

# Backup and recovery guide

There are several ways to create backups of the data used in MiRFleet. This document describes two of the options for creating backups of MiRFleet, and identifies when to use which option, what data is contained, and how to use the backup. The final sections identify setups that MiRFleet Server Solution and MiRFleet PC do not support and provide information regarding what will occur if MiRFleet loses power supply.

## 1. .site files

A .site file is a basic backup of the site configuration.

### When to use .site files

MiR recommends that you export a .site file in the following situations:

- Before a software update or rollback.
- Before and after any major changes to the content included in a .site file, especially missions and maps.

MiR recommends that you use a .site file for recovery in the following situations:

- A factory reset of MiRFleet has been performed.
- A clean MiRFleet installation has been performed.

### Data in a .site file

To see what data is included in a .site file see:

- The *MiRFleet Reference guide*. This can be found under **Help > Manual** in the MiRFleet interface, or on our Distributor site under **Manuals**.
- The how-to guide *How to export and import .site files* found on the Distributor site under **How to**.

### How to use a .site file

To learn how to export and import a .site file see:

- The *MiRFleet Reference guide*. This can be found under **Help > Manual** in the MiRFleet interface, or on our Distributor site under **Manuals**.
- The how-to guide *How to export and import .site files* found on the Distributor site under **How to**.

## 2. Backups

Backups are automatically generated before software updates and rollbacks, but can also be generated manually through the MiRFleet interface.

A backup is a copy of the MiRFleet configuration and contains all saved data except the log files. The backup data can be stored on a different server, and it can be used to recover the state of MiRFleet in the event of a server breakdown.

The MiRFleet software and configuration can be restored from a backup through the MiRFleet interface.

### When to use a backup

MiR recommends that you create a backup in the following situations:

- Before and after any major change to the content included in a .site file, especially missions and maps.
- On a weekly basis.

MiR recommends that you use a backup in the following situations:

- When reverting back to a previously installed software version.



This will also revert all changes performed since the backup was created.

- In the event that the server hosting MiRFleet experiences a breakdown.

### Data in a backup

The backup contains all data stored in the MiRFleet database and the .mir software file for the software version of the backup.

A .site file is a subset of a MiRFleet backup.

Each backup is stored in the directory `/mir_persistence/mir/backups` and the license tied to your host is stored in `/mir_persistence/mir/license`.


## How to use a backup

### How to generate a backup

See section 6.3 of the *MiRFleet Reference guide* on how to use backups. The guide can be found under **Help > Manual** in the MiRFleet interface, or on our Distributor site under **Manuals**.

### How to revert to a backup

In the MiRFleet interface, go to **System > Backups**.

In the list of backups, find the backup you want to revert back to, and under **Function**, select **View** .

Select **Roll back**. MiRFleet will now revert back to that software backup.

### How to store MiRFleet backups on a different server

To store a backup you must store all data in the following directories in the host file system:

- **/mir\_persistence/mir/backups**
- **/mir\_persistence/mir/license**

This can be done by mounting the directories to an external hard drive or network drive or by creating a symbolic link to a different disk partition.

### How to recover from a server breakdown

1. Ensure that MiRFleet is completely uninstalled from the host by following the steps in the how-to guide *How to uninstall MiRFleet Server Solution* found on the Distributor site.
2. Reinstall Docker and MiRFleet on the host by following the installation guide in the *MiRFleet Server Solution Getting started guide* found on the Distributor site under **Manuals**.
3. Copy your backups of the data in:
  - **/mir\_persistence/mir/backups**
  - **/mir\_persistence/mir/license**to the same directories in the newly installed MiRFleet. If any data is present already, overwrite this data with the backup data.
4. If any hardware has been replaced, or MiRFleet is installed on an entirely new hardware, you must enter the license to the MiRFleet interface.
5. Reboot the host.
6. Sign in to the MiRFleet interface, using the usual credentials.

7. Perform a software rollback as described in the section [How to revert to a backup on the previous page](#).

### 3. Redundancy MiRFleet server

Running a service in a redundancy setup is when multiple instances of the service are running and performing tasks. The tasks sent to the services are typically distributed via a load balancer.

If one instance of a service experiences an error or shuts down unexpectedly, the other instances are able to perform new incoming tasks and thereby keep the application running.

It is not possible to run MiRFleet Server Solution or MiRFleet PC in a redundancy setup.

### 4. Hot spare MiRFleet server

A hot spare is a copy of a server instance in standby, and is used in case the primary server instance should fail. The hot spare instance is not performing any tasks when the primary is up and running. However, should the primary instance fail, the hot spare instance will be activated and start performing tasks while the primary instance is inactive.

It is not possible to run MiRFleet Server Solution or MiRFleet PC in a hot spare setup.

### 5. Factory blackout

MiRFleet requires a continuous power supply which can be achieved during factory blackouts, using an uninterruptible power supply (UPS).

In the case of a factory blackout, the network connection between MiRFleet and all robots will most likely be cut. The robots will attempt to finish their tasks, but will not be able to go through Limit-robots zones and be assigned positions by MiRFleet until the network connection is reestablished. However, the safety systems on all robots will still be fully functional, as this does not depend on MiRFleet.

If MiRFleet is restarted after a factory blackout, it will recover its state, as this is similar to restarting MiRFleet.