

Universal Command 7.9.x Quick Reference Guide

Universal Agent 7.9.x

© 2024 by Stonebranch, Inc. All Rights Reserved.

Table of Contents

1	Usage	4
1.1	ucmd COMMAND HOST [USER] [LOCAL] [OPTIONS...] [STDFILE OPTIONS]	4
1.2	ucmd { -help -version }	4
2	Format.....	5
2.1	COMMAND { -cmd [-cmd_type] -script [-options] [-script_type] } [{-file -encryptedfile [-key] }] [-server]	5
2.2	HOST -host [-port] [-hostname_retry_count] [-outboundip].....	5
2.3	LOCAL [-system_id] [-bif_directory] [-plf_directory]	6
2.4	USER [-userid [-pwd]] [-login].....	6
2.5	OPTIONS [{-help -version } [-lang] [-level] [-codepage] [-comment] [-compress] [-connect_timeout] [-crl] [-dns_expand] [-encrypt] [-authenticate] [-host_selection] [-mft_safe_mode] [-networkft] [-managerft] [-assign_process_to_job] [-delay] [-job_retention] [-retry_count] [-retry_interval] [-cmdid] [-restart] [-saf_key_ring] [-saf_key_ring_label] [-ssl_implementation] [-server_stop_conditions] [-tracefilelines] [-tracetable] [-uencrypted_codepage] [-uencrypted_codepage_path] [-elevate_user_token] [-forcecomplete] [-trailingspaces] [-ctl_ssl_cipher_list] [-data_ssl_cipher_list] [-default_cipher] [-cert -private_key [-private_key_pwd]] [-ca_certs [-verify_host_name] [-verify_serial_number]]]	7
2.6	STDFILE-OPTIONS [{-stdin -stdout -stderr} [-codepage] [-remotecodepage] [-mode] [-compress] [-encrypt] [-authenticate] [-localfile]].....	10

1 Usage

1.1 `ucmd COMMAND HOST [USER] [LOCAL] [OPTIONS...] [STDFILE OPTIONS]`

1.2 `ucmd { -help | -version }`

2 Format

There is a long form and, for most options, a short form available for specifying each option on the command line. The long form is not case-sensitive; the short form is case-sensitive.

Options must be prefixed with a dash (-) character. If an option value is specified, the option and its value must be separated by at least one space.

2.1 COMMAND {-cmd [-cmd_type] | -script [-options] [-script_type] } [{-file | -encryptedfile [-key] }] [-server]

Long Form	Short Form	Description
-cmd <i>command</i>	-c <i>command</i>	Command to execute on the remote host. <i>command</i> must be in quotation marks if it contains any white space or shell meta-characters.
-cmd_type <i>type</i>	n/a	Type of command specified by -cmd . Valid values are defined by the server on which the command will be executed.
-encryptedfile <i>file</i>	-x <i>file</i>	Encrypted file from which UCMD options are read. Encrypted UCMD option files are creating using Universal Encrypt.
-exit_code_map <i>map</i>	n/a	Allows exit codes from the user process executed by UCMD Server to be translated (mapped) to a corresponding exit code for UCMD Manager
-file <i>file</i>	-f <i>file</i>	File from which UCMD options are read.
-key <i>key</i>	-K <i>key</i>	Key that was passed to Universal Encrypt when the UCMD option file was encrypted.
-options <i>options</i>	-o <i>options</i>	List of command line options for the script file specified by -script .
-script <i>file</i>	-s <i>file</i>	Script file to execute on the remote host.
-script_type <i>type</i>	n/a	Type of script specified by -script . Valid values are defined by the server on which the script will be executed.
-server <i>options</i>	-S <i>options</i>	Platform-specific options that are passed directly to the server.

2.2 HOST -host [-port] [-hostname_retry_count] [-outboundip]

Long Form	Short Form	Description
-host <i>hostlist</i>	-i <i>hostlist</i> >	List of one or more hosts upon which a command can run.
-hostname_retry_count <i>count</i>	n/a	Number of times that UCMD will attempt to resolve the host name of a specified Universal Broker before it ends with a connect error.

Long Form	Short Form	Description
-outboundip <i>address</i>	n/a	Host network address to bind to for all outbound connections. <i>address</i> format is dotted form (1.2.3.4) or a host domain name.
-port <i>port</i>	-p <i>port</i>	Host port number on which the Universal Broker is listening. Default is the Universal Broker default.

2.3 LOCAL [-system_id] [-bif_directory] [-plf_directory]

Long Form	Short Form	Description
-system_id <i>ID</i> ^Z	n/a	Local Universal Broker with which the UCMD Manager must register before the Manager performs any request.
-bif_directory <i>directory</i> ^U	n/a	Broker Interface File (BIF) directory where the Universal Broker interface file is located.
-plf_directory <i>directory</i>	n/a	Program Lock File (PLF) directory where the program lock files are located.
^Z Available for use on z/OS operating systems only. ^U Available for use on UNIX operating systems only.		

2.4 USER [-userid [-pwd]] [-login]

Long Form	Short Form	Description
-login <i>option</i>	-G <i>option</i>	Establish user login environment.
-pwd <i>password</i>	-w <i>password</i>	Remote user ID's password.
-userid <i>user</i>	-u <i>user</i>	Remote user ID with which the command runs.

2.5 OPTIONS [{-help | -version } | [-lang] [-level] [-codepage] [-comment] [-compress] [-connect_timeout] [-crl] [-dns_expand] [-encrypt] [-authenticate] [-host_selection] [-mft_safe_mode] [-networkft] [-managerft] [-assign_process_to_job] [-delay] [-job_retention] [-retry_count] [-retry_interval] [-cmdid] [-restart] [-saf_key_ring] [-saf_key_ring_label] [-ssl_implementation] [-server_stop_conditions] [-tracefilelines] [-tracetable] [-uencrypted_codepage] [-uencrypted_codepage_path] [-elevate_user_token] [-forcecomplete] [-trailingspaces] [-ctl_ssl_cipher_list] [-data_ssl_cipher_list] [-default_cipher] [-cert -private_key [-private_key_pwd]] [-ca_certs [-verify_host_name] [-verify_serial_number]]]

Long Form	Short Form	Description
-assign_process_to_job <i>option</i>	n/a	Specification for whether or not UCMD Server assigns child processes to a single Windows job object.
-authenticate <i>option</i>	-a <i>option</i>	Specification for whether or not all data sent over the network is authenticated (yes or no). Default is no.
-ca_certs <i>file</i>	n/a	Name of a PEM-formatted file containing the X.509 certificates for trusted Certificate Authorities (CAs).
-cert <i>file</i>	n/a	Name of a PEM-formatted file containing an X.509 certificate used to identify UCMD to the Broker.
-cmdid <i>id</i>	-C <i>id</i>	Identifier of the unit of work represented by the UCMD Manager, UCMD Server, and user command.
-codepage <i>codepage</i>	-t <i>codepage</i>	Code page used to translate text on the local host for all standard files.
-comment <i>text</i>	n/a	User-defined string.
-compress <i>mode[,method]</i>	-k <i>mode[,method]</i>	Specification for whether or not data transmitted across the network should be compressed Valid values for <i>mode</i> are yes and no. Default is no. <i>method</i> specifies the method of compression: <ul style="list-style-type: none"> • zlib (ZLIB compression algorithm is used.) • hasp (HASP compression algorithm is used.) Default is zlib.
-connect_timeout <i>seconds</i>	n/a	Length of time that a UCMD Manager will wait for a connection to a remote Universal Broker to complete.
-crl <i>file / ddname</i>	n/a	File name / ddname of the PEM-formatted file containing the Certificate Revocation List (CRL) issued by the trusted Certificate Authority.
-ctl_ssl_cipher_list <i>ciphers</i>	n/a	SSL/TLS cipher suites (one or more, in their preferred order) for control SSL/TLS connections. <i>ciphers</i> is a comma-separated list of cipher suite names or a single value of NULL-NULL, which disables SSL/TLS, encryption, and message authentication. Valid SSL/TLS cipher suites are AES256-GCM-SHA384,AES256-SHA,AES128-GCM-SHA256,AES128-SHA,ECDHE-RSA-AES256-GCM-SHA384,ECDHE-ECDSA-AES256-GCM-SHA384,ECDHE-RSA-AES128-GCM-SHA256,ECDHE-ECDSA-AES128-GCM-SHA256,RC4-SHA,RC4-MD5,DES-CBC3-SHA.

Long Form	Short Form	Description
-data_ssl_cipher_list <i>ciphers</i>	n/a	SSL/TLS cipher suites (one or more, in their preferred order) for stdio SSL/TLS connections. <i>ciphers</i> is a comma-separated list of cipher suite names. Valid values are AES256-GCM-SHA384, AES256-SHA, AES128-GCM-SHA256, AES128-SHA, ECDHE-RSA-AES256-GCM-SHA384,ECDHE-ECDSA-AES256-GCM-SHA384,ECDHE-RSA-AES128-GCM-SHA256,ECDHE-ECDSA-AES128-GCM-SHA256, RC4-SHA, RC4-MD5, DES-CBC3-SHA, and DES-CBC-SHA. One of these cipher suites is used when encryption is requested with the -encrypt option and the SSL/TLS protocol is used with the server.
-default_cipher <i>cipher</i>	n/a	Default SSL/TLS cipher used when no encryption is requested. Valid values are AES256-GCM-SHA384, AES256-SHA, AES128-GCM-SHA256, AES128-SHA, ECDHE-RSA-AES256-GCM-SHA384,ECDHE-ECDSA-AES256-GCM-SHA384,ECDHE-RSA-AES128-GCM-SHA256,ECDHE-ECDSA-AES128-GCM-SHA256, RC4-SHA, RC4-MD5, DES-CBC3-SHA, DES-CBC-SHA, NULL-SHA256, NULL-SHA, NULL-MD5, and NULL-NULL (no SSL/TLS). Default is NULL-MD5.
-delay <i>seconds</i>	-d <i>seconds</i>	Maximum delay for transmitting data that may be expected due to network conditions.
-dns_expand <i>option</i>	n/a	Number of IP addresses returned to UCMD Manager following a DNS query, which is issued to resolve a host name.
-elevate_user_token <i>option</i>	n/a	Allows a process to obtain a user access token that is not subject to User Account Control (UAC) restrictions. It overrides the UCMD Server ELEVATE_USER_TOKEN configuration option that determines whether a Windows process executes with highest available privileges.
-encrypt <i>option</i>	-e <i>option</i>	Specification for whether or not all data sent over the network is encrypted (yes or no). Default is no.
-forcecomplete <i>option</i>	n/a	Specification for whether or not to force a PENDING server to a completed state (yes or no). Default is no.
-help	-h	Writes help file.
-host_selection <i>option</i>	n/a	Host (from the -host list) that the UCMD Manager will choose to begin its attempts to connect to a remote Universal Broker.
-job_retention <i>seconds</i>	-j <i>seconds</i>	Length of time that a server should wait after the user process ends for a manager reconnect request. The server default is 172,800 seconds (2 days).
-lang <i>language</i>	-L <i>language</i>	Message and text language.
-level <i>level</i> [<i>time</i>]	-l <i>level</i> [<i>time</i>]	Level of messages to write. <i>level</i> is one or more of the following, separated by commas: error warn info audit trace}. <i>time</i> specifies whether or not a time stamp is included with each message. Valid values for <i>time</i> are {notime time}.
-managerft <i>option</i>	-M <i>option</i>	Specification for whether or not to use manager fault tolerance (yes or no). Default is no.
-mft_safe_mode <i>option</i>	n/a	Situations in which more than one host may be specified in the -host list when manager fault tolerance (MFT) is enabled.
-networkft <i>option</i>	-N <i>option</i>	Specification for whether or not to use network fault tolerance (yes or no). Default is no.
-private_key <i>file</i>	n/a	Name of a PEM formatted file containing the RSA private key corresponding to the X.509 certificate specified by -cert .

Long Form	Short Form	Description
-private_key_password <i>password</i>	n/a	Password for the private key file specified by -private_key .
-restart <i>option</i>	-R <i>option</i>	Specification for whether or not this execution of UCMD Manager is a restart of a previous manager fault tolerant Manager. Valid values for <i>option</i> are {yes no auto}. Default is no.
-retry_count <i>count</i>	n/a	Number of reconnection attempts that will be made following a network outage.
-retry_interval <i>seconds</i>	n/a	Number of seconds to wait between reconnection attempts.
-saf_key_ring <i>name</i> ^Z	n/a	SAF certificate key ring name that the Universal Command job should use for its certificate.
-saf_key_ring_label <i>label</i> ^Z	n/a	Label of the certificate in the SAF certificate key ring that the Universal Command job should use for its certificate.
-ssl_implementation <i>option</i> ^Z	n/a	SSL/TLS implementation to be used for network communications. Valid values for <i>option</i> are OPENSLL (OpenSSL SSL/TLS library is used.) and SYSTEM (z/OS system SSL library is used.)
-server_stop_conditions <i>codes</i> ^Z	n/a	Exit codes (one or more) of the executing UCMD Manager that should trigger the locally running Universal Broker to cancel the corresponding UCMD Server for the exited UCMD Manager.
-trace_table <i>size,condition</i>	n/a	Size of a wrap-around trace table maintained in memory. <i>size</i> is the table size in kilobytes or megabytes (for example, 100K or 10M). <i>condition</i> is the condition under which the trace table is written: <ul style="list-style-type: none"> • error: Write table only if the program ends with a non-zero return code. • always: Always write table when the program ends. • never: Never write table.
-tracefilelines <i>count</i>	n/a	Maximum number of lines written to a trace file before it wraps around to the top of the file.
-uencrypted_codepage	n/a	Character code page that Universal Command Manager uses to translate characters within a command file that has been encrypted with the Universal Encrypt utility
-uencrypted_codepage_path	n/a	Location of the code page specified by the UENCRYPTED_CODEPAGE option
-verify_host_name <i>host</i>	n/a	Specification that the Broker's X.509 certificate must identify a host name that matches <i>host</i> .
-verify_serial_number <i>number</i>	n/a	Specification that the Broker's X.509 certificate must have a serial number that matches <i>number</i> . Hexadecimal format is specified with a prefix of 0x or 0X.
-version	-v	Write program version information and exit.
^Z Available for use on z/OS operating systems only.		

2.6 STDFILE-OPTIONS [{-stdin | -stdout | -stderr} [-codepage] [-remotecodepage] [-mode] [-compress] [-encrypt] [-authenticate] [-localfile]]...

Long Form	Short Form	Description
-stdin	-I	Start of stdin options.
-stdout	-O	Start of stdout options.
-stderr	-E	Start of stderr options.
-authenticate <i>option</i>	-a <i>option</i>	Authentication option - yes or no (default) - for the standard file.
-codepage <i>codepage</i>	-t <i>codepage</i>	Code page used to translate text on local host for standard file.
-compress <i>mode[method]</i>	-k <i>mode</i>	<p>Compression option for the standard file.</p> <p>Valid values for <i>mode</i> are yes and no.</p> <p>Default is no.</p> <p><i>method</i> specifies the method of compression:</p> <ul style="list-style-type: none"> • zlib (ZLIB compression algorithm is used.) • hasp (HASP compression algorithm is used.) <p>Default is zlib.</p>
-encrypt <i>option</i>	-e <i>option</i>	<p>Specification for whether or not the standard file is encrypted (yes or no).</p> <p>Default is no.</p>
-localfile <i>file</i>	-F <i>file</i>	Local file name to read from for stdin or written to for stdout and stderr. In the case of stdin, if a <i>file</i> value is not specified, stdin is immediately closed.
-mode <i>mode</i>	-m <i>mode</i>	<p>Standard file transfer mode.</p> <p>Valid values for <i>mode</i> are one or more of the following, separated by commas: {binary text [,direct ucs]}.</p> <p>Default is text,ucs.</p>
-remotecodepage <i>codepage</i>	-T <i>codepage</i>	Code page used to translate text on the remote host for the standard file.
-trailingspaces <i>option</i> ^Z	n/a	<p>Specification for how fixed format records are read from UNVIN ddname.</p> <p>This option is standard input, text mode only. Either the complete record is read including trailing spaces or only the data up to the last non-space character is read. The default behavior is to truncate the data after the last non-space character in the record.</p> <p>Valid values for <i>option</i> are:</p> <ul style="list-style-type: none"> • yes: Complete record is read. • no: Record is truncated after last non-space character. <p>Default is no.</p>
^Z Available for use on z/OS operating systems only.		