

NAME

`slurm_hostlist_create`, `slurm_hostlist_shift`, `slurm_hostlist_destroy` – Slurm host list support functions

SYNTAX

```
#include <slurm/slurm.h>

hostlist_t slurm_hostlist_create (
    char *node_list
);

char * slurm_hostlist_shift (
    hostlist_t host_list
);

void slurm_hostlist_destroy (
    hostlist_t host_list
);
```

ARGUMENTS

node_list

A list of nodes as returned by the **slurm_job_step_create** functions. The returned value may include a simple range format to describe numeric ranges of values and/or multiple numeric values (e.g. "linux[1–3,6]" represents "linux1", "linux2", "linux3", and "linux6").

host_list

A hostlist created by the **slurm_hostlist_create** function.

DESCRIPTION

slurm_hostlist_create creates a database of node names from a range format describing node names. Use **slurm_hostlist_destroy** to release storage associated with the database when no longer required.

slurm_hostlist_shift extracts the first entry from the host list database created by the **slurm_hostlist_create** function.

slurm_hostlist_destroy releases storage associated with a database created by **slurm_hostlist_create** when no longer required.

RETURN VALUE

slurm_hostlist_create returns the host list database or NULL if memory can not be allocated for the database.

slurm_hostlist_shift returns a character string or NULL if no entries remain in the database.

EXAMPLE

```
#include <stdio.h>
#include <hostlist.h>
#include <slurm.h>

int main (int argc, char *argv[])
{
    hostlist_t my_hostlist;
    char *hostnames, *host;

    /* generate a list of hostnames, possibly using a */
    /* slurm job step creation function */

    my_hostlist = slurm_hostlist_create (hostnames);
    if (my_hostlist == NULL) {
        fprintf (stderr, "No memory\n");
        exit (1);
    }
}
```



```
while ( (host = slurm_hostlist_shift(my_hostlist)) ) {  
    printf ("host = %s\n", host);  
    free(host);  
}  
slurm_hostlist_destroy (my_hostlist);  
exit (0);  
}
```

NOTE

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

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SEE ALSO

slurm_get_job_steps(3), slurm_load_jobs(3), slurm_load_partitions(3)

