CCNP ENARSI Starter Pack

README - Start Here

Welcome to the CCNP ENARSI Starter Pack. This guide explains the three downloads, how to open the lab environment, and how to use the matching workbooks.

> **Included scope:** Phase 1 - Advanced OSPF Operations, Labs 01-08. Start with Lab 01 and work through the phase in order.

Included files

1. Prepared EVE-NG environment

`ccnp starter pack.ova`

Import this virtual appliance into your supported hypervisor using its OVA/OVF import workflow. VMware Workstation is one option. Start the VM, then use the EVE-NG address displayed in its console to open the web interface.

The OVA supplies the prepared environment. Its imported virtual disk can require more space than the downloaded OVA. Check available host memory and storage before starting the VM.

2. EVE-NG lab topologies

`Phase 1 Advanced OSPF Operations - Labs.zip`

Use the EVE-NG File Manager import function to upload this ZIP. Keep the archive compressed for web import. The lab files define devices, connections and starting configurations; a Labs ZIP does not contain device images.

If the matching labs are already present in the supplied VM, open those labs. Import the ZIP when the labs are absent or when you need a separate working copy.

3. Practical PDF workbooks

`Phase 1 Advanced OSPF Operations - Workbooks.zip`

Extract this ZIP on your computer. Open a PDF and use the EVE-NG lab with the same lab number and title. Each workbook explains the objectives, topology, configuration steps and expected verification results.

> **At a glance:** OVA = prepared environment | Labs ZIP = topologies
> Workbooks ZIP = instructions and exercises

Recommended setup order

1. Import and prepare the VM

Import **ccnp starter pack.ova**. Keep the supplied hardware settings initially and ensure your host has sufficient resources. Enable hardware virtualization in the host firmware and expose nested virtualization to the EVE-NG VM where required by your hypervisor.

2. Start EVE-NG and sign in

Start the VM and allow it to finish booting. Open **http://<EVE-IP>/** in your browser using the address displayed on the VM console. The address depends on your own network.

Access	Username	Password
EVE-NG web interface	admin	eve
VM console / SSH (if needed)	root	eve

These are the supplied login details. If you change a password, use your updated credentials.

3. Locate or import the Phase 1 labs

In EVE-NG File Manager, locate **CCNP-Enarsi / Phase 1 Advanced OSPF Operations**. If needed, use **Import**, select the original **Labs.zip**, upload it and complete the import. Preserve existing working copies when importing.

4. Choose your starting state

Extract **Workbooks.zip**, open the matching workbook, and choose the appropriate UNL variant:

UNL suffix	What it contains / when to use it
raw	Topology only. Follow the workbook from the beginning.
save-ip-configuration	Hostnames, IP addressing and baseline prerequisites. Build the main routing exercise yourself.
save-config	Complete, healthy exercise configuration. Allow boot and routing convergence, then run the documented verification and pings.

5. Practice and verify

Run **one course lab at a time**. Start its nodes, allow saved startup to finish, and follow the workbook in order. Check the saved device names and addresses before testing. Stop the lab nodes before switching to another lab or incident.

Use the supplied admin account for the starter workflow. Access roles and POD behavior depend on the installed EVE-NG edition.

Phase 1 practice map

Advanced OSPF Operations

Lab / topic	Total	VPCS	Other
01 - OSPFv2 Adjacency, Authentication & Evidence	5	2	3
02 - OSPF Network Types, DR/BDR & Neighbor States	5	0	5
03 - Multi-Area OSPF, ABR & Route Propagation	8	3	5
04 - Stub, Totally Stub & NSSA Area Behavior	7	3	4
05 - OSPF Virtual Links & Backbone Connectivity	7	2	5
06 - OSPFv3 IPv6 Address Families & Reachability	5	0	5
07 - OSPF Path Preference, Cost, ECMP & LSA Analysis	5	0	5
08 - OSPF Production Troubleshooting Challenge	5	0	5

Other counts every non-VPCS device, including routers, switches and Linux nodes. Each scenario remains within seven non-VPCS nodes; the total can exceed seven when VPCS hosts are included.

How to use Lab 08

Lab 08 is the phase troubleshooting challenge. Its **incident-01** through **incident-05** files are independent broken starting states. Open one incident at a time and follow its matching **Troubleshooting Workbook**. Consult the separate **Solution Guide** after your investigation. The **save-config** file is the healthy reference.

Before your first exercise

> Confirm that the lab title matches the workbook, the required images are available, and no other course lab is running. For a quick connectivity check, start with **save-config**; for the full guided exercise, begin with **raw** or **save-ip-configuration**.

Setup references: EVE-NG lab import | Supported hardware and virtualization

Ready to continue beyond OSPF?

Build on your starter experience with **CCNP ENARSI Mastery**: **70 labs across 8 phases**, covering routing, VPNs, infrastructure security, services and production troubleshooting.

Explore the Full CCNP ENARSI Course

dynamips.io/product/ccnp-enarsi-mastery/ - Full 70-lab curriculum follows.

Full course curriculum

CCNP ENARSI Mastery | 8 phases | 70 labs

The starter download covers Phase 1. The complete course continues through all eight phases below.

Phase 1 - Advanced OSPF Operations

Labs 01-08 | 8 labs

Lab 01 - OSPFv2 Adjacency, Authentication & Evidence

Lab 02 - OSPF Network Types, DR/BDR & Neighbor States

Lab 03 - Multi-Area OSPF, ABR & Route Propagation

Lab 04 - Stub, Totally Stub & NSSA Area Behavior

Lab 05 - OSPF Virtual Links & Backbone Connectivity

Lab 06 - OSPFv3 IPv6 Address Families & Reachability

Lab 07 - OSPF Path Preference, Cost, ECMP & LSA Analysis

Lab 08 - OSPF Production Troubleshooting Challenge

Phase 2 - Advanced EIGRP Operations

Labs 09-15 | 7 labs

Lab 09 - EIGRP Classic Neighbor & Metric Operations

Lab 10 - EIGRP Named Mode, IPv6 & Authentication

Lab 11 - DUAL, Feasible Successors & Loop-Free Backup Paths

Lab 12 - EIGRP Stub, Query Scope & Stuck-in-Active Analysis

Lab 13 - Equal/Unequal-Cost Load Sharing & Metric Engineering

Lab 14 - EIGRP in Global & VRF Routing Tables

Lab 15 - EIGRP Production Troubleshooting Challenge

Full course curriculum

CCNP ENARSI Mastery | 8 phases | 70 labs

Phase 3 - Route Control & Multi-Protocol Engineering

Labs 16-22 | 7 labs

Lab 16 - Administrative Distance & Competing Route Sources

Lab 17 - Manual & Auto-Summarization, Discard Routes & Black-Hole Prevention

Lab 18 - OSPF–EIGRP Redistribution & Metric Engineering

Lab 19 - Route Tags, Route Maps & Redistribution Loop Prevention

Lab 20 - Policy-Based Routing & Verified Path Selection

Lab 21 - VRF-Lite Isolation, Route Exchange Boundaries & BFD Analysis

Lab 22 - Route Control & Redistribution Troubleshooting Challenge

Phase 4 - Enterprise BGP Engineering

Labs 23-31 | 9 labs

Lab 23 - eBGP Peering & Prefix Origination

Lab 24 - BGP Neighbor States, Authentication, Timers, Multihop & AS Numbering

Lab 25 - iBGP, Next-Hop Reachability, Full-Mesh Operations & Synchronization Analysis

Lab 26 - MP-BGP IPv6 Address Families & Dual-Stack Exchange

Lab 27 - BGP Best-Path Attributes & Dual-ISP Exit Policy

Lab 28 - Prefix Lists, Route Maps & Inbound/Outbound BGP Policy

Lab 29 - Route Reflectors & Scalable iBGP Operations

Lab 30 - BGP with VRF-Lite & Tenant Route Isolation

Lab 31 - BGP Production Troubleshooting Challenge

Full course curriculum

CCNP ENARSI Mastery | 8 phases | 70 labs

Phase 5 - VPN & Overlay Networks

Labs 32-38 | 7 labs

Lab 32 - MPLS Label Switching, LDP & LSP Analysis

Lab 33 - MPLS Layer 3 VPN & MP-BGP Control-Plane Analysis

Lab 34 - DMVPN Underlay, GRE/mGRE & Single-Hub Design

Lab 35 - NHRP Registration, Dynamic Neighbors & Spoke Reachability

Lab 36 - DMVPN IPsec Tunnel Protection & Security Association Verification

Lab 37 - Spoke-to-Spoke Traffic & Overlay Path Verification

Lab 38 - VPN & DMVPN Production Troubleshooting Challenge

Phase 6 - Infrastructure Security

Labs 39-46 | 8 labs

Lab 39 - IOS AAA with Local, RADIUS & TACACS+ Fallback

Lab 40 - IPv4 Standard/Extended ACL Policy & Negative Testing

Lab 41 - Time-Based ACLs & IPv6 Traffic Filters

Lab 42 - uRPF, Spoofed Sources & Asymmetric Routing

Lab 43 - Control Plane Policing for Management & Routing Traffic

Lab 44 - IPv6 First-Hop Security & Protection Analysis

Lab 45 - Secure Management Access, Privilege Boundaries & Recovery

Lab 46 - Infrastructure Security Troubleshooting Challenge

Full course curriculum

CCNP ENARSI Mastery | 8 phases | 70 labs

Phase 7 - Infrastructure Services & Operational Visibility

Labs 47-56 | 10 labs

Lab 47 - Console/VTY, Telnet, SSH, HTTP/HTTPS & SCP Operations

Lab 48 - TFTP/FTP Transfer, Configuration Backup & Recovery

Lab 49 - SNMPv2c/SNMPv3 Monitoring & Polling Validation

Lab 50 - Local Logging, Syslog, Timestamps, Debugs, Conditional Debugs & Telemetry

Lab 51 - DHCPv4 Server, Client, Relay & Options

Lab 52 - DHCPv6 Client, Server, Relay & IPv6 Options

Lab 53 - IP SLA, Jitter, Object Tracking, Delay & Connectivity

Lab 54 - NetFlow v9, Flexible NetFlow & IPFIX Visibility

Lab 55 - Catalyst Center Assurance Evidence & CLI Correlation - Analysis

Lab 56 - Infrastructure Services Troubleshooting Challenge

Phase 8 - Production Troubleshooting & Final Capstone

Labs 57-70 | 14 labs

Lab 57 - OSPF Adjacency & Area Failure Incident

Lab 58 - EIGRP Successor, Stub & Query Failure Incident

Lab 59 - Redistribution Loop & Missing-Route Incident

Lab 60 - BGP Session Establishment Incident

Lab 61 - BGP Best-Path & Route-Leak Incident

Lab 62 - VRF-Lite Tenant Reachability Incident

Lab 63 - DMVPN Underlay, NHRP & IPsec Incident

Lab 64 - AAA Lockout & Secure Management Incident

Lab 65 - ACL, uRPF & Control-Plane Policy Incident

Lab 66 - DHCPv4/DHCPv6 Client Onboarding Incident

Lab 67 - SNMP, Syslog & NetFlow Visibility Incident

Lab 68 - IP SLA Failover & Performance Incident

Lab 69 - Multi-Site Routing, VPN & Security Change Incident

Lab 70 - ENARSI Production Final Challenge - Shared Network, Five Independent Incidents

Explore the Full CCNP ENARSI Course

dynamips.io/product/ccnp-enarsi-mastery/