

MIST/C – Moodle Integration

Installation and configuration in Moodle:

The installation process for the MIST/C activity module is similar to other Moodle modules. The directory is extracted into the Moodle mods directory and the site administrator completes the installation by loading the admin page and confirming the installation. The installation automatically creates the required tables in the Moodle database. As part of the installation, the site administrator can configure certain parameters:

1. Host address: the host or IP address passed to the client when making a connection. This should be the address where the MIST/C controller process is configured as described in the server installation documentation.
2. TCP Port Range: when a MIST/C Room is added to a course it will be assigned a dedicated TCP port from a continuous range of ports allocated. The interface accepts a starting port number and the number of ports to allocate. This value places a limit on the number of MIST/C Rooms that can be created in Moodle. Once the limit is reached, additional MIST/C rooms cannot be added to Moodle courses.
3. Default client .nwm: this provides the default client configuration parameters that are passed to the client as an XML file during connection. It can be overridden for each course to allow for customization.

After installation is completed, instructors can add MIST/C rooms to individual courses by editing the course and adding the “MIST/C Room” activity. There can only be one MIST/C Room for each course.

There are four capabilities associated with the MIST/C Room activity module in Moodle. These capabilities define the permissions and options available to users accessing the MIST/C Virtual Room.

1. mistc:view – Defines the capability to view the MIST/C virtual room. This is the most basic ability required to connect. By default, it is permitted for all users.
2. mistc:controller – Defines the capability to control the floor in the MIST/C virtual room and transmit audio/slides. By default, this capability is turned on for teachers, non-editing teachers, and managers/administrators.
3. mistc:supporter – Defines the capability to start and stop the server for a specific virtual room. By default, this capability is available to teachers and managers/administrators
4. mistc:administer – Defines the capability to modify the client .nwm configurations. By default, this capability is only enabled for managers/administrators.

It is possible to define a new role in Moodle and assign some or all of these capabilities. For example, it may be useful to create a “classroom support” role in Moodle and give it the `mistc:supporter` capability to allow it to restart the server process for the room if there is a problem.

Starting and stopping a server process for a MIST/C Room: If a user has the `mistc:supporter` or `mistc:administer` capability defined above, when viewing the MIST/C room, they will have an additional link under “Support/Administrator Options” titled “Start/Restart this MIST/C Room Server.” Clicking this link will bring up a new page with a button to restart the server if it is currently running or to start the server if it is not running. It may take up to 30 seconds for the process controller to process the restart or start request. When restarting, all users will be disconnected. (To permanently stop the server process, the MIST/C Room activity must be deleted from the course.)

Modifying the default client .nwm/configuration for all MIST/C Rooms: The site manager/administrator has permission to edit the site wide default client configuration file passed to clients at connect time. To exercise this capability, view the MIST/C room and select Site Administration->Plugins->Activity Modules->MIST/C Room. The possible .nwm file entries are described in the documentation section MISTC Client set-up and configuration.

Customizing the client .nwm/configuration file for a MIST/C Room: Users with the `mistc:administer` capability can also override the default for individual MIST/C rooms. To exercise this capability, view the MIST/C room and follow the link under “Support/Administrator Options” titled “Modify room client configuration”. In the next page, enable or disable the override for this room by checking the checkbox “Override server default NWM”. If the box is checked, the server will pass the contents in the textarea below to the client at connect time instead of the default. Note that disabling the override will not erase the saved configuration, so it can be turned off and on at will without having to be concerned with losing the previous configuration. You must click “Update Room” for changes to take effect.