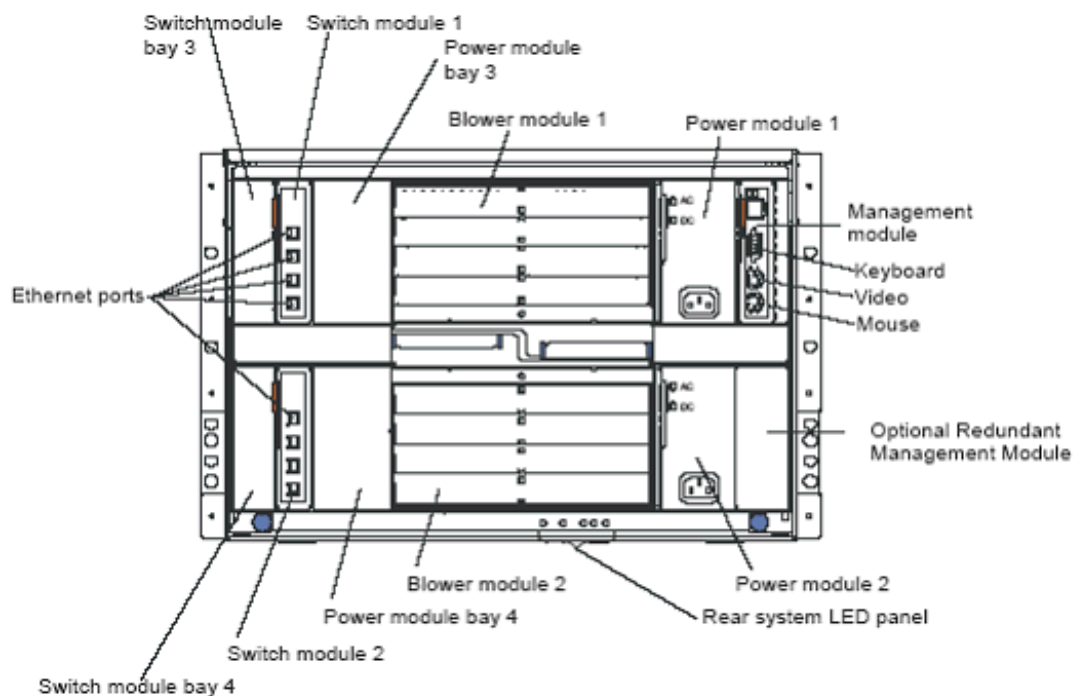


# IBM eServer BladeCenter Configuration Tips

## Planning / Implementation (withdrawn product)

### Main



### Default BladeCenter configuration

**Note:** In this document, the term *blade* refers to any device which occupies a bay in the front of a BladeCenter, and the term *module* defines any device which occupies bays in the rear of a BladeCenter.

The Management Module (MM) and the devices installed in the module bays are configured, by default, to request an IP address from a DHCP server. If no IP addresses are assigned to the devices configured, they are configured automatically with the following IP addresses:

#### Management Module:

- External port: 192.168.70.125
- Internal Port: 192.168.70.126

#### Devices in module bays:

- Module bay 1: 192.168.70.127

- Module bay 2: 192.168.70.128
- Module bay 3: 192.168.70.129
- Module bay 4: 192.168.70.130

### **Power considerations**

With the default power supply configuration, power supplies 1 and 2, are in power domain A, and power supplies 3 and 4 are in power domain B. Power domain A supplies power to all modules and blade slots 1 to 6. Power domain B supplies power to blade slots 7 to 14 only.

Power supply 1 and power supply 2 must have separate AC sources to be in a redundant, supported configuration. Power redundancy is achieved for the entire BladeCenter by having two AC sources, with each AC source connected in both power domains.

In other words:

- AC source 1 is connected to power supplies 1 and 3
- AC source 2 is connected to power supplies 2 and 4

### **Cisco Intelligent Gigabit Ethernet Switch Module(CIGESM) considerations**

- Do not confuse trunking and port aggregation.
- Consider the CIGESM as an EDGE device, and the corresponding upstream switch as a CORE device.
- Change the switch IP address *only* from the Web interface of the Management Module.
- Define the default gateway on the switches; do not leave the field blank.
- Blades and Management network must be on different subnets.
- Configure at least one external port on each CIGESM for trunking.
- Port aggregation will only be required based upon user data traffic demands.

### **Default Vlan configuration of CIGESM**

Vlan1 Management Vlan

- Trunking is disabled in hardware.
- Changing the management Vlan is not recommended.

Vlan2 Data Vlan

- Blade NICs are on this VLAN
- This will need to be modified to correspond to the specific customer network infrastructure design.

### **IBM Director Server considerations**

- The IBM Director management server must have IP connectivity to the Blade NICs.
- The IBM Director management server must have IP connectivity to the Management Module.
- In a Cisco environment, this is accomplished by modifying the appropriate routing table(s).

### **Remote Deployment Manager Server considerations**

- The RDM image repository is not portable. Ensure enough drive space is available to store images, where RDM is being installed.
- The repository must be installed in the RDMROOT.

- RDM does not use NetBIOS, so the RDMROOT must be installed on DASD of the IBM Director Server. For purposes of this document, DASD is considered to be all local Disk visible to the OS, including SAN attached Drives.

#### **RDM/PXE/DHCP configuration considerations**

- DHCP Option 60 needs to be added to DHCP server *only* if the DHCP server is installed on the *same server* as the RDM server.
- The subnet on which the blades reside must be served by a DHCP server, as well as the RDM/PXE server. The DHCP scope for the Blade subnet must have a router defined (Option 3). This is required even on a flat network where there is no actual router. If there is no actual router, use the RDM server's address for the router specification.
- There can be only one PXE server on a subnet. If you want to use RDM, any and all other PXE servers on the same subnet as the Blades must be turned off.

#### **For more information**

Please refer to the product documentation for more detailed instructions.

#### **Related product families**

Product families related to this document are the following:

- [Blade Servers](#)

## Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service. Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

Lenovo (United States), Inc.  
8001 Development Drive  
Morrisville, NC 27560  
U.S.A.  
Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary. Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk. Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

© Copyright Lenovo 2025. All rights reserved.

This document, TIPS0454, was created or updated on October 27, 2004.

Send us your comments in one of the following ways:

- Use the online Contact us review form found at:  
<https://lenovopress.lenovo.com/TIPS0454>
- Send your comments in an e-mail to:  
[comments@lenovopress.com](mailto:comments@lenovopress.com)

This document is available online at <https://lenovopress.lenovo.com/TIPS0454>.

## Trademarks

Lenovo and the Lenovo logo are trademarks or registered trademarks of Lenovo in the United States, other countries, or both. A current list of Lenovo trademarks is available on the Web at <https://www.lenovo.com/us/en/legal/copytrade/>.

The following terms are trademarks of Lenovo in the United States, other countries, or both:

Lenovo®

BladeCenter®

The following terms are trademarks of other companies:

Intel® is a trademark of Intel Corporation or its subsidiaries.

Other company, product, or service names may be trademarks or service marks of others.