

Nodal Architecture

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Introduction

This section describes the physical nodes used to support NC blueprints.

Servers

Build Server

The Build Server node is built using a pre-provisioned VM. Full details are contained in the [Validation Labs](#) section of the NC's R1 documentation.

Regional Controller Node

The Regional Controller (RC) node may be built using either a bare metal server or in a pre-provisioned VM. Full details of the server and VM deployment options are contained in the [Validation Labs](#) section of the NC's R1 documentation.

Rover Pods

Rover edge pods consists of a single node deployed on a bare metal server. Full details of the server are contained in the [Validation Labs](#) section of the NC's R1 documentation.

Unicycle Pods

Unicycle edge pods consists of 3 to 7 nodes deployed on bare metal servers consisting 3 controller nodes (1 genesis and 2 master nodes) and 0 to 4 worker nodes. Full details of the servers are contained in the [Validation Labs](#) section of the NC's R1 documentation.

Switching Subsystem

The switching subsystem is considered a 'black box' in the R1 NC release providing a set of L1, L2, L3 and BGP networking services. As such any selection of switching hardware can be used that provides the necessary services described in detail in the R1 documentation [Network Architecture](#).

In R1 the provisioning of the switching subsystem is considered a pre-requisite that is completed before the deployment of a Build Server, a Regional Controller and Rover and/or Edge pods. The R1 release does not configure the switching subsystem.