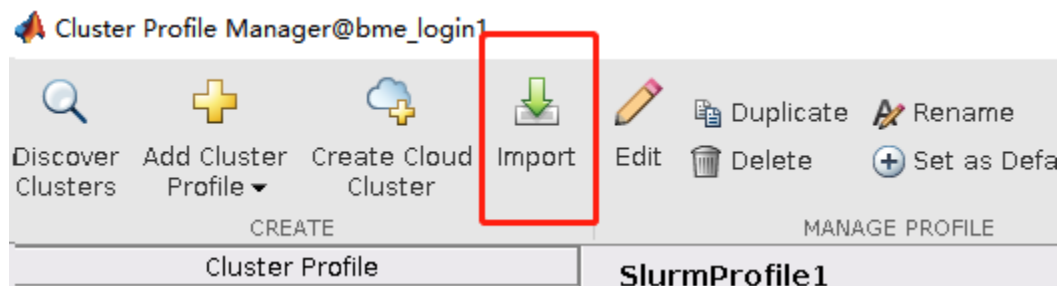
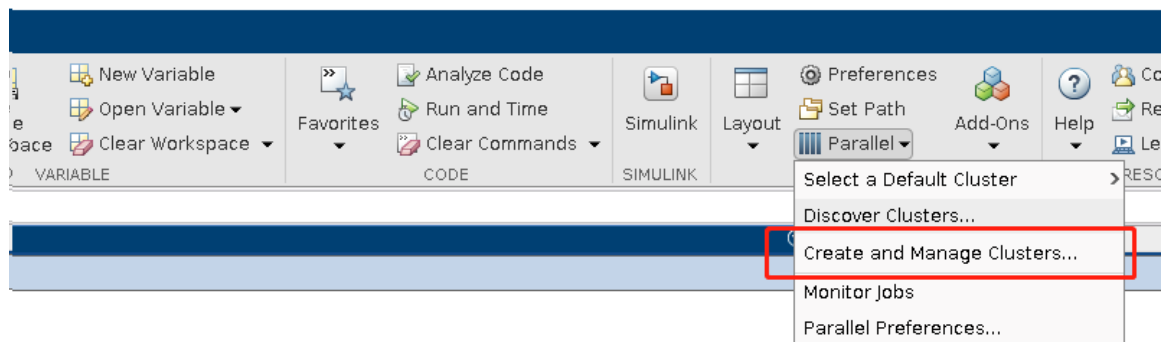


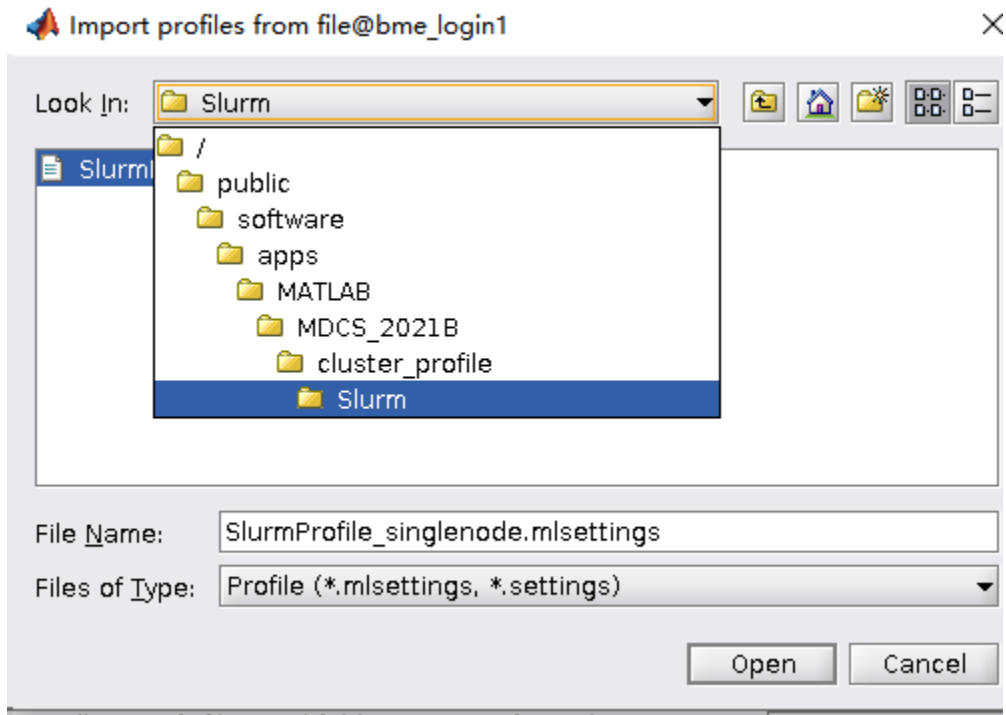
# Slurm 集群版 MATLAB 2021B 使用步骤

1. 登录 user@10.15.49.6，并开启 x11 转发。
2. 加载 matlab 的 module， apps/matlab/2021b
3. 用户在个人电脑开发 MATLAB 脚本，比如 abc.m。然后将其复制到集群文件路径，比如 \$home/myaccount
4. 导入集群配置文件：从登陆节点（10.15.49.6）打开 MATLAB 图形界面，点击 Parallel > create and Manage Cluster Profiles，选择 Import

(可导入自

/public/software/apps/MATLAB/MDCS\_2021B/cluster\_profile/Slurm/SlurmProfile\_singlenode.mlsettings)





## 5. 集群配置说明

1) work 数量及 threads 数量可根据计算资源及实际作业进行调整

Description of this cluster Description	MATLAB2021_FOR_SLURM
Folder where job data is stored on the client JobStorageLocation	/public/software/apps/MATLAB/jobs_slurm_tmp
Number of workers available to cluster NumWorkers	28
Number of computational threads to use on each worker NumThreads	1
Root folder of MATLAB installation for workers ClusterMatlabRoot	/public/software/apps/MATLAB/MDCS_2021B
License number (Optional: Used only if this cluster uses online licensing) LicenseNumber	<none>
Cluster uses online licensing RequiresOnlineLicensing	<none>

## 2) 调度资源配置

ADDITIONAL SLURM PROPERTIES	
Resource arguments for job submission. Use the placeholders '^N^' for the number of workers and '^T^' for NumThreads. ResourceTemplate	--ntasks-per-node=28 --partition=bme_cpu --nodes=1
Additional command line arguments for job submission SubmitArguments	<none>
Script that cluster runs to start workers CommunicatingJobWrapper	MathWorks provided script (default)

FILES AND FOLDERS

ntasks-per-node 每节点使用 cpu 数量

Partition 队列名

Nodes 调用节点数

……其他参数可参考 sbatch 资源调度参数

## 6. 命令行脚本使用

例:

```
module load apps/matlab/2021b
```

```
/public/software/apps/MATLAB/MDCS_2021B/bin/matlab -nodisplay -nojvm < abc.m >> mat.out
```