

# CCIPFM

## IP Foundation for Broadcast Engineers

The IP Foundation for Broadcast Engineers (CCIPFM) v1.0 course introduces you to IP networking and the Cisco® IP Fabric for Media (IPFM) solution. The course is designed for broadcast engineers who will use IP technologies to replace Serial Digital Interface (SDI)-based deployments. No prior IP networking knowledge is required. You will learn the basic principles of IP technologies, including Ethernet functions and standards, IP, the TCP/IP stack, and other technologies used in modern networks. You will also learn about Cisco IPFM deployment, operation, and troubleshooting. The course also covers the Cisco Data Center Network Manager (DCNM) Media Controller, a core component of the Cisco IPFM solution. Lab exercises focus on how to configure basic IP functionality on switches and servers, how to build IP fabric as a baseline for a complete IPFM solution, and how to deploy and troubleshoot the DCNM Media Controller to control flows through the fabric.

### Kursinhalt

- Describe Ethernet communication functions and standards
- Describe the Open Systems Interconnection (OSI) and TCP/IP models
- Describe IPv4 and IPv6 addressing
- Describe TCP and User Datagram Protocol (UDP)
- Explain packet delivery between end hosts
- Explain the port channel features on Cisco Nexus® switches
- Describe basic routing functionalities
- Understand IP multicast technologies
- Describe the overall IPFM solution
- Understand initial sizing and capacity
- Understand how Non-Blocking Multicast (NBM) and multicast function in IPFM
- Understand and verify Precision Time Protocol (PTP) clocking
- Describe the DCNM Media Controller
- Demonstrate the DCNM Media Controller configuration and verification
- Explain how to deploy the IPFM solution in a high-availability manner
- Use the DCNM Media Controller to monitor fabric and to troubleshoot basic connectivity and performance issues
- Understand the approach and basic steps involved in responding to alarms and other notifications

**E-Book** Sie erhalten die englischen Original-Unterlagen als Cisco E-Book.

### Zielgruppe

This course is designed for broadcast engineers.

### Voraussetzungen

We recommend but do not require that you have the following knowledge and skills before taking this class:

- Understanding of broadcast industry requirements and standardization
- Use of basic Linux commands

### Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link:  
[www.expereteach.de/go/IPFM](http://www.expereteach.de/go/IPFM)

### Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

### Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

### Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Training	Preise zzgl. MwSt.
Termine in Deutschland	5 Tage € 5.195,-
Online Training	5 Tage € 5.195,-
	Termine auf Anfrage

# Inhaltsverzeichnis

## CCIPFM – IP Foundation for Broadcast Engineers

### Outline

Describing Ethernet Functions and Standards  
Describing the OSI and TCP/IP Models  
Describing IP Routing  
Introducing IP Multicast  
Introducing Cisco IP Fabric for Media  
Building Cisco IP Fabric for Media  
Cisco IPFM Operations, Administration, and Management  
Orchestrating Flows with DCNM Media Controller  
Cisco IPFM Scalability and Availability  
Monitoring and Troubleshooting Cisco IPFM Operation

### Lab outline

Configure VLANs and Trunks  
Configure Multilayer Switching and IP Addressing  
Configure OSPF  
Multicast on Cisco Nexus Switches  
Implement IPFM Without DCNM Media Controller  
Administer and Maintain the IPFM  
Orchestrate Flows with Cisco DCNM Media Controller  
Orchestrate Flows in Highly Available IPFM  
Monitor and Troubleshoot Cisco IPFM Operation

