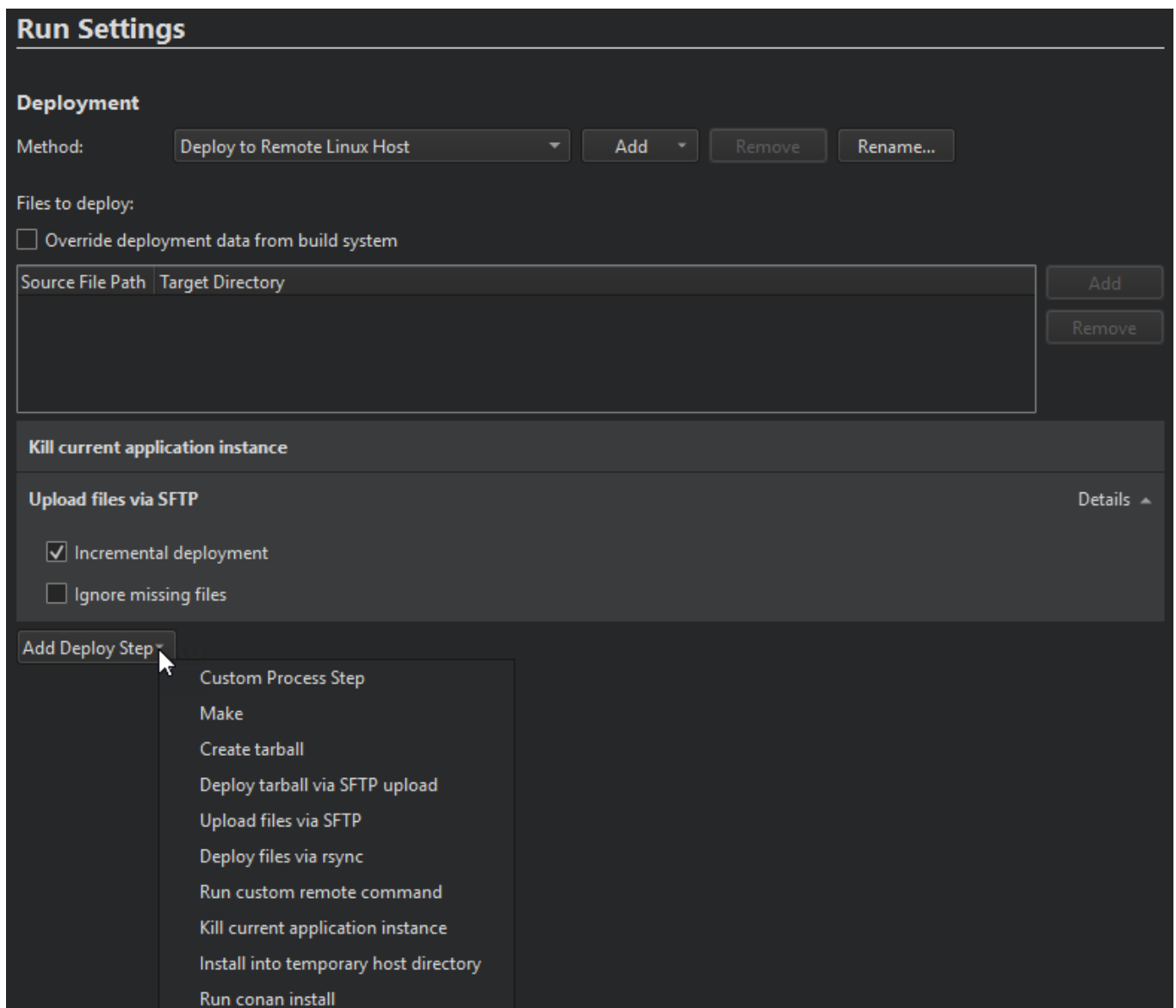


Deploying Applications to Generic Remote Linux Devices

You can specify settings for deploying applications to generic remote Linux devices in the project configuration file and in the **Projects** mode, in **Run Settings**.



The files to be installed are listed in the **Deployment** step, the **Files to deploy** field. The **Source File Path** field displays the location of the file on the development PC. The **Target Directory** field displays the directory where the file is installed on the device. Text in red color indicates that the information is missing.

Adding Missing Files

The process to add files to deploy depends on the build system you use. For more information, see [Specifying Project Contents](#).

CMake Builds

When using CMake as the build system, use the `install` command in the `CMakeLists.txt` file to add the missing files.

For example, add the following lines to the `CMakeLists.txt` file to install the binary of your project to the `/opt` directory on the remote device:

```
set(INSTALL_DESTDIR "/opt")

install(TARGETS <target>
    RUNTIME DESTINATION "${INSTALL_DESTDIR}"
    BUNDLE DESTINATION "${INSTALL_DESTDIR}"
    LIBRARY DESTINATION "${INSTALL_DESTDIR}"
)
```

qmake Builds

When using qmake, edit the `INSTALLS` variable in the project `.pro` file.

When you run the application, Qt Creator copies the necessary files to the device and starts the application on it.

For example, add the following lines to the `.pro` file to copy the binary of your project to the `/opt` directory on the remote device:

```
target.path = /opt
INSTALLS += target
```

To deploy additional files, add them to further targets that you also add to `INSTALLS`.

Deploy Steps

When you run the application on the device, Qt Creator first uploads the necessary files to it, as specified by the deploy steps.

Uploading Files

By default, Qt Creator copies the application files to the device by using the SSH file transfer protocol (SFTP), as specified by the **Upload files via SFTP** step.

Note: If the SFTP upload fails, make sure that the remote device has SFTP enabled in its SSH daemon. Some

If you have a lot of data to copy, select **Details** in the **Upload Files via SFTP** step, and then select the **Incremental deployment** check box. Qt Creator takes note of the deployment time and only copies files that have changed since the last deployment. However, when you make major changes on the device, such as removing files from the device manually or flashing a new disk image, or when you use another device with the same IP address, deselect the check box once, to have Qt Creator deploy all files again.

Creating a Tarball

To only create a tarball and not copy the files to the device, select **Add Deploy Step > Create tarball**. Then remove all other deploy steps.

The **Deploy tarball via SFTP upload** step specifies that Qt Creator uploads the tarball to the device and extracts it.

[< Deploying Applications to Boot2Qt Devices](#)

[Deploying Applications to QNX Neutrino Devices >](#)

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