

Universal Command 7.8.x Quick Reference Guide

Universal Agent 7.8.x

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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. |

| Long Form | Short Form | Description |
|------------------------------------|----------------|--|
| -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. |
| -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_king_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. |

| Long Form | Short Form | Description |
|--------------------------------------|--------------------|--|
| -ctl_ssl_cipher_list <i>ciphers</i> | n/a | <p>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.</p> <p>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.</p> |
| -data_ssl_cipher_list <i>ciphers</i> | n/a | <p>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.</p> <p>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.</p> <p>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.</p> |
| -default_cipher <i>cipher</i> | n/a | <p>Default SSL/TLS cipher used when no encryption is requested.</p> <p>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).</p> <p>Default is NULL-MD5.</p> |
| -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> | <p>Specification for whether or not all data sent over the network is encrypted (yes or no).</p> <p>Default is no.</p> |
| -forcecomplete <i>option</i> | n/a | <p>Specification for whether or not to force a PENDING server to a completed state (yes or no).</p> <p>Default is no.</p> |
| -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. |

| Long Form | Short Form | Description |
|---|---------------------------------|--|
| -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 . |
| -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. |

| Long Form | Short Form | Description |
|--|------------|---|
| -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> | Compression option for the standard file. 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. |
| -encrypt <i>option</i> | -e <i>option</i> | Specification for whether or not the standard file is encrypted (yes or no). Default is no. |
| -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. |

| Long Form | Short Form | Description |
|--|--------------------|--|
| -mode <i>mode</i> | -m <i>mode</i> | Standard file transfer mode. Valid values for <i>mode</i> are one or more of the following, separated by commas: {binary text [,direct ucs]}. Default is text,ucs. |
| -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 | Specification for how fixed format records are read from UNVIN ddname. 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. Valid values for <i>option</i> are: <ul style="list-style-type: none"> • yes: Complete record is read. • no: Record is truncated after last non-space character. Default is no. |
| ^Z Available for use on z/OS operating systems only. | | |