EDOC...

EUROGAM PROJECT

NSF DATA ACQUISITION SYSTEM

Eurogam Spectrum Access Server - Commands

Edition 1.0
December 1991

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Introduction

This document describes the UNIX command interface to the Eurogam Spectrum Access Server (SAS) forming part of the NSF data acquisition system. The commands call the functions described in the document *Spectrum Access Server — C library* (EDOC087)

Each time a command is invoked the host, capability, user and spectrum name are stored in an information file (/usr/tmp/sas_info by default). Subsequent commands will assume these values if they are not specified on the command line.

Commands

sasclaim [-f file] host [-u user] [password] [mode]

Claim the resorce *host* for the use of the user. The returned capability is stored in the information file.

sasfree [-f file] [-u user] [-c capability] [host]

Free the resorce *host*. If *host* is not specified the latest entry in the information file is assumed.

sascreates [-f file] [-u user] [-c capability] [spectrum [host]]

Creates the spectrum *spectrum* (default is "no_spectrum"). The description for the spectrum is currently coded into this testbed.

sasdeletes [–f file] [-u user] [–c capability] [spectrum [host]]

Removes the spectrum *spectrum* from the resource *host*.

sasreads [–f file] [-u user] [–c capability] [spectrum [host]] [-k offset]

Display the contents of a given part of the spectrum *spectrum*. The part of the spectrum to be read is currently coded into this testbed. The default offset is zero.

saswrites [-f file] [-u user] [-c capability] [spectrum [host]] [-k offset]

Write data to a given part of the spectrum *spectrum*. The part of the spectrum to be written to is currently coded into this testbed. The default offset is zero.

sasreadstr [-f file] [-u user] [-c capability] string_type string_number [spectrum [host]]

Read a given string of type *string_type* and number *string_number* from the spectrum *spectrum* on *host*.

saswritestr [-f file] [-u user] [-c capability] string_type string_number [-i string] [spectrum [host]]

Write the string *string* of type *string_type* and number *string_number* to the spectrum *spectrum* on *host*.

saslookup [-f file] [-u user] [-c capability] [spectrum [host]]

Display the header information for a given spectrum.

sasnames [-f file] [-u user] [-c capability] [-k cookie] [host]
Display a list of names recognised by the spectrum access server, starting from position *cookie* in the list. In the case of off-line servers, this will be a list of spectra and directories.

sascao [-f file] [-u user] [-c capability] [-n array][spectrum [host]]
Change the options for the array *array*. The new options are currently coded into the testbed.

saserm [-f file] [-u user] [-c capability] [host]
Displays a short message associated with the last error that occured for the user *user*.

Options

This section describes the options available for the commands above. Users who do not wish to supply all the arguments or to supply them out of order, can do so by specifying them as options.

–c capability This option specifies capability string. The capability is stored in the information file when a resource is claimed so it is not recomended to use this option.

–f file This option specifies the name of the information file to use.

–h host This option specifies the host or resource name. If not specified the command will assume the last host entered on the information file.

–i string This option specifies a string. If not specified, the command will assume a null string was intended.

–k cookie This option specifies cookie value for use when returning lists of registers.

–m mode This option specifies the mode of access to be used when starting a session.

–n number This option specifies the string or array number when carrying out read or write operations..

–p password This option specifies the password for the user when starting a session.

–t type This option specifies the type of string to be dealt with when performing string operations.

–u user This option specifies the user when starting a session.

–x If this option is specified the command will display a list of options and quit.

Examples

sasclaim nnvb will claim the resource *nnvb*.

sasfree –f myfile will free the last resource entered in the file *myfile*.

sascreates aspectrum nnvf will define a spectrum to be known by the resource *nnvx* with name *aspectrum*.

sasdeletes will remove the last spectrum entered in the default information file.

sasreads this.spectrum –n1 –k345 will read array 1 of spectrum *this.spectrum*, starting from element 345 into the area given in *sasreads*.