



# Getting started with SIMULUS

## Quick Guide

For those looking for a quick and easy way to have an initial look into SIMULUS based development, a quick guide available [here](#). This guide is not intended to replace the information below but simply to provide a playground for anyone wanting a quick hands-on experience with SIMULUS.

## Overall process

As explained in the [introduction](#), SIMULUS is a suite of Products with dependencies between them. In order to facilitate its usage, building SIMULUS Products is done using Maven.

The steps needed to start developing SIMULUS or creating a SIMULUS based simulator are:

1. Obtain and configure the SIMULUS prerequisites
2. Build SIMULUS
3. Create a new Maven project for your simulator

When building SIMULUS using Maven all the SIMULUS packages will be available in the local Maven repository. It is also possible to deploy those packages into a Maven repository so that they can be retrieved in another machine, but that configuration is out of the scope of this guide.

## Prerequisites

SIMULUS requires a Linux operating system and some 3rd parties. The [Configuration and Installation Guide](#) contains all the details on how to prepare your environment for SIMULUS.

As mentioned in that guide, a further source of information one can explore is the [Container project](#) that holds the container images used to build SIMULUS. Using containers to setup SIMULUS development or runtime environments is highly recommended as it greatly simplifies the setup process and makes it much easier to distribute, e.g. between developers.

SIMULUS also depends on other Space related communities, namely:

<b>Community</b>	<b>Purpose</b>
<a href="#">GODOT</a>	GENM (11 only) - Orbit and Environment model
<a href="#">SLE-API</a>	GENM - Ground Station Model
<a href="#">OPEN</a>	SIMSAT MMI - Eclipse User Desktop framework
<a href="#">EUD</a>	SIMSAT MMI - Eclipse User Desktop framework

## Building SIMULUS

The process of building SIMULUS involves retrieving the code from the corresponding Git repositories and building them with Maven. This is described in detail on the [Configuration and Installation Guide](#).

As a further source of information you can explore the [Gitlab Pipeline definition](#) that demonstrates the build of the entire SIMULUS Product suite.

## Creating a SIMULUS based simulator

Detailed instructions for the creation of a new SIMULUS based project are detailed in the [Development Process](#) part of SIMULUS reference documentation.