

Send command to a device that supports the AK protocol

Keyword:

@AK_COMMAND

Usage:

Send a command to a device that supports the ASAP3 interface over a serial link (RS-232). The command string will be parsed and converted to a string which the device can interpret. The value **ASAP** should be provided for the *instrument_name*. The ASAP3 strings supported are identified below. The sequence of use of the strings required on initialization is:

- init
- identify
- select

After that, the remaining commands may be used as desired. Monitoring allows measured parameters to be continuously monitored by CyFlex and for their values to be placed in CyFlex variables. It is recommended that a *monclear* command be issued before a new list is specified to avoid transferring data that is not necessary, which would cause performance degradation. Parameter *sets* and *gets* allow fixed parameters to be sent or received. This is supported while monitoring is active or inactive.

The processes **ASAPDrv** and **ASAPMgr** are required to be operating to support the use of this keyword. The commands `/specs/cmds/start_ASAP3` and `/specs/cmds/slay_ASAP3` start and stop these processes.

Data Fields:

```
@AK_COMMAND
#start_type stop_code failure_action
AT_START MODE_TERMINATE 99
#instrument name
ASAP
#command key strings
"command"
```

| Data field | Meaning |
|-----------------|--|
| start_type | code for when to send the command - options are AT_START and AFTER-STABILITY |
| stop_path | code for action to take when communication has completed successfully - options are MODE_TERMINATE, NONE, RETURN, a mode number, or a test procedure pathname |
| fail_path | code for execution path to take if communication fails or an error is reported by the device - options are MODE_TERMINATE, NONE, RETURN, a mode number, or a test procedure pathname |
| instrument_name | the device (should normally be ASAP) |
| command strings | a list of commands to execute in sequence |

Command Strings:

The following command strings are supported:

| | |
|---------------------|---|
| "timeout asset_var" | defines the CyFlex variable that contains the timeout value |
| "init" | initialize the interface with the device |

| | |
|----------------------------------|--|
| "identify ASSET" | identify the host |
| "select_file desc_file bin file" | identify desc file and binary file, for ETAS VS-100, these are the root names of the DAMOS file and HEX file, respectively |
| "monclear" | clear the monitor list |
| "monadd remote_par asset_var" | add monitor parameter, retrieving remote_par and placing the value in asset_var |
| "monon" | start monitoring mode |
| "monoff" | stop monitoring mode |
| "getpar remote_var asset_var" | get parameter value from remote system |
| "setpar remote_var asset_var" | set parameter value in remote system |
| "emergency" | emergency detected by CyFlex |

Example Specification:

| | |
|--------------------------------------|---|
| @AK_COMMAND | |
| #start_type stop_code failure_action | |
| AT_START MODE_TERMINATE ELSE_MODE | |
| #instrument name | |
| ASAP | |
| #command key strings | |
| "timeout asap_to" | #defines the variable that contains the timeout value |
| "init" | #initialize the interface with the device |
| "identify ASSET" | #identify the host |
| "select_file PL056201 PL056201" | #identify desc file and binary file |
| "monclear" | #clear the monitor list |
| "monadd efps_u_w efps_u_w" | #add monitor parameter |
| "monon" | #start monitoring mode |
| "monoff" | #stop monitoring mode |
| "getpar RTMC_PHI_BIMI_CA phi_ca" | #get parameter value from remote system |
| "setpar RTMC_PHI_BIMI_CB phi_enbl" | #set parameter value in remote system |
| "emergency" | #emergency detected by CyFlex |