



Preface

Document Purpose

Data Center High Availability Clusters Design Guide describes how to design and deploy high availability (HA) clusters to provide uninterrupted access to data, even if a server loses network or storage connectivity, or fails completely, or if the application running on the server fails.

Intended Audience

This guide is intended for system engineers who support enterprise customers that are responsible for designing, planning, managing, and implementing local and distributed data center IP infrastructures.

Document Organization

This guide contains the chapters in the following table.

Section	Description
Chapter 1, “Data Center High Availability Clusters.”	Provides high-level overview of the use of HA clusters, including design basics and network design recommendations for local clusters.
Chapter 2, “Data Center Transport Technologies.”	Describes the transport options for interconnecting the data centers.
Chapter 3, “Geoclusters.”	Describes the use and design of geoclusters in the context of business continuance as a technology to lower the recovery time objective.
Chapter 4, “FCIP over IP/MPLS Core.”	Describes the transport of Fibre Channel over IP (FCIP) over IP/Multiprotocol Label Switching (MPLS) networks and addresses the network requirements from a service provider (SP) perspective.
Chapter 5, “Extended Ethernet Segments over the WAN/MAN using EoMPLS.”	Describes the various options available to extend a Layer 2 network using Ethernet over Multiprotocol Label Switching (EoMPLS) on the Cisco Sup720-3B.
Chapter 6, “Metro Ethernet Services.”	Describes the functional characteristics of Metro Ethernet services.
Appendix A “Configurations for Layer 2 Extension with EoMPLS.”	Describes the lab and test setups.

