

# Deploy a N1K VSM as a Service on the CSP2100.

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## Introduction

This article covers the steps to be followed to deploy a Nexus 1000v VSM on a CSP 2100.

## Prerequisites

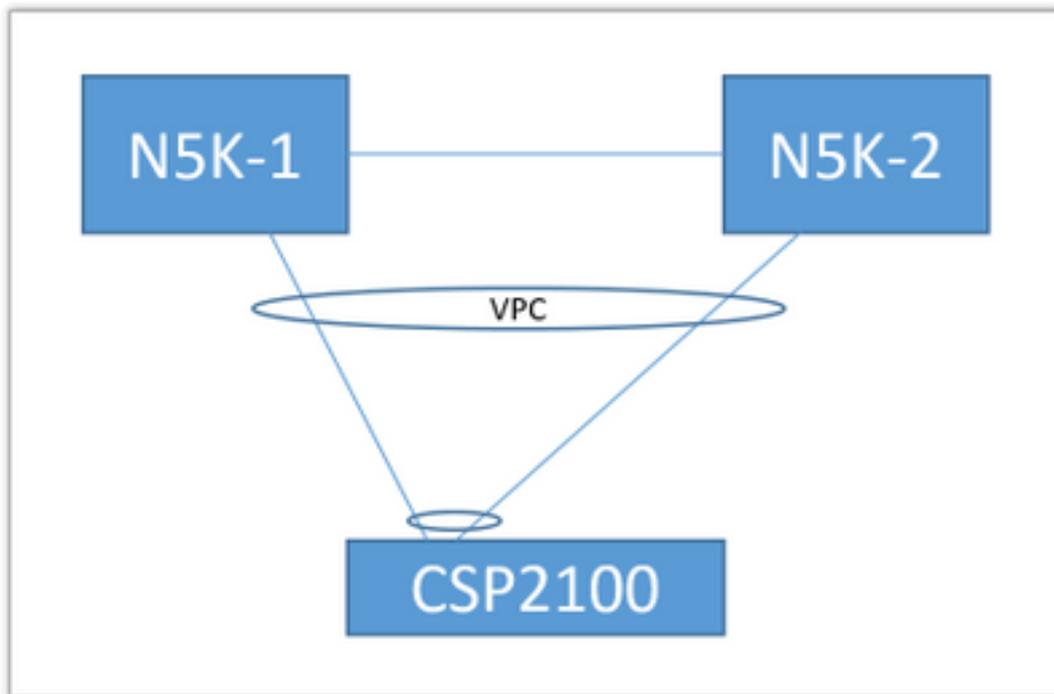
CSP2100 configured and setup with management connectivity.

## Components Used

CSP2100 running version 2.1.0.6

## Configure

## Network Diagram



The above uplink topology is used in the following document. This is only to be used as a reference, to understand how to create and assign uplinks to your service.

The above PortChannel is defined as trunk and the VLANs used for communication with the service are allowed.

## Preliminary Configurations

- Add the VSM images in the 'repository'
- You will find the below through 'Configuraion' (top right corner) > 'Repository'

Services [Repository](#) [pNICs](#) [Cluster](#) [NFS](#) [SNMP](#)

Repository Files

[Select](#) [Upload](#)

File Name	Modified	Size (Bytes)	Host Name
<input type="checkbox"/> n1000v-dk9.5.2.1.SV3.2.1.1010.ova	2016-09-08 19:56	219385379	bgl-csp-2100-01
<input type="checkbox"/> n1000v-dk9.5.2.1.SV3.2.1.iso	2016-09-08 19:57	248762368	bgl-csp-2100-01
<input type="checkbox"/> n1000v-dk9.5.2.1.SV3.2.1.ova	2016-09-08 19:58	218429440	bgl-csp-2100-01

- Choose a file through 'Select' and 'Upload' to add to the repository
- Configure the uplinks of the CSP. Configuration > pNICs

enp7s0f0 up 10G Po12 ethernet

enp7s0f1 up 10G Po12 ethernet

Port Channel Configure

Port Channel Members  
enp7s0f0  
enp7s0f1

Enter Port Channel Name

Choose Bond Mode  
 balance-slb  
 active-backup  
 balance-tcp

Enter VLAN Trunk Range

Choose LACP Type  
 active  
 passive  
 off

[Submit](#) [Delete](#) [Clear](#) [Configuration Done](#)

- Select the interfaces from the list of available uplinks to be bound into a PortChannel
- Name the port-channel and add a ranged of allowed VLANs
- Set Bond mode to 'active/standby' - Pick an LACP mode ('off' is basically "mode on" - no protocol)
- Click on 'Submit' to create the Port-channel
- 'Configuration Done' exits the config prompt.

You will find a new uplink is listed:

Physical Network Interfaces on bgl-csp-2100-01					
Name	Link State	Speed	Member	Vlan Range	Passthrough
Po12	-	10G		1-13	none
enp1s0f0	up	1G			none
enp1s0f1	down	1G			none

You may use a port-channel or a singular uplink, depending on your specific topology.

## Configuring the service

- Go to Configuration > Services and click on Create.

- Enter a name for the service
- Select a node from your cluster to deploy it on
- Choose the desired image from the repository

- You need to define 3 vNICs as the VM expects them (mgmt., control, packet)
- Choose the VLAN id, VLAN type 'access', Tagging 'false', Model 'e1000'
- For network choose 'external network' and pick the port-channel you defined earlier (or any desired uplink)
- Repeat for the other two nics
- Set the resources as required by the VSM (depends on version)
- Add a VNC password - the VNC connection gives you console access to the Service once its

deployed

Once all fields have been entered hit 'Deploy'. If there were any errors with the deployment the GUI should report them.

Once the Service is deployed. Go to Configuration > Services and power-on your newly created VSM.

You can then connect to it via the VNC connection to setup your VSM.

Ref: [http://www.cisco.com/c/en/us/td/docs/switches/datacenter/csp\\_2100/quick\\_start/b\\_Cisco\\_CS\\_P\\_2100\\_Quick\\_Start\\_2\\_1\\_0.html#task\\_3FB0EE9C7BC44F2893A83AFF373EA669](http://www.cisco.com/c/en/us/td/docs/switches/datacenter/csp_2100/quick_start/b_Cisco_CS_P_2100_Quick_Start_2_1_0.html#task_3FB0EE9C7BC44F2893A83AFF373EA669)