navigation period. This option possible value format is valueUNIT, where `value` is an integer and UNIT is the time unit corresponding to: S: seconds m: minutes H: hours D: days W: weeks M: months Y: years This option must always come with the `-before` or `-after` option.
[-before]	Specifies that the selected cartridges backup date must be prior to the time defined through the `-depth` option  This option allows the selection of a group of cartridges. This option is mandatory if `-depth` is specified and `-after` is not.
[-after]	Specifies that the selected cartridges backup date must be after the time defined through the `-depth` option.  This option allows the selection of a group of cartridges. This option is mandatory if `-depth` is specified and `-before` is not.
[-all]	Selects all the cartriges in the pool selected through the `-pool` option.
[-online_ ready]	Displays the list of externalized, recyclable and offline cartridges that can be put online. This option must always be used with the `-list` option.

[-retention valueUNIT]	Displays the list of offline cartridges that will be ready to be put online in less time than specified. This option possible value format is valueUNIT, where `value` is an integer and UNIT is the time unit corresponding to: S: seconds m: minutes H: hours D: days W: weeks M: months Y: years This option must always come with the `-list` and `-online_ready` options.
[-status_ filter]	Specifies the status of the cartridges displayed by the `-list` option. Values can be `"closed", "closed_on_error", "recyclable", "full"` and `"partly filled"` used in a list. The default value is `closed closed_on_ error recyclable full`.
[-do_not_ check_ data_ integrity]	Avoids checking data integrity of each listed cartridge.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-path path]	Selects the cartridges created by the Disk Drive defined by the device descriptor path in the Administration interface. It can be used only if options `-chgpath` and `-path_dest` are used.
[-path_dest new_path]	Specifies the destination path of the DiskDrives directory, which contains the cartridges files on the disk. It can be used only if options `-chgpath` and `-path` are used.

> **Note**: The `-label` and `-pool` parameters allow you to read information in the catalog, whereas the parameter `-drive` enables you to physically read the label of the cartridge located in the dedicated drive.

> **Note**: The `-label` and `-pool` parameters are mutually exclusive.

Operation definition parameters.

[-pool_dest `pool_label`]	Specifies the label of the destination pool, when duplicating cartridges. You can create only one duplicate at a time. Use with the `-duplicate` option only..

-close	Closes the selected cartridge.
-reopen	Performs the reopening of the selected cartridge. The options `[-depth hours]`and `[-before|-after]` are not allowed. Selecting a list of cartridges is therefore impossible. `-unclose` is an alias of this option.
-recycle	Recycles the selected cartridge. Only the recyclable cartridges may be recycled, unless the `-force` option is specified or the cartridges to be recycled have been selected through the `-drive` or `-label` options. To select a list of cartridges, you must specify the options `[-depth]` and `[-before|-after]`.
-new_spare	Creates the selected cartridges in the Spare cartridge pool without using a drive. Can be used only if option `-barcode` is used.
-erase	Specifies the logical and physical deletion of the cartridge in the catalog (equivalent of the Cartridge › Operations › Spare command in Web Administration).
-delete	Specifies the logical deletion of the cartridge in the catalog (equivalent to the Cartridge › Operations › Delete command in Web Administration).
-status	Displays information concerning the selected cartridges.
[-v_ columnname]	Specifies the column(s) to be displayed when -status option is used. Columns will be displayed in the order options are typed. Possible options are: [-v_name] [-v_barcode] [-v_volume] [-v_unit] [-v_tape_file] [-v_status] [-v_ recycling] [-v_location] [-v_rule] [-v_description] [-v_creation_date] [-v_ backup_date] [-v_format] [-v_wear_level] [-v_recyclable] [-v_recycle_age] [-v_type] [-v_pool_label] [-v_close_status] [-v_fill_status]
-create	Specifies the creation of cartidges.
-duplicate	Use this option to duplicate cartridges. You must provide a destination pool name with the `-pool_dest` option, and either a cartridge label (to duplicate a single cartridge) with the `-label` option, a drive (to duplicate the cartridge located inside the drive) with the `-drive` option or a pool label (to duplicate all the cartridges of the pool) with the `-pool` option.
-read	Performs the physical reading of the cartridge.

-chgpath	Specifies the modification, in the catalog, of the path of cartridges created by a Disk Drive. It must be used in conjunction with an actual move of the cartridges files on the disk.
	
	To physically move cartridges from a `src` directory to a `dst` directory, you must first use the `mv` command to move the cartridges on the disk and then use the `-chgpath` option to update the catalog. This is illustrated in the following example:
	
	1 Move tape files on the disk: `mv /home/src/DiskDrives /home/dst/DiskDrives`
	
	2 Update the catalog: `./tina_cart_control -chgpath -path /home/src -path_dest /home/dst`
	
	Before:
	
	`tryphon.root(173) [dev->Bin] ls -la /home/src/DiskDrives/my_cat/pool/`
	`total 643872`
	`-rw-r--r--. 1 root root 659150336  9 févr. 23:00 pool0000001`
	
	After:
	
	`tryphon.root(173) [dev->Bin] ls -la /home/dst/DiskDrives/my_cat/pool/`
	`total 643872`
	`-rw-r--r--. 1 root root 659150336  9 févr. 23:00 pool0000001`

[-nbcart nbcart]	Specifies the number of cartridges to recycle.
[-force]	Forces the recycling, deleting or erasing of selected cartridges, even if they are not deemed recyclable for data integrity reasons. `-force` can only be used with `-recycle`, `-erase` or `-delete`. When you use this option to recycle, erase or delete cartridges, you will also be performing the operation on all the cartridges that contain objects that were backed up during the same backup job as the one you are erasing. This is to protect data integrity and to avoid keeping an incomplete backup in the catalog.

[-range valueUNIT]	Specifies a time interval in the past during which the cartridge cannot be deleted. `value` is an integer and UNIT is the time unit corresponding to: S: seconds m: minutes H: hours D: days W: weeks M: month Y: year
[-barcode barcode1 [barcode2]...)	Selects a list of cartridges using barcodes. It can be used only if option `-new_spare` is used.
[-number number]	Specifies a number for the created cartridge. It can be used only if option `-create` is used.
[-output_ format]	Specifies the display format of the `-status` and `-list` option results. Possible values are `text` and `csv`. Default value is `text`.
[-csv_ separator csv_ separator]	Specifies the separator used by the `csv` format.
[-short]	Specifies the short display of the `-status` and `-list` option result (name and barcode of the cartridges).
[-long]	Specifies the detailed display of the `-status` and `-list` option results. If used with the `-list` option, it displays exhaustive information about the listed cartridges.
[-identity user:password]	See -identity.

Example. `tina_cart_control` use for detecting cartridges that can be put online

In this example, `tina_cart_control` draws the list of offline cartridges that will be recyclable within 5 days.

```
tina_cart_control -list -online_ready -retention 5D
```

Example. `tina_cart_control` use for listing cartridge status

In this example, `tina_cart_control` lists the statuses of the cartridges contained in the pool `lab1`.

```
tina_cart_control -all -status -pool lab1
```

Name	Barcode	Vol	Unit	Tape File	Overall Status	Location	Recyclable	Cycle Age	Status	Filling Level
lab100001		10113	KB	**1**	Full	/d/tina carts	No (data integrity)		Open	Full
lab100002		10113	KB	**2**	Full		No		Open	Full
lab100003	robi_3	10113	KB	**1**	Full	robi	No		Open	Full
lab100004	robi_4	10113	KB	**2**	Full	robi	No		Open	Full
lab100005	robi_5	10113	KB	**2**	Full	robi	No		Open	Full
lab100006	robi_6	10113	KB	**1**	Full	robi	No		Open	Full
lab100007	robi_7	10113	KB	**3**	Full	robi	No		Open	Full
lab100008	robi_8	10113	KB	**1**	Full	robi	No		Open	Full
lab100009	robi_9	10113	KB	**2**	Full	robi	No		Open	Full
lab100010	robi_10	10113	KB	**2**	Full	robi	No		Open	Full
lab100011	robi_11	10113	KB	**1**	Full	robi	No		Open	Full
lab100012	robi_12	10113	KB	**1**	Full	robi	No		Open	Full
lab100013	robi_13	10113	KB	**2**	Full	robi	No		Open	Full
lab100014	robi_14	10113	KB	**1**	Full	robi	No		Open	Full

lab10 0015	robi_ 15	101 13	KB	**1**	Full	robi	No	Ope n	Full
lab10 0016	robi_ 16	101 13	KB	**1**	Full	robi	No	Ope n	Full
lab10 0017	robi_ 17	101 13	KB	**2**	Full	robi	No	Ope n	Full
lab10 0018	robi_ 18	101 13	KB	**1**	Full	robi	No	Ope n	Full
lab10 0019	robi_ 19	101 13	KB	**1**	Full	robi	No	Ope n	Full
lab10 0020		101 13	KB	**1**	Full	/d/tina carts	No	Ope n	Full
lab10 0021		101 13	KB	**1**	Full	/d/tina carts	No	Ope n	Full

tina_catalog_ctrl

The `tina_catalog_ctrl` command allows to change the catalog's activity level, independently of the Tina service or daemon.

User's Permissions

Only the `root` user (Unix), or a user with at least the `backup operator` rights (Windows) can execute this command locally.

To modify a catalog located on a distant machine, any user can launch the command, however, the catalog administrator identity must imperatively be provided using the `-identity` option.

Syntax

```
tina_catalog_ctrl -start|-suspend|-stop|-maintenance|-status
[-catalog catalog] [-identity user:password] [-help]
```

-start	Brings the specified catalog online.
-suspend	Stops the specified catalog. The catalog is automatically brought back online when the Tina service or daemon is started.
-stop	Stops the specified catalog. The catalog can only be brought back online through the -start option.
-maintenance	Put the specified catalog in maintenance mode.

-status	Displays catalog information : its state (catalog_state) and its activity level (catalog_activity).
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-identity user:password]	Use this option to provide the identity of the catalog administrator if you are remotely connecting to the catalog.

The catalog's possible states are: OK and LIGHTLY_DAMAGED. If the catalog is more damaged, the `tina_catalog_ctrl` command is not able to determine it.

The catalog's possible activity levels are:

Activity Level	Description
ACTIVE	The catalog is active.
SUSPENDED	the catalog activity is suspended.
STOPPED	The catalog is stopped.
MAINTAINING	The catalog is in maintenance state, waiting for a repairing action if it is damaged.
ACTIVATING	The catalog is being activated. If the catalog remains in this state, it is certainly damaged, put it in maintenance state and try to restart it.
INACTIVATING	The catalog is being stopped. If the catalog remains in this state, it is certainly damaged, put it in maintenance state and try to stop or suspend it.

Example. `tina_catalog_ctrl` use

In this example, `tina_catalog_ctrl` stops the cat_37_tak catalog.

```
tina_catalog_ctrl -stop -catalog cat_37_tak
cat_37_tak: catalog_state=OK catalog_activity=STOPPED
```

tina_cert

The `tina_cert` binary opens Tina Certificate Installer.

Syntax

```
tina_cert [-language language]
```

Example. Launching Tina Certificate Installer on the Command Line

```
tina_cert
```

See the Atempo-Tina Security & Compliance Manager Documentation for additional information.

tina_clone_catalog

The `tina_clone_catalog` command allows you to clone an existing catalog.

It ensures that a new UUID is allocated to the cloned catalog and prevents from uncontrolled sharing of resources. Cartridges, libraries, and drives are not restored to avoid uncontrolled shared cartridges and/or drives.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.

> **Important**: The `tina_clone_catalog` process generated by the `tina_clone_catalog` command must not be killed under any circumstances, for it implies a mapping of the Tina catalog.

Syntax

```
tina_clone_catalog [-disable] [-size size_MB] [-boot boot_file] [-file file]
[-index index1 [index2]...] [-catalog_name catalog_name] [-pipe pipe] [-
folder folder1 [folder2]...]|[-skip_folder folder1 [folder2]...] [-boot_
restore_index] [-file_size file_size] [-max_catalog_size max_catalog_size]
[-help]
```

[-disable]	Specifies that the catalog's platforms must be disabled on the first connection after the `tina_clone_catalog` is executed.
[-size size_MB]	Specifies the catalog size in MB.
[-boot boot_file]	Restores the catalog from a boot file created with the Catalog application. See Tina Administration Documentation for details.
[-file file1 [file2]...]	Specifies the files from which the catalog must be restored.
[-index index1 [index2]...]	Specifies the path of the Advanced Indexing Database, the PostgreSQL database engine of Tina for Exchange Server 2013 that allows for the search through message attributes (such as subject, sender, recipient, received date, etc.). If this option is not specified, the Advanced Indexing Databases are not restored.
[-catalog_name catalog_name]	Specifies the catalog name. The parameter is mandatory if `-file` option is used.
[-pipe pipe]	Specifies the pipe from which the catalog is to be restored.

[-folder folder1 [folder2]...]	**Advanced option, partial catalog restore**. Allows to restore a catalog that will contain only the backup folders specified in the option. Use this option only in non-interactive mode with either `-file` or `-pipe`. This option is useful if you need to rapidly recreate your catalog to restore specific folders. You should perform a complete catalog restore as soon as possible thereafter. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]` This option cannot be used with the `-skip_folder` option.
[-skip_folder folder1 [folder2]...]	**Advanced option, only for definitive partial catalog restore**. Specifies a list of folders NOT to restore. This option cannot be used with the `-folder` option.
[-boot_ restore_index]	Used with the `-boot` option to indicate that you want to restore the indexes contained in the catalog.
[-file_size file_ size]	Specifies the odb file size in MB. The default size is 1024 MB, the maximum size is 4096 MB.
[-max_ catalog_size max_catalog_ size]	Specifies the maximum catalog size, up to 1024 GB. The maximum size depends upon the `-file_size` parameter, as there cannot be more than 256 odb files, to reach the maximum catalog size of 1024 GB you must set the `-file_size` to 4096MB. The maximum size cannot exceed the available space on disk. The value you enter is by default in MB. If you want to use GB, you must add a G after the value, for instance: -max_catalog_size size `256G`.

tina_cod

The `tina_cod` command allows you to encode and compress files or flows (standard input/output).

Encoding allows you to move non-transparent data on the network and thereby increases security.

Compression enables to reduce the space occupied by data on media. It also reduces the network bandwith required to move a given amount of data.

> **Note**: Encoding and compression take place at the client level and use CPU resources. If both operations are activated, compression is performed before encoding. When encoding and compression are activated, performance will be lower.

> **Note**: Many drives have built-in compression mechanisms at the hardware level.

Compression in Tina is used:

- During restores if, when creating backup selections, the compression option has been activated.
- During catalog backups, unless the `-no_compress` option has been used.

Syntax

```
tina_cod [-codec codec_list1 [codec_list2]...]|[-decode]
[-file_list file_list1 [file_list2]...] [-stdio] [-pipe_in pipe] [-pipe_
out pipe] [-list] [-test] [-crypt_password password] [-compress_
rate compress_rate] [-quiet] [-help]
```

[-codec codecs_list]	Specifies the coder list to use.Default value : LZO.
[-decode] or [-d]	Decodes a coded file.
[-file_list file_list] or [-f file_list]	Specifies the file list to code/uncode. You must use an absolute path.
[-stdio] or [-c]	Specifies the standard input/output use on Unix systems.
[-pipe_in pipe]	Specifies a named pipe to use as input for the command.. Cannot be used with `-stdio`. If used with `-file_list`, the output is sent through a unique file.
[-pipe_out pipe]	Specifies a named pipe to use as output for the command.. Cannot be used with `-stdio`. If used with `-file_list`, the input can come from several files.
[-list] or [-l]	Displays the list of available coders. To see the list of coders added in the form of plug-ins, use the option: `-list -external_codec`.
[-test] or [-t]	Performs a precoding test and provides the result.
[-crypt_password password] or [-pw password]	Allocates a password to a file during encoding. This password is necessary to uncode correctly the file. Useful for the CRYPT coder.
[-compress_rate n%]	Specifies the amount of compression as a percentage
[-quiet]	Specifies not to display any results on the console.

> **Note**: When decoding, it is not necessary to specify the type of coder used: the command recognizes automatically the format of the file previously used and performs the appropriate operation

Example. `tina_cod` use

Encoding example:

```
tina_cod -codec CRYPT -f /usr/file1
```

In this example, a file `/usr/file1.cod` is generated. It has undergone an encoding using the `CRYPT` coder.

You can use several coders at once. Use the `tina_cod -v` command to obtain the names of available coders, then specify the coder(s) that you want to use.

> **Note**: The source file is not modified: the `tina_cod` command creates a file under the same name with the `.cod` extension.

Decoding example:

```
tina_cod -d -f /usr/file1.cod
```

The `/usr/file1.cod` file is automatically uncompressed, knowing its format is not necessary.

tina_config

The `tina_config` command allows you to extract information concerning a server configuration and backup schedule from the catalog.

Rights

Users with these rights in Tina can launch this command:

- General Supervision Tasks (Use Web Administration, Supervision Console, etc.)

  Or
- View folders

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_config [-encode file]|[-decode file] [-html] [-catalog catalog]
[-identity user:password] [-help]
```

Without options	Display the configuration of the catalogs used by the host where the command is executed.
[-encode file]	Creates a file describing the catalogs on the Tina Server. This file is intended to be used by the Atempo Technical Support.
[-decode file]	Decodes a file created with the `-encode` option.
[-html]	Displays the result of the `-decode` option in HTML format.

[-catalog catalog]	Specifies the working catalog. This parameter is mandatory if there are several catalogs.
[-identity user:passwd]	The `-identity` parameter allows you to specify a username and password to connect to the Tina catalog with an identity different from that of the user launching the command. The format of the value given to this parameter is `username:password`. This parameter is mandatory if the user launching the command does not have the necessary permission to access the catalog functionalities required to use the command. For instance, with the `tina_catalog_ctrl` command, used to access a remote catalog, the `-identity` parameter must provide the distant catalog privileged user login. For the commands that launch a graphical interface, if this parameter is not used, the catalog connection identity is requested when the application starts. Note: If the password value is an empty string, then the `username:` and `username` values are accepted for the `-identity` parameter.

Example. `tina_config` use

Sample output of the `tina_config` command:

```
+----------------------------------------------------------------------+

Time Navigator Enterprise Edition
CONFIGURATION

Date: Fri Aug 03 10:41:52 2012
1 : catalog
+----------------------------------------------------------------------+



+----------------------------------------------------------------------+

CATALOG

Name : catalog
Server : Atempoard
Catalog Administrator : admin

+----------------------------------------------------------------------+
Catalog UUID : 925e81e9-b06d-7444-a99c-7976bcca8e3d
Init time : Wednesday 11 July 14:18:20 2012
Save time : Wednesday 11 July 14:18:20 2012
Check time : Wednesday 11 July 14:18:20 2012
Restore time : Wednesday 11 July 14:18:20 2012
Backup date of the file used to restore the catalog : Wednesday 11 July
14:18:20 2012
```

```
Current Catalog Size: : 1024 MB
Maximum Catalog Size: : 68608 MB
In the following table, all volumes are in MB
Device Used Space Available Space Needed Space
D:\TimeNavigator\tina430\Data.catalog 1024 58543 68608

Maximum number of parallel cartridge restore jobs: 3
Maximum number of parallel snapshot restore jobs: 3
Maximum Number of On Demand Backups per 24 hours and per host: 5
+-------------------------------------------------------------------+

HOST(S)

+-------------------------------------------------------------------+


---------
HOST: Atempoard [Windows Server 2008 R2]
---------
- Comment: catalog

- Software Version: 4.3.0 SP0 P4916

- Protocol:
TiNa 4.3.0


- Use : Enabled

- Tunnel Agent: No

- Storage Node: Yes

- Report host unavailability: Yes

- Secured Agent: No

- Drive(s)
libvls_d1 (D:\TimeNavigator\tina430*CONF_DRV@Atempoard) (index: 1) (type:
Vtl Disk Drive)
libvls_d0 (D:\TimeNavigator\tina430*CONF_DRV@Atempoard) (index: 0) (type:
Vtl Disk Drive)

- Platform Group ID: 0

- Strategy(ies)
Strategy A
Backup Strategy
Format: TiNa
```

```
Use cache on Server: Yes
Go through Network FileSystems: No
Do not go through local FileSystems: No
Wait for end of writing on cartridges: No
ACL Backup: No
Relaunch until platform is reachable: No
Continue Backup if one of the Multiple Writing Sessions fails: disabled
Available for On Demand Backup: disabled
Multiplexed Sessions: disabled
Pre-processing command: none
Post-processing command: none
Job Priority: medium
Parallelism index: 1
Retry on incident: 2 with a 10 - minute interval
Full backup (enabled)
Synthetic backup: disabled
Cartridge pool(s): pool01
Schedule: Daily Schedule, start from Monday to Friday at 8 pm
Incremental Backup (enabled)
Cartridge pool(s): pool01
Schedule: Every 1/2 hours

- Backup Selection(s)

/c/bdd
Strategies: A B C D
Selection : *
Rejected :
Compressed : NO
Encoded : NO
Max size : Infinite
Modified since: inactive
Phases : 00-01 01-02 02-03 03-04 04-05 05-06 06-07 07-08 08-09 09-10 10-11
11-12
12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-00
Parallelized:NO
Securized: NO


/d/bdd/perso/photos
Strategies: A B C D
Selection : *
Rejected :
Compressed : NO
Encoded : NO
Max size : Infinite
Modified since: inactive
Phases : 00-01 01-02 02-03 03-04 04-05 05-06 06-07 07-08 08-09 09-10 10-11
11-12
12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-00
```

```
Parallelized:NO
Securized: NO


/d/tina_ff/Adm
Strategies: A B C D
Selection : *
Rejected :
Compressed : NO
Encoded : NO
Max size : Infinite
Modified since: inactive
Phases : 00-01 01-02 02-03 03-04 04-05 05-06 06-07 07-08 08-09 09-10 10-11
11-12
12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-00
Parallelized:NO
Securized: NO


/d/unicode/????????????/??????
Strategies: A B C D
Selection : *
Rejected :
Compressed : NO
Encoded : NO
Max size : Infinite
Modified since: inactive
Phases : 00-01 01-02 02-03 03-04 04-05 05-06 06-07 07-08 08-09 09-10 10-11
11-12
12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-00
Parallelized:NO
Securized: NO

- Backup master: none

- Hosts mastered: none


---------
HOST: fatfreddy [Linux]
---------
- Comment:

- Software Version: 4.2.0 SP0 P2888

- Protocol:
TiNa 4.2.0


- Use : Disabled
```

```
- Storage Node: Yes

- Report host unavailability: Yes

- Secured Agent: No

- Drive(s)
No drive

- Strategy(ies)
No strategy

- Backup Selection(s)
No Backup Selection

- Backup master: none

- Hosts mastered: none


+---------------------------------------------------------------------+

APPLICATION(S)

+---------------------------------------------------------------------+


-------------
APPLICATION: Atempoard.sra [System Recovery Agent]
------------

- Host: Atempoard

- Comment:

- Use : Disabled

- User name: none

- Environment variables:
. TINA_APP_LIB_PATH=libtina_sra.dll

- Platform Group ID: 1

- Strategy(ies)
No strategy

- Backup Selection(s)
```

```
/
Strategies: A B C D
Selection : *
Rejected:
Compressed : YES
Encoded : NO
Max size : Infinite
Modified since: inactive
Phases : 00-01 01-02 02-03 03-04 04-05 05-06 06-07 07-08 08-09 09-10 10-11
11-12
12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-00
Parallelized:NO
Securized:

-------------
APPLICATION: catalog.cat [Catalog]
------------

- Host: Atempoard

- Comment:

- Use : Disabled

- User name: none

- Environment variables:
. TINA_SDB_BOOT_HISTORY=7
. (TINA_SDB_MIRROR_PATH)=(path)
. (TINA_SDB_SAVE_PATH)=(path)
. TINA_SDB_SAVE_HISTORY=3
. (TINA_SDB_CATALOG)=(catalog name)
. (TINA_SDB_MAIL_TO)=(recipient email my_name@my_site.com)
. (TINA_SDB_MAIL_SERVER)=(mail server name)
. (TINA_SDB_MAIL_FROM)=(sender email like tina@my_site.com)
. (TINA_SDB_SMTP_USER)=(login/user if smtp server need authentication)
. (TINA_SDB_SMTP_PASS)=(password if smtp server need authentication)
. TINA_SDB_RECOVER=yes
. (TINA_SDB_RESTORE_PATH)=(default in ${TINA_HOME}/Bin)
. (TINA_SDB_SERVICE_NAME)=(tina)
. (TINA_SDB_HOME)=(home path)
. (TINA_SDB_LIB_PATH)=(tina library path)
. (TINA_SDB_TINA)=(tina)
. TINA_SDB_SAVE_EVENTS=yes
. TINA_SDB_SKIP_INDEX=yes

- Platform Group ID: 2

- Strategy(ies)
No strategy
```

```
- Backup Selection(s)

/
Strategies: A B C D
Selection : *
Rejected:
Compressed : NO
Encoded : NO
Max size : Infinite
Modified since: inactive
Phases : 00-01 01-02 02-03 03-04 04-05 05-06 06-07 07-08 08-09 09-10 10-11
11-12
12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-00
Parallelized:NO
Securized:

-------------
APPLICATION: hv_vmware [HV Agent for VMware]
------------

- Host: qacentos62.fr.atempo.network

- Comment: hv_vmware

- Use : Enabled

- User name: root

- Environment variables:
. TINA_APP_LIB_PATH=libtina_ngavmw.so
. TINA_VCB_PORTNUM=7812
. TINA_VCB_WINDOWS_GATEWAY=Atempoard

- Platform Group ID: 4

- Strategy(ies)

Strategy A
Deduplication Strategy
Go through Network FileSystems: No
Do not go through local FileSystems: No
Fast File Scan (Windows Only):No
Wait for end of writing on cartridges: No
ACL Backup: No
Relaunch until platform is reachable: No
Continue Backup if one of the Multiple Writing Sessions fails: disabled
Available for On Demand Backup: disabled
Pre-processing command: none
Post-processing command: none
```

```
Job Priority: medium
Parallelism index: 2
Retry on incident: 2 with a 10 - minute interval
Full backup (enabled)
Repository pool: pool_dedup
Media pool(s): none
Schedule: none
Incremental Backup (enabled)
Repository pool: pool_dedup
Media pool(s): none
Schedule: none

- Backup Selection(s)

/datacenter1/qatst-vmwarecluster/pool_test
Strategies: A - - -
Selection : *
Rejected:
Compressed : YES
Encoded : NO
Max size : Infinite
Modified since: inactive
Phases : 00-01 01-02 02-03 03-04 04-05 05-06 06-07 07-08 08-09 09-10 10-11
11-12
12-13 13-14 14-15 15-16 16-17 17-18 18-19 19-20 20-21 21-22 22-23 23-00
Parallelized:YES
Securized:

+-----------------------------------------------------------------------+
GROUP(S)

+-----------------------------------------------------------------------+



------
GROUP: deneece
------

- Type: library

- Library type
Breece Hill Q16

- Host
fatfreddy

- Library user
deneece

- Drive(s)
```

```
No drive

------
GROUP: lost+found
------

- Type: media pool

- Cartridge policy
Extensible mode with automatic labelling

- User(s)
lost+found
Cartridge(s)
No cartridge

- Drive(s)
vls01_d0
vls01_d1

------
GROUP: pool01
------

- Type: media pool

- Cartridge policy
Auto recycling mode, 1 day(s) of retention

- User(s)
pool01
Cartridge(s)
pool0100001 (vls01_0) [Vtl Disk Drive] vls01
pool0100002 (vls01_1) [Vtl Disk Drive] vls01
pool0100003 (vls01_2) [Vtl Disk Drive] vls01
pool0100004 (vls01_3) [Vtl Disk Drive] vls01
pool0100005 (vls01_4) [Vtl Disk Drive] vls01
pool0100006 (vls01_5) [Vtl Disk Drive] vls01
pool0100007 (vls01_6) [Vtl Disk Drive] vls01
pool0100008 (vls01_7) [Vtl Disk Drive] vls01
pool0100009 (vls01_8) [Vtl Disk Drive] vls01
pool0100010 (vls01_9) [Vtl Disk Drive] vls01
pool0100011 (vls01_10) [Vtl Disk Drive] vls01
pool0100012 (vls01_11) [Vtl Disk Drive] vls01
pool0100013 (vls01_12) [Vtl Disk Drive] vls01
pool0100014 (vls01_13) [Vtl Disk Drive] vls01
pool0100015 (vls01_14) [Vtl Disk Drive] vls01
pool0100016 (vls01_15) [Vtl Disk Drive] vls01
pool0100017 (vls01_16) [Vtl Disk Drive] vls01
pool0100018 (vls01_17) [Vtl Disk Drive] vls01
```

```
pool0100019 (vls01_18) [Vtl Disk Drive] vls01
pool0100020 (vls01_19) [Vtl Disk Drive] vls01
pool0100021 (vls01_20) [Vtl Disk Drive] vls01
pool0100022 (vls01_21) [Vtl Disk Drive] vls01
pool0100023 (vls01_22) [Vtl Disk Drive] vls01
pool0100024 (vls01_23) [Vtl Disk Drive] vls01
pool0100025 (vls01_24) [Vtl Disk Drive] vls01

- Drive(s)
vls01_d0
vls01_d1

------
GROUP: spare
------

- Type: media pool

- Cartridge policy
Extensible mode with automatic labelling

- User(s)
spare
Cartridge(s)
No cartridge

- Drive(s)
vls01_d0
vls01_d1

------
GROUP: system
------

- Type : user group

- User(s)
super
Cartridge(s)
No cartridge

- Drive(s)
No drive

------
GROUP: vls01
------

- Type: library
```

```
- Library type
Virtual Library (Atempo VLS)

- Host
barbarella

- Library user
houat_vls01

- Serial Number:
Atempo VLS

- Drive(s)
vls01_d0
vls01_d1

+----------------------------------------------------------------------+

USERS PROFILES

+----------------------------------------------------------------------+



--------------
ADMINISTRATION
--------------
General Supervision Tasks (Use Administration Console, Supervision Console
...)
| Platforms (create, modify, delete)
| . Drives (create, modify, delete)
| . . Media pools (create, modify, delete)
| . . | Library (create, modify, delete)
| . . | . Users, Groups and Rights (Create, Modify, Delete)
| . . | . . Job Operator (Cancel, Restart, etc.)
default - - - - - - -
admin X X X X X X X

------
MEDIAS
------
Accessible Cartridges: All
| Accessible Cartridges: User's only
| . Remove Snapshots
| . . Mount request operator
| . . | Drive use
| . . | . Library use
default - - - - - -
admin X X X X X X

-------
```

```
BACKUPS
-------
Strategy A Accessible
| Strategy B Accessible
| . Strategy C Accessible
| . . Strategy D Accessible
| . . | Strategies (modify, delete)
| . . | . Backup Selections (modify, delete)
| . . | . . Platform use (start backups)
| . . | . . | Restore Backed up Data
| . . | . . | . Choose the destination directory
| . . | . . | . . On Demand Backup
default X X X X - X - X X -
admin X X X X X X X X X

--------
ARCHIVES
--------
Archive administrator (access to all folders)
| Create local archive folders
| . Create archive folders
| . . Edit folders
| . . | Delete folders
| . . | . View folders
| . . | . . Restore archives
| . . | . . | Archive files
| . . | . . | . Create archives
| . . | . . | . . Edit archives
| . . | . . | . . | Delete archives
default - X - X X X X X X X
admin X X X X X X X X X X

--------
SECURITY
--------
Certificates (create, import, delete)
| Security Templates (create, delete)
| . Rules (create, delete)
default - - -
admin X X X

------
OTHERS
------
Run Restore & Archive Manager
| Connect to any platform via Restore & Archive Manager
| . Open backup folders
| . . Forbidden Menus Hidden
| . . | Forbidden Menus Dimmed
default X - - X -
```

```
admin X X X - X

+------------------------------------------------------------------------+
SCHEDULER

+------------------------------------------------------------------------+


----------
PROPERTIES
----------
- Scheduler enabled
- Verbose mode disabled
- Scheduled job timeout: 3600
- Duration since last valid collection

--------------------------
RECURRENT NON WORKING DAYS
--------------------------
- No recurrent non working day

--------------------------
SPECIFIC NON WORKING DAYS
--------------------------
No specific non working day

+------------------------------------------------------------------------+

SCHEDULE(S)

+------------------------------------------------------------------------+


---------
SCHEDULE: Programmation hebdomadaire, d,marrage chaque samedi … 20:00
---------
- Verbose mode: disabled

- Schedule Rule: D,marrage, Chaque semaine le samedi … 20:00
Description: RŠgle de d,marrage, Chaque semaine le samedi … 20:00
Id: 101
Validity: from 2012-07-11
Frequency: weekly
every 1 week the Saturday
Offset: 0 days
Start Hours:
20:00
Active interval: no defined limits

---------
```

```
SCHEDULE: Programmation journaliŠre, d,marrage du Lundi au Vendredi … 20:00
---------
- Verbose mode: disabled

- Schedule Rule: D,marrage, Chaque semaine le lundi... … 20:00
Description: RŠgle de d,marrage, Chaque semaine le lundi, mardi, mercredi,
jeudi, vendredi … 20:00
Id: 100
Validity: from 2012-07-11
Frequency: weekly
every 1 week the Monday, Tuesday, Wednesday, Thursday, Friday
Offset: 0 days
Start Hours:
20:00
Active interval: no defined limits

---------
SCHEDULE: Programmation mensuelle, d,marrage le premier dimanche de chaque
mois … 20:00
---------
- Verbose mode: disabled

- Schedule Rule: D,marrage, Chaque mois le 1ier dimanche … 20:00
Description: RŠgle de d,marrage, Chaque mois le 1ier dimanche … 20:00
Id: 102
Validity: from 2012-07-11
Frequency: monthly
the first Sunday every 1 month
Offset: 0 days
Start Hours:
20:00
Active interval: no defined limits

+---------------------------------------------------------------------+

ARCHIVE FOLDER(S)

+---------------------------------------------------------------------+


No archive folder

+---------------------------------------------------------------------+

DRIVE(S)

+---------------------------------------------------------------------+


------
```

```
DRIVE: libvls_d0
------

- Type: Vtl Disk Drive

- Status: Enabled

- Serial Number: No Serial Number

- Local drive connected to: Atempoard

- Connection List:

. Host: Atempoard, Device Descriptor: D:\TimeNavigator\tina430*CONF_
DRV@Atempoard, Status: Enabled

- Library: libvls (0)


------
DRIVE: libvls_d1
------

- Type: Vtl Disk Drive

- Status: Enabled

- Serial Number: No Serial Number

- Local drive connected to: Atempoard

- Connection List:

. Host: Atempoard, Device Descriptor: D:\TimeNavigator\tina430*CONF_
DRV@Atempoard, Status: Enabled

- Library: libvls (1)


+-------------------------------------------------------------------+

DEDUPLICATION ENGINE(S)

+-------------------------------------------------------------------+


---------------------
DEDUPLICATION ENGINE: dedup
---------------------
- Comment: dedup
```

```
- ALN Host Name: qacentos62.fr.atempo.network

- ALN Port Number: 23232

- ALN User Name: root

- Environment variables:

+-------------------------------------------------------------------+

DEDUPLICATION POOL(S)

+-------------------------------------------------------------------+


-------------------
DEDUPLICATION POOL: pool_dedup
-------------------
- Comment:

- Retention: Infinite

- Deduplication Engine: dedup
```

tina_daemon

`tina_daemon` is Tina's main process. It is initiated when a machine starts. It must be running on the server as well as on network machines controlled by Tina.

> **Note**: Only the `root` user (on Unix) and users with at least the `backup operator` rights (on Windows) can run this command.

Syntax

```
tina_daemon [-reset][-tina][-tina_service_name]
[-tina_service_tcp_num][tina_service_udp_num]
```

[-reset]	Specifies the cache space reinitialization.
[-tina]	Specifies the working environment name.
[-tina_service_name]	Specifies the service name.
[-tina_service_tcp_num]	Specifies the TCP service number.
[-tina_service_udp_num]	Specifies the UDP service number.

tina_daemon Processes

Several `tina_daemon` processes can run simultaneously, each of them having a specific function.

> **Important**: Some `tina_daemon` processes are critical for they imply a mapping of the Tina catalog. Such critical processes must not be killed under any circumstances.

The `tina_daemon` number is the value of the `-td_op` option displayed when:

- **On Unix.** Running the `ps -elf | grep tina_daemon` command.
- **On Windows.** Using the Process Explorer utility. Go to the http://www.sysinternals.com web site.

This table provides the list of all `tina_daemon` processes along with their `tina_daemon` number:

tina_ daemon	Function	Critical
0	Temporary process on Unix: appears briefly when starting the Tina daemon. On Windows, the process is permanent.	No on Unix Yes on Windows
1	Father process. Waits for requests and launches child processes. Handles the connections between clients and servers.	No on Unix Yes on Windows
2	Manages network requests. Such requests include mounting a cartridge, sending or receiving a file, etc.	Yes
3	On Windows, manages identities when connecting with an identity other than NTAuthoritySystem.	Yes
4	Manages the catalog, for instance, allocation and release of cache resources, catalog shutdown, etc.	Yes
5	Allocates resources (drives, cartridges) to job. Launches newly created jobs or jobs that are retried.	Yes
6	Manages I/O data streams from the server to the drives.	Yes
7	Manages group streams.	Yes
8	Performs actual I/O data streams, for instance for multiple writing backups, two sessions write the same data on two different media.	Yes
9	Purges the Tina events (every hour at 35).	No
10	Unused	
11	Runs catalog maintenance jobs (everyday at 12:00)	Yes

tina_ daemon	Function	Critical
12	Unused	
13	Handles NDMP connection requests.	No
14	Handles NDMP requests.	No
15	Temporary process: provides the Tina client protocol version to the server.	No
16	Unused	
17	Runs job duplication.	Yes
18	Manages licenses	No
19	Runs collection jobs for Atempo-Tina Reporter User's Guide	Yes
20	Sends the events received by tina_daemon_1 to the event file	No
21	Handles job scheduling and management	Yes

Example.

```
Unix:
[root@aria tina38]# ps -elf | grep tina_daemon
root 27227 1 0 75 0 - 3437 schedu Apr14 ? 00:02:28
/usr/tina38/Bin/tina_daemon -td_op 1 -tina tina38 -tina_service_name tina38
-com
root 32177 27227 1 75 0 - 8868 schedu 08:49 ? 00:00:00
/opt/tina38/Bin/tina_daemon -td_op 2 -td_fnet 5 -td_snet 7 -td_reason 1 -
tina ti

Windows
"C:\Program Files\Atempo\tina\Bin\tina_daemon.exe" -td_op 1 -tina_service_
tcp_num 2525 -tina_service_udp_num 2526 -comm_by_pipe YES
"C:\Program Files\Atempo\tina\Bin\tina_daemon.exe" -td_op 2 -td_fnet 696 -
td_snet 680 -td_reason 1 -tina_service_tcp_num 2525 -tina_service_udp_num
2526 -comm_by_pipe YES
```

tina_del

The `tina_del` command allows you to delete file versions from the Tina catalog.

With this command, versions can be deleted either recursively or interactively.

Deleting a version is a final operation (unless you have a catalog backup containing the version).

Rights

This command must be run on the Tina server as `root` on Unix systems or as `administrator` on Windows systems.

Syntax

```
tina_del -path_folder path [-folder folder] [-r]|[-i] [-strat A|B|C|D] [-
catalog_only] [-catalog catalog] [-identity user:passwd] [-help]
```

-path_folder path	Specifies the absolute path of the object to delete (directory or file). It is not allowed to delete the root of the tree (/) The syntax of the `-path_folder` option corresponds to that used by the operating system of the local machine (ex: `/usr` for `Unix`, `c:\users` for Windows). However, if you use the option `-catalog_only` the syntax of `-path_folder` is the posix syntax, not that of the operating system of the local machine.
[-folder folder]	Specifies the backup or archive folder. If the option is not specified, the default folder name is the host folder name. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]`.
[-r]	Allows you to delete all versions of the selected objects. If `tina_del -r` is used on a directory that defines a backup selection, all versions in the directory are deleted, including the backup selection. To avoid deleting a backup selection, do not use `tina_del -r` on the directory that defines the backup selection. If this parameter is not specified, the default deletion is interactive `-i`.
[-i]	Allows you to select the version to delete. This option does not apply to directories.
[-strat A|B|C|D]	Lists all the versions of a file in the selected strategy (whereas in standard configuration, the list displays a single version per time phase).
[-catalog_only]	This option allows to directly delete versions in the catalog , without connecting to the platform where the object was backed up or archived. As a result the path you provide with the option -path_folder must use the posix syntax, not the syntax of the platform operating system. Deleting time should be shorter when you use `-catalog_only`. `-catalog_only` was formerly named `-past`.

[-catalog catalog]	Specifies the working catalog. This parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity.

Example. `tina_del` use

The `tina_del` command can be used to free up space in the catalog or to delete an object.

This execution interactively deletes from the catalog a version of the file `aff.c` located in the directory `/usr/dbase/src.`

When the command line is entered, the list of versions of this file is displayed. Just choose the versions you want to delete.

```
tina_del -path_folder /usr/dbase/src/aff.c -folder host.asterix -i
+---------------------+
DELETING VERSIONS
Time Navigator
version 4.2
+---------------------+
FOLDER: host.asterix FILE: /usr/dbase/src/aff.c
(0) exit
(2) -rw-r--r-- dbase atempo 28929 Mon Sep 23 14:28:32 2002 aff.c
(3) -rw-r--r-- dbase atempo 31929 Mon Sep 23 16:08:00 2002 aff.c
choice> 2
(2) deleted.
choice> 0
end.
```

On Unix platforms, this execution recursively deletes from the catalog the directory `/src` and all the versions it contains.

```
tina_del -path_folder /usr/dbase/src -folder host.asterix -r
Object "/usr/dbase/src" deleted
```

This execution does not find the file `aff.c` because all the versions of the file `aff.c` have been previously deleted.

```
tina_del -path_folder /usr/dbase/src/aff.c -folder host.asterix -i
tina_del: Object "/usr/dbase/src/aff.c" not found
```

tina_drive_control

The `tina_drive_control` command allows you to test a drive.

Rights

This command must be run on the Tina server as `root` on Unix systems or as `administrator` on Windows systems.

Syntax

```
tina_drive_control -drive drive_name [-host_access host_name] [-test] [-
catalog catalog] [-identity identity]
```

-drive drive_ name	Specifies the name of the drive on which to operate.
[-host_access host_name]	Specifies the name of the host used to access the drive on which to operate. This option is very useful in SAN environments. It can be used only if the `-drive` option is used.
[-test]	Executes the drive test. It can be used only if the `-drive` option is used.
[-catalog catalog]	Specifies the working catalog. This parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity.

tina_event

The `tina_event` command allows you to view the `event` file through the command line. Information contained in the file is sent to the standard output of the entered command.

> **Note**: Any user can execute this command.

The `tina_daemon` process must be running on the host where the `event`file to view is located, except if these two conditions are met:

- You are connected as `root` (Unix) or `backup operator` or `administrator` (Windows).
- You are viewing the `event` file of the local machine (option `[-target_host host]` not specified).

When you enter the command without any options, these fields are displayed by default:

- The `Severity` field: specifies the event severity level.
- The `Date` field: specifies the event date.
- The `Message` field: specifies the event text.

These default severity levels are displayed:

- `alarm_critical`.
- `alarm_major`.
- `alarm_minor`.
- `fatal`.
- `info`.

For more information on severity levels, see the Event Viewer topic of the Tina Administration Documentation.

> **Note**: The process used to redirect events has been modified (date format). If you use scripts with redirected files. you must use the Version 3.7.0.2 Event Redirection Compatibility tunable (`old_event_output_compatible`) for compatibility reasons. For more information, see the Atempo-Tina Tunables documentation.

Syntax

```
tina_event [-v_development] [-v_ad_cell_obj] [-v_class] [-v_pid]
[-v_job_id] [-v_program] [-v_host] [-v_user] [-v_catalog] [-v_server]
[-v_log_date] [-_severity_full] [-f_date YYYYMMDDHHmm YYYYMMDDHHmm]
[-f_pid pid] [-f_job_id jobid1 [jobid2]...] [-f_program program]
[-f_host hostname] [-f_user username] [-f_catalog catalog] [-f_
server server] [-f_severity alarm_critical alarm_major alarm_minor fatal
error warning info acct debug] [-f_log_date YYYYMMDDHHmm YYYYMMDDHHmm] [-
all_event] [-output_format text|csv] [-csv_separator csv_separator] [-
file file] [-output_file output_file] [-split_by_catalog]
[-max_line number_line] [-catalog catalog] [-target_host hostname] [-help]
```

Display Options	
[-v_ development]	Specifies the display of the `Development` field containing information useful for solving a problem.
[-v_ad_cell_ obj]	Specifies the display of the `ad_cell_obj` field indicating the catalog identifier of the involved object.
[-v_class]	Specifies the display of the `Class` field indicating the backup selection involved in the event.
[-v_pid]	Specifies the display of the `Pid` field indicating the process identification number involved in the event.
[-v_job_id]	Specifies the display of the `Job_id` field indicating the ID of the job involved in the event.
[-v_program]	Specifies the display of the `Program` field indicating the program involved in the event.
[-v_host]	Specifies the display of the `Host` field indicating the host involved in the event.
[-v_user]	Specifies the display of the `User` field indicating the user involved in the event.
[-v_catalog]	Specifies the display of the `Catalog` field indicating the catalog involved in the event.

[-v_server]	Specifies the display of the `Server` field indicating the server involved in the event.
[-v_log_date]	Specifies the display of the event log date in the event file.
[-v_severity_ full]	Specifies the display of the full text of the error severity.
[-all_event]	Specifies the display of all severities and all fields for all events.
Filter Options	
[-f_date YYYYMMDDHHmm YYYYMMDDHHmm]	
	Specifies a filter for the `Date` field.
[-f_pid pid]	Specifies a filter for the `Pid` field.
[-f_job_id job_ id]	Specifies a filter for the `Job ID` field. May contain a list.
[-f_program program]	Specifies a filter for the `Program` field.
[-f_host hostname]	Specifies a filter for the `Host` field.
[-f_user username]	Specifies a filter for the `User` field.
[-f_catalog catalog]	Specifies a filter for the `Catalog` field.
[-f_server server]	Specifies a filter for the `Server` field.
[-f_severity alarm_criticaalarm_major alarm_minor fatal error warning info acct debug]	

	Specifies a filter for the `Severity` field.
	You can choose among these severity levels:
	`alarm_critical (C) error (E)`
	`alarm_major (M) warning (W)`
	`alarm_minor (m) info (I)`
	`fatal (F) acct (A)`
	`debug (D)`

[-f_log_date]	Specifies a filter for the event log date in the event file.
Other Options	
[-output_ format]	Specifies the display format command result. Possible values are `text` and `csv`. Default value is `text`.
[-csv_ separator cvs_ separator]	Specifies the separator used by the `csv` format.
[-file file]	Specifies the name of the input file.
[-output_file output_file]	Specifies the name of the output file. If the option is not specified, the standard output is used. The output file format is UTF8. The file name can be concatened with other information if the `-split_by_catalog` and `-max_line` options are used.
[-split_by_ catalog]	The output file name (OutputFile) is processed as a prefix to which the "catname" catalog name is added. The "OutputFile_catname" file is used as output file for the "catname" catalog events (events that are not attached to a catalog will be written in OutputFile).
[-max_line number_line]	Specifies the maximum number of lines to be written in a file. When this limit is reached, another OutputFile_XY name is used (where XY is the file number). If the `-split_by_catalog` option is used, the file name includes the catalog name (ex: OutputFile_catname_XY).
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-target_host hostname]	Specifies the host where the file `event` to view is located. If the option is not specified, the viewed file is that of the local machine.

Example. `tina_event` use

The `Severity`, `Date` and `Message` fields are always displayed. In this example, the display of the `Pid`, `Program` and `Host` fields is specified. The `Host` field is filtered in order to display only the events applying to the host `olive`. As no filter is specified for the `Severity` field, default severity levels are displayed (`alarm_critical`, `alarm_major`, `alarm_minor`, `fatal` and `info`).

```
tina_event -v_pid -v_program -v_host -f_host olive
```

```
Sev Pid Program Date Host Message
I 8665 tina_daemon Wed Jan 10 17:52:21 2001 olive "Service opened"
I 8665 tina_daemon Wed Jan 10 18:17:04 2001 olive "Service closed"
I 10172 tina_init Thu Jan 11 07:54:02 2001 olive "Start tina_init"
I 10172 tina_init Thu Jan 11 07:57:29 2001 olive "New catalog
 initialized."
```

```
I 10197 tina_daemon Thu Jan 11 07:59:48 2001 olive "Checking cache
 and catalog
 "demo" sessions"
I 10196 tina_daemon Thu Jan 11 07:59:48 2001 olive "Service opened"
I 11714 tina_daemon Thu Jan 11 16:09:03 2001 olive "Extension of
 "BackupA"
 cartridge pool"
F 12970 tina_adm Thu Jan 11 19:20:34 2001 olive "XIOErrorHdler"
I 10196 tina_daemon Fri Jan 12 10:21:48 2001 olive "Service closed"
I 1070 tina_daemon Fri Jan 12 10:57:26 2001 olive "Checking cache
 and catalog
 "demo" sessions"
I 3446 tina_daemon Wed Jan 17 09:34:17 2001 olive "Service opened"
F 4633 tina_alpha Wed Jan 17 14:37:16 2001 olive "TNCommandExecute failed:
rc = TNErrRequest"
I 3446 tina_daemon Wed Jan 17 15:29:09 2001 olive "Service closed"
I 5353 tina_init Wed Jan 17 15:30:05 2001 olive "Start tina_init"
I 5353 tina_init Wed Jan 17 15:32:56 2001 olive "New catalog
 initialized."
I 5365 tina_daemon Wed Jan 17 15:33:05 2001 olive "Checking cache
 and catalog
 "demo" sessions"
I 5364 tina_daemon Wed Jan 17 15:33:05 2001 olive "Service opened"
I 5390 tina_daemon Wed Jan 17 15:36:20 2001 olive "Extension of
 "BackupA"
 cartridge pool"
M 14641 tina_adm Tue Jan 23 09:05:30 2001 olive "Error initiating
 backup"
I 14791 tina_daemon Tue Jan 23 09:22:47 2001 olive "Extension of
 "BackupA"
 cartridge pool"
F 14994 tina_daemon Tue Jan 23 09:50:07 2001 olive "Error reserving
 catalog"
I 14532 tina_daemon Tue Jan 23 09:50:22 2001 olive "Service closed"
F 14997 tina_daemon Tue Jan 23 09:50:25 2001 olive "Error reserving
 catalog"
I 15000 tina_init Tue Jan 23 09:50:36 2001 olive "Start tina_init"
I 15000 tina_init Tue Jan 23 09:54:33 2001 olive "New catalog
 initialized."
I 15006 tina_daemon Tue Jan 23 09:54:50 2001 olive "Checking cache
 and catalog
 "demo" sessions"
```

Note: You can also use the Monitoring-Event Viewer command in Web Administration to display the list of events. For more information on the `event` file, see the "event File" topic of Tina Administration Documentation.

tina_event_viewer

The `tina_event_viewer` binary opens Event Viewer.

Syntax

```
tina_event_viewer [-catalog catalog] [-file file]
[-language language] [-no_refresh] [-jobid id] [-all_events] [-help]
```

[-catalog catalog]	Specifies the catalog to which the application is connected. Not compatible with `-file`.
[-file file]	Specifies the `event` file to which the application is connected. Not compatible with `-catalog`.
[-no_refresh]	Disables the automatic update of the displayed events.
[-jobid id]	Filters the events concerning only the job corresponding to the `job_id` value.
[-all_events]	Displays all the events of the catalog or file.

Example. Usage of the `tina_event_viewer` binary.

In this example, Event Viewer is opened in French and displays all the events of the `Demo` catalog.

```
tina_event_viewer -catalog Demo -all_events -language French
```

tina_export

The `tina_export` command enables you to select and copy the data of a backup or a standard archive folder at a given date. By default, this command exports the last complete backup available for the folder (i.e., the last full backup plus any incremental backups that followed). Data is transferred on the network.

The `tina_export` creates these two jobs:

- A first job that exports data (i.e., in the source catalog, it reads the data from media).
- A second job that imports data (i.e., in the destination catalog, it writes the data on tape).

Source and Destination Types

You can export files within the same catalog or into another catalogs, provided that the operating systems are compatible (i.e., from Unix to Unix or from Windows to Windows).

In accordance to both the source and destination types of the exported object, you can specify different destinations for the `tina_export` command:

- This table describes the destinations that you can specify in accordance to the source type:

Source	Destination
A backup folder	These are the possible destinations for the exported files: • An archive folder. • **Itself.** In such a case, you obtain the same result as if you perform a full synthetic backup. • Another backup folder.
An archive folder	These are the possible destinations for the exported files: • Itself. • Another archive folder.
A strategy	Another strategy.

- This table describes the destinations that you can specify in accordance to the backup folder destination type:

Data produced by	Can only be exported into
Host backups	A host backup folder, a file system application, or an archive.
A file system application	A host backup folder, a file system application, or an archive.
A backup of another application type	An application folder of the same type.

- In accordance to the archive folder destination type, the only destination that you can specify is an archive, whether it is itself or another archive.

Drives

Exporting data within the same catalog requires the presence of two drives, while exporting data between different catalogs requires the presence of one drive per catalog. Tina automatically searches for the server name associated with the destination catalog in the `catalogs` file.

Source and Destination Formats

The `tina_export` command uses the server cache to move the data and only supports the `TiNa` or `tar` backup formats.

When performing an export, you can modify the data format (i.e., `TiNa` or `tar`) that then becomes the strategy format in the destination folders in these ways:

- From `TiNa` into `tar`.
- From `tar` into `TiNa`.

The keywords and the description of an archive folder are kept during export.

Rights

You must run the `tina_export` command on the Tina server in this way:

- **Unix.** As `root`.
- **Windows.** As `administrator`.

Syntax

```
tina_export -folder folder [-path_folder path1 [path2]...]
[-date yyyymmddhhmm] [-date_dest date] [-strat A|B|C|D] [-catalog_dest
catalog]
-folder_dest folder [-update] [-strat_dest A|B|C|D] [-path_folder_dest
archive_path] [-full]|[-incr] [-catalog catalog] [-help]
```

`-folder` ***`folder`***	Source folder to export (backup or archive folder). For a backup folder, you must specify if the folder belongs to a host `-folder host.<host_name>` or to an application `-folder appl.<application_name>`.
`[-path_folder` ***`path`*****`]`**	This parameter uses the Unix syntax (e.g., `/usr` or `/c/users`). The parameter accepts a path list; however, you cannot specify two paths where one is included in the other. **Example.** The `-path_folder /usr/people/user1 /usr/people/user2` syntax is correct. However, the `-path_folder /usr/people/ usr/people/user2` syntax is not correct since `user2` is included in `people`.
`[-date` ***`yyyymmddhhmm`*****`]`**	Date of the versions of the source folder to export. If the `-date` option is not set, the default date is the present.
`[-date_dest` ***`date`*****`]`**	Performs a synthetic backup in the past. It represents the backup date of the exported objects. By default, it is the current date.
`[-strat A|B|C|D]`	Strategy associated with the source folder. This option applies to backup folders. If the `-strat` option is not set, the default strategy is the standard strategy (all strategies defined on the host).
`[-catalog_dest` ***`catalog`*****`]`**	Destination catalog. If the `-catalog_dest` option is not set, the default catalog is the source catalog.

-folder_dest *folder*	Destination folder (backup or archive folder). For a backup folder, you must specify if the folder belongs to a host **-folder_dest** *host.folder* or to an application **-folder_dest** *appl.folder*.
[-update]	Updates the description and the keywords in the destination folder. This option applies to archive folders.
[-strat_dest A|B|C|D]	Strategy associated with the destination folder. This option applies to backup folders and is mandatory.
[-path_folder_dest *archive_path***]**	Archive absolute path in the destination folder. This option applies to archive folders. If the **-path_folder_dest** option is not set, the objects contained in the source folder are copied in the destination archive folder root. The syntax of the **-path_folder_dest** parameter corresponds to the POSIX syntax (e.g., **/archive**).
[-full]	Specifies a full export at a given date (all folder objects). The default export is the full export.
[-incr]	Specifies an incremental export. The **tina_export** command only backs up the folder objects that have been modified compared to the given path and strategy in the destination folder. If the **-incr** option is not set, the default exportation is the full exportation.
[-catalog *catalog***]**	Source catalog. The parameter is mandatory if there are several catalogs.

Examples. Usage of the **tina_export** command.

- To export from a backup folder into another backup folder with the same name.

  In this example, only the objects in the **source** backup folder of the **asterix** host that have been modified since the last export and which are located in the **/usr** directory are exported to the destination backup folder with the same name.

  Objects are exported from the **SRC** source catalog to the **DEST** destination catalog.

  The exported objects of the source backup folder are those that were backed up with strategy **A**. They will be associated with strategy **B** in the destination backup folder.

  ```
  # ./tina_export -catalog SRC -folder host.asterix -path_folder /usr -
  strat A -catalog_dest DEST -folder_dest host.asterix -incr -strat_dest B
  ```

- To export from a backup folder into an archive folder.

  In this example, all the objects of the source backup folder of the **oradb** application backed up with strategy **A** are exported to the **Archiveoradb** archive folder, in the **/archive1** archive.

  ```
  # ./tina_export -folder appl.oradb -strat A -folder_dest Archiveoradb -
  full -path_folder_dest /archive1
  ```

tina_find

The `tina_find` command allows you to search for objects (directories and/or files):

- Either on a given date (present or past).
- Or in a given time navigation period.

If searching is performed in the present and with no time navigation value, in other words on the disk, it is not necessary to specify the settings `-lost_files`, `-strat` and `-all` which apply to objects backed up in the catalog.

If searching is performed in the past, in other words in the catalog, you can search for:

- Objects which have disappeared in a selected time interval using the parameter `-lost_files`
- Any backup version using the option `-catalog_only`.

The user can also search for objects in archive folders using the parameter `-folder`.

> **Note**: In order to use `tina_find` on applications, you must have the application Tina software library installed on the machine where you perform the `tina_find` operation. This library must be in the same path as on the machine where the application is running.

> **Note**: To use `tina find` across all applications or/and hosts, add the `*` wildcard character after -`host` or `-applications.`

Rights

Users with these rights in Tina can launch this command:

- If no target is specified, no right is needed

OTHERWISE

- Open backup folders if the target folder is of backup type

  Or
- View folders if the target folder is of archive type

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_find [-path_folder search_path] [-pattern "pattern"]
[-host host1 [host2]...]|[-application application1 [application2]...]|
[-folder archive_folder] [-depth valueUNIT] [-lost_files] [-strat A|B|C|D]
[-all] [-long] [-display_cart] [-nfs] [-date yyyymmddhhmm] [-no_r] [-
outptut_format text|csv] [-catalog_only]|[-user user]|[-password password]
[-csv_separator csv_separator] [-catalog catalog] [-identity user:passwd] [-
help]
```

[-path_folder search_path]	Specifies the directory from which the search is performed. If the option is not specified, the search is performed from the root (/). On macOS platforms, the option `-path_folder` is not case sensitive, even if the directory is located in a case sensitive file system.
[-pattern "pattern"]	Specifies a list of special characters separated by spaces used for the search. The list must be written into quotation marks. If the option is not specified, the list of special characters contains all objects (symbol `*`).
[-host [host1] [host2]...]	Specifies the list of hosts onto which searching is performed. If the option is not specified, searching is performed on the local host. If the option is used without the arguments `[host1] [host2]...`, searching is performed on all the hosts declared in the catalog. If the directory specified in the option `[-path search_path]` is not found on a host with the settings specified on the command line, the message `Object not found` is displayed and the search continues on other hosts.
[-application [application1] [application2]...]	Specifies the list of applications onto which searching is performed. If the option is used without the arguments `[application1] [application2]...`, searching is performed on all the applications declared in the catalog.
[-folder archive_ folder]	Specifies the archive folder into which the search is performed.
[-depth valueUNIT]	Specifies a time navigation period. This option possible value format is valueUNIT, where `value` is an integer and UNIT is the time unit corresponding to: S: seconds m: minutes H: hours D: days W: weeks M: month Y: year

[-lost_files]	Specifies the search only for objects disappeared in the activated time navigation period (symbol `*` to the left of the disappeared object). If the option is not specified, all objects are searched (disappeared or not).
[-strat A|B|C|D]	Specifies the backup strategy of the searched objects (`A`, `B`, `C` or `D`). If the option is not specified, the default strategy is that to which the user has access.
[-all]	Specifies the display of all versions of the searched objects. If the option is not specified, only the latest version of searched objects is displayed. The object date displayed varies as follows: • If the object is displayed in the present, on the disk, the displayed date is the object last modification date. • If the object is displayed in the past (i.e., the object is in the catalog) the displayed date is the object latest version date. By default, the time navigation period is infinite. You can set a time navigation value with the option `-depth`.
[-long]	Specify the display of both the backup date and the last modification date. If the object is not backed up, the backup date is replaced by the mention `Object on disk`.
[-display_cart]	Displays the name of the cartridge containing the backed up files.
[-nfs]	Specifies to go through the NFS mount points during searching. If the option is not specified, the Going through NFS Mount Points option is activated.
[-date yyyymmddhhmm]	Specifies the search date. If the option is not specified, searching is performed in the present.
[-no_r]	Specifies that the search is limited to the current directory and is not recursive.
[-outptut_format text|csv]	Specifies the output format of the search result. The possible values are `text` or `csv`, the default value is `text`.
[-catalog_only]	This option allows to search for objects in the catalog instances, without connecting to the platform where the object was backed up or archived. As a result `-catalog_only` cannot be used in the present. The information returned may differ from a search with connection to the platform since it is not interpreted by the platform operating system. For instance, a path appears as a posix path even for windows platforms.

[-user user]	To be used with the -host parameter. Specifies the user's name of the host to be searched, if required.
[-password password]	To be used with the -host parameter. Specifies the user's password of the host to be searched, if required.
[-csv_separator csv_separator]	This option is useful if the -output_format option has been set to csv. It allows to set the character or character string to be used as a separator. The default value is the semicolon";".
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity.

Example. `tina_find` use

In this example, all objects consisting of four characters (`????`) or having the extension .c (`*.c`) or beginning with the letter b (`b*`) are searched from the directory `/usr` on the local host (`olive`). A two-week time navigation period is activated (`2W`) from the present. Two files have disappeared in the selected time interval (symbol `*`).

```
tina_find -path_folder /usr -pattern "???? *.c b*" -depth 2W
```

-path

```
Scanning olive...
file    tina    atempo  1642 Fri Jan 12 15:34:50 2001   /usr/MakeDoc.c
file    tina    atempo  980 Fri Jan 12 15:34:50 2001    /usr/MakeTime.c
file    tina    atempo  19916 Fri Jan 12 15:34:50 2001  /usr/TXTtoPS.c
directory tina      atempo         0 Fri Dec 15 08:54:01 2000   /usr/Snmp
file    tina    atempo  1553 Fri Dec 15 08:54:58 2000   /usr/Snmp/test.c
file    tina    atempo  254 Mon Jan 29 14:08:31 2001    /usr/Snmp/big.c
file    tina    atempo  1981 Wed Nov 15 17:26:20 2000   /usr/Snmp/rcv.c
file    tina    atempo  302 Wed Nov 15 08:14:50 2000    /usr/Kit/syslog.c
file    tina    atempo  7712 Fri Jan 12 15:36:17 2001 *         /usr/Tunes/binary
file    tina    atempo  1310 Tue Dec 26 15:36:17 2000 *         /usr/Tunes/link
file    tina    atempo  1940 Fri Jan 12 15:17:42 2001   /usr/Tunes/logs
Total : 11
```

In this example, the display is modified by the presence of the parameter `-all`. All the versions of searched objects are displayed. One object is fuzzy (? symbol).

```
tina_find -path /usr -pattern "???? *.c b*" -depth 2W -all
Scanning olive...
file    tina    atempo  1642    Fri Jan 12 15:34:50 2001        Object on disk  /usr..
file    tina    atempo  1642    Fri Jan 12 15:34:50 2001        Wed Jan 17 15:36:17 20
                                                                                /usr..
file    tina    atempo  1642    Fri Jan 12 15:34:50 2001        Tue Jan 16 11:54:01 20
                                                                                /usr..
file    tina    atempo  980     Fri Jan 12 15:34:50 2001        Object on disk  /usr..
file    tina    atempo  980     Fri Jan 12 15:34:50 2001        Wed Jan 17 15:36:17 20
                                                                                /usr..
file    tina    atempo  980     Fri Jan 12 15:34:50 2001        Tue Jan 16 11:54:01 20
                                                                                /usr..
file    tina    atempo  19916   Fri Jan 12 15:34:50 2001        Object on disk  /usr..
file    tina    atempo  19916   Fri Jan 12 15:34:50 2001        Wed Jan 17 15:36:17 20
                                                                                /usr..
file    tina    atempo  19916   Fri Jan 12 15:34:50 2001        Tue Jan 16 11:54:01 20
```

```
                                                                                /usr..
directory tina          atempo  0       Fri Dec 15 08:54:01 2000        Object on disk
                                                                                /usr..
file    tina    atempo  1553    Fri Dec 15 08:54:58 2000        Object on disk  /usr..
file    tina    atempo  1553    Fri Dec 15 08:54:58 2000        Wed Jan 17 15:36:17 200
                                                                                /usr..
file    tina    atempo  1553    Fri Dec 15 08:54:58 2000        Tue Jan 16 11:54:01 200
                                                                                /usr..
file    tina    atempo  254     Mon Jan 29 14:08:31 2001        Object on disk  /usr..
file    tina    atempo  254     Mon Jan 29 14:08:31 2001        Wed Jan 17 15:36:17 200
                                                                        ?       /usr..
file    tina    atempo  254     Mon Jan 29 14:08:31 2001        Tue Jan 16 11:54:01 200
                                                                                /usr..
file    tina    atempo  1981    Wed Nov 15 17:26:20 2000        Object on disk  /usr..
file    tina    atempo  1981    Wed Nov 15 17:26:20 2000        Wed Jan 17 15:36:17 200
                                                                                /usr..
file    tina    atempo  1981    Wed Nov 15 17:26:20 2000        Tue Jan 16 11:54:01 200
                                                                                /usr..
file    tina    atempo  302     Wed Nov 15 08:14:50 2000        Object on disk  /usr..
file    tina    atempo  302     Wed Nov 15 08:14:50 2000        Wed Jan 17 15:36:17 200
                                                                                /usr..
file    tina    atempo  302     Wed Nov 15 08:14:50 2000        Tue Jan 16 11:54:01 200
                                                                                /usr..
file    tina    atempo  7712    Fri Jan 12 15:34:50 2001        Object on disk  /usr..
file    tina    atempo  7712    Fri Jan 12 15:34:50 2001        Wed Jan 17 15:36:17 200
                                                                        *       /usr..
file    tina    atempo  7712    Fri Jan 12 15:34:50 2001        Tue Jan 16 11:54:01 200
                                                                        *       /usr..
file    tina    atempo  1310    Tue Dec 26 13:54:17 2000        Object on disk  /usr..
file    tina    atempo  1310    Tue Dec 26 13:54:17 2000        Wed Jan 17 15:36:17 200
                                                                        *       /usr..
file    tina    atempo  1310    Tue Dec 26 13:54:17 2000        Tue Jan 16 11:54:01 200
                                                                        *       /usr..
file    tina    atempo  1940    Fri Jan 12 15:17:42 2001        Object on disk  /usr..
file    tina    atempo  1940    Fri Jan 12 15:17:42 2001        Wed Jan 17 15:36:17 200
                                                                                /usr..
file    tina    atempo  1940    Fri Jan 12 15:17:42 2001        Tue Jan 16 11:54:01 200
                                                                                /usr..
Total : 31
```

tina_folder_control

> **Important**: This binary must be used with the assistance of the Atempo Customer Support.

The `tina_folder_control` binary allows to perform operations on a catalog folder.

To set a folder in maintenance status, use the `-maintain_folder` option of `tina_init` or `tina_odbsave` binaries. See tina_init and tina_odbsave.

> **Note**: Any privileged user can execute this command.

Syntax

```
tina_folder_control [-end_folder_maintenance folder1 [folder2]...]| [-
import_folder folder1 [folder2]...] [-file catalog_backup] [-keep_platform_
disabled] [-catalog catalog][-list_folder][-list_maint_folder][-help]
```

-end_folder_ maintenance folder	If a folder cannot be repaired and there is no previous valid catalog backup available, the maintenance can be ended explicitly on that folder using `-end_ folder_maintenance` option. This leaves the folder empty and without previous backup selections that are lost. Be careful: all instances will be lost.
-import_folder folder	Specifies the list of folders to import in the existing catalog. Import is performed for listed folders which are in maintenance state. It restores metadata in the folders and implicitly ends folder maintenance. To import a folder, it must first be set in maintenance status using the `-maintain_folder` option of `tina_init` or `tina_odbsave` binaries. See tina_init and tina_odbsave. To use this option, the catalog must be stopped. In case of import failure because the catalog backup used for the import was also corrupted, just freeze again the folder in maintenance state and import the folder from another catalog backup. If the folder cannot be repaired and there is no previous valid catalog backup available, the maintenance can be ended explicitly on that folder using the `-end_folder_maintenance` option. This leaves the folder empty and without previous backup selections that are lost.
-file catalog_ backup	Specifies the catalog backup file from which the folders will be imported. It can be used only if `-import_folder` option is used.
-keep_ platform_ disabled	Let corresponding platforms disabled for both operations, i.e., `import_ folder` and `end_folder_maintenance`.
-catalog catalog	Specifies the name of the catalog.
-list_folder	Lists all catalog folders.
-list_maint_ folder	Lists only folders in maintenance.

tina_help

The `tina_help` binary displays help about objects specified in command line (e.g., Alarm ID, Tunable, etc.).

> **Note**: Any user can execute this command.

Syntax

```
tina_help  [-alarm_id ID] [-parameter_list]
[-parameter tunable_name] [-envvar_list] [-envvar envvar_name]
```

```
[-app_type appli_type] [-alarm_list]
```

[-alarm_id *ID*]	Displays the help message of the alarm associated with the specified alarm.
[-parameter_list]	Retrieves the known tunable list.
[-parameter *tunable_name*]	Specifies the tunable name.
[-envvar_list]	Retrieves the known environment variables list.
[-envvar *envvar_name*]	Specifies the environment variable name.
[-app_type *appli_type*]	Specifies the application type.
[-alarm_list]	Displays the help message for all known alarms.

Example. Usage of the `tina_help` binary.

In this example, the alarm help message associated with the alarm ID `10001` is displayed. The alarm help message is composed of these three fields:

- **Alarm ID.** Identification number of the alarm.
- **CAUSE.** Cause of the problem.
- **ACTION.** Action to perform to solve the problem.

```
tina_help -alarm_id 10001
Alarm ID: TN_ALARM_ID010001
CAUSE:
The creation of a shared memory segment for cache failed.
ACTION:
- Check that the required size and number of shared memory segments are
authorized on your host.
- Contact the system administrator if necessary.
```

For more information on alarm management, see the Alarms description of the Tina Administration Documentation.

tina_init

The `tina_init` command allows you to initialize Tina, to create and size the catalog and cache space. It can also be used to restore a backed up catalog and to modify the server information.

Two modes exist for this command:

- The interactive mode is used for creating, modifying, or restoring the catalog and is accompanied by a questionnaire used to set the configuration of the catalog operation to be performed.

- The non-interactive mode is mainly used to restore a catalog with the `tina_init -file`, `tina_init -boot`, or `tina_init -pipe` options. This mode is not accompanied by the questionnaire used to set the configuration of the catalog operation to be performed.

  You can also use the non-interactive mode to create or modify a catalog, provided that you have created a file containing all the properties required for the catalog creation or modification. The catalog is created or modified based on that file.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.

> **Important**: The `tina_init` process generated by the `tina_init` command must not be killed under any circumstances, for it implies a mapping of the Tina catalog.

Syntax

```
tina_init [-disable] [-config]|[-folder folder1 [folder2]...]| [-skip_
folder folder1 [folder2]...]|[-maintain_folder folder] [-close_cart] [-
size size_MB] [-nb_instance number] [-boot boot_file] [-file file] [-
index index1 [index2]...] [-memory_cache_only cache_size (MB)] [-pipe pipe]
[-path path] [-force_reinit]|[-no reinit] [-catalog_name catalog_name] [-
boot_restore_index] [-file_size file_size] [-max_catalog_size max_catalog_
size] [-help] [-create]|[-edit] [-property_file parameter_file]
```

Interactive Mode:

tina_init without any parameter	Interactive mode, a questionnaire appears to define the catalog configuration to create restore or modify.

Non-Interactive Mode to restore a catalog

[-disable]	Specifies that the catalog's platforms must be disabled on the first connection after the `tina_init` is executed.
[-config]	Specifies the restore of the catalog configuration only.
[-close_cart]	Allows to close all cartridges in the catalog when restoring it to avoid overwriting data backed up between the last catalog backup and the catalog restore.
[-size size_ MB]	Specifies the catalog size in MB.
[-nb_instance number]	Specifies the maximum number of instances to be restored for each object. The default is all versions.
[-boot boot_ file]	Restores the catalog from a boot file created with the Catalog application. See Tina Administration Documentation for details.

[-file file]	Specifies the file from which the catalog will be restored.
[-index index]	Specifies the path of the Advanced Indexing Database, the PostgreSQL database engine of Tina for Exchange Server 2013 that allows for the search through message attributes (such as subject, sender, recipient, received date, etc.). If this option is not specified, the Advanced Indexing Databases are not restored.
[-memory_ cache_only cache_size (MB)]	This option can be used only if the `-file` option is used. It allows to restore a catalog without the disk cache originally defined for the catalog, and in addition, it allows to specify the amount in MB of the memory cache to be assigned to the restored catalog. The actual memory cache size will be the closer multiple of 32 MB to the value you provide. If you enter 0, the cache will be 32 MB.
[-pipe pipe]	Specifies the pipe from which the catalog will be restored.
[-maintain_ folder folder]	Specifies the list of folders to restore empty and in maintenance state, other folders are restored as usual. This is useful if you want to temporarily skip a damaged folder. The corresponding administrative objects (media, platforms) are frozen and platforms are disabled until the repaired folder is imported from another catalog backup. If the folder cannot be repaired quickly, a correct previous catalog backup can be used for the import instead of waiting for a repaired catalog backup provided by the Atempo Technical Support. Be careful: advanced option for temporary partial restore. This option allows to set the folders of the list to maintenance state, and not restore metadata associated to these folders. For these folders, the automatic recycling of media is frozen, and backed up data are temporarily skipped since they need to be repaired. Setting a folder in maintenance state prevents from: • running jobs related to that folder, • allocate cartridges related to that folder for writing, • automatically recycle cartridges related to that folder, • automatic recycling of HyperVision Deduplication Storage instances related to that folder, • viewing the content of jobs and cartridges, when related to that folder, • creating a backup selection on that folder, • enabling the corresponding platform. To import a folder from another catalog, see tina_folder_control. This option cannot be used with the `-skip_folder` and `-folder` options.

[-folder folder]	**Advanced option only for definitive partial catalog restore**. Allows to restore a catalog that will contain only the backup folders specified in the option. Use this option only in non-interactive mode with either `-file` or `-pipe`. This option is useful if you need to rapidly recreate your catalog to restore specific folders. You should perform a complete catalog restore as soon as possible thereafter. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]` This option cannot be used with the `-skip_folder` and `-maintain_folder` options.
[-skip_folder folder]	**Advanced option only for definitive partial catalog restore**. Specifies a list of folders NOT to restore. This option cannot be used with the `-folder` and `-maintain_folder` options.
[-path path]	**Advanced option only for partial catalog restore**. Allows to restore a catalog that will contain only the directory specified in the option. Use this option only in non-interactive mode with either `-file` or `-pipe`. This option is useful if you need to rapidly recreate your catalog to restore a specific directory. You should perform a complete catalog restore as soon as possible thereafter.
[-force_reinit]	Non barcode libraries only. Specifies to perform a read-label reinitialization as part of the catalog restore process.
[-no_reinit]	Indicates that no libraries reinitialization is performed when restoring the catalog.
[-catalog_ name catalog_ name]	Specifies the catalog name. The parameter is mandatory if `-file` or `-pipe` are used.
[-boot_ restore_ index]	Used with the `-boot` option to indicate that you want to restore the indexes contained in the catalog.
[-file_size file_size]	Specifies the odb file size in MB. The default size is 1024 MB, the maximum size is 4096 MB.

[-max_catalog_size max_catalog_size]	Specifies the maximum catalog size, up to 1024 GB. The maximum size depends upon the `-file_size` parameter, as there cannot be more than 256 odb files, to reach the maximum catalog size of 1024 GB you must set the `-file_size` to 4096MB. The maximum size cannot exceed the available space on disk. The value you enter is by default in MB. If you want to use GB, you must add a G after the value, for instance: -max_catalog_size `256G`.

Non Interactive Mode to create or modify a catalog

-create	Indicates that you want to create a catalog. The catalog configuration to be created must be specified with the option `-property_file`.
-edit	Indicates that you want to modify a catalog. The catalog configuration to be modified must be specified with the option `-property_file`.
[-property_file parameter_file]	This option is used with `-create` and `-modify` to specify the path of an xml file containing the configuration of the catalog to create or modify. See Sample XML configuration file: for details. If you do not specify a user and password for the catalog administrator, the default will be admin with no password.

Example. `tina_init` in interactive mode

For examples of catalog initialization or backed up catalog restore in command line with `tina_init`, see Catalog Manual Procedures.

Example. `tina_init` in non-interactive mode to create a catalog

```
tina_init -create -property_file C:\Program Files\Atempo\TINA46SP1\catalog_configuration.xml
```

Parameter `overwrite_catalog`

The parameter `overwrite_catalog` indicates whether or not you want to overwrite an existing catalog if the name of the catalog you want to create already exists. If you set the parameter to 0, the existing catalog is not overwritten and the catalog creation stops. If you set it to 1, any existing catalog with the same name as the one you specify in the configuration file is overwritten.

Sample XML configuration file:

```
<?xml version="1.0" encoding="UTF-8"?>
<parameters>
 <catalog>
 <catalog_name>cat</catalog_name>
 <user>admin</user>
 <password>tina</password>
 <overwrite_catalog>0</overwrite_catalog>
 </catalog>
```

```
<cache>
<memory>
<memory_size>64</memory_size>
<number_of_cache>2</number_of_cache>
</memory>
<disk>
<disk_size>1</disk_size>
<number_of_segments>2</number_of_segments>
<absolute_path>g:/cat/disk1</absolute_path>
<absolute_path>g:/cat/disk2</absolute_path>
<current_size>32</current_size>
<current_size>64</current_size>
</disk>
</cache>
<advanced_parameters>
<memory_cache_container_size>4</memory_cache_container_size>
<disk_cache_container_size>4</disk_cache_container_size>
<avg_no_of_backup_versions>1</avg_no_of_backup_versions>
<odb_size>1024</odb_size>
<odb_max_catalog_size>2</odb_max_catalog_size>
<odb_file_size>1024</odb_file_size>
</advanced_parameters>
<server>
<server_name>PD05341A</server_name>
</server>
</parameters>
```

Description of the XML Tags

<parameters> </parameters>

Parent section of property-file in which you can specify the various parameters of catalog creation and edition.

<catalog></catalog>

Mandatory subsection related to catalog parameters.

<catalog_name>catalog-name</catalog_name>

Mandatory parameter specifying the name of catalog.

<user>username</user>

Optional parameter specifying the username of the catalog. If not specified, the default username will be `admin`.

<password>password</password>

Optional parameter specifying the password for the catalog. If not specified, the catalog will have no password.

<overwrite_catalog>0/1</overwrite_catalog>

Optional parameter specifying whether or not you want to overwrite an existing catalog if the name of the catalog you want to create already exists. If you set the parameter to `0`,the existing catalog is not overwritten and the catalog creation stops. If you set it to `1`, any existing catalog with the same name as the one you specify in the configuration file is overwritten. Default value is `0`.

<cache></cache>

Optional subsection related to cache. Either memory section or disk cache section is required. Both of them can also be specified. If this subsection is not specified, default memory cache of 32 MB will be used.

<memory></memory>

Parameter specifying the memory cache section.

<memory_size>memory size</memory_size>

Parameter specifying the memory size in MB.

<number_of_cache>number of segments</number_of_cache>

Parameter specifying the number of memory cache segments.

<disk></disk>

Parameter specifying the disk cache section.

<disk_size>disk size</disk_size>

Parameter specifying the size of the disk cache. The unit for this parameter depends on the value you set if you use the `cache_mb_unit` tunable:

- If you set the `cache_mb_unit` tunable to `no` (default value), you need to enter a value in GB (minimum expected value is 1 GB).
- If you set the `cache_mb_unit` tunable to `yes`, you need to enter a value in MB (minimum expected value is 32 MB).

If this parameter is not specified, the default value is taken.

> **Important**: For catalog creation, this parameter becomes mandatory if disk cache section (`<disk></disk>`) is specified.

<number_of_segments>number of segments</number_of_segments>

Parameter specifying the number of disk cache segments. Default values is `1`. If this parameter is specified, you need to specify as many absolute paths as disk cache segments. See <absolute_path>absolute path</absolute_path> .

<absolute_path>absolute path</absolute_path>

Parameter specifying the absolute path of each disk cache segment.

> **Important**: For catalog creation, this parameter becomes mandatory if disk cache section (`<disk></disk>`) is specified.

If the number of disk cache segments is not specified, one absolute path is to be defined.

<current_size>current size</current_size>

Parameter specifying the size of the disk cache segment. If this parameter is not specified, the default value will be taken.

The unit for this parameter depends on the value you set if you use the `cache_mb_unit` tunable:

- If you set the `cache_mb_unit` tunable to `no` (default value), you need to enter a value in GB (default value is 1 GB).
- If you set the `cache_mb_unit` tunable to `yes`, you need to enter a value in MB (default value is 32 MB).

<advanced_parameters></advanced_parameters>

Optional subsection related to advanced parameters. If not specified, the default values are taken for all the parameters below:

- `memory-cache-container-size` (only if memory cache is specified, otherwise it is not required)
- `disk_cache_container_size` (only when disk cache is specified, otherwise it is not required)
- `avg_no_of_backup_versions`
- `odb_size`
- `odb_max_catalog_size`
- `odb_file_size`

<memory_cache_container_size>size</memory_cache_container_size>

Parameter specifying in MB the size of the memory cache container, if memory cache is specified. Otherwise it is not required.

If this parameter is not specified, the default value is taken: it is calculated according to available disk space.

<disk_cache_container_size>size</disk_cache_container_size>

Parameter specifying in MB the size of the disk cache container, if disk cache is specified. Otherwise it is not required.

If this parameter is not specified, the default value is taken: it is calculated according to available disk space.

<avg_no_of_backup_versions>number</avg_no_of_backup_versions>

Parameter specifying the average number of backup versions. If this parameter is not specified, the default value (2) is taken.

<odb_size>size of the catalog</odb_size>

Parameter specifying the catalog size in MB. If this parameter is not specified, the default value (1024 MB) is taken.

<odb_max_catalog_size>odb-max-size</odb_max_catalog_size>

Parameter specifying the maximum catalog size in GB. If this parameter is not specified, the default value is taken: it is the maximum size in GB limited by current disk space.

<odb_file_size>odb file size</odb_file_size>

Parameter specifying the odb file size in MB. If this parameter is not specified, the default value (1024 MB) is taken.

<server></server>

Optional subsection related to the server running `tina_init`. If this parameter is not specified, the hostname of the system running `tina_init` will be taken as default value.

<server_name>server-name</server_name>

Parameter specifying the server name.

Table of Units for the Size of Disk Cache and Disk Cache Segments

The table below lists the units to specify when defining the size of disk cache and disk cache segments in the non-interactive mode of the `tina_init` command. Several cases are presented, taking into account several parameters, such as the activation/deactivation of the `cache_mb_unit` tunable, if the disk cache already exists, etc.

Case #	tina_init command (creating/modifying a catalog)	cache_mb_unit tunable defined?	Disk cache already exists?	If disk cache exists, is its value divisible by 1024?	Unit for disk cache size	Is the specified size of the default disk cache segment divisible by 1024?	Unit for disk cache segment size to specify in the XML file
1	Create	Not defined	N/A	**N/A**	GB	N/A	GB

Case #	tina_init command (creating/modifying a catalog)	cache_mb_unit tunable defined?	Disk cache already exists?	If disk cache exists, is its value divisible by 1024?	Unit for disk cache size	Is the specified size of the default disk cache segment divisible by 1024?	Unit for disk cache segment size to specify in the XML file
2	Create	Defined to yes	N/A	**N/A**	MB	N/A	MB
3	Create	Defined to no	N/A	**N/A**	GB	N/A	MB
4	Modify	Not defined	No	**N/A**	GB	No	MB
5	Modify	Defined to yes	No	**N/A**	MB	No	MB
6	Modify	Defined to no	No	**N/A**	GB	No	MB
7	Modify	Not defined	No	**N/A**	GB	Yes	GB
8	Modify	Defined to yes	No	**N/A**	MB	Yes	MB
9	Modify	Defined to no	No	**N/A**	GB	Yes	GB
10	Modify	Not defined	Yes	**No**	MB	No	MB
11	Modify	Defined to yes	Yes	**No**	MB	No	MB
12	Modify	Defined to no	Yes	**No**	MB	No	MB
13	Modify	Not defined	Yes	**No**	MB	Yes	MB
14	Modify	Defined to yes	Yes	**No**	MB	Yes	MB

Case #	tina_init command (creating/modifying a catalog)	cache_mb_unit tunable defined?	Disk cache already exists?	If disk cache exists, is its value divisible by 1024?	Unit for disk cache size	Is the specified size of the default disk cache segment divisible by 1024?	Unit for disk cache segment size to specify in the XML file
15	Modify	Defined to no	Yes	**No**	MB	Yes	MB
16	Modify	Not defined	Yes	**Yes**	GB	No	MB
17	Modify	Defined to yes	Yes	**Yes**	MB	No	MB
18	Modify	Defined to no	Yes	**Yes**	GB	No	MB
19	Modify	Not defined	Yes	**Yes**	GB	Yes	GB
20	Modify	Defined to yes	Yes	**Yes**	MB	Yes	MB
21	Modify	Defined to no	Yes	**Yes**	GB	Yes	GB

tina_job

The `tina_job` binary opens Job Manager. The list gathers backup, archiving, restoration and duplication sessions.

> **Note**: Any user can execute this command.

Syntax

```
tina_job [-catalog catalog] [-language language] [-identity user:passwd] [-job_polling_period period] [-help]
```

[-catalog catalog] Specifies the working catalog. The parameter is mandatory if there are several catalogs.

[-identity user:passwd]	See -identity.
[-job_polling_ period period]	Specifies the period, in seconds, of the displayed information update. Its value can vary from 3 to 60 seconds.

Example. `tina_job` use

In this example, Job Manager is running for the catalog `Demo`.

```
tina_job -catalog Demo
```

For more information on job management, see the Jobs section of the Tina Administration Documentation.

tina_job_control

The `tina_job_control` command allows you to perform operations on jobs:

- Cancelling jobs.
- Pausing jobs.
- Restarting jobs.
- Changing job priority.
- Duplicating jobs

> **Note**: This command applies to a single catalog.

Rights

Users with these rights in Tina can launch this command:

- General Supervision Tasks (Use Web Administration, Supervision Console...) (READ only)

  Or
- Job Operator (cancel, restart, etc.)

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_job_control -jobid job_id -cancel|-pause|-restart|-duplicate|
-change_priority top|up|down|bottom [-no_wait] [-pool pool_name] [-close_
cart] [-empty_cart] [-continue_on_error] [-view] [-catalog catalog] [-
identity user:passwd] [-help]
```

-jobid job_id	Specifies the job corresponding to the `job_id` value.
-cancel	Cancels the specified job.
-pause	Pauses the specified job.
-restart	Restarts the specified job that was previously cancelled or paused.

-duplicate	Duplicates the specified job.
-change_priority top|up|down|bottom	Allows to modify job priority. The job priority can be either moved Up by one, moved Down by one, or moved all the way to the Top or the Bottom of the list.
[-no_wait]	Specifies to end the command without waiting for the operation to be completed. Only available with the -duplicate parameter.
[-pool pool_name]	Specifies the name of the cartridge pool that will be used for the job duplication. If not used, the original cartridge pool of the duplicated job will be used. Only available with the -duplicate parameter.
[-close_cart]	Allows to close the duplicated cartridges. Only available with the -duplicate parameter.
[-empty_cart]	Specifies that only empty cartridges will be used for job duplication. Only available with the -duplicate parameter.
[-continue_on_error]	Specifies that job duplication will not stop due to data errors. Only available with the -duplicate parameter.
[-view]	Allows to view the job details. Displays the father jod id, or the list of child job ids separated by a comma (if any).
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity.

Example. `tina_job_control` use

The job 4056 is cancelled:

```
tina_job_control -catalog atempo -jobid 4056 -cancel
```

The job 4056 is paused:

```
tina_job_control -catalog atempo -jobid 4056 -pause
```

The job 4056 is restarted:

```
tina_job_control -catalog atempo -jobid 4056 -restart
```

The priority of the job 4056 is moved to the Top of the list:

```
tina_job_control -catalog atempo -jobid 4056 -change_priority top
```

The priority of the job 4056 is moved Up by one:

```
tina_job_control -catalog atempo -jobid 4056 -change_priority up
```

The priority of the job 4056 is moved Down by one:

```
tina_job_control -catalog atempo -jobid 4056 -change_priority down
```

The priority of the job 4056 is moved to the Bottom of the list:

```
tina_job_control -catalog atempo -jobid 4056
-change_priority bottom
```

The job 4056 is duplicated on empty cartridges without stopping on eventual data errors and the duplicated cartridges will be closed:

```
tina_job_control -catalog atempo -jobid 4056 -duplicate -pool pool1 -
continue_on_error -empty_cart -close_cart
```

For more information on job management, see the Jobs section of the Tina Administration Documentation.

tina_library

The `tina_library` binary opens Library Manager.

> **Note**: Any user can execute this command.

Syntax

```
tina_library [-catalog catalog] [-library library] [-language language] [-
identity user:passwd] [-help]
```

[-catalog catalog]	Specifies the working catalog..
[-identity user:passwd]	See -identity.

[-library library]	Specifies the library to be displayed in Library Manager.

Example. `tina_library` use

In this example, Library Manager is running in English for the `Documentation` catalog and the `DocLib` library.

```
tina_library -catalog Documentation -library DocLib
```

For more information on the Library Management application, see the "Managing Libraries" section of the Tina Administration Documentation.

tina_library_control

The `tina_library_control` command allows you to initiate reinitialization operations on a library, for example when the library is inconsistent, and to bring cartridges on and off line. Displaying lists of cartridges filtered according to certain criteria in order to detect which cartridges could be put offline.

> **Note**: Any user can execute this command.

Syntax

```
tina_library_control -library library -reinit_status|-reinit_read_label|
-reinit_barcode|-reinit_full_inventory|-offline|-online|-list|-content
[-retry_mbox_full] [-label cartridge_label]|[-barcode bar_code]|
[-pool pool_label] [-output_format text|csv] [-short]|[-long] [-do_not_
check_data_integrity] [-offline_ready] [-csv_separator csv_separator] [-no_
wait] [-retention valueUNIT]
[-status_filter status_filter1 [status_filter2]...] [-known_cart]
[-catalog catalog] [-help]
```

-library library	Specifies the library name.
-reinit_status	Specifies that the mention "Reinit" in `tina_adm` main window is removed.
-reinit_read_label	Performs a reinitialization with label reading after a library inconsistency.
-reinit_barcode	Performs a reinitialization with bar code reading after a library inconsistency. The library must support barcodes.
-reinit_full_inventory	Performs a library full inventory after a library inconsistency.
-offline	Indicates that you want to put one or several cartridges offline. You must provide either a cartridge label to unload a single cartridge, with the `-label` option, or a pool to unload all the cartridges in a pool, with the `-pool` option.
-online	Brings the cartridges located in the in mailbox(es) or the in/out mailbox(es) on line. This option is not available for library without mailbox.

-list	Displays the list of the cartridges known to the catalog inside the library with this information: name, barcode, volume, status, location and retention period (in seconds). By default, the cartridges are sorted by recycling date, the cartridges that will be recycled sooner coming first. If you add the `-short` option, only the name and barcode information is displayed. Perform a library reinitialization prior to using this option to make sure that the results will be correct.
-content	Allows to list all the slot found in the library, their type, their status and their contents.
[-retry_ mbox_full]	Allows to retry bringing a cartridge off line if the library mailbox is full when the request is issued. Retries continue until the mailbox becomes free.
[-label cartridge_ label]	Label of the cartridge to be put offline or online, depending on the option specified. Only one label can be specified. This option can only be used if the `-offline` or `-online` options are used.
[-barcode bar_code]	Barcode of the cartridge to put offline or online, depending on the option specified. Only one barcode can be specified. This option can only be used if the `-offline` or `-online` options are used.
[-known_ cart]	Specifies that among the cartridges located in the mailbox, only the cartridges known to the catalog will be put online. This option can only be used if the`-online` option is used.
[-pool pool_ label]	Label of the pool to be put offline. To be used when all cartridges in a pool are to be put off line.
[-output_ format text|csv]	Specifies the display format of the `-list` option result. The possible values are `text` and `csv`. The default value is `text`.
[-short]	Specifies the short display of the `-list` option result (name and barcode).
[-long]	Specifies the detailed display of the `-list` option result.
[-do_not_ check_ data_ integrity]	Do not check data integrity of each listed cartridge. Can be used only if the `-list` option is used.

[-offline_ ready]	Displays the list of online cartridges that are: • Full, closed, or closed on error, • That are not required for data integrity reasons (media containing the only existing copy of a backup), • That are non recyclable (belonging to a pool with infinite retention period, or not yet recyclable), and thus can be put offline. This option must always come with the `-list` option.
[-csv_ separator csv_ separator]	Specifies the separator used by the `csv` format.
[-no_wait]	This option is obsolete.
[-retention]	Displays the list of online cartridges that will be recyclable in more time than specified. This option possible value format is valueUNIT, where `value` is an integer and UNIT is the time unit corresponding to: • S: seconds • m: minutes • H: hours • D: days • W: weeks • M: months • Y: years This option must always come with the `-list`, `-offline_ready` and `-status_ filter recyclable` options.
[-status_ filter]	Specifies the status of the cartridges displayed by the `-list` option. Values can be `"closed", "closed_on_error", "recyclable", "full"` and `"partly filled"` used in a list. The default value is `closed closed_on_error full`.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.

Example. `tina_library_control` use

In this example, reinitialization with bar code reading is required for the library `Library` connected to the host `hercule`.

```
tina_library_control -library Lib -library_host hercule
-reinit_barcode
```

Example. `tina_library_control` use for detecting the cartridges to be put offline

In this example, tina_library_control draws the list of online cartridges that are closed on error, closed, full or partly filled and that will not be recyclable before two weeks.

```
tina_libray_control -list -offline_ready -status_filter recyclable -
retention 2W
```

Example. `tina_library_control` use for listing the library slots and their content

```
tina_library_control -content -library robi

d0_robi Drive 0 Disabled
d1_robi Drive 1 Enabled
m0 Mailbox 0 Enabled
m1 Mailbox 1 Enabled
Picker 0 Enabled
s0 Slot robi_0 lab100002 0 Enabled
s1 Slot robi_1 ????? 1 Enabled
s2 Slot robi_2 spare00003 2 Enabled
s3 Slot robi_3 ????? 3 Enabled
s4 Slot robi_4 ????? 4 Enabled
s5 Slot robi_5 ????? 5 Enabled
s6 Slot robi_6 ????? 6 Disabled
s7 Slot robi_7 ????? 7 Disabled
s8 Slot robi_8 ????? 8 Enabled
s9 Slot robi_9 ????? 9 Enabled
```

tina_listcart

The `tina_listcart` command allows you to display the list of all objects (directories and/or files) located on a given cartridge.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.

> **Note**: This command must be run on the server.

Syntax

```
tina_listcart -label label [-outptut_format text|csv] [-csv_separator csv_
separator] [-listjob] [-v_type] [-v_path] [-v_backup_date] [-v_modification_
date] [-v_info_cart] [-v_folder] [-v_default] [-data_integrity_check] [-
catalog catalog] [-identity user:password] [-help]
```

-label label	Specifies the label of the cartridge on which the list of files to display is located.
[-outptut_ format text|csv]	Specifies the output format of the command result. The possible values are `text` or `csv`, the default value is `text`.
[-csv_ separator csv_ separator]	This option is useful if the -output_format option has been set to csv. It allows to set the character or character string to be used as a separator. The default value is the semicolon";".
[-listjob]	Displays the list of jobs located on a cartridge.

[-v_type]	Displays a column containing the type of the objects
[-v_path]	Displays a column containing the name of the objects
[-v_backup_date]	Displays a column containing the backup dates of the objects
[-v_modification_date]	Displays a column containing the last modification date of the objects
[-v_info_cart]	Displays a column containing cartridge information for the objects
[-v_folder]	Displays a column containing the folder name of the objects
[-v_default]	Displays these columns: -v_info_cart, -v_backup_date, -v_folder, -v_modification_date, -v_path
[-data_integrity_check]	If a cartridge cannot be recycled due to a data integrity issue, this option displays information about the relevant job: platform name, strategy name and backup date.
[-catalog catalog]	Specifies the working catalog. This parameter is mandatory if there are several catalogs.

Example. `tina_listcart` use

In this example, the list of the directories and files backed up on the cartridge `TAK00001` of the cat_40_tak catalog is displayed.

```
# ./tina_listcart -label TAK00001 -catalog cat_40_tak


File Backup Backup Last Modification Backed up
Information Date Folder Date File
------------------------------------------------------------------------

(1,304,1171660) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:36:26
2004 d:\reno_files\ nath_nus_bis\chant de la liberation.mp3
(1,1173444,575) Thu May 12 10:00:05 2005 host.elliot Tue Nov 16 14:45:17
2004 d:\reno_files\ nath_nus_bis\lenfantetlafleur.zip
(1,1174371,169154) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:30:22
2004 d:\reno_files\ nath_nus_bis\st_medard.mp3
(1,1344013,0) Thu May 12 10:00:05 2005 host.elliot Wed May 04 09:20:09 2005
d:\reno_files\ nath_nus_ter
(1,1344317,3891404) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:36:26
2004 d:\reno_files\ nath_nus_ter\chant de la liberation.mp3
(1,5239857,575) Thu May 12 10:00:05 2005 host.elliot Tue Nov 16 14:45:17
2004 d:\reno_files\nath_nus_ter\ lenfantetlafleur.zip
```

```
(1,5240784,169154) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:30:22
2004 d:\reno_files\nath_nus_ter\st_medard.mp3
(2,228,0) Thu May 12 16:11:40 2005 host.elliot Thu Jan 01 01:00:00 1970 d:\
(2,468,0) Thu May 12 16:11:40 2005 host.elliot Wed May 11 14:06:40 2005
d:\reno_files
(2,728,0) Thu May 12 16:11:40 2005 host.elliot Tue Nov 16 14:46:02 2004
d:\reno_files\ nath_nus
(2,1028,3891404) Thu May 12 16:11:40 2005 host.elliot Tue Nov 09 12:36:26
2004 d:\reno_files\ nath_nus\chant de la liberation.mp3
(2,3896564,659) Thu May 12 16:11:40 2005 host.elliot Tue Nov 16 14:45:17
2004 d:\reno_files\ nath_nus\ lenfantetlafleur.zip
(2,3897571,169154) Thu May 12 16:11:40 2005 host.elliot Tue Nov 09 12:30:22
2004 d:\reno_files\ nath_nus\st_medard.mp3
(2,4067213,0) Thu May 12 16:11:40 2005 host.elliot Wed May 04 09:19:36 2005
d:\reno_files\ nath_nus_bis
```

Example. `tina_listcart` use

In this example, the list of the directories and files backed up on the cartridge `TAK00001` of the cat_40_tak catalog is displayed, including the object type information.

```
# ./tina_listcart -label TAK00001 -catalog cat_40_tak -v_type


File Backup Backup Last Modification Type Backed up
Information Date Folder Date File
------------------------------------------------------------------------

(1,304,1171660) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:36:26
2004 file d:\reno_files\ nath_nus_bis\chant dela liberation.mp3
(1,1173444,575) Thu May 12 10:00:05 2005 host.elliot Tue Nov 16 14:45:17
2004 file d:\reno_files\ nath_nus_bis\lenfantetlafleur.zip
(1,1174371,169154) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:30:22
2004 file d:\reno_files\ nath_nus_bis\st_medard.mp3
(1,1344013,0) Thu May 12 10:00:05 2005 host.elliot Wed May 04 09:20:09 2005
dir d:\reno_files\ nath_nus_ter
(1,1344317,3891404) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:36:26
2004 file d:\reno_files\ nath_nus_ter\chant dela liberation.mp3
(1,5239857,575) Thu May 12 10:00:05 2005 host.elliot Tue Nov 16 14:45:17
2004 file d:\reno_files\ nath_nus_ter\lenfantetlafleur.zip
(1,5240784,169154) Thu May 12 10:00:05 2005 host.elliot Tue Nov 09 12:30:22
2004 file d:\reno_files\ nath_nus_ter\st_medard.mp3
(2,228,0) Thu May 12 16:11:40 2005 host.elliot Thu Jan 01 01:00:00 1970 dir
d:\
(2,468,0) Thu May 12 16:11:40 2005 host.elliot Wed May 11 14:06:40 2005 dir
d:\reno_files
(2,728,0) Thu May 12 16:11:40 2005 host.elliot Tue Nov 16 14:46:02 2004 dir
d:\reno_files\ nath_nus
(2,1028,3891404) Thu May 12 16:11:40 2005 host.elliot Tue Nov 09 12:36:26
2004 file d:\reno_files\ nath_nus\chant de la liberation.mp3
```

```
(2,3896564,659) Thu May 12 16:11:40 2005 host.elliot Tue Nov 16 14:45:17
2004 file d:\reno_files\ nath_nus\lenfantetlafleur.zip
(2,3897571,169154) Thu May 12 16:11:40 2005 host.elliot Tue Nov 09 12:30:22
2004 file d:\reno_files\ nath_nus\st_medard.mp3
(2,4067213,0) Thu May 12 16:11:40 2005 host.elliot Wed May 04 09:19:36 2005
dir d:\reno_files\ nath_nus_bis
```

The file information provides these three items of information (A, B, C):

- A is the number of the tape file where the file is written,
- B is the file offset on the tape,
- and C is the file size (this size is 0 when the file is a directory).

tina_listjob

The `tina_listjob` command allows you to display the list of all objects (directories and/or files) processed by a specific job. The information displayed for each object, depends on the column options you choose. By default, if no column option is selected, at least this information appears:

- Name of the media where the object is located
- Type of the object
- Backup dates of the object
- Object size
- Object path

Rights

This command must be run on the Tina server as `root` on Unix systems or as `administrator` on Windows systems.

Syntax

```
tina_listjob -jobid jobid [-force] [-max_obj max_obj] [-all] [-output_format
Format] [-csv_separator separator] [-v_size] [-volume_unit unit] [-v_path]
[-v_type] [-v_backup_date] [-v_last_access_date] [-v_modification_date] [-v_
info_cart] [-v_barcode] [-v_host] [-v_strat] [-v_sess] [-v_default] [-
catalog catalog] [-help]
```

-jobid	Specifies the ID of the job for which you want to list objects.
[-force]	Specifies that the list must be displayed even if jobs are running, which could divert some needed resources from the jobs. If this option is not selected, Tina does not generate the job list if there are jobs in progress.
[-max_obj max_obj]	Specifies the maximum number of objects to be retrieved by a request.

[-all]	Specifies to display all object versions processed by all sessions of the specified job. This option is only usefull for multiple writing sessions. It allows to see each version of the object whereas you only see a single version per object if you do not use it.
[-output_ format Format]	Specifies the format used to display the data. Possible Values are `text` or `csv`. The default value is `text`.
[-csv_ separator separator]	Specifies the character used as a separator when you choose `cvs` as the output format. The default value is ";".
[-v_size]	Displays a column containing the size of the objects
[-volume_unit unit]	Allows to specify the size unit of the object processed by the job. By default the size is in bytes. Possible values are: `byte`, `kilo`, `mega`, `giga`, `tera` and `best`. if you choose `best`, Tina uses the unit that fits the size best.
[-v_path]	Displays a column containing the path of the objects
[-v_type]	Displays a column containing the type of the objects
[-v_backup_ date]	Displays a column containing the backup dates of the objects
[-v_last_ access_date]	Displays a column containing the date the file was last accessed
[-v_ modification_ date]	Displays a column containing the date the file was last modified
[-v_info_cart]	Displays a column containing the media information of the objects
[-v_barcode]	Displays a column containing the barcode of the media where the objects backup is located
[-v_host]	Displays a column containing the name of the host where the objects is located
[-v_strat]	Displays a column containing the letter of the strategy of the objects
[-v_sess]	Displays a column containing a session id for each object. This allows you to discriminate between versions of the same object backed up in two sessions in the same job. This option is useful if `tina_listjob` is lanched with the `-all` option, permitting display of all the job sessions

-v_default	Displays the default columns in the default order; `-v_info_cart`, `-v_type`, `-v_backup_date`, `-v_size`, `-v_path`. This option is useful if you want to display the default columns plus one or more columns, you do not have to enter the 5 default columns options one by one.
[-catalog catalog]	Specifies the working catalog. This option is mandatory if several catalogs are present on the Tina server.

Example. Generating a job content list in text format

```
tina_listjob -catalog test -jobid 177

lab100006(2,228,0) dir Tue Oct 19 17:49:49 2004
0 d:\
lab100006(2,468,0) dir Tue Oct 19 17:49:49 2004
0 d:\reno_files
lab100006(2,744,20684) file Tue Oct 19 17:49:49 2004
20684 d:\reno_files\api_crt.doc
lab100006(2,21772,20684) file Tue Oct 19 17:49:49 2004
20684 d:\reno_files\api_crt.doc_save1
lab100006(2,42796,24268) file Tue Oct 19 17:49:49 2004
24268 d:\reno_files\cartridge.doc
lab100006(2,67412,24268) file Tue Oct 19 17:49:49 2004
24268 d:\reno_files\cartridge.doc_save1
lab100006(2,92020,23756) file Tue Oct 19 17:49:49 2004
23756 d:\reno_files\cartridges.doc
lab100006(2,116124,23756) file Tue Oct 19 17:49:49 2004
23756 d:\reno_files\cartridges.doc_save1
lab100006(2,140216,25804) file Tue Oct 19 17:49:49 2004
25804 d:\reno_files\Copy.doc
lab100006(2,166364,25804) file Tue Oct 19 17:49:49 2004
25804 d:\reno_files\Copy.doc_save1
lab100006(2,192500,70860) file Tue Oct 19 17:49:49 2004
70860 d:\reno_files\CV.doc
lab100006(2,263764,70860) file Tue Oct 19 17:49:49 2004
70860 d:\reno_files\CV.doc_save1
lab100006(2,335024,45260) file Tue Oct 19 17:49:49 2004
45260 d:\reno_files\CV98.doc
lab100006(2,380656,45260) file Tue Oct 19 17:49:49 2004
45260 d:\reno_files\CV98.doc_save1
lab100006(2,426288,45260) file Tue Oct 19 17:49:49 2004
45260 d:\reno_files\CVphoto.doc
lab100006(2,471924,45260) file Tue Oct 19 17:49:49 2004
45260 d:\reno_files\CVphoto.doc_save1
lab100006(2,517560,1135) file Tue Oct 19 17:49:49 2004
1135 d:\reno_files\encoded_file.coded
lab100007(1,276,14028) file Tue Oct 19 17:49:49 2004
14028 d:\reno_files\ModeleSpec.doc
```

```
lab100007(1,14652,14028) file Tue Oct 19 17:49:49 2004
14028 d:\reno_files\ModeleSpec.doc_save1
lab100007(1,29032,184) file Tue Oct 19 17:49:49 2004
184 d:\reno_files\New Document text.txt
lab100007(1,29576,184) file Tue Oct 19 17:49:49 2004
184 d:\reno_files\New Document text.txt_save1
lab100007(1,30096,258) file Tue Oct 19 17:49:49 2004
258 d:\reno_files\~$CV98.doc
lab100007(1,30698,258) file Tue Oct 19 17:49:49 2004
258 d:\reno_files\~$CV98.doc_save1
```

Example. Generating a job content list in csv format

```
D:\TINA_3~4>tina_listjob -catalog test -jobid 177 -force -output_format csv

lab100667(4,228,0);dir;2004-10-22 14:33;0;d:\;
lab100667(4,468,0);dir;2004-10-22 14:33;0;d:\reno_files;
lab100667(4,744,20684);file;2004-10-22 14:33;20684;d:\reno_files\api_
crt.doc;
lab100667(4,21772,20684);file;2004-10-22
14:33;20684;d:\reno_files\api_crt.doc_save1;
lab100667(4,42800,20684);file;2004-10-22
14:33;20684;d:\reno_files\api_crt.doc_save2;
lab100667(4,63824,24268);file;2004-10-22
14:33;24268;d:\reno_files\cartridge.doc;
lab100667(4,88440,24268);file;2004-10-22
14:33;24268;d:\reno_files\cartridge.doc_save
lab100667(4,113048,23756);file;2004-10-22
14:33;23756;d:\reno_files\cartridges.doc;
lab100667(4,137152,23756);file;2004-10-22
14:33;23756;d:\reno_files\cartridges.doc_sa
lab100667(4,161244,25804);file;2004-10-22 14:33;25804;d:\reno_
files\Copy.doc;
lab100667(4,187392,25804);file;2004-10-22
14:33;25804;d:\reno_files\Copy.doc_save1;
lab100667(4,213540,10956);file;2004-10-22
14:33;10956;d:\reno_files\Copy.doc_save2;
lab100667(4,224840,25804);file;2004-10-22
14:33;25804;d:\reno_files\Copy.doc_save3;
lab100667(4,250976,70860);file;2004-10-22 14:33;70860;d:\reno_files\CV.doc;
lab100667(4,322240,70860);file;2004-10-22
14:33;70860;d:\reno_files\CV.doc_save1;
lab100667(4,393500,45260);file;2004-10-22 14:33;45260;d:\reno_
files\CV98.doc;
lab100667(4,439132,45260);file;2004-10-22
14:33;45260;d:\reno_files\CV98.doc_save1;
```

tina_odbcheck

The `tina_odbcheck` command allows you to verify the state of free cells in your catalog.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with `administrator's` rights can execute this command on Windows systems.

Syntax

```
tina_odbcheck [-reset] [-opcode opcode] [-catalog catalog] [-help]
```

-reset	This option should only be used under the supervision of Atempo's customer service.
-opcode opcode	Set this option to 1, it specifies to verify the state of free cells in the catalog.
[-catalog catalog]	Specifies the catalog in which the verification should be performed. This parameter is mandatory if there are several catalogs.

Example. `tina_odbcheck` use

```
elektra# ./tina_odbcheck -opcode 1
Check operation 1 in progress ...
Check operation 1 done.
```

If "Check operation 1 done" displays, it indicates that nothing unusual was detected during the `tina_odbcheck`. In addition, this information can be found in the logs:

```
2|7|check_all_free_cell|1|1|3|1117113821|1117113821|4401|tina_
odbcheck|elektra|~|root|~|tmy|elektra|Checking empty segments...|0|~|
2|7|check_all_free_cell|7|1|3|1117113821|1117113821|4401|tina_
odbcheck|elektra|~|root|~|tmy|elektra|Checking used segments...|0|~|
2|7|check_all_free_cell|13|1|3|1117113821|1117113821|4401|tina_
odbcheck|elektra|~|root|~|tmy|elektra|Checking full segments...|0|~|
```

tina_odbfree

The `tina_odbfree` command allows you to delete backup versions from the catalog based either on the folder they belong to, according to a number of versions; or on the media they are located on, according to a retention time.

It also enables you to delete instances of a deduplication strategy in a folder.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.

Syntax

```
tina_odbfree [-folder folder1 [folder2]...] [ -dedup_strat strat_num] [-
keep_full n] [-invert] [-label label] [-retention days] [-jobid jobid] [-
batch] [-catalog catalog] [-help]
```

[-folder folder1 [folder2]...]	Specifies the backup folder in which the versions to delete are located. By default, all folders are purged. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]`
[-dedup_ strat strat_ num]	Enables you to delete the instances of a given deduplication strategy in a folder. This option can only be used with the `-folder` option. This option cannot be used with the `-keep_full` option.
[-keep_ full n]	Specifies the number of full backup to keep in the catalog. This option can only be used with the `-folder` option. This option handles the parallel backups as a single job. This option cannot be used with the `-dedup-strat` option.
[-invert]	It must be used with [-keep_full n] to specify the number of full backups to delete from catalog.
[-label label]	Specifies the label of the media on which the versions to delete are located.
[-retention days]	Specifies the age, in days, beyond which the backup versions will be deleted from the media. This option can only be used with the `-label` option.
[-jobid jobid]	Specifies the ID of the job to delete.
[-batch]	Allows to postpone the catalog purge until the next scheduled maintenance job (by default every day at 12:00pm)
[-catalog catalog]	Specifies the catalog in which the versions to delete are located. This parameter is mandatory if there are several catalogs.

Using tina_odbfree

This example deletes all the backup versions older than seven days on the cartridge Bck00007.

```
tina_odbfree -label Bck00007 -retention 7
```

tina_odbgc

The `tina_odbgc` command allows you to delete the contents of the garbage collector created by the recycling of media and to synchronize the catalog jobs with the corresponding HyperStream

Servers.

> **Note**: Only the `root` (Unix) or `administrator` (Windows) user can execute this command.

Syntax

```
tina_odbgc [-purge] [-hss_sync] [-sync] [-catalog catalog] [-help]
```

[-purge]	Empties the garbage collector created by the recycling of media.
[-hss_sync]	Synchronizes the jobs of the Tina catalog with the corresponding HyperStream Servers.
[-sync]	Waits for the end of the catalog maintenance job and allows to run this job as pre-processing for another job.
[-catalog catalog]	Specifies the catalog for which the actions (purge and synchronization) are performed. This parameter is mandatory if there are several catalogs.

tina_odbsave

The `tina_odbsave` command allows you to back up the catalog.

- Used without option, `tina_odbsave` sends the catalog backup file to the `stdout` standard output. The program output may then be redirected to a file or a named pipe.
- Used with the `-dir_dest` option, `tina_odbsave` creates one catalog backup file named `catalog_save`. The compression format is a native format: `cod`. A tool, `tina_cod`, is delivered to compress and uncompress `.cod` files. Use the `[-no_compress]` option to prevent backup files from being compressed.
  If backup files already exist when the command `tina_odbsave` is running, they are deleted, then recreated.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.

> **Note**: The command tina_odbsave does not accept internationalized values.

Syntax

```
tina_odbsave [-no_compress] [-dir_dest destination_directory]| [-check] [-
maintain_folder folder1 [folder2]...]|[-folder folder1 [folder2]...]|
[-skip_folder folder1 [folder2]...]|[-config] [-no_job] [-prefix prefix]
[-file odbsave_file] [-pipe odbsave_pipe] [-index_dir index_directory] [-
catalog catalog] [-help]
```

[-no_ compress]	Specifies not to compress the catalog backup if the -dir_dest option is used. By default, the compression is automatically performed.
[-dir_dest destination_ directory]	Specifies the absolute path of the destination directory. This directory must already exist. The syntax corresponds to that used by the operating system of the local machine (ex: `/usr/tina/Savetina` for Unix and `d:\Savetina` for Windows).
[-check]	This option allows you to test the reliability of the catalog backup you are about to perform. If the command returns an error, you will not be able to restore your catalog if you back it up in its present state. You should use the last correct catalog backup to restore your catalog.
[-maintain_ folder folder_ list]	Specifies the list of folders to be saved empty and in maintenance state. This is useful if you want to temporarily skip a damaged folder, in particular when the damaged folder prevents from backing up the catalog. The corresponding administrative objects (media, platforms) are frozen and platforms are disabled until the repaired folder is imported from another catalog backup. If the folder cannot be repaired quickly, a correct previous catalog backup can be used for the import instead of waiting for a repaired catalog backup provided by the Atempo Technical Support. Be careful: advanced option for partial backup. This option allows to set the folders of the list to maintenance state, and not back up metadata associated to these folders. For these folders, the automatic recycling of media is frozen, and backed up data are temporarily deleted as they need to be repaired. Setting a folder in maintenance state prevents from: • running jobs related to that folder, • allocate cartridges related to that folder for writing, • automatically recycle cartridges related to that folder, • automatic recycling of HyperVision Deduplication Storage instances related to that folder, • viewing the content of jobs and cartridges, when related to that folder, • creating a backup selection on that folder, • enabling the corresponding platform. To import a folder from another catalog, see tina_folder_control. This option cannot be used with the `-skip_folder` and `-folder` options.

[-folder folder1 [folder2]...]	Specifies the list of the backup or archive folders to back up. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]` This option cannot be used with the `-skip_folder` and `-maintain_folder` options.
[-skip_folder folder1 [folder2]...]	Specifies a list of folders NOT to be saved. This option cannot be used with the `-maintain_folder` and `-folder` options.
[-config]	Specifies that only the catalog's configuration is backed up.
[-no_job]	This option can only be used along with the `-config` option. It indicates that job information is excluded from the catalog configuration backup.
[-prefix prefix]	The `-prefix` option used with the `-dir_dest` option, allows you to replace the "`catalog_save`" part of the catalog backup file name with a name of your choice.
[-file odbsave_file]	Specifies the name and path of the catalog backup file.
[-pipe odbsave_ pipe]	Allows the backup to be directed to a pipe.
[-index_dir index_ directory]	Specifies the absolute path of the directory where you want to back up indexes. If this option is not specified, indexes are not backed up.
[-catalog catalog]	Specifies the name of the catalog to be backed up. This parameter is mandatory if there are several catalogs.

Example. `tina_odbsave` use

For an example of a catalog backup using `tina_odbsave`, see Catalog Manual Procedures.

tina_operator

The `tina_operator` binary opens Media Request Console.

> **Note**: Any user can execute this command.

Syntax

```
tina_operator [-catalog catalog] [-language language]
[-identity user:passwd] [-help]
```

[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity.

Example. `tina_operator` use

In this example, Media Request Console is running in French for the catalog `Demo`.

```
tina_operator -catalog Demo -language French
```

> **Note**: You can also use the Monitoring › Media Request Console menu in Web Administration to access Media Request Console.

For more information on processing operators requests, see the Media Request Console topic of the Tina Administration Documentation.

tina_ping

The `tina_ping` command allows you to test whether a Tina service or daemon is started on a machine.

> **Note**: Any user can execute this command.

Syntax

```
tina_ping -host host [-tina_service_tcp_num tcp_port_number|
-tina_service_name service_name] [-bonjour] [-no_icmp_ping] [-register_
bonjour] [-verbose] [-help]
```

-host host	Specifies the system where the test is performed.
[-tina_service_ tcp_num tcp_ port_number]	Specifies the TCP port number associated to the tested service or daemon.
[-tina_service_ name service_ name]	Specifies the name of the service tested on the targeted machine.
[-bonjour]	Lists all the catalogs present on the local network using the `bonjour` protocol.
[-no_icmp_ping]	During the `tina_ping` command, allows to skip the ICMP ping test on hosts that do not allow the ICMP ping function.
[-register_ bonjour]	Registers the local machine in the `bonjour` protocol by simulating the presence of a catalog. This option is useful to troubleshoot issues related to the `bonjour` protocol.

[-verbose]	Used with any other option, displays more detailed information.

tina_report

The `tina_report` command produces reports concerning the data backed up, either globally for all the catalogs involved, or in a more detailed fashion. The reports are invoice-oriented, allowing users to be billed depending on the volume processed.

Rights

Users with this right in Tina can launch this command:

- General Supervision Tasks (Use Web Administration, Supervision Console., etc.)

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_report [-customer_id customer_id] [-start_date YYYYMMDDHHmm] [-end_
date YYYYMMDDHHmm] [-simple_invoice]|[-detailed_invoice] [-v_archives]
[-volume_unit kilo|mega|giga|tera] [-output_format text|xml|csv] [-csv_
separator csv_separator] [-xml_stylesheet_file file] [-xml_stylesheet_
type stylesheet_type] [-file file] [decode]| [-encode] [-catalog catalog] [-
identity identity] [-help]
```

[-customer_id customer_id]	Displays the customer ID provided in the report.
[-start_date YYYYMMDDHHmm]	Specifies the beginning date for the report. By default, the time period covered by the report is one calendar month prior to the moment the command is launched. For instance, if the report is run on June 10, the default time period is May 1 at 0:00 to May 31 at 23:59.
[-end_date YYYYMMDDHHmm]	Specifies the end date for the report. By default, the time period covered by the report is one calendar month prior to the moment the command is launched. For instance, if the report is run on June 10, the default time period is May 1 at 0:00 to May 31 at 23:59.

[-simple_invoice]	Indicates that the information provided by the report is for all catalogs.
	`Maximum number of backed up hosts`
	`Number of backed up files`
	`Last protected disk volume` (indicates the volume of data that could be restored using the last backup. If the backup was incremental this volume includes data up to the latest full backup performed)
	`Backed up volume`
	This option cannot be used with the `-detailed_invoice` option. `-simple_invoice` is the default option for the `tina-report` command.

[-detailed_invoice]	Indicates that the information provided by the report is sorted by backup selection, for each host, application or archive folder:
	`Number of backed up files`
	`Maximum backed up disk volume`
	This option cannot be used with the `-simple_invoice` option.

[-v_archives]	Displays all the archives of each archive folder. It can be used only if the `-detailed_invoice` option is used.
[-volume_unit kilo|mega|giga|tera]	Specifies the volume unit. The default unit is GB.
[-output_format text|xml|csv]	Specifies the display format: text: text format, readable with a text editor. This is the default value. xml: XML format, used with the DTD files provided below. csv: CSV format. This format can be read with a spreadsheet program such as Microsoft Excel.
[-csv_separator csv_separator]	Specifies the csv separator used. The default separator is a semicolon.
[-xml_stylesheet_file file]	Name of the stylesheet that will be used to display the XML document. See XML reports for details.
[-xml_stylesheet_type stylesheet_type]	Type of the stylesheet that will be used to display the XML document. See XML reports for details.
[-file file]	Specifies the absolute path of the ouput file. By default, information is displayed on the standard output.
[-decode]	Decrypts an encoded file. It can be used only if the `-file` option is used.

[-encode]	Specified to create a file containing the report information in an encoded format. This option requires the `-file` option and creates two files: a file containing the report and a file with a `.cod` extension, containing the same report in an encoded format.
[-catalog catalog]	Specifies the catalogs for which information is displayed. By default all the catalogs present in the `Conf/catalogs` file are taken into account.
[-identity user:passwd]	See -identity.

XML reports

You can create XML reports with the `tina_report` commands, using stylesheets. There are two ways to use stylesheets:

1. Generate an HTML page using an XSLT processor like Xalan from the Apache Group. Go to the http://xml.apache.org/xalan-c/index.html address.
2. Open the XML file directly in a browser that supports XSL Transformations. You must remove the comments concerning the reference to the stylesheets in the XML reports.

> **Note**: If you use Internet Explorer, you need the msxml3.dll.

Generating an XML report

Use these options:

- `-output_format xml`
- `-xml_stylesheet_file file`: you can either use your own stylesheet file or use one of the two sample stylesheets located in the `Tools/Tina/xsl` directory of the **Tina** installation directory:
  - `tina_report_simple.xsl`
    XSLT stylesheet for the command:

    ```
    tina_report -output_format xml -simple_invoice
    ```
  - tina_report_detailed.xsl
    XSLT stylesheet for the command:

    ```
    tina_report -output_format xml -detailed_invoice
    ```
- `-xml_stylesheet_type stylesheet_type`: use this option only if your stylesheet is of a format other than .xsl, to specify the file extension of the stylesheet.

Sample XML files

Along with the sample stylesheet files, you will find this file in the `Tools/Tina/xsl` directory:

- `tina_xsl_conf.xml`
  Parameter file that contains the language parameter for the stylesheet

```
<language xml:lang="en"/>
```

It specifies the language used to display the data with an ISO639-1 tag. Go to the http://lcweb.loc.gov/standards/iso639-2/langhome.html address.

- `tina_xsl_messages.xml`
  XML Dictionary for the stylesheets. Each message is defined as follows:

```
<message id="message_id">
<language xml:lang="en">English translation of the message</language>
<language xml:lang="fr">French translation of the message</language>
<language xml:lang="es">Spanish translation of the message</language>
</message>
```

If you need to display your data in another language, you can translate each message and specify this language in the `tina_xsl_conf.xml` file.
Messages must be written using UTF8 encoding. It allows for unicode character display.

Simple Report DTD file

```
<!DOCTYPE simple_report [
<!ELEMENT simple_report (report_parameters, report)>
<!ELEMENT report_parameters (customer_code, report_date, period_start_date,
period_end_date)>
<!ELEMENT customer_code (#PCDATA)>
<!ELEMENT report_date (#PCDATA)>
<!ATTLIST report_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
<!ELEMENT period_start_date (#PCDATA)>
<!ATTLIST period_start_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
<!ELEMENT period_end_date (#PCDATA)>
<!ATTLIST period_end_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
<!ELEMENT report (catalog_number, scanned_catalog_number, nb_host_max, nb_
backuped_files, backuped_volume_max)>
<!ELEMENT catalog_number (#PCDATA)>
<!ELEMENT scanned_catalog_number (#PCDATA)>
<!ELEMENT nb_host_max (#PCDATA)>
<!ELEMENT nb_backuped_files (#PCDATA)>
<!ELEMENT backuped_volume_max (#PCDATA)>
<!ATTLIST backuped_volume_max unit (B | KB | MB | GB | TB) #REQUIRED>
<!ELEMENT backuped_volume_total (#PCDATA)>
<!ATTLIST backuped_volume_total unit (B | KB | MB | GB | TB) #REQUIRED>
]>
```

Detailed Report DTD file

```
<!DOCTYPE detailed_report [
<!ELEMENT detailed_report (report_parameters, report)>
<!ELEMENT report_parameters (customer_code, report_date, period_start_date,
period_end_date, catalog_number)>
<!ELEMENT customer_code (#PCDATA)>
<!ELEMENT report_date (#PCDATA)>
<!ATTLIST report_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
```

```
<!ELEMENT period_start_date (#PCDATA)>
<!ATTLIST period_start_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
<!ELEMENT period_end_date (#PCDATA)>
<!ATTLIST period_end_date format CDATA #FIXED "YYYY-MM-DD HH:mm">
<!ELEMENT catalog_number (#PCDATA)>
<!ELEMENT report (catalog_report+)>
<!ELEMENT catalog_report (platform*, archive_folder*)>
<!ATTLIST catalog_report name CDATA #REQUIRED status (active | unreachable |
forbidden) #REQUIRED>
<!ELEMENT platform ((application_type | host_type), class*)>
<!ATTLIST platform name CDATA #REQUIRED type (host | application) #REQUIRED>
<!ELEMENT application_type (#PCDATA)>
<!ELEMENT host_type (#PCDATA)>
<!ELEMENT class (nb_backuped_files, backuped_volume_max)>
<!ATTLIST class path CDATA #REQUIRED>
<!ELEMENT nb_backuped_files (#PCDATA)>
<!ELEMENT backuped_volume_max (#PCDATA)>
<!ATTLIST backuped_volume_max unit (B | KB | MB | GB | TB) #REQUIRED>
<!ELEMENT archive_folder (archive*)>
<!ATTLIST archive_folder name CDATA #REQUIRED>
<!ELEMENT archive (nb_archived_files, archived_volume_max)>
<!ATTLIST archive path CDATA #REQUIRED>
<!ELEMENT nb_archived_files (#PCDATA)>
<!ELEMENT archived_volume_max (#PCDATA)>
<!ATTLIST archived_volume_max unit (B | KB | MB | GB | TB) #REQUIRED>
]>
```

tina_restore

> **Important**: If you want to restore the data of an agent which does not have the same Tina version as the server, run the `tina_restore` command on the agent. You cannot restore from the server.

The `tina_restore` command allows you to restore the contents of a backup or archive folder through the command line.

If a name conflict arises during a restoration, former files are renamed by default, unless specified otherwise with the `[-mode]` option.

> **Note**: Any user can restore data with `tina_restore` depending on its rights and its user profile.

> **Note**: You can restore data in a named pipe with the `tina_restore` command. Specify the named pipe in the `-path_dest path` parameter.

For more information concerning user rights, see the "Users and Access Rights" topic of the Tina Administration Documentation.

Syntax

```
tina_restore -path_folder path1 [path2]...|-file_list file_path [-file_list_
dest file_path] [-behavior_on_missing_file continue|continue_with_error_
code|abort] [-ex_path_folder path1 [path2]...]|[-ex_file_list file_path] [-
folder folder] [-path_dest path] [-folder_dest folder] [-drive drive] [-
strat A|B|C|D] [-mode restore_mode] [-date yyyymmddhhmm | yyyymmddhhmmss] [-
depth valueUNIT] [-no_rewind] [-silent] [-offline_mode offline_mode] [-all_
vers] [-user user] [-password password] [-v_jobid] [-error_
mode continue|abort|replace_after_reboot]
[-test_mode test_mode] [-do_not_restore_security_attributes] [-secure_
interactive_password]|[-secure_session_password_id] [-xml_restore_
parameters_file] [-file_mode_interactive_user] [-restore_chronological_
order] [-catalog catalog] [-identity user:passwd] [-help]
```

-path_folder path1 [path2]...	Specifies the absolute paths in the folder of objects (directories and/or files) to be restored (selection list). The syntax corresponds to the syntax of the operating system being used. On macOS platforms, the option `-path_folder` is case sensitive. To list the contents of a directory, you must provide the exact case of the directory path even if the directory is located in a non-case sensitive file system.
[-file_list file_path]	Specifies a file containing the absolute paths (one path per line) of all objects to be restored (selection list). This file accepts that lines remain empty between each absolute path specified. The absolute paths of all objects to be restored must be UTF-8 coded without BOM. You can use Notepad++ and specify Encode/Convert in UTF-8 (without BOM). This parameter is very useful when the number of objects to be restored is high. The Windows syntax is: `C:\my_directory\my_file` The Unix syntax is: `/my_directory/my_file`
[-file_list_dest file_path]	This option can only be used with `-file_list`. It specifies a file containing the absolute path and name of the object restore destination. The list of objects must correspond to the list specified with `-file_list`, i. e., one path per line, and the same number of entries in both files.

[-behavior_on_ missing_file continue|continue_ with_error_ code|abort]	This sub-option can only be used with `-file_list` when the sub-option `-file_list_dest` is used. It specifies the behavior of `tina_ restore` if a file in the file list does not exist at the indicated location. The default behavior is `continue`, where the process ignores missing files and returns the value `0 (OK)`. The `continue_with_error_code` option also skips missing files, but returns the value `18 (FileNotFound)`. Finally, the `abort` option ends the process and returns the value `40 (Abort)`.
[-ex_path_folder path1 [path2]...]	
	Specifies the absolute paths in the folder of objects (directories and/or files) not to be restored (exclusion list). The syntax of the parameters corresponds to the Unix syntax (ex: `/archive1/bin`).
[-ex_file_list file_ path]	Specifies a file containing the absolute paths (one path per line) of all objetcs not to be restored (exclusion list). The parameter is very useful when the number of objects not to be restored is high.
[-folder folder]	Specifies the source backup or archive folder. If this option is not specified, the local machine folder is selected. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]`.
[-path_dest path]	Specifies the absolute path of the destination directory (or possibly of the named pipe used to restore objects) on the host. This parameter is mandatory when you restore objects from an archive folder and optional when you restore objects from a backup folder. If the option is not specified in the case of a backup folder, objects are restored in the original directory. The syntax corresponds to that used by the operating system of the local machine (ex: `/usr/tina` for Unix, `c:\users\tina` for Windows).

[-folder_dest folder]	Specifies the destination backup or archive folder. For a backup folder, if the destination folder is not specified, the default behavior is as follows: • If the source folder is an application, the destination folder is the same as the source folder. • If the source folder is a host or a Filesystem application, the destination folder is the machine where the `tina_restore` command was launched. For an archive folder, if the destination is not specified, the local machine folder is selected.
[-drive drive]	Specifies the drive of the local machine. This parameter applies to local archive folders only and is mandatory. Do not use it for central archive folders. For Unix, this parameter represents the drive special file: `/dev/xxxx` For Windows, it represents the cxbytzla drive address.
[-strat A|B|C|D]	Specifies the restoration of objects backed up by the specified backup strategy (`A`, `B`, `C` or `D`). This parameter concerns backup folders and is optional.
[-mode rename|rename_restored|abort|replace|ignore|ignore_same|ignore_recent]	
	Specifies the objects restoration mode. • `rename`: Renames the files that already exist on disk. A suffix is added at the end of the filename (ex: `file.doc` is renamed into `file.doc_save1`). • `rename_restored`: Renames the restored file. A suffix is added to the name of the restored file (ex: `file.doc` is renamed into `file.doc_rest1`). The file already present on the disk keeps its original name. • `abort`: Stops the restore if the object exists already. • `replace`: Deletes the object if it exists already. `replace` is the only available mode to restore from an application backup folder. • `ignore`: Keeps the disk object if it exists already. • `ignore_same`: Keeps the disk object if it exists already and is identical. • `ignore_recent`: Keeps the disk object if it already exists and is more recent.
[-date yyyymmddhhmm]	Specifies the visualization date in the past (year, month, day, hour and minute). If the option is not specified, the latest version is restored.

[-depth valueUNIT]	Specifies a navigation period in the past to select files to restore. UNIT can be S (seconds), m (minutes), H (hours), D (days), W(weeks), M (months) or Y(years). This option is required if you are restoring a missing file, otherwise Tina will not be able to find the file to restore.
[-no_rewind]	Specifies that the media used for the restore must not be rewinded at the end of the current restore session.
[-silent]	Indicates that the command must be executed silently.
[-offline_mode offline_mode]	Specifies the operation to perform if the cartridges containing the data to restore is offlline: • `ignore`: Ignores the objects which data is not available • `request`: Requests the cartridge from the cartridge operator. • `abort`: Stops the restore. `-offline_mode` can only be used with libraries, not with manual drives.
[-all_vers]	Forces the restore of all the versions of an object according to the date specified.
[-user user]	Specifies the user used to connect to the destination platform. In order to avoid having to type a User/Password at this point, you may set these variables in your environment prior to launching the restore: TINA_USER_REST TINA_PASSWORD_REST Use the command "set" on Windows and "setenv" on Unix to assign a value to theses variables. You must choose a user with sufficient permissions to connect to the destination platform and perform the restore.
[-password password]	Specifies the pasword associated to the user.
[-v_jobid]	Displays the job ID in CSV format once the restore job is completed.
[-error_mode continue|abort|replace_after_reboot]	

Specifies the behavior to adopt when encountering an error. This option can only be used if the `-mode` option is set to: rename, ignore_same, or ignore_recent. If this parameter is not specified, the default behavior is "`continue`".

- `abort`: Stops the restore.
- `continue`: Skip the file causing the error and continue restoring.
- replace_after_reboot (Windows only): This value applies to errors occurring when trying to restore a file aleady in use. If you select this option, the file is restored but not taken into account until the machine is rebooted.

[-test_mode standard|server_only]

Specifies that you want to run a restore test instead of a real restore. The restore test performs all restore operations except for the actual writing of data on disk.

- standard: Runs a full restore test.
- server_only: Runs a partial restore test. Backed up data is only sent to the **Tina** Server and not to the agent. Permissions are not checked.

This mode is useless when backing up data without using cache on server.

[-do_not_restore_security_attributes]

Specifies to not restore security attributes.

[-secure_interactive_password]

Enables the interactive mode to ask certificate passwords during the restore of secured data.

This option must not be used if option [-secure_session_password_id] is used.

[-secure_session_password_id]

Specifies the names and the passwords of the certificates needed during the restore of secured data. The contents of this option is a coded ID that is created using the `tina_scm_control>create password session` command. See tina_scm_control for details.

This option must not be used if option [-secure_interactive_password] is used.

[-xml_restore_parameters_file]

Path to the xml file containing parameters for specific applications.

[-file_mode_ interactive_user]	Specifies to ask interactively user credentials for file mode restore. It can be used only if option -xml_restore_parameters_file is used.
[-restore_ chronological_order]	Specifies to restore objects in the same order that they were backed up.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-identity user:passwd]	See -identity. If you are performing a cross restore of a Filesystem application on a windows platform, this option is mandatory.

Example. `tina_restore` use

Example 1: In this example, data located in the `/bin` directory and backed up with strategy `B` in the backup folder of the `asterix` host is restored in the `/usr` destination directory.

```
tina_restore -path_folder /bin -folder host.asterix -strat B -path_dest /usr
```

Example 2: In this example, the missing file `myfile` located in /DIR1/DIR2 that disappeared within the last three days is restored in its original location.

```
tina_restore -path_folder /DIR1/DIR2/myfile -depth 3D
```

Example 3: In this example, all the archive logs of the Oracle database `DBORA` located in the folder `appl."ora71"` are recovered at their original location.

```
tina_restore -path_folder /DBORA/_ARCHIVE_LOGS
-folder appl.ora71
```

Example 5: This command performs a full restore test. It checks whether the data located in the `/bin` directory and backed up with strategy `B` in the backup folder of the `asterix` host would be successfully restored in the `/usr` destination directory.

```
tina_restore -path_folder /bin -folder host.asterix -strat B -path_dest /usr
-test_mode standard
```

Example 6: These commands perform a restore from an archive folder.
The first command restores the entire archived folder.
The second command restores a specific file (here it is `event.xls)` in the folder.
Both commands restore from a specific folder which is the archive name, located in a specific path (path_folder).
The restored file(s) are sent to a specific destination specified by path_dest.
`X:\temp\somefolder` specifies some drive and destination for the restored file(s).

First command:

```
tina_restore -folder test -path_folder /ar1/ar11/ -path_dest
x:\temp\somefolder -event_to_console
```

Second command:

```
tina_restore -folder test -path_folder /ar1/ar11/event.xls -path_dest
x:\temp\somefolder -event_to_console
```

tina_sched

The `tina_sched` binary opens Task Viewer.

Syntax

```
tina_sched [-catalog catalog] [-historic_hours hours]
[-scheduled_hours hours] [-estimation number] [-language language]
[-help]
```

[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs
[-historic_ hours hours]	Specifies the historical time phase in the backup schedule (past). By default, the time phase is set to 48 hours before the present.
[-scheduled_ hours hours]	Specifies the scheduled time phase in the backup schedule (future). By default, the time phase is set to 24 hours after the present.
[-estimation number]	Specifies the number of backups used to calculate the average duration of scheduled backups. By default, the duration estimation of scheduled backups is calculated on the latest backup performed. This option is superceded in version 4.1 because once it is set in Task Viewer it is saved and does not need to be set in the command line. However it is retained for reasons of retro-compatibility.

Example. Modifying Parameters on the Command Line

In this example, Task Viewer runs in English.

The backup schedule extends over five days with a view of the backups from the last two days and for the three coming days.

The scheduled backup durations are calculated from the last five performed backups.

```
tina_sched -historic_hours 48 -scheduled_hours 72 -estimation 5
```

See the Task Viewer topic of the Tina Administration Documentation for additional information.

tina_scm

The `tina_scm` binary opens Security & Compliance Manager.

Syntax

```
tina_scm [-catalog catalog] [-language language][-identity user:passwd]
```

[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs

Example. Launching Security & Compliance Manager on the Command Line

```
tina_scm -catalog samba
```

See the Atempo-Tina Security & Compliance Manager Documentation for additional information.

tina_scm_control

The `tina_scm_control` command allows users to administer certificates, security templates and rules in command mode.

> **Note**: Only users with the appropriate Tina Security permissions can execute this command. See the Atempo-Tina Security & Compliance Manager Documentation for details.

Syntax

```
tina_scm_control [-catalog catalog]
```

[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs

- To quit the interactive mode, type `q` at the `tina_scm_control` prompt.
- To cancel an operation, enter `c` at the `confirm` prompt.

This table summarizes the operations that can be performed on security objects, depending on the type of object you are administering.

For detailed information concerning each security object, see the Atempo-Tina Security & Compliance Manager Documentation.

Object Name	Operations	Command	Shortcut	See
Certificate Repository	Change	`change repository`	ch re	Changing the Certificate Repository
	View	`view repository`	v re	Viewing the Certificate Repository

Object Name	Operations	Command	Shortcut	See
Certificate Authority	Create	`create authority`	cr a	Creating a Certificate Authority
Certificate	Create	`create certificate`	cr c	Creating a certificate
	Install	install certificate	in c	Installing a certificate
	Uninstall	uninstall certificate	u c	Uninstalling a certificate
	Import	import certificate	`im c`	Importing a certificate
	Delete	delete certificate	d c	Deleting a certificate
	View	view certificate	v c	Viewing a certificate
	List	list certificates	l c	Listing certificates
	Copy to other catalogs	push certificate	p c	Copying a certificate to other catalogs
	Export	export certificate	e c	Exporting a certificate
Security Template	Create	create security template	c s	Creating a Security template
	Import	import security template	i s	Importing a security template
	Delete	delete security template	d s	Deleting a security template
	View	view security template	v s	Viewing a security template
	List	list security templates	l s	Listing security templates
	Copy to other catalogs	push security template	p s	Copying security templates to other catalogs
	Export	export security template	e s	Exporting security templates

Object Name	Operations	Command	Shortcut	See
Rule	Create	create rule	cr ru	Creating a rule
	Delete	delete rule	d r	Deleting a rule
	View	view rule	v r	Viewing a rule
	List	list rules	l r	Listing rules
	Copy to other catalogs	push rule	p r	Copying rules to other catalogs
	Export	export rule	e r	Exporting rules
Password Session	Create	create password session	c p	Creating a Password Session

Changing the Certificate Repository

The certificate files generated at certificate creation are stored in the Certificate Repository. The path of this repository can be modified.

Example. Changing the certificate repository

```
tina_scm_control>change repository
New certificate repository>(d:\Atempo\Certs) c:\Certs
```

Viewing the Certificate Repository

You can view the path of the Certificate Repository, as well as the list of the certificate files contained in the repository.

Example. Viewing the certificate repository

```
tina_scm_control>view repository
Certificate repository path: d:\Certs
Name NED MED
Atempo *
```

Creating a Certificate Authority

To create a Certificate Authority, you need to provide these elements:

- Catalog name (only if you have more than one catalog)
- A parent Certificate Authority name, except if the Certificate Authority is self-signed
- A start date and an expiration date
- A password for the Certificate Authority
- The path of a file where the certificate will be generated.

Example. Creating the Certificate Authority

```
tina_scm_control>create authority
Name of Certificate Authority>Atempo
Parent certificate name>
Start Date (mm/dd/yy)>(12/05/2006)
```

```
End Date (mm/dd/yy)>(12/05/2007)
Certificate password>
Verifying password>
Comment>Certificate Authority for securing our sensitive data
Absolute path of the output certificate file>d:\atempo\secure\CertAut.cert
Install certificate locally once created y/n>(n)
Confirm y/n>(y)
```

Performing Certificate Operations

1. Creating a certificate

   To create a certificate, you need to provide these elements:

   – Certificate type: media or network encryption
   – Certificate name
   – Parent certificate name and password
   – Start and expiration dates of the certificate
   – A password for the certificate
   – The path of the output file where the certificate will be generated.

   > **Note**: Install the certificate locally if you want the certificate to secure backup and restore operations for the local host.

   Example. Creating a certificate

```
tina_scm_control>create certificate
Create type
1)certificate for media encryption
2)certificate for network encryption
(1 or 2)>(1) 1
Certificate name>Finance
Parent certificate name>atempo
Parent certificate password>
Start date (mm/dd/yyyy must be between 12/05/2006 and 12/05/2007)>
(12/05/2006)
Expiration date (mm/dd/yyyy must be between 12/05/2006 and
12/05/2007)>12/05/2007
Certificate password>
Verifying password>
Comment>
Absolute path of the output certificate file>d:\Certs\finance.cert
Install certificate locally once created y/n>y
Confirm y/n/c>(y) y

Object creation done
```

2. Installing a certificate

   A certificate must be installed on a local machine if you want to use it to secure backup and restore operations for the local host.

   To install a certificate, you need to provide these elements:

- Absolute path of the certificate file (located in the certificate repository)
- Certificate password

Example. Installing a certificate

```
tina_scm_control>install certificate
Absolute path of the certificate file>D:\Atempo\Certs\Engineering.cert
Certificate password>
Change certificate password y/n>(y) y
New certificate password>
Verifying password>
Confirm y/n/c>(y) y
```

3. Uninstalling a certificate

   A certificate must be uninstalled from the local machine if you no longer want to use it to secure backup and restore operations for the local host.

   To uninstall a certificate, you need to provide these elements:

   - Name of the certificate

   Example. Uninstalling a certificate

```
tina_scm_control>uninstall certificate
Certificate name>Engineering
Confirm y/n/c>(y) y
```

4. Importing a certificate

   Import certificates if you want to add to the Tina certificate hierarchy some certificates that were created by another application. To import a certificate, you need to provide these elements:

   - File format of the certificate (either PEM, or PKCS12)
   - Absolute path of the certificate file
   - Absolute path of the private key file (only if the certificate file is in the PKCS12 format)
   - Certificate type: media or network encryption
   - Certificate password

   > **Note**: If several related external certificates are imported, the import must be done following their hierarchical links, beginning with the highest certificate.

   Example. Importing a certificate

```
tina_scm_control>import certificate
File format
1)PEM
2)PKCS12
(1 or 2)>(1) 1
Absolute path of the certificate file>c:\Temp\Import\import_cert.crt
Absolute path of the private key file>c:\Temp\Import\import_cert
Import type
1)Certificate for media encryption
2)Certificate for network encryption
(1, or 2)>(1) 1
```

```
Certificate password>
Change certificate password y/n>(y) y
New certificate password>
Verifying password>
Comment>
Absolute path of the output certificate file>d:\Certs\HR.cert
Install certificate locally once created y/n>n
Confirm y/n/c>(y) y

Certificate "HR.cert" has been created
```

5. Deleting a certificate

   You can only delete a Certificate Authority if the certificate is present on the local host.

   To delete a certificate, you need to provide this information:

   – Certificate name

   > **Note**: When you delete a certificate, it is only deleted from the catalog, unless you specify that you want to erase it from the disk also.

   Example. Deleting a certificate

```
tina_scm_control>delete certificate
Certificate name>mycert
Erase local certificates y/n>(n) y
Confirm y/n/c>(y) y
Deleting a certificate from catalog is not reversible.
It will delete all child certificates and will no longer allow backup or
archiving using those certificates.
Do you want to proceed? y/n>y
Object deletion done
```

6. Viewing a certificate

   This function allows you to view information concerning a single certificate.

   To view a certificate, you need to provide this information:

   – Certificate name

   Example. Viewing a certificate

```
tina_scm_control>view certificate
Certificate name>Validation
Name : Validation
Identity : 9d8a955d-78ed5751-3f8b2a8c-80d7be36-13348e82
Creation time : unknown
Status : Active
Start date : Wed Apr 05 02:00:00 2006
End date : Fri Jul 28 02:00:00 2007
Number of use : 2
Comment :
tina_scm_control>
```

7. Listing certificates

This function allows you to view the list of all the certificates present in the catalog and on the local machine.

Example. Listing certificates

```
tina_scm_control>list certificate

Name Catalog NED MED Status Us
Finance * * Active 0
HR * * Active 2
Mycert * * Revoked 0
tina_scm_control>
```

8. Copying a certificate to other catalogs

   To copy a certificate to another catalog, you need to provide this information:

   – Certificate name
   – Catalog name(s)

   Example. Copying a certificate to other catalogs

```
tina_scm_control>push certificate
Certificate name>engineering
Select catalogs
1)hermes
Catalog numbers separated by ','>1

Selected catalogs: hermes
Confirm y/n/c>(y)

hermes: done
Operation on other catalogs done

Object push done
```

9. Exporting a certificate

   To export a certificate, you need to provide this information:

   – Certificate name
   – File format of the certificate (either PEM, or PKCS12)
   – Absolute path of the file where the certificate will be exported
   – Absolute path of the private key file (only if the certificate file is in the PKCS12 format)
   – Certificate password (for private key export)

   Example. Exporting a certificate

```
tina_scm_control>export certificate
Certificate name>mycert2
File format
1)PEM
2)PKCS12
(1 or 2)>(1) 2
Absolute path of the certificate file>f:\tmp\export_mycert2
Absolute path of the private key file>f:\tmp\export_mycert2.priv
```

```
Certificate password>
Change certificate password y/n>(y)
New certificate password
Verifying password>
Confirm y/n/c>(y)
tina_scm_control>

Object export done
```

Performing Security Template Operations

1. Creating a Security template
   To create a security template, you need to provide these elements:
   - Security template name
   - Reference security template names, if any. If you specify one or several reference templates, only the parameters that are common to all the reference templates will be available
   - Media encryption algorithms, hash names, and minimum key length
   - Network encryption algorithms, hash names, and minimum key length
   - Minimum and maximum retention period
   - Signing certificate name and password
   - Start and expiration dates

   Example. Creating a security template

```
tina_scm_control>c s
Security template name>Atempo
Security template names to inherit from>
Minimum encryption key length>128
Media encryption algorithms
Select values number separated by ','
1)aes
2)3des
3)blowfish
4)cast
(1, 2, 3, or 4)>(1) 1,2,3

Selected values: aes, 3des, blowfish
Media encryption hash names
Select values number separated by ','
1)sha1
2)sha224
3)sha256
4)sha384
(1, 2, 3, or 4)>(1) 2, 3, 4

Selected values: sha224, sha256, sha384
Minimum encryption key length>128
Network encryption algorithms
```

```
Select values number separated by ','
1)aes
2)3des
3)blowfish
4)cast
(1, 2, 3, or 4)>(1) 1,2,3

Selected values: aes, 3des, blowfish
Network encryption hash names
Select values number separated by ','
1)sha1
2)sha224
3)sha256
4)sha384
(1, 2, 3, or 4)>(1) 2,3,4

Selected values: sha224, sha256, sha384
Minimum retention (must be between 0 and infinite)>(32W)
Maximum retention (must be between 0 and infinite)>(infinite)
Start date (mm/dd/yyyy must be between 03/24/2006 and 03/24/2010)>
(03/24/2006)
Expiration date (mm/dd/yyyy must be between 03/24/2006 and 03/24/2010)>
(03/24/2010)
Signing certificate name>Atempo
Signing certificate password>
Comment>comm
Confirm y/n/c>(y) y
Extend operation to other catalogs y/n>(n) n
tina_scm_control>

Object creation done
```

2. Importing a security template

   To import a security template, you need to provide these elements:

   – Security template name and location

   Example. Importing a security template

```
tina_scm_control>import security template
Security template file path>d:\tmp_a_vider\main_template.txt
Security template name>imported_security_template
Confirm y/n/c>(y) y
tina_scm_control>tina_scm_control>
```

3. Deleting a security template

   To delete a security template, you need to provide this information:

   – Security template name

   Example. Deleting a security template

```
tina_scm_control>delete security template
```

```
Security template name>Atempo
Confirm y/n/c>(y) y
Extend operation to other catalogs y/n>(n) n
```

4. Viewing a security template

   This function allows you to view information concerning a security template.

   To view a security template, you need to provide this information:

   – Security template name

   Example. Viewing a security template

```
tina_scm_control>view security
Security template name>new_security_temp
Name : new_security_temp
Network encryption algorithm : aes, des, 3des
Minimum key length for network encryption : 128
Network encryption hash names : sha384, sha512, whirlpool
Media encryption algorithm : aes, des, 3des
Minimum key length for media encryption : 128
Media encryption hash names : sha384, sha512, whirlpool
Minimum retention : 32W
Maximum retention : infinite
Start date : Thu Mar 24 01:00:00 2005
End date : Wed Mar 24 01:00:00 2010
Certificate : : engineering
tina_scm_control>
```

5. Listing security templates

   This function allows you to view the list of all the security templates.

   This information is provided:

   – Security template name
   – Network encryption algorithms
   – Network encryption hash names
   – File encryption algorithms
   – File encryption hash names
   – Minimum retention
   – Maximum retention
   – Start date
   – End date

   > **Note**: If several algorithms are present within the same category, only one algorithm is displayed followed by "...".

   Example. Listing security templates

```
tina_scm_control>list security template

new_security_temp aes, ... sha384, ... aes, ... sha384, ... 32W
infinite 03/24/2005 03/24/2010
imported_security_template aes, ... sha1, ... aes, ... sha1, ... 32W
infinite 03/24/2005 03/24/2010
```

```
newtemp1 aes sha224 aes sha1 520W
572W 01/01/2005 12/31/2006
lastimportedtemp aes, ... sha1, ... aes, ... sha1, ... 10D
infinite 03/11/2005 03/11/2006
```

6. Copying security templates to other catalogs
   To copy a security template to another catalog, the signing certificate must be already present in the catalog. You also need to provide this information:
   – Security template name
   – Catalog name(s)

   Example. Copying a certificate to other catalogs

```
tina_scm_control>push security template
Security template name>atempo
Select catalogs
1)hermes
Catalog numbers separated by ','>1

Selected catalogs: hermes
Confirm y/n/c>(y)

hermes: done
Operation on other catalogs done

Object push done
```

7. Exporting security templates
   This function allows you to export a security templates to a file. To export a template, you need to provide these elements:
   – Security template name
   – Absolute path of the file where the template is exported

   Example. Exporting a security template

```
tina_scm_control>export security template
Security template name>exported_security_template
Security template file path>d:\tmp\exp_template.tpl
Confirm y/n/c>(y) y
```

Performing Rule Operations

1. Creating a rule
   A rule must have a unique name in the catalog.
   To create a rule, you need to provide these elements:
   – Rule name
   – Reference security template names
   – File encryption algorithms and hash names
   – Network encryption algorithms and hash names
   – Retention
   – Start and expiration dates

– Signing certificate name and password

Example. Creating a rule

```
tina_scm_control>create rule
Rule name>Internal
Names of the security templates to inherit from>atempo
Media encryption algorithms
1)aes
2)des
3)3des
(1, 2 or 3)>(1) 1

Selected values: aes

Media encryption hash names
1)sha384
2)sha512
3)whirlpool
(1, 2 or 3)>(1) 2

Selected values: sha512

Network encryption algorithms
1)aes
2)des
3)3des
(1, 2 or 3)>(1) 3

Selected values: 3des

Network encryption hash names
1)sha384
2)sha512
3)whirlpool
(1, 2 or 3)>(1) 2

Selected values: sha512

Retention (must be between 0 and infinite)>(0) 1Y
Volume triggering key change (MB)>(0) 100
Signing certificate name>new_main_cert
Signing certificate password>
Start date (mm/dd/yyyy must be between 03/24/2005 and 03/24/2010)>
(03/24/2005)
Expiration date (mm/dd/yyyy must be between 03/24/2005 and 03/24/2010)>
(03/24/2010)
Comment>comment
Confirm y/n/c>(y) y
Extend operation to other catalogs y/n>(n) n
```

```
Object creation done
```

2. Deleting a rule

   To delete a rule, you need to provide these elements:

   – Rule name

   Example. Deleting a rule

```
tina_scm_control>delete rule
Rule name>newrule
Confirm y/n/c>(y) y
Extend operation to other catalogs y/n>(n) n
tina_scm_control>
```

3. Viewing a rule

   To view a rule, you need to provide these elements:

   – Rule name

   Example. Viewing a rule

```
tina_scm_control>view rule
Rule name>Internal
Name : Internal
Network encryption algorithm : 3des
Network encryption key length : 24
Network encryption hash names : sha512
Media encryption algorithm : aes
Media encryption key length : 24
Media encryption hash names : sha512
Minimum retention : 34W
Start date : Thu Mar 24 01:00:00 2005
End date : Wed Mar 24 01:00:00 2010
Certificate : Engineering
Comment :
Volume triggering key change : 100MB
tina_scm_control>
```

4. Listing rules

   This function allows you to view the list of all the rules in the catalog.

   This information is provided:

   – Rule name
   – Network encryption algorithm
   – Network encryption key length
   – Network encryption hash name
   – Media encryption algorithm
   – Media encryption key length
   – Media encryption hash name
   – Minimum retention
   – Start date

– End date

Example. Listing security templates

```
tina_scm_control>l r

Internal 3des 24 sha512 aes 24 sha512 1 years 12/24/2005
03/24/2010
newrule2 aes 16 sha224 aes 16 sha1 1 years 12/12/2005
12/31/2006
tina_scm_control>
```

5. Copying rules to other catalogs

   To copy a security rule to another catalog, the signing certificate must be already present in the catalog. You also need to provide this information:

   – Security rule name
   – Catalog name(s)

   Example. Copying a certificate to other catalogs

```
tina_scm_control>push rule
Security template name>Internal
Select catalogs
1)hermes
Catalog numbers separated by ','>1

Selected catalogs: hermes
Confirm y/n/c>(y)

hermes: done
Operation on other catalogs done
```

6. Exporting rules

   This function allows you to export a security rule to a file. To export a rule, you need to provide these elements:

   – Security rule name
   – Absolute path of the file where the rule is exported

   Example. Exporting a rule

```
tina_scm_control>export rule
Rule name>exported_rule
Rule file path>d:\tmp\exp_template.rl
Confirm y/n/c>(y) y
Object export done
```

Creating a Password Session

The goal of a password session is to provide all the necessary certificate information to restore secured data. To create a password session, you need to provide these elements:

- Certificate name and password (for as many certificates as needed)

- Validity time

Example. Creating a password session

```
tina_scm_control>create password session
Certificate name>mycert1
Certificate password>
Add another password y/n>(y)
Certificate name>mycert2
Certificate password>
Add another password y/n>(y)n
Session validity time (valueUNIT, S, m, H, D, W, M, Y)>10m
Alternative directory for restore certificates/>d:\Certs

mycert1
mycert2

Session Identity
44~uGsLwQAAAAAACAAAAAgbbh11.8sCcBwta6N6Dr5H0r2m3BLHa6B96yNdutwMUsAA
tina_scm_control>
```

You can now use that session identity to restore secured data using the `tina_restore` command with the `-secure_session_password_id`. See tina_restore for details.

tina_sendmail

The `tina_sendmail` command allows you to send email in command mode.

> **Note**: Any user can use this command.

Syntax

```
tina_sendmail -server smtp_server -to email_address_1 [email_address_2]...|-
tofile file [-cc email_address_1 [email_address_2]...] [-from email_address]
[-subject subject] [-body body_text]|[-body_file body_file] [-
attach attachment_list1 [attachment_list2]...] [-charset charset] [-port
port] [-user username] [-pass password] [-help]
```

-server smtp_server	Specifies the name of the SMTP server to be used to send the email.
-to email_address_1 [email_address_2]	Specifies the recipient(s) address(es).
-tofile file	Specifies the file containing the address list.
[-cc email_address_1 [email_address_2]...]	Specifies the address(es) that should receive a copy of the email.

[-from email_address]	Specifies the email address of the sender.
[-subject subject]	Specifies the subject of the email.
[-body body_text]	Specifies the body of the email.
[-body_file body_file]	Specifies the path of the file containing the body of the email.
[-attach attachment_ list1 [attachment_ list2]...]	Specifies the path of the file(s) to be attached to the email.
[-charset charset]	Specifies the charset encoding, such as UTF-8 or ISO-8859-1, to be used for the subject and body of the email. The default is US-ASCII.
[-port]	Specifies the SMTP server port (default is 25).
[-user]	If the smtp server requires a password, specifies the user name.
[-pass]	If the smtp server requires a password, specifies the password.

tina_shell

The `tina_shell` command allows you to use the `tina_shell` language, whether in interactive mode or with scripts files.

For more information on `tina_shell`, refer to the Atempo-Tina Shell Scripting Documentation.

Syntax

```
tina_shell [-file script_file] [-catalog catalog] [-identity user:password]
[-help]
```

no parameter	Opens the `tina_shell` prompt interactive mode.
[-file script_file]	Specifies a file containing a sequence of `tina_shell` commands.
[-catalog catalog]	Specifies the working catalog. This parameter is mandatory if several catalogs are involved.
[-identity user:passwd]	See -identity.

tina_sidf

The `tina_sidf` command allows you to list or extract the contents of media written in the sidf format without the use of the catalog. This command can thus be used to recover some data, for instance a catalog backup, even if the catalog is not available or if you are unable to restore it.

The cartridge containing the files to read or to extract is automatically rewound in order to position anywhere on the tape.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.
> This user is authorized to read media contents and can specify a list of tape files (including their paths).

The command must be entered on the host to which the drive is connected. When executing this command, no access to the catalog, nor connection to the server is involved.

If the drive you want to use is not connected to the local host, use the `[-host]` option to specify the remote host to which the drive is connected.

Since it does not require access to the catalog, the `tina_sidf` command can be used on a system where Tina is not installed. To ensure it works correctly in this case, you must:

- copy the `tina_sidf` binary in a `Bin` directory
- copy the `mess.fc` file in a `Conf` directory, created in the same place as the Bin directory
- set the `TINA_HOME` environment variable value to the directory containing the `Bin` and `Conf` directories.

Prerequisites

In order to use the `tina_sidf` command to restore data, the drives that are going to read the cartridges, must be configured to work with Tina.

See the Tina Administration Documentation for details on configuring drives automatically, or the Atempo-Tina Drivers Documentation for manual configuration information.

Syntax

```
tina_sidf [-type "dev_type"] [-list]|[-scan]|[-extract]
[-scan_nb_obj_to_list nb_objects] [-scan_skip_size size_MB] [-device device_
descriptor] [-skip n] [-range [device,skip,count] [...]] [-files file1
[file2]...] [-format sidf|raw] [-all] [-no_decode] [-raw_data] [-block_size
size] [-force_ask_type] [-crypt_password password] [-key key_file] [-host
host_name] [-catalog] [-event_to_console]
```

[-type "dev_type"]

Specifies the type of drive used to read cartridges.

`"dev_type"` must be between double quotes and can take these values:

"DAT"
"Magneto-Optical": if you use `tina_sidf` along with a magneto-optical drive, refer to Flipping Magneto-Optical disks.
"Exabyte 2GB"
"Exabyte 5GB"
"3480"
"Mag Tape 6250"
"Streamer QIC24"
"Streamer QIC150"
"CompactTape TK/TZ"
"Streamer QIC525"
"Exabyte 2GB-C"
"Exabyte 5GB-C"
"DAT-C"
"Disk Drive"
"Virtual Drive"
"DLT 2000"
"DLT 4000"

***(continued)*[-type "dev_type"]**	"Overland 3480" "Exabyte Mammoth" "DLT 7000" "Tandberg SLR32" "Tandberg SLR50" "IBM Magstar MP" "T9840" "IBM 3590" "Exabyte Mammoth 2" "AIT (35GB)" "Exabyte VXA-1 (ECRIX VXA)" "DLT 8000" "Raw File": tape file extracted from disk. "Tandberg SLR100" "AIT2 (50GB)" "LTO HP Ultrium 1" "LTO IBM Ultrium 1" "LTO Seagate Ultrium 1" "STK T9940" "SuperDLT 220" "EMC Tape Emulator" "DLT1" "Sony DTF2" "Quantum DX series" "AIT3 (100GB)" "Exabyte VXA-2" "SuperDLT 320" "LTO HP Ultrium 2"

***(continued)*[-type "dev_type"]**	"LTO IBM Ultrium 2" "VTL Disk Drive" "SAIT (500GB)" "SuperDLT 600" "Tanberg SLR140" "UDO" "DLT VS160" "LTO HP Ultrium 3" "LTO IBM Ultrium 3" "AIT4 (200GB)" "LTO TANDBERG LTO-2" "Fujitsu VTL Drive" "IBM 3592" "AITE Turbo" "AIT1 Turbo" "AIT2 Turbo" "LTO QUANTUM 3" "Exabyte VXA-320 (VXA-3)" "DLT-S4" "DLT-V4"

***(continued)*[-type "dev_type"]**	"LTO QUANTUM 2" "DVD-RAM" "DLT VS80" "T10000A" "AIT5 (400 GB)" "IBM Ultrium 4" "HP Ultrium 4" "IBM TS1120" "Null Disk Drive" "UDO2" "NearStor VTL Drive" "IBM TS1130" "TANDBERG LTO-3" "TANDBERG LTO-4" "HyperStream Server" "QUANTUM LTO4" "IBM Ultrium 5" "HP Ultrium 5" "QUANTUM LTO5" "IBM TS1140" "T10000B" "T10000C" "HP Ultrium 6" "IBM Ultrium 6" "QUANTUM LTO 6" "TANDBERG LTO-5" "TANDBERG LTO-6" "T10000D" "IBM TS1150"
[-list]	Displays the list of backed up files.
[-scan]	Allows to rapidly identify the contents of a cartridge: `-scan` displays the 10 first files of each tape file. This option can be used with the `-skip` option to specify on which tape file the scanning begins.
[-extract]	Extracts the backed up files. Files are restored in the current directory.
[-scan_nb_obj_to_list nb_objects]	Specifies the number of files to list before skipping to the next segment.
[-scan_skip_size size_MB]	Specifies the file size threshold (MB) to skip to the next segment.

[-device device_ descriptor] [-skip n]	Specifies the drive used and the location of the tape file. The device descriptor must specify a "no rewind", "variable block" device. The first file on the tape corresponds to the label and is numbered 0. **Examples.** Unix: `/dev/tape -skip 4` with 4 = 4th backup (5th tape file). Windows: `cxbytzla -skip 3` with 3 = 3rd backup (4th tape file). If you use the option `[-all]` along with this parameter, the specified number of the tape file is that from which all the tape files on the cartridge are listed or extracted. The device descriptor of a VTL Disk Drive is the absolute path of the cartridge in POSIX format. ex: Unix: `/bck/DiskDrives/catalog/catalog_vls/full00041` Windows: `/g/bck/DiskDrives/catalog/catalog_vls/full00041`
[-range [device, skip,count] [...]]	Specifies the range(s) of tape files to list or extract. `device` represents the device descriptor. `skip` represents the positionning on the tape and `count` represents the number of tape files to list or extract. If `count` is not specified, reading continues until the end of the backup session or the end of the tape. This option is useful for backups spread out onto several tape files.
[-files file1 [file2]...]	Specifies the files to list or extract either explicitely or using pattern matching characters, for instance: `*.doc`. If the option is not specified, all the files located on the specified tape file are listed or extracted. On macOS platforms, the option `-files` is case sensitive. You must use the exact case of the file names to list or extract when using this option.
[-format sidf|raw]	Specifies the backup format of the files to list or extract. The default format is sidf.

[-all]	Lists or extracts all the tape files located on the cartridge.This option can only be used with a "no rewind" device.
	The option, used with the parameter `-list`, is very useful when you want to list all or parts of the cartridge contents. It avoids repeating the required operations (rewind, label reading, media location, etc.).
	To list the cartridge contents, specify on the command line:
	`-list -device /dev/tape -skip 1 -all`
	To list data from the 7th tape file (6th backup) until the end of the cartridge, specify on the command line:
	`-list -device /dev/tape -skip 6 -all`

[-no_decode]	Specifies that the files extracted will not be uncompressed nor decoded.
[-raw_data]	For windows data only: this option must imperatively be used if the data you are extracting is segmented accross several tape files. See Segmentation Issues for details.
[-block_size size]	Specifies the size of a block: 128 KB by default, or 64 KB. This option must be used if a file backed up with a Unix machine (128 KB) is restored on a Windows machine (64 KB).
[-force_ask_ type]	Specifies to ask the user to provide the drive type for each new tape file to list or extract. Usefull when several drive types were used for a single backup.
[-crypt_ password password]	Specifies a password for encryption/decryption.
[-key key_ file]	Specifies the key needed to decode.
[-host host_ name]	Specifies the name of the remote host where the drive is located (if you want to restore data with a drive that is not connected to the local machine). The option does not apply to VLS. If you use this option, you must specify a catalog name. See `[-catalog]`.
[-catalog]	This option must be used with the `[-host]` option and becomes mandatory. Specifies the name of the current catalog. This option is used for security reasons. The catalog can be unavailable or stopped. The catalog you specify must be defined in the `Conf/catalogs` file of both the local and remote hosts.
[-event_to_ console]	Sends event to the console.

```
Using tina_sidf to list contents
[root@semaphore Bin]# ./tina_sidf -list -type "Disk Drive" -device $TINA_
HOME/DiskDrives/ff/ff_vls/vls_0 -skip 1

Time Navigator Enterprise Edition Label:
Name : pool00001
Creation date: Mon Jan 3 16:26:26 2005
Description :
Label format: V5
Recycle date: Tue Jan 4 16:30:18 2005
Owner : pool
```

```
Listing tape file #1

Backup time is Tuesday 04 January 16:40:43

rwxrwx--- 0/0 symb Mon Mar 25 09:00:00 1996 /.boot_path -> The TINA_SDB_
BOOT_PATH environment variable is no longer used. Please delete it from your
application environment. Use TINA_SDB_MIRROR_PATH to perform a copy of boot
catalog
rwxr-x--- 0/0 dir Tue Jan 4 16:40:44 2005 / Information
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /..appl -> Time
Navigator Enterprise Edition Catalog 4.0.0.0.SP0, App 4.0.0, 1.8
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /..host -> Hostname
"semaphore", Dynamic "Linuxlibc62", Compiled Jan 3 2005
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.080 -> Server:
semaphore
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.085 -> Comment:
ff
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.090 -> First
creation time: Monday 03 January 16:15:42
[...]
rw-r--r-- 443/100 14602 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess.c
rw-r--r-- 443/100 394987 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess.h
rw-r--r-- 443/100 167255 Mon Mar 3 21:25:24 2003
/Configuration/Conf/Mess/txt_mess.h.new
rw-r--r-- 443/100 167255 Mon Mar 3 21:25:25 2003
/Configuration/Conf/Mess/txt_mess.h.old

Session volume is 9 MB (9 MB selected)
Session number of object is 213 (213 object selected)
```

Example. Using `tina_sidf` to scan a tape

```
[root@semaphore Bin]# ./tina_sidf -scan -type "Disk Drive" -device $TINA_
HOME/DiskDrives/ff/ff_vls/vls_0 -skip 1

Time Navigator Enterprise Edition Label:
Name : pool00001
Creation date: Mon Jan 3 16:26:26 2005
Description :
Label format: V5
Recycle date: Tue Jan 4 16:30:18 2005
Owner : pool
```

```
Scanning tape file #1

rwxrwx--- 0/0 symb Mon Mar 25 09:00:00 1996 /.boot_path -> The TINA_SDB_
BOOT_PATH environment variable is no longer used. Please delete it from your
application environment. Use TINA_SDB_MIRROR_PATH to perform a copy of boot
catalog
rwxr-x--- 0/0 dir Tue Jan 4 16:40:44 2005 / Information
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /..appl -> Time
Navigator Enterprise Edition Catalog 4.0.0.0.SP0, App 4.0.0, 1.8
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /..host -> Hostname
"semaphore", Dynamic "Linuxlibc62", Compiled Jan 3 2005
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.080 -> Server:
semaphore
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.085 -> Comment:
ff
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.090 -> First
creation time: Monday 03 January 16:15:42
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.092 -> Last
restore time: Monday 03 January 16:15:42
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.095 -> Last save
time: Tuesday 04 January 11:32:31
... Skip scaning
Segment #1: backup time is Tuesday 04 January 16:40:43



Scanning tape file #2

rw-r--r-- 443/100 394987 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess_new.h
rw-r--r-- 443/100 394987 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess_old.h
rwxr-xr-x 443/100 dir Mon Apr 26 16:25:16 2004 /Configuration/Conf/SAM
rwxr-xr-x 443/100 dir Tue Apr 27 11:02:22 2004 /Configuration/Conf/SAM/CVS
rw-r--r-- 443/100 349 Tue Apr 27 11:02:22 2004
/Configuration/Conf/SAM/CVS/Entries
rw-r--r-- 443/100 9 Wed Nov 5 18:20:16 2003
/Configuration/Conf/SAM/CVS/Repository
rw-r--r-- 443/100 55 Wed Nov 5 18:20:16 2003
/Configuration/Conf/SAM/CVS/Root
rw-r--r-- 443/100 4 Wed Nov 5 18:20:16 2003 /Configuration/Conf/SAM/CVS/Tag
rwxr-xr-x 443/100 18850 Fri Nov 7 17:40:01 2003
/Configuration/Conf/SAM/OJB.properties
... Skip scaning
Segment #2: backup time is Tuesday 04 January 16:40:43



Scanning tape file #3
```

```
rwxrwx--- 0/0 symb Mon Mar 25 09:00:00 1996 /.boot_path -> The TINA_SDB_
BOOT_PATH environment variable is no longer used. Please delete it from your
application environment. Use TINA_SDB_MIRROR_PATH to perform a copy of boot
catalog
rwxr-x--- 0/0 dir Tue Jan 4 16:58:02 2005 / Information
rwxr-x--- 0/0 symb Tue Jan 4 16:58:02 2005 / Information /..appl -> Time
Navigator Enterprise Edition Catalog 4.0.0.0.SP0, App 4.0.0, 1.8
rwxr-x--- 0/0 symb Tue Jan 4 16:58:02 2005 / Information /..host -> Hostname
"semaphore", Dynamic "Linuxlibc62", Compiled Jan 3 2005
rwxr-x--- 0/0 symb Tue Jan 4 16:58:02 2005 / Information /.080 -> Server:
semaphore
rwxr-x--- 0/0 symb Tue Jan 4 16:58:02 2005 / Information /.085 -> Comment:
ff
rwxr-x--- 0/0 symb Tue Jan 4 16:58:02 2005 / Information /.090 -> First
creation time: Monday 03 January 16:15:42
rwxr-x--- 0/0 symb Tue Jan 4 16:58:02 2005 / Information /.092 -> Last
restore time: Monday 03 January 16:15:42
rwxr-x--- 0/0 symb Tue Jan 4 16:58:02 2005 / Information /.095 -> Last save
time: Tuesday 04 January 16:41:34
... Skip scaning
Segment #3: backup time is Tuesday 04 January 16:58:01



Scanning tape file #4

rw-r--r-- 443/100 394987 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess_new.h
rw-r--r-- 443/100 394987 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess_old.h
rwxr-xr-x 443/100 dir Mon Apr 26 16:25:16 2004 /Configuration/Conf/SAM
rwxr-xr-x 443/100 dir Tue Apr 27 11:02:22 2004 /Configuration/Conf/SAM/CVS
rw-r--r-- 443/100 349 Tue Apr 27 11:02:22 2004
/Configuration/Conf/SAM/CVS/Entries
rw-r--r-- 443/100 9 Wed Nov 5 18:20:16 2003
/Configuration/Conf/SAM/CVS/Repository
rw-r--r-- 443/100 55 Wed Nov 5 18:20:16 2003
/Configuration/Conf/SAM/CVS/Root
rw-r--r-- 443/100 4 Wed Nov 5 18:20:16 2003 /Configuration/Conf/SAM/CVS/Tag
rwxr-xr-x 443/100 18850 Fri Nov 7 17:40:01 2003
/Configuration/Conf/SAM/OJB.properties
... Skip scaning
Segment #4: backup time is Tuesday 04 January 16:58:01



Scanning tape file #5
```

```
Scanning stopped because there is an error (end of media ?): TN_ERR_MAG_PHYS
```

Example. Using `tina_sidf` to extract data

```
[root@semaphore Bin]# ./tina_sidf -extract -type "Disk Drive" -device $TINA_
HOME/DiskDrives/ff/ff_vls/vls_0 -skip 1 -format raw

Time Navigator Enterprise Edition Label:
Name : pool00001
Creation date: Mon Jan 3 16:26:26 2005
Description :
Label format: V5
Recycle date: Tue Jan 4 16:30:18 2005
Owner : pool



Extracting tape file #1

Raw file path: /DT/local/lch/FF/Bin/cart_dump_pool00001_file001
```

Segmentation Issues

If the files you are trying to extract, list or scan are segmented across several tape files, you need to either use the `-interactive` mode (see Interactive Mode) or, follow special procedures to restore your data (see Non-Interactive Mode).

A tape file consists of several files containing data backed up by Tina and corresponding to a backup session. The maximum size of a tape file is 1 GB. If the size of a backup is superior to 1 GB, several tape files of 1 GB each are written.

When restoring segmented tape files containing data in the TiNa format, each segment receives this suffix: `.SEGMENT_XX`, where `XX` is a two digit number incremented for each restored tape file. Thus, you have to extract the different parts and concatenate them to restore the original file.

To identify the tape files you need to extract, use the `-scan` option that allows to rapidly identify the tape file contents.

Interactive Mode

Once you have identified the tape files to extract, launch the `tina_sidf -interactive` command. You may specify some parameters in the command line using the available `tina_sidf` options (semi-interactive mode), or you can simply use the fully interactive mode and provide all parameters as you go. In semi-interactive mode, you are asked to provide only the missing parameters.

```
Using tina_sidf in semi-interactive mode
[lch@semaphore Bin]# tina_sidf -list -device /DT/DiskDrives/fdl/fdl_
VLS/VLS000005 -type "Vtl Disk Drive" -skip 1 -interactive
```

```
Device type: Vtl Disk Drive (id=46)
Device: /DT/DiskDrives/fdl/fdl_VLS/VLS000005
Skip: 1
Format: 9
Block size: 128 KB
Action: 1

Listing segment #1


Time Navigator® Enterprise Edition Label:
Name : VLS000005
Creation date: Thu Feb 5 14:19:19 2004
Description :
Label format: V5
Recycle date: Thu Feb 5 14:19:19 2004
Owner : VLS

rwxrwxrwx 0/0 dir Thu Feb 5 14:59:51 2004 /DT
rwxr-xr-x 0/0 dir Mon Oct 20 12:16:21 2003 /DT/one
rw-r--r-- 443/100 65536 Thu Jul 18 19:36:21 2002 /DT/one/64k
rwxr-xr-x 443/100 12615680 Tue Nov 12 12:04:36 2002 /DT/one/DATA.SESSION.001

Enter device name (/dev/... on Unix, a full path for Disk Drive and Raw
File)
Device: (/DT/DiskDrives/fdl/fdl_VLS/VLS000005 ) /DT/DiskDrives/fdl/fdl_
VLS/VLS000006

Number of file mark to skip
Label is first file mark. No skip needed on device type "Raw File"
Skip: (1)


Device type: Disk Drive (id=46)
Device: /DT/DiskDrives/fdl/fdl_VLS/VLS000006
Skip: 1
Format: 9
Block size: 128 KB
Action: 1

Listing segment #1


Time Navigator® Enterprise Edition Label:
Name : VLS00006
Creation date: Thu Feb 5 14:19:27 2004
Description :
Label format: V5
Recycle date: Thu Feb 5 14:19:27 2004
Owner : VLS
```

```
rw-r--r-- 443/100 228882 Mon Jul 29 21:01:42 2002 /DT/one/ndmpd
rw-r--r-- 443/100 0 Tue Mar 12 12:49:30 2002 /DT/one/ndmpd2
rw-r--r-- 443/100 31 Fri Jul 5 18:42:00 2002 /DT/one/test.txt
rw-r--r-- 443/100 955471 Mon Jul 29 21:02:40 2002 /DT/one/tina.cod
rwxr-xr-x 443/100 0 Thu Feb 28 18:27:49 2002 /DT/one/tina_robot
rw-r--r-- 443/100 0 Thu Jan 1 02:00:00 1970 /DT/one/zero
rw-r--r-- 443/100 0 Fri Jan 1 02:00:00 2038 /DT/one/zero2
rwxrwxrwx 443/100 symb Thu Jul 18 17:07:04 2002 /DT/one/link ->
/DT/one/ndmpd
rw-r--r-- 443/100 fifo Thu Nov 28 20:30:30 2002 /DT/one/fifo
rwxr-xr-x 443/100 dir Mon Apr 8 19:30:52 2002 /DT/one/dir
rw-rw-rw- 0/0 741 Tue Apr 9 15:56:18 2002 /DT/one/dir/gmon.out
```

Example. Using `tina_sidf` in full interactive mode

```
[root@semaphore Bin]# ./tina_sidf -interactive
(0) DAT (1) Magneto-Optical
(2) Exabyte 2GB (3) Exabyte 5GB
(4) 3480 (5) Mag Tape 6250
(6) Streamer QIC24 (7) Streamer QIC150
(8) CompactTape TK/TZ (9) Streamer QIC525
(10) Exabyte 2GB-C (11) Exabyte 5GB-C
(12) DAT-C (13) Disk Drive
(14) Virtual Drive (15) DLT 2000
(16) DLT 4000 (17) Overland 3480
(18) Exabyte Mammoth (19) DLT 7000
(20) Tandberg SLR32 (21) Tandberg SLR50
(22) IBM Magstar MP (23) T9840
(24) IBM 3590 (25) Exabyte Mammoth 2
(26) AIT (35GB) (27) Exabyte VXA-1 (ECRIX VXA)
(28) DLT 8000 (29) Raw File
(30) Tandberg SLR100 (31) AIT2 (50GB)
(32) HP Ultrium (33) IBM Ultrium
(34) Seagate Ultrium (35) T9940
(36) SuperDLT 220 (37) EMC Tape Emulator
(38) DLT1 (39) Sony DTF2
(40) Quantum DX30 (41) AIT3 (100GB)
(42) Exabyte VXA-2 (43) SuperDLT 320
(44) HP Ultrium 2 (45) IBM Ultrium 2
(46) Vtl Disk Drive (47) SAIT (500GB)
(48) SuperDLT 600 (49) Tandberg SLR140
(50) UDO (51) DLT VS160
Device type: 13

Enter device name (/dev/... for Unix, cbtl for Windows, a full path for Disk
Drive and Raw File)
Not: If using a manual drive enter device name only when new media is
physically inserted
Device: /DT/local/lch/FF/DiskDrives/ff/ff_vls/vls_0
```

```
(1) list objects
(2) extract objects
(3) scan tape file (list the first objects of each tape file)
Select action: 1

Number of tape files to skip
Skip: (1)

Format: sidf is the default format
Format: sidf is the format used when not using the cache on server
Format: raw is used to extract raw data without interpreting the format
Format [sidf|raw]: (sidf) tina

Time Navigator Enterprise Edition Label:
Name : pool00001
Creation date: Mon Jan 3 16:26:26 2005
Description :
Label format: V5
Recycle date: Tue Jan 4 16:30:18 2005
Owner : pool



Listing tape file #1

Backup time is Tuesday 04 January 16:40:43

rwxrwx--- 0/0 symb Mon Mar 25 09:00:00 1996 /.boot_path -> The TINA_SDB_
BOOT_PATH environment variable is no longer used. Please delete it from your
application environment. Use TINA_SDB_MIRROR_PATH to perform a copy of boot
catalog
rwxr-x--- 0/0 dir Tue Jan 4 16:40:44 2005 / Information
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /..appl -> Time
Navigator Enterprise Edition Catalog 4.0.0.0.SP0, App 4.0.0, 1.8
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /..host -> Hostname
"semaphore", Dynamic "Linuxlibc62", Compiled Jan 3 2005
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.080 -> Server:
semaphore
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.085 -> Comment:
ff
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.090 -> First
creation time: Monday 03 January 16:15:42
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.092 -> Last
restore time: Monday 03 January 16:15:42
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.095 -> Last save
time: Tuesday 04 January 11:32:31
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.100 -> Last check
time: Tuesday 04 January 11:32:37
```

```
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.103 -> Number of
times the catalog was recreated/defragmented: 0
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.105 -> Catalog
size: 64 MB
rwxr-x--- 0/0 symb Tue Jan 4 16:40:44 2005 / Information /.110 -> Catalog
free space: 58 %
[...]
.#mess.fd.1.321.2.52.2.959
rwxr-xr-x 443/100 318 Wed Mar 24 15:19:11 2004
/Configuration/Conf/Mess/check_base
rwxr-xr-x 443/100 1649 Fri Jun 7 03:13:14 2002
/Configuration/Conf/Mess/check_mess
rwxr-xr-x 443/100 1759 Tue Mar 18 14:28:40 2003
/Configuration/Conf/Mess/genMessFc
rw-r--r-- 443/100 1574 Tue Mar 18 14:28:40 2003
/Configuration/Conf/Mess/genMessFc.bat
rw-r--r-- 443/100 361 Fri Jun 7 03:13:14 2002 /Configuration/Conf/Mess/get_
empty_file_list
rwxr-xr-x 443/100 1329 Tue Oct 8 00:29:08 2002 /Configuration/Conf/Mess/get_
full_file_list
rwxr-xr-x 443/100 5694 Tue Sep 21 10:59:16 2004
/Configuration/Conf/Mess/get_tree
rwxr-xr-x 443/100 1694 Fri Jun 7 03:13:14 2002
/Configuration/Conf/Mess/list_mess
rw-r--r-- 443/100 245096 Mon Mar 3 21:25:24 2003
/Configuration/Conf/Mess/lug_txt_mess.c.new
rw-r--r-- 443/100 388121 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/lug_txt_mess_new.c
rwxr-xr-x 443/100 402553 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/mess.fc
rw-r--r-- 443/100 661974 Mon Jan 3 10:10:15 2005
/Configuration/Conf/Mess/mess.fd
rwxr-xr-x 443/100 402553 Mon Jan 3 10:10:55 2005
/Configuration/Conf/Mess/mess_sidf.fc
rwxr-xr-x 443/100 402553 Mon Jan 3 10:10:55 2005
/Configuration/Conf/Mess/messodb.fc
rw-r--r-- 443/100 289 Mon Jan 3 10:10:53 2005 /Configuration/Conf/Mess/txt_
lang.c
rw-r--r-- 443/100 227 Mon Jan 3 10:10:53 2005 /Configuration/Conf/Mess/txt_
lang.h
rw-r--r-- 443/100 14602 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess.c
rw-r--r-- 443/100 394987 Mon Jan 3 10:10:53 2005
/Configuration/Conf/Mess/txt_mess.h
rw-r--r-- 443/100 167255 Mon Mar 3 21:25:24 2003
/Configuration/Conf/Mess/txt_mess.h.new
rw-r--r-- 443/100 167255 Mon Mar 3 21:25:25 2003
/Configuration/Conf/Mess/txt_mess.h.old
```

```
Session volume is 9 MB (9 MB selected)
Session number of object is 213 (213 object selected)
```

Non-Interactive Mode

As an alternative to using the `-interactive` option, you can use these procedures:

To restore segmented files in non-interactive mode

1. Identify the tape files to be restored.
2. Extract data from both tape files using the `-raw` option to avoid interpreting the data.
3. Concatenate both parts of the segmented file.
   Unix: `cat file1 file2 > target_file`
   Windows: `copy file1/B+file2/B target_file`
4. Run the `tina_sidf -type "Raw File"` command.

Example. Using `tina_sidf` in non-interactice mode to extract data

If the file you want to extract is contained in a single tape file:

```
[lch@semaphore Bin]# tina_sidf -type "Vtl Disk Drive" -device
/DT/DiskDrives/fdl/fdl_VLS/VLS000017 -skip 2 -extract

Time Navigator® Enterprise Edition Label:
Name : pool00117
Creation date : Mon Jan 19 11:45:06 2004
Description : 370
Label format : V5
Recycle date : Mon Jan 19 11:45:06 2004
Owner : pool


Extracting segment #2

rwxrwxrwx 0/0 dir Mon Jan 12 15:34:49 2004 /DT
rwxr-xr-x 0/0 dir Mon Oct 20 12:16:21 2003 /DT/one
rw-r--r-- 443/100 65536 Thu Jul 18 19:36:21 2002 /DT/one/64k
rwxr-xr-x 443/100 dir Mon Apr 8 19:30:52 2002 /DT/one/dir
[lch@semaphore Bin]# ls -l DT/one
total 72
-rw-r--r-- 1 lch users 65536 jui 18 2002 64k
drwxr-xr-x 2 lch users 4096 avr 8 2002 dir
[lch@semaphore Bin]#
```

If the file you want to extract is spread out on two tape files:

5. List the contents of the tape file:

```
[lch@semaphore Bin]# tina_sidf -type "Vtl Disk Drive" -device
/DT/DiskDrives/fdl/fdl_VLS/VLS000017 -skip 3 -list

Time Navigator® Enterprise Edition Label:
Name : VLS000017
Creation date : Mon Jan 19 11:45:06 2004
Description : 370
Label format : V5
Recycle date : Mon Jan 19 11:45:06 2004
Owner : VLS

Listing segment #3

rwxrwxrwx 0/0 dir Mon Jan 12 15:34:49 2004 /DT
rwxr-xr-x 0/0 dir Mon Oct 20 12:16:21 2003 /DT/one
rw-r--r-- 443/100 65536 Thu Jul 18 19:36:21 2002 /DT/one/64k
rwxr-xr-x 443/100 12615680 Tue Nov 12 12:04:36 2002 /DT/one/DATA.SESSION.001
Object processing error "/DT/one/DATA.SESSION.001"
Incorrect file reading
```

6. An end of tile is detected in the middle of an object indicating that this object is spread on two tape files.
   Extract the first tape file in format "raw":

```
[lch@semaphore Bin]# tina_sidf -type "Vtl Disk Drive" -device VLS000017 -
skip 3 -format raw -extract
```

   Tina returns a message indicating the name and location of the extracted file:

```
tina_sidf dump file is "/DT/local/37/Bin/cart_dump_VLS000017_file003"
```

7. Extract the second tape file in format "raw":

```
[lch@semaphore Bin]# tina_sidf -type "Vtl Disk Drive" -device VLS000018 -
skip 1 -format raw -extract


tina_sidf dump file is "/DT/local/37/Bin/cart_dump_VLS000018_file001"
```

8. Repeat steps 3 and 4 until all the tape files you need have been extracted.
9. Concatenate the two (or more) tape files:

```
[lch@semaphore Bin]# cat /DT/local/37/Bin/cart_dump_VLS000017_file003
/DT/local/37/Bin/cart_dump_VLS000018_file001>/DT/local/37/Bin/cart_dump_ok
```

10. Run the `tina_sidf` command again on the concatenated file.

```
[lch@semaphore Bin]# tina_sidf -type "Raw File" -device
/DT/local/37/Bin/cart_dump_ok -extract
```

```
Extracting segment #0

rwxrwxrwx 0/0 dir Mon Jan 12 15:34:49 2004 /DT
rwxr-xr-x 0/0 dir Mon Oct 20 12:16:21 2003 /DT/one
rw-r--r-- 443/100 65536 Thu Jul 18 19:36:21 2002 /DT/one/64k
rwxr-xr-x 443/100 12615680 Tue Nov 12 12:04:36 2002 /DT/one/DATA.SESSION.001
rw-r--r-- 443/100 228882 Mon Jul 29 21:01:42 2002 /DT/one/ndmpd
rw-r--r-- 443/100 0 Tue Mar 12 12:49:30 2002 /DT/one/ndmpd2
rw-r--r-- 443/100 31 Fri Jul 5 18:42:00 2002 /DT/one/test.txt
rw-r--r-- 443/100 955471 Mon Jul 29 21:02:40 2002 /DT/one/tina.cod
rwxr-xr-x 443/100 0 Thu Feb 28 18:27:49 2002 /DT/one/tina_robot
rw-r--r-- 443/100 0 Thu Jan 1 02:00:00 1970 /DT/one/zero
rw-r--r-- 443/100 0 Fri Jan 1 02:00:00 2038 /DT/one/zero2
rwxrwxrwx 443/100 symb Thu Jul 18 17:07:04 2002 /DT/one/link ->
/DT/one/ndmpd
rw-r--r-- 443/100 fifo Thu Nov 28 20:30:30 2002 /DT/one/fifo
rwxr-xr-x 443/100 dir Mon Apr 8 19:30:52 2002 /DT/one/dir
rw-rw-rw- 0/0 741 Tue Apr 9 15:56:18 2002 /DT/one/dir/gmon.out
[lch@semaphore Bin]# ls -l DT/one
total 13580
-rw-r--r-- 1 lch users 65536 jui 18 2002 64k
-rwxr-xr-x 1 lch users 12615680 nov 12 2002 DATA.SESSION.001
drwxr-xr-x 2 lch users 4096 jan 19 15:17 dir
prw-r--r-- 1 lch users 0 nov 28 2002 fifo
lrwxrwxrwx 1 lch users 13 jan 19 15:17 link -> /DT/one/ndmpd
-rw-r--r-- 1 lch users 228882 jui 29 2002 ndmpd
-rw-r--r-- 1 lch users 0 mar 12 2002 ndmpd2
-rw-r--r-- 1 lch users 31 jui 5 2002 test.txt
-rw-r--r-- 1 lch users 955471 jui 29 2002 tina.cod
-rwxr-xr-x 1 lch users 0 fév 28 2002 tina_robot
-rw-r--r-- 1 lch users 0 jan 1 1970 zero
-rw-r--r-- 1 lch users 0 jan 1 2038 zero2
```

tina_start_backup

The `tina_start_backup` command allows you to initiate on demand, the incremental or full backup of any host with the specified strategy, exactly as the Launch Backup button of the Data Management › Strategies panel in Web Administration.

> **Important**: This command triggers the operation but does not wait until it is completed, unless the `[-sync]` option is used.

Rights

Users with these rights in Tina can launch this command:

- Platforms (create, modify, delete) AND the corresponding Allowed Strategies

  Or

- Platform use (start backups) AND the corresponding Allowed Strategies

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_start_backup -host host|-application application -strat A|B|C|D [-
full]|[-incr] [-sync] [-v_jobid] [-identity user:password]
[-catalog catalog] [-help]
```

-host host	Specifies the name of the host to be backed up.
-application application	Specifies the name of the application to be backed up.
-strat A|B|C|D	Specifies the backup strategy (`A`, `B`, `C` or `D`) to be used.
[-full]	Specifies a full backup. By default, the session is a full backup.
[-incr]	Specifies an incremental backup. If the option is not specified, the default session is a full backup.
[-sync]	Specifies that the tina_start_backup command will end only after the corresponding backup job is complete. This option is only available when backing up an agent which has a version higher than 3.7.x.x.
[-v_jobid]	Displays the job ID of the backup job in CSV format. This option is only available when backing up an agent which has a version higher than 3.7.x.x.
[-identity user:password]	See -identity.
[-catalog catalog]	Specifies the working catalog. This parameter is mandatory if several catalogs are involved.

Example. `tina_start_backup` use

In this example, `tina_start_backup` initiates an incremental backup on the `daffy` host with strategy `B`.

```
# ./tina_start_backup -host daffy -strat B -incr
```

For more information on the manual triggering of a backup, see the "Manual Triggering of a Backup" topic of the Tina Administration Documentation.

tina_stop

The `tina_stop` command allows you to stop Tina. Without the option `[-host host1 [host2]...]`, the program only stops the application on the host from which the command is entered.

> **Note**: Only the `root` user can execute this command on Unix systems.
> Only a user with at least the `backup operator` rights can execute this command on Windows systems.

> **Note**: This command can be used for a Unix, Windows, or NetWare client host.

Syntax

```
tina_stop [-host host1 [host2]...]
```

[-host host1 [host2]...]	Specifies the host(s) onto which the application is stopped. If the option is not specified, the application is stopped on the host from which the command is entered.

Example. `tina_stop` use

In this example, Tina is stopped on the `olive` host from the server.

```
# ./tina_stop -host olive
```

You must wait for a few seconds before getting the control back.

```
tina_stop: Time Navigator stopped on "olive"
```

tina_storage_ctrl

The `tina_storage_ctrl` command allows you to perform operations on deduplication storage backups:

- List the deduplication pools in the catalog.
- List all or part of the backups in a deduplication pool, displaying job id, backup date, application name, object name, and recyclability information.
- Erase all or part of the backups in a deduplication pool. The actual metadata removal and synchronization with the storage is performed by the maintenance job.

The selection of backups to display or erase can be refined adding selection criteria to the command. Available criteria are: `deduplication pool > application name > object name`.

A date selection criterion can be added with a start date and/or end date.

The object name depends on the type of application. For virtualization applications, it is the Virtual Machine name.

The erase operation displays selected backups and, if any non-recyclable backups are involved, requires confirmation. User can confirm, remove only recyclable data, or cancel the operation.

A force option allows silent removal without confirmation of all selected backups, including those that are not recyclable.

Rights

Users with administration rights in Tina can launch this command. For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_storage_ctrl [-list_pool_content]|[-list_pools]|[-erase_pool_content] [-pool pool_name] [-application application_name] [-object object_name] [-start_date yyyymmddhhmmss] [-end_date yyyymmddhhmmss] [-force] [-catalog catalog] [-help]
```

[-list_pools]	Lists all deduplication pools.
[-list_pool_content]	Displays recycling information of backups in the selected pool.
[-erase_pool_ content]	Erases the content of the pool from the catalog. Erasing from deduplication storage will be performed by next maintenance job.
[-pool pool_name]	Specifies the pool to which the list or erase operations of the pool content are applied. Can be used only if options `-erase_pool_content` or `-list_pool_content` are used.
[-application application_name]	Specifies the application to which the list or erase operations are applied for the pool. Can be used only if option `-pool` is used.
[-object object_name]	Specifies the object to which the list or erase operations are applied. Can be used only if option `-application` is used.
[-start_date yyyymmddhhmmss]	Specifies the backup date from which the list and erase operations are applied. Can be used only if option `-pool` is used.
[-end_date yyyymmddhhmmss]	Specifies the backup date up to which the list and erase operations are applied. Can be used only if option `-pool` is used.
[-force]	Forces erase operation. Can be used only if option `-erase_pool_content` is used.
[-catalog catalog]	Catalog name.
[-help]	Help for this command. The alias for this option is `-h`.

Examples of use cases

1. Recycling data of a test VM, or of a VM backed up by mistake

For integrity reasons, whatever the retention period, there is always at least one instance of a backed-up object in a deduplication storage.

The last instance can be removed either by deleting the entire HVA application, or using `tina_storage_ctrl` as follows:

a. Check contents

You need to know the name of the deduplication pool, the name of the Tinaapplication and the name of the VM. In this example, the pool name is dedup_days, the application name is HVvmw and the VM name is ipcop:

```
tina_storage_ctrl -catalog tina1 -list_pool_content -pool
dedup_days -application HVvmw -object ipcop
```

```
Name: Pack 111 for Job ID 202 and delegated object ipcop,
Retention: 4124, Integrity: 1, Type: 1, Job: 202, Application
name: HVvmw, Object name: ipcop, Archive time: 2018 February
22 18:15:21, Recyclable: No, Reason: retention - integrity

Name: Pack 110 for Job ID 200 and delegated object ipcop,
Retention: 1182, Integrity: 0, Type: 1, Job: 200, Application
name: HVvmw, Object name: ipcop, Archive time: 2018 February
22 17:26:19, Recyclable: No, Reason: retention
```

Each line describes the state of one backup, with the following fields:

- Name: Description of the corresponding backup with its Tinadata storage id, job id, and object name.
- Retention: Remaining retention time in seconds.
- Integrity: Integrity status. Values are:
  1: The backup is the more recent available on this object.
  0: There is at least one more recent backup.
    - On HVDS, incremental backups are consolidated into the repository, so any kind of backup (incremental or full) can be the integrity backup.
    - On XDF, there is no consolidation, so the integrity backup is the more recent full backup, plus all following incremental backups.
- Type: Type of deduplication repository where the job is stored. Values are:
  1: HVDS
  2: XDF
- Job id: Id of the backup job.
- Application name: Name of the Tina HVA application.
- Object name: Name of the object. For Virtualization applications like VMware and Hyper-V, it is the Virtual Machine name.
- Archive time: Date and time of the backup.
- Recyclable: Yes if it is automatically recyclable, No if not.
- Reason: If not recyclable, the reason(s) why it is not recyclable.

b. Erase contents

Erase operation will ask confirmation if some of the selected data are protected by integrity. In this example, we decide to keep the data in integrity to show the -force option afterward:

```
tina_storage_ctrl -catalog tina1 -erase_pool_content -pool
dedup_days -application HVvmw -object ipcop
```

```
Name: Pack 111 for Job ID 202 and delegated object ipcop,
Retention: 4124, Integrity: 1, Type: 1, Job: 202, Application
name: HVvmw, Object name: ipcop, Archive time: 2018 February
22 18:15:21, Recyclable: No, Reason: retention - integrity

Name: Pack 110 for Job ID 200 and delegated object ipcop,
Retention: 1182, Integrity: 0, Type: 1, Job: 200, Application
name: HVvmw, Object name: ipcop, Archive time: 2018 February
22 17:26:19, Recyclable: No, Reason: retention

WARNING: some selected data are in a retention period or
essential to the integrity of the backup.

Erase all selected packs (y), only packs with no critical
data (n), cancel operation (c). Confirm y/n/c>(n) n

Operation has skipped 1 non-erasable pack(s)

Operation has erased 1 pack(s)
```

If you are certain you want to erase and do not want confirmation, add the -force option:

```
tina_storage_ctrl -catalog tina1 -erase_pool_content -pool
dedup_days -application HVvmw -object ipcop -force
```

```
Operation has erased 1 pack(s)
```

This does not list the selected and erased backups, and does not ask for confirmation. It only displays how many backups have been erased.

2. Listing backups in a determined period of time

In this example, the pool name is myDedupPool, the application name is HVvmw and the VM name is fedmin.

a. List all backups for the selected VM

```
tina_storage_ctrl -catalog tina1 -list_pool_content -pool
myDedupPool -application HVvmw -object fedmin
```

```
Name: Pack 107 for Job ID 194 and delegated object fedmin,
Retention: 0, Integrity: 1, Type: 1, Job: 194, Application
name: HVvmw, Object name: fedmin, Archive time: 2018 February
22 14:44:05, Recyclable: No, Reason: integrity

Name: Pack 106 for Job ID 192 and delegated object fedmin,
Retention: 0, Integrity: 0, Type: 1, Job: 192, Application
name: HVvmw, Object name: fedmin, Archive time: 2018 February
22 14:25:25, Recyclable: Yes

Name: Pack 105 for Job ID 190 and delegated object fedmin,
Retention: 0, Integrity: 0, Type: 1, Job: 190, Application
```

```
name: HVvmw, Object name: fedmin, Archive time: 2018 February
22 14:07:22, Recyclable: Yes

Name: Pack 104 for Job ID 188 and delegated object fedmin,
Retention: 0, Integrity: 0, Type: 1, Job: 188, Application
name: HVvmw, Object name: fedmin, Archive time: 2018 February
22 14:03:02, Recyclable: Yes
```

b. List the backups in the selected period for the selected VM

```
tina_storage_ctrl -catalog tina1 -list_pool_content -pool
myDedupPool -application HVvmw -object fedmin -start_date
20180222140500 -end_date 20180222143000

Name: Pack 106 for Job ID 192 and delegated object fedmin,
Retention: 0, Integrity: 0, Type: 1, Job: 192, Application
name: HVvmw, Object name: fedmin, Archive time: 2018 February
22 14:25:25, Recyclable: Yes

Name: Pack 105 for Job ID 190 and delegated object fedmin,
Retention: 0, Integrity: 0, Type: 1, Job: 190, Application
name: HVvmw, Object name: fedmin, Archive time: 2018 February
22 14:07:22, Recyclable: Yes
```

tina_stream

The `tina_stream` command allows you to read data flows sent through a named pipe by a variety of operations (`dump`, `cp`, SGBD backups, etc.). Once read, data is archived on a media belonging to the user's media pool.

> **Note**: The media format cannot be `tar` nor `cpio`.

An object `object_name` belonging to the owner `user` is created in the destination archive `archive_dest`.

> **Note**: The `tina_restore` command allows you to perform the opposite operation, i.e., to restore data in a named pipe. Specify the named pipe in the `path_dest path` parameter. See tina_restore for details.

Rights

Users with this right in Tina can launch this command:

- Archive files

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_stream -pipe pipe -folder folder -archive archive_path [-create_
archive] [-keywords keyword1 keyword2] -name object_name -user user [-
silent]
```

```
[-pool p1 [p2]...] [-drive drive] [-sync_cart] [-date yyyymmddhhmm] [-v_
jobid] [-catalog catalog] [-help]
```

-pipe pipe	Specifies a named pipe. The syntax of the parameter `-pipe` corresponds to that used by the operating system of the local machine. The path can contain symbolic links and can also be located in any filesystem supporting pipes.
-folder folder	Specifies the destination archive folder. In the case of a backup folder, you must specify if the folder belongs to a host `[-folder host.<host_name>]` or to an application `[-folder appl.<application_name>]` Destination folder using cartridges in either the `tar` or `cpio` format are not supported by the `tina_stream` command.
-archive archive_ path	Specifies the absolute path of the archive in the destination folder. The syntax of the parameter `-archive` corresponds to the Unix syntax.
[-create_archive]	Specifies the creation of the destination archive if it does not exist.
[-keywords]	Specifies a list of keywords that will be associated to the archive. Only type keywords chosen from the keyword list of the archive folder.
-name object_name	Specifies the created object in the `archive` destination archive.
-user user	Specifies the owner of the `object_name` created.
[-silent]	Specifies that the command is executed without information display.
[-pool p1 [p2]...[p4]]	Specifies a list of media pools. The list is limited to 4 pools. If it is not specified, the program searches for the pool name in the folder.
[-drive drive]	Specifies the drive of the local machine.
[-sync_cart]	Specifies the end of archiving once data has been written on medias. If the option is not specified, the end of archiving is specified once data has been written in the cache.
[-date yyyymmddhhmm]	Specifies the archiving date (year, month, day, hour and minute). The option allows you to preset the archiving date. If it is not specified, the default date is that of the machine.
[-v_jobid]	Displays the ID of the current job while the command is running.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.

Example. Use `tina_stream` in a Named Pipe

In this example, a new object called `vmunix` is archived in the archive `/archive1` of the central folder `folder`. It belongs to `root` and is written on one of the medias of the media pool `pool`.

To read a data flow with tina_stream

1. Create a named pipe (only the `root` user can create a named pipe):
   `mknod /dev/tina p`
2. Create a media pool called `pool` using Web Administration (Backup Destinations › Media Pools › New Pool).
   Associate the pool with a label (Label textbox) and drives (Associated Drives area).
3. Prelabel one or several medias of the pool using Web Administration or Restore & Archive Manager (Backup Destinations › Media Pools › Write Label button).
4. Create an archive folder called `folder` with Restore & Archive Manager (Archiving › Folders › New).
5. Associate the `pool` media pool as the main cartridge pool with the `folder` folder (Main button of the Media Pools area).
6. Create an archive called `/archive1` using the `tina` application (Archiving › Archives › New menu).
7. Supply the named pipe:

```
cp /vmunix /dev/tina
```

8. Read the named pipe:

```
tina_stream -pipe /dev/tina -folder folder
-archive /archive1 -name vmunix -user root
-pool pool
```

> **Note**: If an error occurs while reading the pipe (such as TN_ERR_TIMEOUT), a major alarm is issued on the job and on the host.

> **Note**: Traditionally, this operation was executed in a Unix script initiated by `cron`. Never use a slash (`/`) in the object name because it is used as a path separator for Unix files. It would then be impossible to access the object.

Example. Using `tina_stream` in a Script

This script executes the partition `dump` of Sun machines and assigns names depending on a table contained in the file `hostname.data` specific to each machine. The script, called `dumpsys`, can be executed by `cron` on the first day of each month, at midnight. Just add this line in the crontabs of `root`:

```
0 0 1 * * dumpsys obelix
file dumpsys
#!/bin/csh -f

if ( $#argv != 1 ) then
echo «usage: $0 fichier_de_donnees»
exit 1
endif

set liste = `cat $1.data`
```

```
set i = 1
while ( $i <= $#liste )
set fs = $liste[$i]
@ i++
set name = $liste[$i]
/etc/dump 0usf 100000 - /dev/$fs > /dev/tina&
~tina/tina_stream /dev/tina backup_systeme $1_$name root bckSYS
@ i++
end

exit 0
file hostname.data
sd0a root
sd0g usr
```

tina_synchvds

The `tina_synchvds` command allows you to realize HyperVision Deduplication Storage maintenance tasks.

> **Note**: This command must be used only with the Atempo Technical Support assistance.

Rights

Users with this right in Tina can launch this command:

- Administration

For more information on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_synchvds [-catalog catalog] [-identity identity] [-catalog_id UUID] [-
list_clients]|[-client UUID]|[-synchronize mode] [-path_to_remove full_
path]|[-remove]
[-config_name config_name]|[-hvds_server server_name]|[-hvds_port port_num]|
 [-hvds_user user_name]|[-hvds_password Password] [-console] [-help]
```

[-catalog catalog]	Catalog name
[-identity identity]	Catalog identity of the user. Identity format is "user:passwd" or "user"
[-catalog_id UUID]	ID string of a Catalog to operate on. If not provided, UUID of catalog used to authenticate will apply.
[-list_clients]	List HVDS Clients declared for a Catalog

[-client UUID]	UUID of HVDS Client. Used to remove a single file from this client, remove this client from HVDS depending on other parameters or simply list its content.
[-synchronize mode]	check|normal|force The "check" option generates a list of desynchronized clients, "normal" resynchronizes desynchronized clients, and "force" resynchronizes all clients, comparing contents even if SynchIDs are the same.
[-path_to_ remove full_ path]	Full path, including time extension, of the file to remove from client. Can be used only if option "-client" is used.
[-remove]	Request to remove client from HVDS. Can be used only if option "-client" is used.
[-config_ name config_ name]	Configuration to connect to HVDS, as it is known from the catalog.
[-hvds_server server_name]	Name (or IP address) of HVDS server to connect to. Can be used only if options "-hvds_port", "-hvds_user", "-hvds_password" are used.
[-hvds_port port_num]	Port number to connect to HVDS server. Can be used only if options "-hvds_server", "-hvds_user", "-hvds_password" are used.
[-hvds_user user_name]	User name to authenticate with HVDS server. Can be used only if options "-hvds_server", "-hvds_port", "-hvds_password" are used.
[-hvds_ password Password]	Password to authenticate user with HVDS server. Can be used only if options "-hvds_server", "-hvds_port", "-hvds_user" are used.
[-console]	Specifies output to console mode (implicit when -list_clients or -client are specified).

tina_tunable_ctrl

The `tina_tunable_ctrl` command enables you to set, update, or delete a tunable across a list of hosts in a single command.

The list can be provided either in the form of a predefined file containing a list of hosts using the option `-list`, or you can specify the name of each host to which you want to apply the tunable with the option `-hosts`. The tunable is set sequentially on all the hosts you indicate. If a host is

unreachable, the command waits until the network timeout is reached, then moves on to the next host in the list.

If the tunable is already set on one of the hosts specified, its value is not changed, unless you use the option `-force` or `-merge` to update the new tunable values. -force overwrites the existing values whereas -merge adds the new values to the existing ones.

> **Note**: The command does not verify the validity of the tunable. If a host does not behave as expected after running the command, verify the tunable parameters and check the host logs.

Required Permissions

Users with the Configuration permission in Tina can launch this command:

For details on users and access rights, see the Tina Administration Documentation.

Syntax

```
tina_tunable_ctrl [-verbose] [-catalog catalog] [-identity user:password] [-
file file] [-hosts hosts] [-name name] [-comment comment] [-
catalogs catalogs] [-binaries binaries] [-values values] [-disabled] [-
force] [-merge] [-remove] [-help]
```

[-verbose]	Displays information on the screen once the command has been executed.
[-catalog catalog]	Specifies the working catalog. The parameter is mandatory if there are several catalogs.
[-identity user:password]	See -identity.
[-file file]	Specifies the name of a text file containing the list of hosts on which you want to set the tunable. If you use both `-file` and -hosts options, only `-file` is taken into account. The text file must contain one host per line.
[-hosts hosts]	Specifies the names of the hosts on which you want to set the tunable. The host names must be separated by a space.
[-name name]	Specifies the name of the tunable to set. If you do not specify a name, the command reads and displays the tunables found in the logs on the hosts.
[-comment comment]	Enables you to add a comment.
[-catalogs catalogs]	Specifies the list of catalogs for which the tunable is active. By default the tunable is active on all catalogs.

[-binaries binaries]	Specifies the list of binaries for which the tunable is active. By default the tunable is active on all binaries.
[-values_values]	Specifies the value, or list of values if the tunable is an array, of the tunable to set.
[-disabled]	Specifies to disable the tunable. Use this option if you want to temporarily disable a tunable without removing it from the hosts.
[-force]	When you update an existing tunable, the `-force` option enables you to overwrite the existing parameters of the tunable.
[-merge]	When you update an existing tunable, the `-merge` option enables you to merge some existing parameters of the tunable as follows: • Value is overwritten • Comment is overwritten • Binaries are merged with the existing • Catalogs are merged with the existing
[-remove]	Specifies to permanently remove the tunable from the hosts.

Example. Using `tina_tunable_ctrl` to set a tunable

This command sets the tunable `no_ping` to Yes on the hosts `tryphon`. The tunable is active with the catalogs `440_tryphon`, `maaki`, `doc` and `mrkt`.

```
tina_tunable_ctrl -hosts tryphon -name no_ping -comment "Unavailable host" -
catalogs 440_tryphon maaki doc mrkt -values Yes -verbose
```

And returns this information:

```
Host[0]=tryphon : Trying to insert tunable "no_ping
Host[0]=tryphon : Unable to find tunable "no_ping"
Host[0]=tryphon : Tunable "no_ping" added in list
Host[0]=tryphon : Tunable "no_ping" set
```

Example. Using `tina_tunable_ctrl` to update a tunable

This command updates the lists of catalogs on which the tunable `no_ping` will be active on the host `tryphon`.

```
tina_tunable_ctrl -hosts tryphon -name no_ping -catalogs newcata -merge
```

Example. Using `tina_tunable_ctrl` to delete a tunable

This command deletes the tunable `no_ping` from the host `tryphon`.

```
tina_tunable_ctrl -hosts tryphon -name no_ping -remove
```

tina_user_info_cmd

This agent-side command allows end users to access information relating to On Demand Backups, to launch On Demand Backups, or cancel On Demand Backups in progress. It offers some of the functionalities of the Agent Job Viewer GUI from the command line.

Users have access to this function if they have been given authorization by the administrator.

Syntax

```
tina_user_info_cmd [-output_format text|csv] [-csv_separator csv_separator]
[-start_eub]|[-abort_eub] [-catalog catalog] [-help]
```

[-output_format text|csv]	Specifies the format used to export the data to standard output. Default value is text.
[-csv_separator csv_separator]	Specifies the separator used with the CSV format (default value is ";")
[-start_eub]	Starts an On Demand Backup
[-abort_eub]	Cancels an On Demand Backup already in progress
[-catalog catalog]	Catalog name
[-help]	This page. Alias on this option is: -h

Example. Sample output when used for information (no arguments or only output formatting arguments):

```
C:\Program Files\Atempo\tina4\Bin>tina_user_info_cmd
---------------------------------------
HOST: takata
---------------------------------------
Service is up
Last completed backup: Wed Sep 20 20:00:36 2006
The last known backup started at Thu Sep 21 14:17:37 2006 terminated on
error
Next backup: Thu Sep 21 20:00:00 2006
Backup in progress ...
No Restore in progress
On Demand Backup is available
On Demand Backup list For Catalog rabbit :
On Demand Backup Job 297 Running
Started at Thu Sep 21 14:36:22 2006
Platform host.takata
Class : /e/410AutomapTest
On Demand Backup Job 296 Terminated On Error
Started at Thu Sep 21 14:17:37 2006
Platform host.takata
Class : /e/410AutomapTest
```

Example.

This command stops a backup already in progress on a catalog called rabbit:

```
tina_user_info_cmd -abort_eub -catalog rabbit
```

CHAPTER 4 - Internationalization

This topic indicates for all commands, the options that accept internationalized characters and the ones that do not accept internationalized characters.

Command	Internationalized Options	Non Internationalized Options
tina	No internationalized options for this command	
tin@	No internationalized options for this command	
tina_acct	[-xml_stylesheet_ type stylesheet_type] [-file file] [-customer_id customer_ id]	[-host host1 [host2]...] [-platform platform1 [platform2]...] [-volume_unit kilo|mega|giga] [-back_hour hours]|[-start_ date yyyymmddhhmm] [-end_ date yyyymmddhhmm] [-skipped_jobs] [-display_active_jobs_only] [-v_classes] [-v_ report_date] [-v_period] [-v_catalog] [-v_ platform] [-v_jobtype] [-v_status] [-v_user] [-v_description] [-v_dates] [-v_elapsed] [-v_ jobid] [-v_father_jobid] [-v_volume] [-v_ expected_volume] [-v_objects] [-v_cart] [-v_ barcode] [-v_folder] [-v_properties] [-v_ duplicated_job_id] [-v_vm_name] [-output_format text|xml|csv] [-csv_separator csv_separator] [-xml_ stylesheet_file file] [-catalog catalog] [-identity user:password] [-help]
tina_adm	No internationalized options for this command	
tina_alarm	[-text text]	-severity severity_level [-catalog catalog] [-library library] | [-host host] | [-application application] | [-drive drive] [-label label] [-alarm_id id] [-jobid id] [-help
tina_alpha	No internationalized options for this command	

Command	Internationalized Options	Non Internationalized Options
tina_archive	[-folder_dest folder] [-archive_dest archive_path] Note: -folder_dest and -archive dest are internationalized only for file system archiving, not for application archiving. [-file_list file_path] [-file_list_dest file_path] [-user user] [-password password] [-keywords]	[-host host] [-application application] [-create_archive] [-path path1 [path2]...]| [-full]|[-incr] [-pool p1 [p2]...] [-drive drive] [-sync_cart] [-v_jobid] [-date yyyymmddhhmm] [-catalog catalog] [-identity user:passwd] [-error_mode continue|abort] [-no_r] [-help]
tina_archive_control	[-folder folder_name] [-archive archive_name] [-description description] [-keywords keyword1 [keyword2]...] [-prolog file_path] [-epilog file_path] [-os_user user_name] [-os_group group_name]	-create|-edit|-remove|-list|-statistic|-view [-remove_keywords] [-permission permission1 [permission2]...][-cartridge_format format] [-file_format format1 [format2]...] [-through_link yes/no] [-pool pool_name1 [pool_name2]...] [-host host_name] [-manage_acl yes/no] [-lanfree yes/no] [-remove_archived_file yes/no] [-use_empty_archive yes/no] [-sync_cart yes/no] [-continue_on_error yes/no][-keyword_on_archive yes/no] [-propagate] [-catalog catalog] [-outptut_format text|csv] [-csv_separator csv_separator] [-protected_size] [-type] [-help]
tina_backup	[-user user] [-password password] [-file_list file_path] [-parallel_file_list file_path]	[-host host]|[-application application] [-full]|[-incr] [-strat A|B|C|D] [-sync_cart] [-v_jobid] [-date yyyymmddhhmm] [-path path1 [path2]...] [-encode] [-compress] [-catalog catalog] [-identity user:passwd] [-help]
tina_cache	No internationalized options for this command	
tina_cart	No internationalized options for this command	

Command	Internationalized Options	Non Internationalized Options
tina_cart_control	[-pool pool_label] [-pool_dest pool_label]	[-label label] [-drive drive] -close|-reopen|-recycle|-erase|-delete|-status|-create|-duplicate|-list [-depth valueUNIT] [-before]|[-after]|[-all] [-no_empty] [-online_ready] [-nbcart nbcart] [-force]|[-range valueUNIT] [-barcode barcode1 [barcode2]...] [-output_format text|csv] [-csv_separator separator] [-short]|[-long] [-do_not_check_data_integrity] [-retention valueUNIT] [-status_filter status_filter1 [status_filter2]...] [-catalog catalog] [-v_name] [-v_barcode] [-v_volume] [-v_unit] [-v_tape_file] [-v_status] [-v_recycling] [-v_location] [-v_rule] [-v_description] [-v_creation_date] [-v_backup_date] [-v_format] [-v_wear_level] [-v_recyclable] [-v_recycle_age] [-v_type] [-v_pool_label] [-v_close_status] [-v_fill_status] [-identity identity] [-help]
tina_catalog_ctrl	No internationalized options for this command	
tina_clone_catalog	[-boot boot_file] [-file file]	[-disable] [-size size_MB] [-index index] [-catalog_name catalog_name] [-pipe pipe] [-folder folder] [-skip_folder folder] [-boot_restore_index] [-file_size file_size] [-max_catalog_size max_catalog_size]
tina_cod	No internationalized options for this command	
tina_config	[-encode file] [-decode file]	[-html] [-catalog catalog] [-identity user:password] [-help]
tina_daemon	No internationalized options for this command	
tina_del	-path_folder path [-folder folder]	[-r]|[-i] [-strat A|B|C|D][-catalog catalog] [-catalog_only] [-identity user:passwd] [-help]

Command	Internationalized Options	Non Internationalized Options
tina_event	[-file file] [-output_file output_file]	[-v_development] [-v_ad_cell_obj] [-v_class] [-v_pid] [-v_job_id] [-v_program] [-v_host] [-v_user] [-v_catalog] [-v_server] [-v_log_date] [-_severity_full] [-f_date YYYYMMDDHHmm YYYYMMDDHHmm] [-f_pid pid] [-f_job_id jobid1 [jobid2]...] [-f_program program] [-f_host hostname] [-f_user username] [-f_catalog catalog] [-f_server server] [-f_severity alarm_critical alarm_major alarm_minor fatal error warning info acct debug] [-f_log_date YYYYMMDDHHmm YYYYMMDDHHmm] [-all_event] [-output_format text|csv] [-csv_separator csv_separator] [-split_by_catalog] [-max_line number_line] [-target_host hostname] [-catalog catalog] [-help]
tina_event_viewer	No internationalized options for this command	
tina_export	-folder folder -folder_dest folder [-path_folder path1 [path2]...] [-path_folder_dest archive_path]	[-date yyyymmddhhmm] [-date_dest date] [-strat A|B|C|D] [-catalog_dest catalog] [-update] [-strat_dest A|B|C|D] [-full]|[-incr] [-catalog catalog] [-help]
tina_find	[-path_folder search_path] [-pattern "pattern"] [-folder archive_folder] [-user user] [-password password]	[-host host1 [host2]...]|[-application application1 [application2]...]| [-depth valueUNIT] [-lost_files] [-strat A|B|C|D] [-all] [-long] [-display_cart][-nfs] [-date yyyymmddhhmm] [-no_r] [-catalog catalog] [-catalog_only] [-identity user:passwd][-outptut_format text|csv] [-csv_separator csv_separator] [-help]

Command	Internationalized Options	Non Internationalized Options
tina_folder_control	[-file catalog_backup]	[-end_folder_maintenance] [-import_folder] [-keep_platform_disabled] [-catalog catalog]
tina_help	Displays the localized version of alarm contents	
tina_init	[-file file1 [file2]...] [-index index1 [index2]...] tina_init also manages the interactive input of internationalized values for the catalog administrator name and password, and the Cache Path.	[-disable] [-config] [-close_cart] [-size size_MB] [-nb_instance nb] [-boot boot_file] [-catalog catalog] [-pipe pipe] [-folder folder1 [folder2]...] [-path path] [-force_reinit] [-boot_restore_index] [-max_catalog_size size] [-memory_cache_only] [-create] [-modify] [-property_file file_path] [-help]
tina_job	No internationalized options for this command	
tina_job_control	No internationalized options for this command	
tina_library	No internationalized options for this command	
tina_library_control	No internationalized options for this command	
tina_listcart	No internationalized options for this command	
tina_listjob	No internationalized options for this command	
tina_odbcheck	No internationalized options for this command	
tina_odbfree	No internationalized options for this command	

Command	Internationalized Options	Non Internationalized Options
tina_odbgc	No internationalized options for this command	
tina_odbsave	[-file odbsave_file] [-index_ dir destination directory]	[-no_compress] [-max_output_size size_ MB] [-dir_dest destination_directory1 [destination_directory2]...]|[-check] [-folder folder1 [folder2]...] [-config] [-no_job] [-prefix prefix] [-pipe odbsave_pipe] [-catalog catalog] [-help]
tina_operator	No internationalized options for this command	
tina_ping	No internationalized options for this command	
tina_report	[-customer_id customer_ id] [-xml_stylesheet_file file] [-file file]	[-start_date YYYYMMDDHHmm] [-end_ date YYYYMMDDHHmm] [-simple_ invoice]|[-detailed_invoice] [-output_ format text|xml|csv] [-csv_separator csv_ separator] [-xml_stylesheet_ type stylesheet_type] [-volume_unit kilo|mega|giga|tera] [-encode] [-catalog catalog] [-identity] [-help]
tina_restore	-file_list file_path [-file_ list_dest file_path] [-ex_path_folder path1 [path2]...][-ex_file_ list file_path] [-folder folder] [-user user] [-password password]	-path_folder path1 [path2]... [-path_dest path] [-folder_dest folder] [-drive drive] [-strat A|B|C|D] [-mode restore_ mode] [-date yyyymmddhhmm | yyyymmddhhmmss] [-no_rewind] [-silent] [-offline_mode offline_mode] [-v_jobid] [-error_mode continue|abort|replace_after_ reboot] [-test_mode test_mode] [-secure_ interactive_password]| [-secure_session_password_id] [-catalog catalog] [-identity user:passwd] [-all_vers] [-depth] [-help]
tina_scm	No internationalized options for this command	
tina_scm_ control	No internationalized options for this command	

Command	Internationalized Options	Non Internationalized Options
tina_sched	No internationalized options for this command	
tina_ sendmail	No internationalized options for this command	
tina_shell	[-file script_file]	[-catalog catalog] [-identity user:password] [-help]
tina_sidf	No internationalized options for this command	
tina_start_ backup	No internationalized options for this command	
tina_stop	No internationalized options for this command	
tina_stream	-name object_name -user user [-keywords keyword1 keyword2] -pipe pipe -folder folder -archive archive_path	[-create_archive] [-silent] [-pool p1 [p2]...] [-drive drive] [-sync_cart] [-date yyyymmddhhmm] [-catalog catalog] [-help]
tina_ synchvds	[-identity identity] [-path_ to_remove full_path] [-hvds_server server_ name] [-hvds_user user_ name] [-hvds_password Password]	[-catalog catalog] [-catalog_id UUID] [-list_ clients] [-client UUID] [-synchronize mode] [-remove] [-config_name config_name] [-hvds_port port_num] [-console]
tina_ tunable_ctrl	[-catalog catalog] [-identity user:password] [-file file] [-hosts hosts] -name name [-comment comment] [-catalogs catalogs] [-binaries binaries] [-values values]	[-verbose] [-disabled] [-force] [-merge] [-remove] [-help]

Command	Internationalized Options	Non Internationalized Options
tina_user_info_cmd	No internationalized options for this command	

CHAPTER 5 - Additional Information

These topics give you more information on:

- Error Codes
- Command Syntax Evolution
- Catalog Manual Procedures
- Flipping Magneto-Optical disks

Error Codes

This table contains the main error codes returned by the Tina commands, either directly in command line or via the event logs, as well as the error codes returned by the API.

Error name	Error Code	Description
OK	0	Operation successfully completed
ERR_PROCESS	2	Saturated system, unable to launch a new process
ERR_COMM	6	Error in the network connection
ERR_SERV	7	The server was unable to process the request due to an irregular behavior
ERR_REQ	8	The request is incorrect
ERR_FATALE	9	Abort due to a major inconsistency
ERR_DISK	10	Disk I/O error
ERR_ODB	11	Major catalog inconsistency
ERR_MEM	12	Not enough memory to perform the operation
ERR_CONFIG	17	The environment configuration is incorrect
ERR_FNF	18	File not found
ERR_CONNECT_SERV	19	Unable to connect to the server
ERR_SERV_RESS	20	Not enough server resource to process request
ERR_PERM	23	Unable to process request due to access rights problem
ERR_FS_FULL	25	File system full

Error name	Error Code	Description
ERR_BC	27	Error while creating a backup class
ERR_STALE	28	The handle is not attached to the object (missing object)
ERR_MAG_PHYS	29	Drive I/O error
ERR_MAG_EOT	31	EOT (end of tape) reached
ERR_ALLOC	34	Resource is already allocated
ERR_NOLABEL	35	The cartrigde is not labeled
ERR_MAG_FMT	37	The cartrigde format is incorrect
ERR_MAG_NOT_READY	38	The drive is not ready or the cartridge is missing
ERR_ABORT	40	User abort
ERR_MAG_CART_PROT	39	The cartrigde is write protected
ERR_CONNECT_REM_MAG	43	Unable to connect to the drive host
ERR_FORMAT_TAR	45	tar format error in the header/trailer
ERR_FORMAT_CPIO	46	cpio format error in the header/trailer
ERR_BCNF	47	No backup class defined for the object
ERR_SHUTDOWN	49	Abort due to a server shutdown
ERR_ROB_NOT_READY	51	The library is not ready
ERR_ROB_REQ	53	Unable to process request
ERR_ROB_PHYS	54	library I/O error
ERR_MOUNT_ABORT	55	Mount request aborted
ERR_ROB_SRC_VIDE	58	The source location is empty
ERR_ROB_DST_PLEIN	59	The destination location is already full

Error name	Error Code	Description
ERR_MAG_BUSY	61	The drive is already allocated
ERR_EOF	64	EOF (end of file) reached
ERR_CONNECT_APP	71	Unable to connect to the application
ERR_READ_FILE	73	Error while reading file from disk
ERR_WRITE_FILE	74	Error while writing file to disk
ERR_MOUNT_RESS	76	The resource to be mounted is unavailable
ERR_CONFLICT_ RESS	77	Several processes are trying to access the same resource

Command Syntax Evolution

This topic summarizes the command syntax evolution between the different versions of Tina.

> **Note**: All commands are written in lower case letters.

From version 4.6 SP2 to version 4.6 SP3

The commands listed in this table have been modified:

Command	New Options	Modified Options	New Sub-Options
tina_restore		A new sub-option can be used when file_list is used with file_list_dest	-behavior_on_missing_file continue|continue_with_error_ code|abort

From version 4.6 SP1 to version 4.6 SP2

The commands listed in this table have been modified:

Command	New Options	Modified Options	New Sub-Options
tina_archive		A new sub-option can be used when file_list is used with file_list_dest	-behavior_on_missing_file continue|continue_with_error_ code|abort

From version 4.6 SP0 to version 4.6 SP1

New commands:

- `tina_storage_ctrl`

The commands listed in this table have been modified:

Command	New Options	Modified Option
tina_alarm	-class event_class	
tina_init		-file file
tina_odbsave		The -max_output_size option is no more available. The -dir_dest option is now available for a single directory.
tina_synchvds		-synchronize mode normal|prevent|force becomes -synchronize mode check|normal|force

From version 4.5 SP1 to version 4.6 SP0

New commands:

- `tina_drive_control`

The commands listed in this table have been modified:

Command	New Options	Deleted Options
tina_folder_control	-list_folder -list_maint_folder	

From version 4.4 SP2 to version 4.5 SP0

New commands: Not applicable.

The commands listed in this table have been modified:

Command	New Options	Deleted Options
tina_help	-alarm_list	

From version 4.4 SP1 to version 4.4 SP2

New commands:

- `tina_clone_catalog`
- `tina_folder_control`

The commands listed in this table have been modified:

Command	New Options	Deleted Options
tina		-choose_target_platform
tina_init	-maintain_folder folder -skip_folder folder	
tina_odbsave	-maintain_folder folder -skip_folder folder	
tina_restore	-do_not_restore_security_attributes -restore_chronological_order	

From version 4.4 SP0 to version 4.4 SP1

New commands:

- `tina_synchvds`

The commands listed in this table have been modified:

Command	New Options	Modified Options
tina_acct	-v_father_jobid	
tina_job_control		`-view`

From version 4.3 SP3 to version 4.4 SP0

The commands listed in this table have been modified:

Command	New Options	Modified Options
tina_odbgc	-hss_sync	
tina_odbfree	-dedup_strat strat_num	

From version 4.3 SP1 to version 4.3 SP3

New commands:

- `tina_help`

The commands listed in this table have been modified:

Command	New Options	Modified Options
tina_sidf	-host -catalog	

From version 4.2.SP8 to version 4.3 SP1

Command	New Options	Modified Options
tina_odbgc	-sync	
tina_cart	-old_format	

From version 4.2.SP7 to version 4.2 SP8

Command	New Options	Modified Options
tina_acct	-v_vm_name	
tina_restore	-xml_restore_parameters_file	
tina_cart	-verbose -offset	

From version 4.2.SP6 to version 4.2 SP7

Command	New Options	Modified Options
tina_archive	-file_list_dest file_path	
tina_cart	-source_data_os_type	
tina_odbfree	-jobid	
tina_ping	-no_icmp_ping	

From version 4.2.SP5 to version 4.2 SP6

Command	New Options	Modified Options
tina_stream	-v_jobid	

From version 4.2.SP4 to version 4.2 SP5

No evolution.

From version 4.2.SP3 to version 4.2 SP4

The commands described in this table have been modified:

Command	New Options	Modified Options
tina_acct	-v_barcode	
tina_cod	-pipe_in -pipe_out	
tina_init	-memory_cache_only -operation -properties	
tina_listcart	-v_type -v_path -v_backup_date -v_modification_date -v_info_cart -v_folder -v_default	
all commands	-long_version	

From version 4.2.0 to version 4.2.0 SP3

The commands described in this table have been modified:

Command	New Options	Modified Options
tina_export		-drive_dest option becomes obsolete
tina_find		`-job_id` becomes `-jobid, but -job_id is kept as an alias`
tina_ sendmail	-user and -password	

From version 4.1.0 to version 4.2.0

New commands:

- `tina_help`

The commands described in this table have been modified:

Command	New Options	Modified Options
tina_acct	-platform -display_active_jobs_only	

Command	New Options	Modified Options
tina_alarm	-alarm_id -jobid	
tina_cache	-once	
tina_cart_control	-v_columnname	
tina_init	`-max_catalog_size`	`-catalog_name` option becomes -catalog
tina_job_control		-abort option becomes -cancel -suspend option becomes -pause
tina_listcart	-data_integrity_check	
tina_listjob	-v_last_access_date -v_modification_date	
tina_restore	-all_inst	-all_inst option becomes `-all_vers`
tina_export		-drive_dest option becomes obsolete

From version 4.1.0 to version 4.1.0 SP2

The commands described in this table have been modified:

Command	New Options	Modified Options
tina_archive	-no_r	
tina_restore	-depth	

From version 4.0.1 to version 4.1.0

The commands described in this table have been modified:

Command	New Options	Modified Options
tina_acct	-v_priority	
tina_alarm	-label	
tina_init	-index -boot_restore_index	
tina_listcart	-listjob	

Command	New Options	Modified Options
tina_library_control	-retry_mbox_full	
tina_report	-identity	
tina_sched		-estimation
tina_scm_control	change repository view repository create authority revoke certificate install certificate uninstall certificate export security template export rule	erase certificate (obsolete) import certificate (obsolete) export certificate (obsolete)

From version 4.0.0 to version 4.0.1

New commands:

- `tina_odbcheck`
- `tina_scm`
- `tina_scm_control`
- `tina_sendmail`

The commands described in this table have been modified:

Command	New Options	Modified Options
tina_alpha	-identity	
tina_archive	-identity	
tina_archive_control	-protected_size -type -identity	
tina_backup	-parallel_file_list	
tina_cart_control	-no_empty	

Command	New Options	Modified Options
tina_del	-identity	
tina_find	-identity	
tina_job_control	-view -identity	
tina_library_control	-content	
tina_report		The `Maximum Secured Volume` field becomes `Last protected disk volume`
tina_restore	-identity	

From version 3.7.0.4 to version 4.0.0

New commands:

- `tina_archive_control`
- `tina_job_control`
- `tina_sidf`

The commands described in this table have been modified:

Command	New Options	Modified Options
tina_acct	-v_folder -v_properties -v_duplicated_job_id	`-show_all` becomes `-skipped_jobs`
tina_alarm	-host -library -application -drive	
tina_archive	This command has been split into two commands: `tina_archive` and `tina_backup`. These options have been added: `-application` -error_mode	`-archive` does not exist any longer -backup does not exist any longer. It is replaced by the `tina_backup` command.
tina_cache	-jobs_to_stderr	

Command	New Options	Modified Options
tina_cart	-block_size	-raw becomes -no_decode `-format none` becomes `-format raw`
tina_cart_control	-list -short -online_ready -retention -status_filter	
tina_del		`-past` becomes `-catalog_only`
tina_find	-catalog_only -output_format -csv_separator	
tina_library_control	-short -offline_ready -retention -status_filter -known_cart	
tina_odbsave	-no_job	
tina_listcart	-output_format -csv_separator	
tina_listjob	-unit	
tina_restore	-test_mode -all_inst	

From version 3.7.0.3 to 3.7.0.4

New commands:

- `tin@`
- `tina_listjob`

Command	New Options	Modified Options
tina		`-run_local`

Command	New Options	Modified Options
tina_archive	-file_list_dest file_path]	
tina_cart		`-files`
tina_del		`-past` becomes `-catalog_only`
tina_find	-catalog_only	
tina_init	`-folder` `-path`	
`tina_library_control`	`-known_cart`	
tina_restore	-file_list_dest file_path -mode rename_restored	

From version 3.7.0.1 to version 3.7.0.3

The commands described in this table have been modified:

Command	New Options	Modified Options
`tina_library_control`		`-no_wait` does not exist any longer
tina_find	`-long`	
tina_ndmp_tape	This command does not exist any longer	
tina_init	`-close_cart` `-force_reinit`	
tina_cart	`-raw_data`	`-format` contains two new formats: `none` and `sidf`
tina_cart_control		`-spare` becomes `-new_spare`
tina_odbfree	`-batch`	`nb_instance` becomes `-keep_full`
tina_acct	-identity	
tina_catalog_control	-identity	
tina_config	-identity	
tina_shell	-identity	

From version 3.6 to version 3.7

New commands:

- `tina_cache`
- `tina_catalog_ctrl`
- `tina_event_viewer`
- `tina_odbcheck`
- `tina_odbfree`
- `tina_ping`
- `tina_report`(exists since Tina 3.6.0.2).

The `tina_robot` and `tina_robot_control` command were renamed to `tina_library` and `tina_library_control`.

These commands have been completely renovated, in order to homogenize the Tina command line or to improve features and performances:

- `tina_acct`
- `tina_cod`

The commands described in this table have been modified:

Command	New Options	Modified Options
`tina`	`-target_appl`	

`tina_archive`	`-encode`
	`-compress`
	`-user`
	`-password`
		`-path_src` becomes `-path`
		`-device` becomes `-drive`

`tina_cart`		`-dev_type` becomes `-type` `-full` becomes `-all`

`tina_cart_control`	`-nbcart`
	`-force`
	`-path`
	`-chgpath`
	`-path_dest`
	`-output_format`
	`-csv_separator`
	`-long`
		`-unclose` becomes `-reopen`

Command	New Options	Modified Options
`tina_config`		`-code` becomes `-encode`

tina_event	`-v_ad_cell_obj`
	`-v_class`
	-v_log_date
	-v_severity_full
	`-f_job_id`
	-f_log_date
	`-output_format`
	`-csv_separator`
	-file
	-output_file
	-split_by_catalog
	-max_line	

tina_export		-folder_src becomes -folder -path_src becomes -path -strat_src becomes -strat -archive_dest becomes -path_folder_dest -up_folder_dest becomes -update -device_dest becomes -drive_dest
tina_find	-no_r	-path becomes -path_folder -unit and -value become -depth -dimmed becomes -lost_files -display_full becomes -all
tina_init	-disable -size -config	

Command	New Options	Modified Options
tina_restore		`-device` becomes `-drive` New value for the `-error_mode` option: `replace_after_reboot`.

tina_stream	`-keywords`	`-fifo` becomes `-pipe`
		`-folder_dest` becomes `-folder`
		`-archive_dest` becomes `-archive`
		`-device` becomes `-drive`

From version 3.5 to version 3.6

It is now possible to use the '-' sign in an option argument.

Command	New Options	Modified Options
tina_acct	-simple invoice -detailed invoice -customer_id -start_date -end_date -elapsed -volume_unit -host	
tina_cart_control	`-duplicate` -pool_dest	`-user` becomes `-pool` `-drive now accepts host:drive` as an argument.
tina_library_control	-online	`-out` becomes `-offline`
tina_odbsave	-prefix	
tina_restore	-error_mode	

From version 3.1 to version 3.5

`tina_acct2` becomes `tina_acct`.

Command	New Options	Modified Options
`tina_cart`	`-raw`	-format arguments are more precise. -device new type: Raw file. -device type:pos becomes -device type -skip n.
`tina_cart_control` **syntax 1**	`-erase` -read	
`tina_cart_control` **syntax 2**	`-user` -drive -create -number	
`tina_cod`	-v -l -codec -d -t -p -f -c -compress_rate -p -help	The new parameters replace version 3.1 parameters.
tina_config	-code	
tina_export	-date_dest	
`tina_init`	-file|-pipe -catalog_name -boot -help -nb_instance	

Command	New Options	Modified Options
tina_find	-user -password	
tina_odbsave	-file|-pipe	
tina_operator	new command	
tina_library	new command	

tina_library_ control	-out
	`-barcode`
	`-label`
	`-pool`	

`tina_sched`	-historic_hours -scheduled_ hours -estimation	`-catalog_list catalogn no longer exists.`

From version 3.0 to version 3.1

Command	New Options	Modified Options
tina_archive (archiving)	`-full/incr`	
`tina_cod`		
tina_del	-strat A|B|C|D	
tina_event	`-all_event`	
tina_job	-polling_period period	
tina_restore	-no_rewind	
tina_sched	`-catalog_list catalogn`	

Catalog Manual Procedures

Web Administration lets you perform these operations via a graphical interface:

- Creating a catalog (menu Catalog-Create). See the Tina Administration Documentation.
- Backing up a catalog (Catalog Application). See the Tina Administration Documentation.
- Restoring a catalog (Catalog Application). See the Tina Administration Documentation.

However, these operations can also be performed in command line, as described below.

Creating a Tina Catalog

The catalog is a database local to the server which contains all the information required for Tina operations. It is created with the `tina_init` program which makes it possible to:

- Initialize some parameters needed by Tina.
- Create and size the catalog and the cache space.

This program creates `.odb` files. These files size cannot exceed 4 GB. If the catalog size is 10.5 GB, it will create two `.odb` files of 4 GB an one `.odb` file of 0.5 GB.

These `odb` files are located in the `Data.catalog_name` directory.

> **Note**: **Unix.** Prior to launching the `tina_init` command, you can create symbolic links to export `odb_x` files to a different file system.

Example. Initializing the Catalog with `tina_init`

Prerequisites:

- You must check that the machine date is correct.
- Make sure you have the necessary license file installed on your server. If not, a temporary 30 days license file is automatically created.

Open Command Line Interface and enter this command:

```
tina_init
```

This interactive text displays:

```
+-------------------------+
CATALOG CONFIGURATION
Time Navigator Enterprise Edition
Version 4.6
+-------------------------+
+---------------------------+
HOST USED
name : dayos
type : PC/Windows NT
+---------------------------+
```

`tina_init` is an interactive binary which asks you a number of questions in order to create a catalog. This program is also used to restore or modify a backed up catalog.

You can:

```
1) create a new catalog,
2) restore a backed up catalog,
3) modify catalog configuration.
(1, 2 or 3) > 1
```

If you do not have the necessary license file installed, `tina_init` creates a temporary 30 days license file with this message:

```
WARNING: Catalogs created with an evaluation license file can only be used
with the same evaluation license file or with a standard license file.
```

```
No license file found
Do you want to create a temporary evaluation license file? (y(es) / n(o)):
(yes) y
A temporary evaluation license file valid for 30 days has been created.
```

Otherwise `tina_init` uses the license file installed in the `TINA_HOME/Conf` directory.

See the Tina Installation Documentation for details.

```
Use Server License? (y(es) / n(o):(yes) y
```

You must provide a catalog administrator name. The catalog administrator is the only user that can grant access rights to other users. He has all the rights to perform any operations on the catalog, except editing the catalog. Editing the catalog can only be performed by root (under Unix) or an administrator (under Windows).

For added security, you can define a password for the catalog administrator once the catalog is created.

```
+------------------------+
CONFIGURATION PARAMETERS
+------------------------+
---------
CATALOG:
---------
Catalog name     : rome
Catalog administrator name: (admin)
Catalog administrator password:
Confirm Password             :
```

The cache space can be of two types: disk cache or memory cache. You must define at least one type of cache. In order to improve performances, both cache space type can be segmented. These tables summarize the cache characteristics for each cache type, and the disk cache maximum size according to the catalog size:

Cache Characteristics

Cache type	Characteristic	Value
Memory	Maximum Size	2047 MB
	Minimum Size	32 MB
	Maximum Number of Segments	32
	Minimum Number of Segments	0 if at least 1 disk cache segment has been defined, otherwise 1
	Maximum Segment Size	Unix: 2047MB Windows: 64 MB except if tunable max_memory_axes_size is set (see the documentation for details)
	Minimum Segment Size	32 MB
Disk	Maximum Size	32 GB to 512 GB depending on the catalog size (see Maximum Disk Cache Size)
	Minimum Size	1 GB
	Maximum Number of Segments	32
	Minimum Number of Segments	0 if at least 1 memory cache segment has been defined, otherwise 1
	Maximum Segment Size	(see Maximum Disk Cache Size)
	Minimum Segment Size	32 MB

Maximum Disk Cache Size

If the catalogue size is ...	...the maximum disk cache size is...
< 2 GB	32 GB
>= 2 GB and < 8 GB	128 GB
>= 8 GB and < 16 GB	256 GB
> 16 GB	512 GB

> **Note**: Atempo recommends not to locate the catalog and the cache space on the same disk for performance reasons.

> **Note**: The actual cache size of the catalog depends on the number of segments and the size of the cache containers. Tina computes the cache size based on the various information you provide. As a result, the actual cache size can be slightly different from the size you ask for as it is rounded to the nearest multiple of both the number of segments and the container size.

```
-------------
CACHE:
-------------
You want to create:
1) memory cache only,
2) disk cache only,
3) memory and disk cache.
(1, 2 or 3) > (1) 3
-------------
MEMORY CACHE:
-------------
Memory cache space size must be between 32 MB and 2047 MB

Current Size (MB) : (32) 64
Number of cache segments (1 to 2): (1)

Number of segments: 1
Segment size: 64 MB
```

Atempo recommends using at least 64 MB of memory cache.

```
-------------
DISK CACHE:
-------------
Total disk cache size must be between 1 GB and 32 GB

Current Size (GB): 1
Number of cache segments (1 to 32): (1) 4

Number of segments: 4
Segment size: 256 MB
Segment number 1
Absolute path : /DT/DEV/dev/sht/V4/caches/cache1
Current Size (MB): (256)
Segment number 2
Absolute path : /DT/DEV/dev/sht/V4/caches/cache2
Size (MB) : (256)
Segment number 3
Absolute path : /DT/DEV/dev/sht/V4/caches/cache3
Size (MB) : (256)
Segment number 4
```

```
Absolute path : /DT/DEV/dev/sht/V4/caches/cache4
Size (MB) : (256)

Advanced parameters definition? (y(es) / n(o)): (n) y
```

The default container size is calculated according to the total (memory and disk) cache size you specify (memory and disk) in the Cache tab. You may change the size of the containers as needed, with or without modifying the size of the cache. The container size can vary between 4 MB and 256 MB. The default container size is as follows:

Total cache size	32 MB	64 MB	128 MB	256 MB	512 MB	1 GB	2 GB	4 GB	8 GB
	8	16	32	**64**	64	64	8	**16**	32
Size of containers	4 MB	4 MB	4 MB	**4 MB**	8 MB	16 MB	256 MB	**256 MB**	256 MB

```
Memory cache consists of 16 containers of 4 MB
Disk cache consists of 64 containers of 16 MB

Note: Disk and Memory container size could be multiple of value specified
below.
Size of memory containers (4 to 8 MB): (4)
Size of disk containers (16 to 128 MB): (16)

Average number of backup versions per object: (2)
```

The default size of the catalog is set to 4 GB and the maximum size to 1024 GB, unless you have less than 1024 GB available, in which case the maximum size is the maximum available space on your disk.

```
Warning: Maximum size is limited by current disk space to 92 GB
Current size (GB):(4)
Maximum size (GB):(92)
Odb file size (in GB): (4)
```

The name of the server corresponds to its hostname.

```
-------
SERVER:
-------
Name : (arwen)
```

A summary of the configuration enables you to check your choices.

If you agree with the configuration, enter "y".
If you wish to modify some parameters, enter "n". The program will ask you the same questions again. Parameters entered previously are recalled in brackets. Press return to keep them or enter new parameters to modify them.

```
+------------------------------+
Summary - CATALOG CONFIGURATION
+------------------------------+
---------
CATALOG:
---------
Name : rome
Current Size (GB) : 4
Max Size (GB) : 92
Odb File size (GB): 4
Catalog administrator name: admin
```

The default size of the catalog is set to 4 GB and the maximum size to 1024 GB, unless you have less than 1024 GB available, in which case the maximum size is the maximum available space on your disk.

The default catalog file size (odb) is 4 GB.

```
-------------
CACHE:
-------------
Segment number 1
Absolute path : memcache
Current Size (MB) : 128
Segment number 2
Absolute path : /DT/DEV/dev/sht/V4/caches/cache1
Size (MB) : 256
Segment number 3
Absolute path : /DT/DEV/dev/sht/V4/caches/cache2
Size (MB) : 256
Segment number 4
Absolute path : /DT/DEV/dev/sht/V4/caches/cache3
Size (MB) : 256
Segment number 5
Absolute path : /DT/DEV/dev/sht/V4/caches/cache4
Size (MB) : 256
-------
SERVER:
-------
Name : arwen
Type : Linux

Do you want to proceed with this configuration? (y(es) / n(o)):y
```

```
```

This step is not interactive. It indicates the catalog creation progression.

```
- - Creating the catalog "rome"
Creating and initializing catalog super cell
Creating and initializing catalog files (total size: 128 MB)
... 128 MB

- Creating the cache space
Creating segment 0 in cache space
Creating segment 1 in cache space
Creating segment 2 in cache space
Creating segment 3 in cache space
Creating segment 4 in cache space

- Creating the server
- Creating the Catalog application
- Creating the group "system"
- Creating the user "root"
Creating the cartridge pool "lost+found"
Creating the cartridge pool "spare"

- Catalog creation complete
```

The catalog and the cache space are created and sized. Tina parameters are initialized.

Once the catalog is created, launch a `tina_daemon` (Unix) or start the service `tina` (Windows) on the server to start the application.

> **Note**: `tina_init` upgrades the `catalogs` file of the server in the `Conf` directorv. This file must then be upgraded on all clients in the `~tina/Conf` directory on Unix or `tina\Conf` on Windows.

The catalog backup is essential and must be performed daily and verified.

Modifying the Catalog

Once a catalog has been created, you can modify it. All catalog parameters can be modified except for the Host ID and the catalog name.

You need to stop the catalog in order to modify it.

1. **Unix.** Launch a shell with the root login, move to the Tina installation directory, by default `/usr/Atempo/tina`, and set the environment with the command:
   . ./.tina.sh
   Windows. Choose the menu Start-Programs-Tina-Utilities-Command Line Interface.
2. **Unix and Windows.** Stop the catalog with the command:
   `tina_catalog_ctrl -catalog <catalog_name> -stop`
3. Launch the command `tina_init`
4. Choose option 3. This script displays, enter `y` to modify the parameters:

```
+------------------------------+
CURRENT CONFIGURATION PARAMETERS
```

```
+-------------------------------+
---------
CATALOG:
---------
Name : pirate
Current size (MB) : 1024
Maximum size (GB) : 92
Catalog administrator name: pirate
-------------
CACHE:
-------------
Segment number 1
Absolute path : memcache
Current size (MB) : 64
-------
SERVER:
-------
Name : taanoki
Type : Windows Server 2003

Do you want to modify this configuration? (y(es) / n(o)):y
```

5. Accept all parameter values, except the one you want to modify, for instance, to modify the catalog administrator name, enter the new name:

```
+------------------------+
CONFIGURATION PARAMETERS
+------------------------+
---------
CATALOG:
---------
Name : pirate
Catalog administrator name: (pirate) admin
```

6. Continue with the modification script and enter `y` at the end

```
Do you want to change the catalog administrator password? (y(es) / n(o)):(n)
-------------
CACHE:
-------------
You want to:
1) keep previous cache configuration,
2) modify memory cache only,
3) modify disk cache only,
4) modify memory and disk cache.
(1, 2, 3 or 4) > (1) 1

Advanced parameters definition? (y(es) / n(o)): (n) n
-------
SERVER:
-------
Name : (taanoki)
```

```
+------------------------------+
Summary - CATALOG CONFIGURATION
+------------------------------+
---------
CATALOG:
---------
Name : pirate
Current size (GB) : 4
Maximum size (GB) : 92
File size (GB) : 4
Catalog administrator name: admin
-------------
CACHE:
-------------
Segment number 1
Absolute path : memcache
Size (MB) : 64
-------
SERVER:
-------
Name : taanoki
Type : Windows Server 2003

Do you want to proceed with this configuration? (y(es) / n(o)): y

- Catalog edition complete
```

7. Start the catalog with the command:

```
tina_catalog_ctrl -catalog <catalog_name> -start
```

Backing up the Catalog manually

The catalog is a database local to the server. It contains the objects defined by the administrator (hosts, applications, drives, libraries, cartridges, users, strategies, classes, etc.) and information on objects backed up by Tina.

Tina offers graphical interfaces for the catalog backup and allows to automate it.

See the Tina Administration Documentation - topic Catalog Backup & Restore, for more details on the catalog automatic backup using the Catalog application.

In addition, you can manually back up the catalog using the command line.

The catalog must be backed up daily and checked.

Backing up the catalog correctly is the only guarantee to use the software in a reliable way. Any fault must be quickly dealt with.

Backup Method

Logical or Hot Backup (opened base): the catalog is exported into an ASCII file, with the `tina_odbsave` command.

Advantages: - Logical control of the backed up information validity.
- Operation not interrupted.
- Low storage cost.

Drawbacks: - Slow catalog backup and restore operations.

Performing Backups

The catalog can be backed up with this command:

```
tina_odbsave [-no_compress]
[-dir_dest destination_directory]|[-check]
[-folder folder1 [folder2]...] [-config] [-no_job] [-prefix prefix]
[-file odbsave_file] [-pipe odbsave_pipe] [-catalog catalog] [-help]
```

For details concerning the `tina_odbsave` command, see tina_odbsave.

Unix. This program must be executed by the `root` user on Tina server.

Windows. This program must be executed by the user which has, at least, the rights of the `backup operator` on Tina server.

Catalog information is written in a destination directory.
Each administrator can choose the backup review storage location:

- Another disk.
- A directory mounted via NFS or a remote disk.
- A device provided to that end, etc.

Catalog information is automatically compressed with a compression rate of about 85 % to 95 %. The compression format is a native format: `cod`. A tool, `tina_cod`, is provided to compress and uncompress the `cod` files. However, former backups performed in earlier versions (`.z`) are still compatible.

For more information on the `tina_cod` command, see tina_cod.

The backup volume increases with the number of objects and instances contained in the catalog.

The catalog can be backed up on line or when the application does not run. The ideal case is to back it up when no automatic backup is in process. Indeed, performance is better and all backups are protected against the loss of the catalog.

The catalog backup file is called `catalog_save` and has the `.cod` extension (automatic compression by default). The destination directory paths of the backup file topics must be absolute.

You should regularly back up the catalog, at least once a day.

Unix. The easiest way to do it is to run a Unix script with the `cron` command.

You can add this line in the crontabs of the `root` user:

```
00 20 * * * /usr/tina/script >/dev/null 2>&1
```

The file `/usr/tina/script` is started each day at 8 p.m. The `root` user must have the right to run this file. Standard (`stdout`) and error (`stderr`) outputs are redirected towards the `/dev/null` file in order to avoid filling the system console with messages.

Processes run by `cron` do not usually inherit any environment variable. If this is the case on your Tina server, paths to the directories, files and commands used in your script must be absolute. Current hours are G.M.T. hours (Greenwich Mean Time).

Whatever the situation, you must check that your script is running correctly if it has been started with the `cron` command.

Windows. The easiest way to do it is to use the at command under Windows. This command allows you to plan the running of the `tina_odbsave` command.

```
at 10:00/every:M,T,W,Th,F c:\tina\Bin\tina_odbsave
-catalog catalog -dir_dest d:\dir1_dest dir2_dest ...
```

The catalog backup is automatically initiated at 10 a.m. every day except on week-ends.

Whatever the situation, you must check that your script is running correctly if it has been started with the `at` command.

> **Important**: Do not forget to automatically start the service Schedule.

For more information on the `tina_odbsave` command, see tina_odbsave.

> **Important**: For security and performance reasons, Atempo highly recommends to back up the catalog on a disk different from the one onto which the catalog is located.

Monitoring Backups

Messages are written in the `event` file to indicate the beginning and the end of the catalog backup. A beginning message with no end may mean that:

- The catalog backup is in process.
- The catalog backup failed.

You should read the `event` file or Unix/Windows alert files of the host to determine the reason why it stopped.

For more information on the `event` file , see the "Event File" topic in the Tina Administration Documentation - topic Monitoring Tools.

The backup may have ended because the server was stopped during the operation. You should also check that the disk space allocated for the catalog backup is sufficient.

An alarm is triggered to report a backup error message.

Host stop or rebooting dates and error messages such as `file system full` or `disk full` are written in management files specific to each vendor.

If the catalog is corrupted, its backup fails. The application must be stopped, then started once the last catalog being backed up has been correctly restored.

The catalog may be corrupted because of a sudden application interruption if:

- There was a power outage, etc.
- **Unix.** The signal `9` (`kill -9`) was sent to a Tina process.

> **Note**: Yet, if such events occur, the risk of losing the catalog remains very low.

> **Important**: A power failure is recorded neither in the system files nor in the `event` file. Only the date of the system reboot is known.
> **Unix.** Never stop a Tina process using `kill -9` without previously trying several simple commands `kill` (without `-9`) and waiting for a while. If a `tina_daemon` process is waiting, it may not stop immediately. You must wait for a few minutes.

This procedure allows you to check before actually performing a backup, whether you will be able to restore your catalog via a `tina_init`, if you were to back it up in its current state.

You should use this verification when you doubt the consistency of your catalog. The check will tell you if you can safely back up your catalog and then restore it, or if you should use a previously backed up version of your catalog to restore it.

> **Important**: This verification is not a foolproof way of establishing whether your catalog is or is not damaged. It only attests to the reliability of the catalog backup you are about to perform.

This procedure implies that file backups are completely stopped and that restoring data is impossible.

To check the catalog backup

1. Temporarily stop the Tina application.

Unix. To do so, stop the `tina_daemon` process on the Tina server by executing the `tina_stop` command.

Windows. To do so, stop the service `tina` on Tina server.

If backups are in progress, error messages are displayed in the `event` file.

2. Enter this command:

Unix. `~tina/Bin/tina_odbsave -catalog catalog -check`

Windows. c:\tina\Bin\tina_odbsave -catalog catalog -check

3. If the verifying process returns errors, you will not be able to perform a catalog backup allowing you to restore it. You should use the last correct catalog backup to restore the catalog.
4. If the verification does not return any error, perform a backup and use it to restore your catalog.

> **Note**: This operation must be performed by the user `root` (under Unix) or `administrator` (under Windows) on Tina server. It is not necessary to stop client daemons (under Unix) or services (under Windows). This operation may be time-consuming if the catalog is voluminous.

> **Note**: If an error occurs, make sure that it is not due to a problem such as `file system full` or `disk full`.

The `tina_odbsave` program may be executed on a host other than the Tina server, from a binary copy of the server base, the presence of the cache space is not necessary.

If your Tina server is no longer available because of a disk crash or if it is definitely out of order, data backups can be temporarily or definitively performed with another server.

This only requires that a catalog backup be available on the media or on the disk of a running machine and data be restored on the new server.

Manually restoring the Catalog

The backed up catalog is restored with the `tina_init` command.

Unix. This program must be executed by the `root` user on the Tina server.

Windows. This program must be executed by the user which has, at least, the rights of the `backup operator` on the Tina server.

For more information on how to initialize Tina with the `tina_init` program, see Creating a Tina Catalog.

Preparing for Restore

You should stop Tina before attempting to restore the catalog.

Unix. To do so, stop the `tina_daemon` process on the Tina server by executing `tina_stop`. Use the option `[-host host1 [host2]...]` of `tina_stop` if you execute the command from a client.

Windows. To do so, stop the `tina` service on the Tina server.

The `tina_init` program may be executed on a host other than the Tina server. The machine must have enough disk space to create the catalog and the cache space on it. Restore is all the quicker if the host used has enough memory. The selected host may be a more powerful machine and/or one with more memory than the Tina server.

> **Note**: Both servers must be of the same type, i.e. they must have the same architecture and operating system.

> **Note**: Writing on disk via NFS or another network disk sharing software is generally slower than on a local disk. The `odb` file must be created on a disk local to the Tina server. Once the catalog is restored, you only have to copy this file into the server directory `Data.catalog_name`. The files constituting the cache space must be copied at their allocated positions.

The program `tina_init` uncompresses the backup file(s). Just specify the absolute path of the backup file(s).

To restore a catalog from one or several backup files

1. Execute the `tina_init` program. The program is interactive and asks a certain number of questions.
2. Specify the number of backup files.

Specify the absolute path of the backup file(s):
Unix. `backup_dir/catalog_save.cod`
Windows. `d:\backup_dir\catalog_save.cod`

> **Note**: If catalog backup files are compressed, the `tina_init` program is not case-sensitive and accepts both extensions `.cod` and `.Z`. Former backups remain compatible.

> **Note**: If your library has the capacity to read barcodes, the catalog restore process automatically includes a barcode reinitialization.
> If your library does not support barcodes, a read label reinitialization can be included in the restore process if you use this command:
> `tina_init -force_reinit`

This option is only available for non barcode libraries, and it will trigger a reinitialization of all non barcode libraries associated to the catalog.

Restore Examples

These examples show how to use `tina_init` when restoring the catalog.

Unix. Before initiating `tina_init`, you should stop the daemon with the `tina_stop` command on the machine onto which the command is executed.

Windows. Before initiating `tina_init`, you should stop the `tina` service on the machine onto which the command is executed.

Example. Restoring a Catalog without Modifying Parameters

```
+-------------------------+
CATALOG CONFIGURATION
Time Navigator Enterprise Edition

Version 4.2
+-------------------------+

+----------------------------+
HOST USED
name : taanoki
type : PC/Windows NT
+----------------------------+


You can:
1) create a new catalog,
2) restore a backed up catalog,
3) modify catalog configuration.
(1, 2 or 3) > 2


You can:
1) restore a backed up catalog,
2) restore a backed up catalog and index,
3) restore a backed up catalog (configuration only),
4) restore an index.
(1, 2, 3 ou 4) >1


Do you want to close the medias?
Y(es) or n(o): (no)
```

If you restore all objects, the application asks if you want to close the medias. You should generally answer "`y`" if any file backup took place since the last catalog backup to close unfilled medias that could contain backups not known to the catalog. You can answer "`n`" if you have stopped the `tina_daemon` (under Unix) or service `tina` (under Windows) of the server before backing up the catalog and if you restore the catalog without starting the application again.

If you answer "y", this question displays:

```
You can :
1) close all cartridges,
2) select the cartridges to close.
(1 ou 2) > 1
```

You can control the media closing phase by selecting option 2: once the catalog and cache are created, you should validate the media closing. You must absolutely close all the cartridges onto which data has been written since the catalog backup. To avoid any error, you can select option 1.

```

Number of backup files: (1)
Absolute path of backup file number 1: /DT/DEV/dev/sht/V4/save.cod

Odbsave file version: 4.2.0
Odbsave file created: Tuesday 22 April 10:20:04 2008
+------------------------+
CONFIGURATION PARAMETERS
+------------------------+
---------
CATALOG:
---------
Name : rome
A catalog already exists with this name. This operation will overwrite it.
Do you want to continue? (y(es) / n(o): y
-------------
CACHE:
-------------
Segment number 1
Absolute path : memcache
Current size (MB) : 128
Segment number 2
Absolute path : /DT/DEV/dev/sht/V4/caches/cache1
Current size (MB) : 256
Segment number 3
Absolute path : /DT/DEV/dev/sht/V4/caches/cache2
Current size (MB) : 256
Segment number 4
Absolute path : /DT/DEV/dev/sht/V4/caches/cache3
Current size (MB) : 256
Segment number 5
Absolute path : /DT/DEV/dev/sht/V4/caches/cache4
Current size (MB) : 256

You want to:
1) keep previous cache configuration,
2) modify memory cache only,
3) modify disk cache only,
4) modify memory and disk cache.
(1, 2, 3 or 4) > (1)
```

```
Advanced parameters definition? (y(es) / n(o)): (n)
Warning: Maximum size is limited by current disk space to 92 GB
-------
SERVER:
-------
Name : (taanoki)


+-------------------------------+
Summary - CATALOG CONFIGURATION
+-------------------------------+
---------
CATALOG:
---------
Name : rome
Current Size (GB) : 4
Max Size (GB) : 92
Odb File size (GB): 4

-------------
CACHE:
-------------
Segment number 1
Absolute path : memcache
Size (MB) : 128
Segment number 2
Absolute path : /DT/DEV/dev/sht/V4/caches/cache1
Size (MB) : 256
Segment number 3
Absolute path : /DT/DEV/dev/sht/V4/caches/cache2
Size (MB) : 256
Segment number 4
Absolute path : /DT/DEV/dev/sht/V4/caches/cache3
Size (MB) : 256
Segment number 5
Absolute path : /DT/DEV/dev/sht/V4/caches/cache4
Size (MB) : 256
-------
SERVER:
-------
Name : taanoki
Type : Windows Server 2003

Do you want to proceed with this configuration? (y(es) / n(o)): y

- Creating the catalog "rome"
Creating and initializing catalog super cell
Creating and initializing catalog files (total size: 4 GB)
... 4 GB
```

```
- Creating the cache space
- Start read backed up catalog
Average number of backup instances per object: 5
Number of instances to restore: 4
Progression Instances Objects Time Total time Free space (%)


Objects : 4
Instances : 4
Total time : 1 s
Rate : 0.0144 M/h

- Catalog restore complete.
```

Example. Catalog Restore when Modifying Parameters

You can modify the parameters chosen during Tina installation while restoring the catalog:

- Volume of the catalog.
- Distribution and volume of the cache space.
- Server host.

If you want to decrease the catalog and/or cache space size, you must first delete the catalog and/or cache file.

Former parameters are indicated into brackets. Press return to keep them or enter the new ones. In this example, the volume of the catalog is increased and the server changes (new server type different from the previous server).

```
+-------------------------+
CATALOG CONFIGURATION
Time Navigator Enterprise Edition

Version 4.2
+-------------------------+

+---------------------------+
HOST USED
name : taanoki
type : PC/Windows NT
+---------------------------+


You can:
1) create a new catalog,
2) restore a backed up catalog,
3) modify catalog configuration.
(1, 2 or 3) > 2


You can:
1) restore a backed up catalog,
```

```
2) restore a backed up catalog and index,
3) restore a backed up catalog (config only),
4) restore an index.
(1, 2, 3 ou 4) >1

CAUTION: THIS OPERATION OVERWRITES EXISTING CATALOG!

Do you want to close the medias?
Y(es) or n(o): n

Number of backup files: (1)
Absolute path of backup file number 1: /DT/DEV/dev/sht/V4/save.cod

Odbsave file version: 4.2.0
Odbsave file created: Tuesday 22 April 10:20:04 2008

+------------------------+
CONFIGURATION PARAMETERS
+------------------------+
---------
CATALOG:
---------
Name : rome
A catalog already exists with this name. This operation will overwrite it.
Do you want to continue? (y(es) / n(o): y
-------------
CACHE:
-------------
Segment number 1
Absolute path : memcache
Current size (MB) : 128
Segment number 2
Absolute path : /DT/DEV/dev/sht/V4/caches/cache1
Current size (MB) : 256
Segment number 3
Absolute path : /DT/DEV/dev/sht/V4/caches/cache2
Current size (MB) : 256
Segment number 4
Absolute path : /DT/DEV/dev/sht/V4/caches/cache3
Current size (MB) : 256
Segment number 5
Absolute path : /DT/DEV/dev/sht/V4/caches/cache4
Current size (MB) : 256

You want to:
1) keep previous cache configuration,
2) modify memory cache only,
3) modify disk cache only,
4) modify memory and disk cache.
(1, 2, 3 or 4) > (1) 3
```

```
-------------
DISK CACHE:
-------------
Total disk cache size must be between 1 GB and 32 GB

Size (GB) : (1)
Number of cache segments (1 to 32): (4) 2

Number of segments: 2
Segment size: 512 MB
Segment number 1
Absolute path : (/DT/DEV/dev/sht/V4/caches/cache1)
Current size (MB) : (512)
Segment number 2
Absolute path : (/DT/DEV/dev/sht/V4/caches/cache2)
Current size (MB) : (512)

Advanced parameters definition? (y(es) / n(o)): (n) y

Memory cache consists of 4 containers of 32 MB
Disk cache consists of 32 containers of 32 MB

Size of memory containers (4 to 256 MB): (32) 16
Size of disk containers (4 to 1024 MB): (32)

Average number of backup instances per object: (5)
-------
SERVER:
-------
Name : (taanoki)


+------------------------------+
Summary - CATALOG CONFIGURATION
+------------------------------+
---------
CATALOG:
---------
Name : rome
Current Size (GB) : 4
Max Size (GB) : 92
Odb File size (GB): 4
-------------
CACHE:
-------------
Segment number 1
Absolute path : memcache
Current ize (MB) : 128
Segment number 2
Absolute path : /DT/DEV/dev/sht/V4/caches/cache1
```

```
Current size (MB) : 512
Segment number 3
Absolute path : /DT/DEV/dev/sht/V4/caches/cache2
Current size (MB) : 512
-------
SERVER:
-------
Name : taanoki
Type : Windows Server 2003

Do you want to proceed with this configuration? (y(es) / n(o)): y

- Creating the catalog "rome"
Creating and initializing catalog super cell
Creating and initializing catalog files (total size: 4 GB)
... 4 GB

- Creating the cache space
- Start read backed up catalog
Average number of backup instances per object: 5
Number of instances to restore: 4
Progression Instances Objects Time Total time Free space (%)


Objects : 4
Instances : 4
Total time : 1 s
Rate : 0.0144 M/h

- Catalog restore complete
```

Restarting the Application

After restoring the catalog, some operations have to be performed to restart Tina.

If you have recreated the catalog and the cache space on a host other than the Tina server, you should copy the generated catalog and cache space files at their respective positions in the Tina server tree structure.

Unix. Then you must execute the `tina_daemon` process on the server, being logged in as `root`. The process will automatically run as a background task.

Windows. Then you must start the `tina` service on the server being connected as `backup operator`.

It is advised to reinitialize the contents of your libraries. If cartridges have been moved since the catalog backup, the location of cartridges known to Tina is not the right one. As soon as an error is detected, the library will be reinitialized. However, it is better to anticipate an operation which may be time-consuming and delay the beginning of a writing session on cartridges.

Flipping Magneto-Optical disks

If you use `tina_cart` along with a magneto-optical drive, you must set the FLIP_SCRIPT_PATH environment variable. Its value must be the path to a script which will flip the magneto-optical media when required, followed by the drive device descriptor.

On Unix systems (ksh):

1. Create the `flip.sh` script in the TINA_HOME directory. This script must contain these commands:

```
if [ ! "$1" -o ! "$2" ]; then
echo "Usage : $0 library_device drive_number"
echo " $0 /dev/qc0,0 d0"
exit 5
fi
TINA_HOME=${TINA_HOME:-"/usr/tina"};
if [ ! -d $TINA_HOME ];then
echo \$TINA_HOME = $TINA_HOME doesn t exist
exit 2
fi
cmd="open $1 \nopen $1 \nmov Marilou36!
-flip $2 $2\nclose"
echo $cmd
echo $cmd | $TINA_HOME/Bin/qcdiag
```

2. Declare the FLIP_SCRIPT_PATH variable:

```
(ksh) export FLIP_SCRIPT_PATH="$TINA_HOME/flip.sh /dev/qc0,0 d0"
```

where `/dev/qc0,0 d0` represents the device descriptor of the magneto-optical drive.

On Windows systems:

1. Create the `flip.cmd` script in the TINA_HOME directory. This script must contain these commands:

```
@echo off
rem echo %0 %1 %2
rem set FLIP_SCRIPT_PATH="%TINA_HOME%\flip.cmd" c3b0t1l0 d0
echo flip
echo open %1 > qcdiag.txt
echo mov -flip %2 %2 >> qcdiag.txt
qcdiag qcdiag.txt > NUL
rem use pause instead of qcdiag for manual drive
```

2. Declare the FLIP_SCRIPT_PATH variable:

```
set FLIP_SCRIPT_PATH="%TINA_HOME%\flip.cmd" c3b0t2l0 d0
```

where `c3b0t2l0 d0` is the device descriptor of the magneto-optical drive.