Preface

Document Purpose

The data center is the repository for applications and data critical to the modern enterprise. The enterprise demands on the data center are increasing, requiring the capacity and flexibility to address a fluid business environment whilst reducing operational costs. Data center expenses such as power, cooling, and space have become more of a concern as the data center grows to address business requirements.

Blade servers are the latest server platforms that attempt to address these business drivers. Blade servers consolidate compute power and suggest that the data center bottom line will benefit from savings related to the following:

- Power
- Cooling
- Physical space
- Management
- Server provisioning
- Connectivity (server I/O)

This document explores the integration of blade servers into a Cisco data center multi-tier architecture.

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, “Blade Servers in the Data Center—Overview.”	Provides high-level overview of the use of blade servers in the data center.

Chapter 2, “Integrated Switch Technology.”	Provides best design practices for deploying Cisco Intelligent Gigabit Ethernet Switch Modules (Cisco IGESM) for the IBM eServer BladeCenter (BladeCenter) within the Cisco Data Center Networking Architecture.
Chapter 3, “Pass-Through Technology.”	Provides best design practices for deploying blade servers using pass-through technology within the Cisco Data Center Networking Architecture.
Chapter 4, “Blade Server Integration into the Data Center with Intelligent Network Services.”	Discusses the integration of intelligent services into the Cisco Data Center Architecture that uses blade server systems.