Slurm API(3)   Slurm job step initiation functions   Slurm API(3)

NAME

slurm_free_job_step_create_response_msg, slurm_job_step_create – Slurm job step initiation functions

SYNTAX

#include <slurm/slurm.h>

void **slurm_free_job_step_create_response_msg** (
        job_step_create_response_msg_t *slurm_step_alloc_resp_msg_ptr*
);

int **slurm_job_step_create** (
        job_step_create_request_msg_t *slurm_step_alloc_req_msg_ptr*,
        job_step_create_response_msg_t **slurm_step_alloc_resp_msg_pptr*
);

ARGUMENTS

slurm_step_alloc_req_msg_ptr
        Specifies the pointer to the structure with job step request specification. See slurm.h for full details on the data structure's contents.

slurm_step_alloc_resp_msg_pptr
        Specifies the double pointer to the structure to be created and filled with a description of the created job step: node allocation, credentials, etc. See slurm.h for full details on the data structure's contents.

DESCRIPTION

slurm_free_job_step_create_response_msg Release the storage generated in response to a call of the function **slurm_job_step_create**.

slurm_job_step_create Initialize a job step including the allocation of nodes to it from those already allocate to that job. Always release the response message when no longer required using the function **slurm_free_job_step_create_response_msg**. The list of host names returned may be matched to their data in the proper order by using the functions **hostlist_create**, **hostlist_shift**, and **hostlist_destroy**.

RETURN VALUE

On success, zero is returned. On error, −1 is returned, and Slurm error code is set appropriately.

ERRORS

SLURM_PROTOCOL_VERSION_ERROR Protocol version has changed, re−link your code.

ESLURM_INVALID_JOB_ID the requested job id does not exist.

ESLURM_ALREADY_DONE the specified job has already completed and can not be modified.

ESLURM_ACCESS_DENIED the requesting user lacks authorization for the requested action (e.g. trying to delete or modify another user's job).

ESLURM_DISABLED the ability to create a job step is currently disabled. This is indicative of the job being suspended. Retry the call as desired.

ESLURM_INTERCONNECT_FAILURE failed to configure the node interconnect.

ESLURM_BAD_DIST task distribution specification is invalid.

SLURM_PROTOCOL_SOCKET_IMPL_TIMEOUT Timeout in communicating with Slurm controller.

NOTE

These functions are included in the libslurm library, which must be linked to your process for use (e.g. "cc −lslurm myprog.c").

COPYING

Copyright (C) 2002-2007 The Regents of the University of California. Produced at Lawrence Livermore National Laboratory (cf, DISCLAIMER). CODE−OCEC−09−009. All rights reserved.

This file is part of Slurm, a resource management program. For details, see

<https://slurm.schedmd.com/>.

Slurm is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

Slurm is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

SEE ALSO

hostlist_create(3), **hostlist_shift**(3), **hostlist_destroy**(3), **srun**(1), **slurm_get_errno**(3), **slurm_perror**(3), **slurm_strerror**(3)