IBM LoadLeveler for AIX 5L and Linux

Diagnosis and Messages Guide

Version 3  Release 2
Note!

Before using this information and the product it supports, be sure to read the information in "Notices" on page 115.

Third Edition (May 2004)

This edition applies to version 3 release 2 of IBM® LoadLeveler® for AIX 5L™ (product number 5765-E69), IBM LoadLeveler for Linux (product number 5724-I23), and to all subsequent releases and modifications until otherwise indicated in new editions. This edition replaces GA22-7882-01. Significant changes or additions to the text and illustrations are indicated by a vertical line (|) to the left of the change.

IBM welcomes your comments. A form for readers’ comments may be provided at the back of this publication, or you can send your comments to the address:

    International Business Machines Corporation
    Department 55JA, Mail Station P384
    2455 South Road
    Poughkeepsie, NY 12601-5400
    United States of America

    FAX (United States & Canada): 1+845+432-9405
    FAX (Other Countries):
        Your International Access Code +1+845+432-9405

    IBMLink™ (United States customers only): IBMUSM10(MHVRCFS)
    Internet e-mail: mhvrcfs@us.ibm.com

If you want a reply, be sure to include your name, address, and telephone or FAX number.

Make sure to include the following in your comment or note:
• Title and order number of this book
• Page number or topic related to your comment

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

About this book

This book is designed for any user of LoadLeveler who needs to resolve a system message and respond to that message. This book lists all of the error messages generated by the LoadLeveler software and its components and describes a likely solution for each message. Informational messages are not included.

References to RS/6000® SP™ or SP should be read to also include currently supported IBM @server Cluster 1600 hardware.

Who should read this book

This book is designed for system programmers and administrators, but should be used by anyone responsible for diagnosing problems related to LoadLeveler. To use this book, you should be familiar with the AIX® and Linux operating systems. Where necessary, some background information relating to AIX and Linux is provided. More commonly, you are referred to the appropriate documentation.

Conventions used in this book

This book uses the following typographic conventions:

<table>
<thead>
<tr>
<th>Typographic</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bold</strong></td>
<td>• <strong>Bold</strong> words or characters represent system elements that you must use literally, such as commands, flags, and path names.</td>
</tr>
</tbody>
</table>
| *Italic*    | • *Italic* words or characters represent variable values that you must supply.  
• *Italics* are also used for book titles and for general emphasis in text. |
| Constant width | Examples and information that the system displays appear in constant width typeface. |
| [ ]          | Brackets enclose optional items in format and syntax descriptions. |
| { }          | Braces enclose a list from which you must choose an item in format and syntax descriptions. |
| | A vertical bar separates items in a list of choices. (In other words, it means “or.”) |
| < >          | Angle brackets (less-than and greater-than) enclose the name of a key on the keyboard. For example, **<Enter>** refers to the key on your terminal or workstation that is labeled with the word Enter. |
| ...          | An ellipsis indicates that you can repeat the preceding item one or more times. |
| **<Ctrl>-x** | The notation **<Ctrl>-x** indicates a control character sequence. For example, **<Ctrl-c>** means that you hold down the control key while pressing **<c>**. |
| \            | The continuation character is used in coding examples in this book for formatting purposes. |

Requisite and related information

The LoadLeveler publications are:

- LoadLeveler for AIX 5L and Linux: Installation Memo, GI11-2819
- LoadLeveler for AIX 5L and Linux: Using and Administering, SA22-7881
- LoadLeveler for AIX 5L and Linux: Diagnosis and Messages Guide, GA22-7882
To access all LoadLeveler documentation, refer to the IBM @server Cluster Information Center. This Web site is located at:

http://publib.boulder.ibm.com/clresctr

and contains the most recent LoadLeveler documentation in PDF and HTML formats.

A LoadLeveler Documentation Updates file is also maintained on this Web site. The LoadLeveler Documentation Updates file contains updates to the LoadLeveler documentation. These updates include documentation corrections and clarifications that were discovered after the LoadLeveler books were published.

Both the current LoadLeveler books and earlier versions of the library are also available in PDF format from the IBM Publications Center Web site located at:

http://www.ibm.com/shop/publications/order

It is easiest to locate a book in the IBM Publications Center by supplying the book’s publication number. The publication number for each of the LoadLeveler books is listed after the book title in the preceding list.

Accessibility information

Accessibility information for the IBM @server pSeries® is available online. Visit the IBM @server pSeries Information Center at:


To view information about the accessibility features of @server pSeries software and the AIX operating system, click AIX and pSeries accessibility.

How to send your comments

Your feedback is important in helping us to produce accurate, high-quality information. If you have any comments about this book or any other LoadLeveler documentation:

• Send your comments by e-mail to: mhvrdfs@us.ibm.com
  Include the book title and order number, and, if applicable, the specific location of the information you have comments on (for example, a page number or a table number).

• Fill out one of the forms at the back of this book and return it by mail, by fax, or by giving it to an IBM representative.

To contact the IBM cluster development organization, send your comments by e-mail to: cluster@us.ibm.com
# Chapter 1. LoadLeveler messages

## 2512 Error messages

### 2512-001

**Cannot chdir to directory_type directory, directory_name on hostname. uid=uid errno=error number.**

**Explanation:** The *chdir* system call failed for the specified directory.

**User Response:** Verify that the directory exists, and that the user has permission to access it.

### 2512-002

**Cannot open file filename in mode mode name. errno=error_num [error_msg].**

**Explanation:** The *open* system call failed for the specified file.

**User Response:** Verify that the directory and file exist, and that the user has permission to access them.

### 2512-003

**Cannot create the directory_type directory, directory_name on hostname. uid=uid errno=error_num [error_msg].**

**Explanation:** The *mkdir* system call failed for the specified directory.

**User Response:** Verify that the directory does not already exist, and that the user has permission to create it.

### 2512-004

**Cannot create pipe for program_name. errno=error_num [error_msg].**

**Explanation:** The *pipe* system call failed.

**User Response:** Correct the problem indicated by the error number.

### 2512-005

**Open failed for file filename, errno = error_number.**

**Explanation:** The *open* system call failed for the specified file.

**User Response:** Verify that the directory and file exist, and that the user has permission to access them. Also ensure that the user has read permission for the history file.

### 2512-006

**Cannot continue.**

**Explanation:** An error occurred while running the specified command; the command cannot recover.

**User Response:** Retry the command. If the problem persists, contact IBM service.

### 2512-007

**LOADL_ADMIN not specified in configuration file! No administrator commands are permitted.**

**Explanation:** The *LoadL_config* file does not contain a list of LoadLeveler administrators. Even if DCE or cluster security services is enabled, the configuration file must contain a list of users who are to receive mail for problem notification.

**User Response:** Add a *LOADL_ADMIN* entry containing one or more administrator uids to the *LoadL_config* file.

### 2512-010

**Unable to allocate memory.**

**Explanation:** The program could not allocate virtual memory.

**User Response:** Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-016</td>
<td>Unable to write file <code>filename</code>.</td>
<td>A system call to write to the specified file failed.</td>
<td>Verify that the file has write permissions, and that the file system containing it is not full.</td>
</tr>
<tr>
<td>2512-017</td>
<td>Command transmission to LoadL_schedd on host <code>hostname</code> failed.</td>
<td>The command cannot contact or send data to the LoadL_schedd daemon.</td>
<td>Verify that the LoadL_schedd daemon is running on the specified host, and that the host can be accessed on the network.</td>
</tr>
<tr>
<td>2512-019</td>
<td>Job ids must not be specified when host or user names are also specified.</td>
<td>You cannot specify job IDs with host or user names.</td>
<td>Specify either a job list, or a host or user list with the command.</td>
</tr>
<tr>
<td>2512-020</td>
<td>Internal error: error (file: <code>filename</code> line: <code>line_number</code>).</td>
<td>You cannot specify job IDs with host or user names.</td>
<td>Verify that the LoadL_schedd daemon is running on the specified host, and that the host can be accessed on the network.</td>
</tr>
<tr>
<td>2512-021</td>
<td>Cannot connect to LoadL_schedd on host <code>hostname</code>.</td>
<td>The specified command could not contact the LoadL_schedd daemon.</td>
<td>Verify that the LoadL_schedd daemon is running on the specified host, and that the host can be accessed on the network.</td>
</tr>
<tr>
<td>2512-023</td>
<td>Could not obtain configuration data.</td>
<td>The specified command cannot open or read the LoadLeveler configuration files.</td>
<td>Verify that all of the configuration and administration files exist, and that the user has access to them.</td>
</tr>
<tr>
<td>2512-024</td>
<td>Error occurred getting cluster hostnames.</td>
<td>The specified command cannot obtain the list of hosts in the LoadLeveler cluster. The failure may be due to an error opening or reading the LoadLeveler configuration files, or to a syntax error in one of the configuration files.</td>
<td>Verify that all of the configuration and administration files exist, and that the user has access to them. Retry the command. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2512-025</td>
<td>Only the LoadLeveler administrator is permitted to issue this command.</td>
<td>The specified command must be issued by a LoadLeveler administrator. The user is not listed as an administrator in the LoadLeveler configuration file.</td>
<td>Have an administrator issue the command, or have an administrator add the user to the LoadLeveler configuration file's LOADL_ADMIN list. If DCE is enabled, the user's DCE principal must be a member of the LoadL-admin group. If cluster security services is enabled, the user's mapped identity must be a member of the group specified by SEC_ADMIN_GROUP.</td>
</tr>
</tbody>
</table>
2512-027 Dynamic load of filename from system_name failed. errno=error_num [error_msg].

Explanation: The load system call failed for the specified file.
User Response: Verify that the specified file has been installed in the correct directory, and that it has the correct permissions.

2512-028 ERROR error at line line_num in file filename.

Explanation: A LoadLeveler daemon or command terminated as a result of detecting corrupted internal data.
User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-029 Cannot establish UNIX domain listen socket for path, pathname. errno=error_num [error_msg].

Explanation: The listen system call failed. A LoadLeveler process was attempting to listen on a UNIX® domain socket to communicate with another process.
User Response: Correct the problem indicated by the error number.

2512-030 Cannot stat file filename.

Explanation: The stat system call failed for the specified file.
User Response: Verify that the file exists, and that it has the appropriate permissions.

2512-031 Cannot change mode on file filename to file permissions.

Explanation: The chmod system call failed while attempting to change permissions on the specified file.
User Response: Verify that the file exists, and that it has the appropriate permissions.

2512-032 Cannot open file filename. errno = error num.

Explanation: The open system call failed for the specified file.
User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-033 Cannot open file filename.

Explanation: The open system call failed for the specified file.
User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-034 File file not found.

Explanation: The specified file does not exist.
User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-035 Cannot read file file.

Explanation: You do not have read access to the specified file.
User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-036 Unable to invoke path, retcode = code, errno = error.

Explanation: The specified calling program failed to invoke an installation exit routine.
User Response: Verify that the directory and file exist, and that the user has execute permission.
User *username* failed user name validation on host *hostname*.

**Explanation:** A user is required to have the same UID on the host from which a command is issued and the host which receives the command.

**User Response:** Verify that the specified user has the same UID on all hosts in the LoadLeveler cluster including submit only machines.

---

2512-038 The *specified_option* option and the *specified_option* option are not compatible.

**Explanation:** The command was issued with conflicting options.

**User Response:** Reissue the command using at most one of these options.

---

2512-039 The *specified_option* option is not compatible with any of the following options: *option1*, *option2*.

**Explanation:** The command was issued with conflicting options.

**User Response:** Reissue the command using at most one of the options.

---

2512-040 Invalid input specified: *value* is not valid for *parameter*.

**Explanation:** A *value* that is not valid or that is out of range was specified for one of the input parameters.

**User Response:** Specify a valid *value* according to the LoadLeveler documentation.

---

2512-041 Failed to connect to the LoadLeveler.

**Explanation:** Attempted to connect to LoadLeveler and failed.

**User Response:** Check whether LoadLeveler is up and running. Restart LoadLeveler if needed.

---

2512-042 Failed to obtain the required information.

**Explanation:** Attempted to get information from LoadLeveler and failed.

**User Response:** Check whether LoadLeveler is up and running. Restart LoadLeveler if needed.

---

2512-043 The format of character string specified *(string)* is not valid for a LoadLeveler job step.

**Explanation:** A string having the format: *[hostname.]*job_id.*step_id* is expected.

**User Response:** Specify a string of the expected format.

---

2512-044 Invalid value *value* for input *input_command*. Default value used.

**Explanation:** A *value* that is not valid or that is out of range was specified for one of the inputs.

**User Response:** Specify a valid *value* according to the LoadLeveler documentation.

---

2512-045 ERROR: *error_msg*.

**Explanation:** An error occurred.

**User Response:** Take action according to the specifics of the actual error message.

---

2512-046 You are not authorized to issue this command. Only the owner of the job or the LoadLeveler administrator may issue the *command_name* command.

**Explanation:** Only the LoadLeveler administrator or the job owner can issue the command for the specified job.

**User Response:** Contact the job owner or LoadLeveler administrator.

**Explanation:** This command can only be issued by the job owner or the LoadLeveler administrator. See *LoadLeveler: Using and Administering* for more information on command permissions.
| 2512-047 | **Version** `version_number` of LoadLeveler for Linux does not support **security mechanism used.**  
**Explanation:** The security mechanism specified in the LoadLeveler configuration file is not supported.  
**User Response:** Disable the specified security mechanism and restart LoadLeveler.  
| 2512-048 | **Version** `version_number` of LoadLeveler for Linux does not support the **type of scheduler specified.**  
**Explanation:** The specified scheduler type in the LoadLeveler configuration file is not supported.  
**User Response:** Specify a supported scheduler type and restart LoadLeveler.  
| 2512-049 | **Version** `version_number` of LoadLeveler for Linux does not support **product feature specified.**  
**Explanation:** The specified product feature is not supported in this version of LoadLeveler.  
**User Response:** Do not specify the parameters associated with this feature in your configuration file or job command file.  
| 2512-051 | This job has not been submitted to LoadLeveler.  
**Explanation:** The job was not submitted because of an error. This message is preceded by a message explaining the error.  
**User Response:** Correct the error indicated in the previous message.  
| 2512-052 | **Submit Filter:** `rc = return_code`.  
**Explanation:** The submit filter returned a non-zero exit code. The job was not submitted.  
**User Response:** Contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.  
| 2512-053 | **Unable to process the job command file** (`filename`) **from the Submit Filter** filter.  
**Explanation:** The `stat` system call failed for the filtered job command file.  
**User Response:** Contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.  
| 2512-054 | **Unable to process the job command file** (`filename`) **from the Submit Filter** filter. **No output.**  
**Explanation:** The submit filter returned an empty job command file.  
**User Response:** Contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.  
| 2512-055 | **Unable to process the job command file** `filename` **for input, the error is:** `error`.  
**Explanation:** This message is the result of either a failure opening the job command file, or an error running the submit filter.  
**User Response:** Verify that the job command file exists, and that the user has permission to access it. If a submit filter is configured, then contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.  
| 2512-056 | **Unable to process the job command file** `filename`.  
**Explanation:** This message is the result of either a failure opening the job command file, or an error running the submit filter.  
**User Response:** Verify that the job command file exists, and that the user has permission to access it. If a submit filter is configured, then contact the LoadLeveler administrator who provided the submit filter to help you determine the cause of the problem.  

Chapter 1. LoadLeveler messages 5
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-057</td>
<td>Unable to process the contents of the job command file <em>filename</em>.</td>
<td>The job command file does not contain any LoadLeveler commands. A LoadLeveler command or keyword statement must be preceded by <code>@</code>.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-058</td>
<td>The command file <em>filename</em> does not contain any queue keywords.</td>
<td>The job command file does not contain a LoadLeveler <code>queue</code> keyword. A LoadLeveler job must have at least one <code>queue</code> keyword.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-059</td>
<td>Unable to process the command file <em>filename</em>. The syntax is unknown.</td>
<td>The job command file does not contain any valid LoadLeveler statements.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-060</td>
<td>Syntax error: <em>keyword unknown command file keyword</em>.</td>
<td>The specified keyword is not a valid LoadLeveler keyword.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-061</td>
<td>Syntax error: <em>keyword = keyword_value unknown keyword value</em>.</td>
<td>The specified value is not valid for this keyword.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-062</td>
<td>Syntax error: <em>keyword = keyword_value takes only one keyword value</em>.</td>
<td>More than one value was given for the specified keyword. This keyword accepts only one value.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-063</td>
<td>Syntax error: <em>keyword = num_value is not a valid numerical keyword value</em>.</td>
<td>The value given for the specified keyword is not a numeric value. This keyword requires a numeric value.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-064</td>
<td>Syntax error: <em>keyword = value keyword value must be greater than zero</em>.</td>
<td>The value given for the specified keyword is not a positive number. This keyword requires a numeric value greater than zero.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-065</td>
<td>Unable to expand job command keyword <em>keyword = keyword_value</em>.</td>
<td>The keyword cannot be expanded using the job command file macros.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-066</td>
<td>Unable to expand job command keyword value <em>keyword = keyword_value</em>.</td>
<td>The specified macro, used as a keyword value, could not be expanded.</td>
<td>Verify that the macro is defined correctly in the job command file, then resubmit the job.</td>
</tr>
</tbody>
</table>
2512-067  The keyword statement cannot exceed number characters.
Explanation: The specified keyword statement, including all substitutions and expansions, cannot exceed the specified length.
User Response: Correct the job command file, then resubmit the job.

2512-068  The specified job_name of keyword is not valid.
Explanation: The value of the job_name statement is not valid. The job_name can only contain alphanumeric characters.
User Response: Correct the job command file, then resubmit the job.

2512-069  The specified step_name of command_file is not valid.
Explanation: The step_name of the specified keyword statement is not valid. The step name must: a) start with an alphabetic character, b) contain only alphanumeric characters, and c) cannot be T or F.
User Response: Correct the job command file, then resubmit the job.

2512-070  Invalid character(s) were specified for notify_user = user_name.
Explanation: The I, <, >, and ; characters are not allowed in the name of the notify_user.
User Response: Correct the job command file, then resubmit the job.

2512-071  network.mpi_lapi cannot be specified with any other network statements.
Explanation: If network.mpi_lapi is specified, it must be the only network statement.
User Response: Correct the job command file, then resubmit the job.

2512-074  The priority value is not valid: keyword = keyword_value.
Explanation: The priority value must be between 0 and 100.
User Response: Correct the job command file, then resubmit the job.

2512-076  The required keyword keyword was not found in the administration file.
Explanation: The specified keyword must appear in the administration file, so that LoadLeveler can process job command files.
User Response: Add the specified keyword to the administration file, then resubmit the job.

2512-077  A valid class could not be found in the default class list.
Explanation: The resource limits specified for the job exceed the resource limits for all classes in the default_class list for this user.
User Response: Take one of the following actions: a) specify a class in the job command file that satisfies the job’s resource limits, b) adjust the resource limits specified in the job command file, or c) have the LoadLeveler administrator add a class capable of accepting the job to the default_class list for the user.

2512-078  Group group_name is not valid for user user_name.
Explanation: The group assigned to this job either excludes or does not include the user.
User Response: Take one of the following actions: a) specify a valid group in the job command file, b) have the LoadLeveler administrator allow the user into the specified group, or c) have the LoadLeveler administrator change the default group for the user.
2512-079  Class classname is not valid for user user_name.
Explanation:  The class assigned to this job either excludes, or does not include the user.
User Response:  Take one of the following actions: a) specify a valid class in the job command file, b) have the LoadLeveler administrator allow the user to use the specified class, or c) have the LoadLeveler administrator change the default class of the user.

2512-080  Class classname is not valid for group group_name.
Explanation:  The class assigned to this job either excludes or does not include the group.
User Response:  Take one of the following actions: a) specify a valid class for the group, or a valid group for the class in the job command file, b) have the LoadLeveler administrator allow the group to use the specified class, or c) have the LoadLeveler administrator change the default class or default group for the user.

2512-081  Account number num is not valid for user user_name.
Explanation:  The account validation program determined that the user is not permitted to use the account number specified in the job command file.
User Response:  If the default account validation program is being used, then either use an account number assigned to the user, or have the LoadLeveler administrator add the account number to the user stanza in the administration file. If an installation specific account validation program is being used, then contact the LoadLeveler administrator.

2512-082  Condition code specified in the statement dependency = condition_code is not valid.
Explanation:  The condition code in the dependency statement must be CC_NOTRUN, CC_REMOVED, or an integer value between 0 and 255.
User Response:  Correct the job command file, then resubmit the job.

2512-083  The condition code integer value specified in the statement dependency = value is not within the range of 0 and 255.
Explanation:  The condition code in the dependency statement must be CC_NOTRUN, CC_REMOVED, or an integer value between 0 and 255.
User Response:  Correct the job command file, then resubmit the job.

2512-084  The expression specified in the statement dependency = dependency_value is not valid.
Explanation:  The value for the dependency statement must contain one or more expressions of the form: stepname operator value. Multiple expressions must be separated by the logical operators: && or ||.
User Response:  Correct the job command file, then resubmit the job.

2512-085  The syntax in the statement dependency = dependency_value is not valid.
Explanation:  The value for the dependency statement must contain one or more expressions of the form: stepname operator value. Multiple expressions must be separated by the logical operators: && or ||.
User Response:  Correct the job command file, then resubmit the job.

2512-086  The step_name in the statement dependency = dependency_value is not valid.
Explanation:  The step_name in the dependency statement is not valid. The step name must: a) start with an alphabetic character, b) contain only alphanumeric characters, and c) not be T or F.
User Response:  Correct the job command file, then resubmit the job.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-087</td>
<td>The step_name in the statement dependency = dependency_value was not previously defined.</td>
<td>Any step_name used in the dependency statement must be the name of a previously defined job step.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-088</td>
<td>The operator in the statement dependency = dependency_value is not valid.</td>
<td>The value for the dependency statement must contain one or more expressions of the form stepname operator value. Multiple expressions must be separated by the logical operators: &amp;&amp; or</td>
<td></td>
</tr>
<tr>
<td>2512-089</td>
<td>Syntax error: Class should not be included as part of keyword_value.</td>
<td>The class keyword cannot be used in requirements or preferences statements.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-090</td>
<td>The getcwd function failed with error error_num.</td>
<td>The getcwd system call failed when the submit process attempted to retrieve the name of the current working directory.</td>
<td>Consult the specified error number for more information.</td>
</tr>
<tr>
<td>2512-095</td>
<td>The resource limit resource_identification is unknown.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2512-096</td>
<td>This non-AIX version of LoadLeveler does not support check pointing.</td>
<td>Checkpointing is only supported on AIX versions of LoadLeveler.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-097</td>
<td>This non-AIX version of LoadLeveler does not support parallel jobs.</td>
<td>Parallel jobs are only supported on AIX versions of LoadLeveler.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-098</td>
<td>This non-AIX version of LoadLeveler does not support PVM3 jobs.</td>
<td>PVM3 jobs are only supported on AIX versions of LoadLeveler.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-101</td>
<td>The executable’s version of the checkpointing library can not be determined.</td>
<td>Checkpointing requires that the executable be linked with the checkpointing library.</td>
<td>Link edit the executable with the correct version of the checkpointing library, then resubmit the job.</td>
</tr>
<tr>
<td>2512-102</td>
<td>The CkptVersion cannot be defined in the requirements keyword statement.</td>
<td>CkptVersion cannot be specified in the requirements statement. If a job command file requests checkpointing, then LoadLeveler will add CkptVersion to the requirements statement implicitly.</td>
<td>Remove the CkptVersion expression from the requirements statement, then resubmit the job.</td>
</tr>
</tbody>
</table>
2512-105 The *keyword_value* conflicts with the Adapter = in the requirements or preferences statements.

Explanation: A job command file cannot contain both a *network* keyword, and an *Adapter* preference, in the requirements statement.

User Response: The *network* keyword is the preferred method for requesting adapters. Remove the *Adapter* preference from the requirements statement, then resubmit the job.

2512-108 Syntax error: *node = keyword_value* minimum is greater than maximum.

Explanation: The minimum number of nodes must be less than, or equal to, the maximum number of nodes.

User Response: Correct the job command file, then resubmit the job.

2512-109 The *keyword* LoadLeveler keyword is not valid for an NQS job:

Explanation: The specified keyword is not allowed in a job command file for a job that is routed to NQS. The supported level of NQS does not have an option equivalent to this keyword.

User Response: Correct the job command file, then resubmit the job.

2512-110 The NQS_submit keyword must be specified for class *class_name*.

Explanation: The specified class has NQS_class=true, but the class does not have the NQS_submit keyword, which specifies that the job be submitted to the NQS queue, in the administration file.

User Response: Have the LoadLeveler administrator correct the administration file, then resubmit the job.

2512-111 The NQS_query keyword must be specified for class *class_name*.

Explanation: The specified class has NQS_class=true, but the class does not have the NQS_query keyword, which specifies the NQS queue for job monitoring, in the administration file.

User Response: Have the LoadLeveler administrator correct the administration file, then resubmit the job.

2512-112 The NQS keyword *keyword_value* is missing a required value.

Explanation: The NQS keyword requires a value.

User Response: Correct the job command file, then resubmit the job.

2512-114 Unable to allocate *number bytes* of memory using malloc().

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2512-115 Unable to connect to a schedd machine.

Explanation: The submit command cannot connect to a LoadLeveler schedd machine.

User Response: Verify that a LoadL_sched daemon is running on this machine or at least one public scheduling machine, and that the scheduling machine can be accessed on the network.

2512-116 Unable to submit a job to the schedd machine.

Explanation: The submit command either cannot connect, or cannot send the job data to a LoadLeveler schedd daemon.

User Response: Verify that a LoadL_sched daemon is running on this machine or at least one public scheduling machine, and that the scheduling machine can be accessed on the network.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-117</td>
<td>This check pointing job requires the CHKPT_FILE or CHKPT_DIR environment variables.</td>
<td>A parallel LoadLeveler job with user initiated checkpointing requires that the CHKPT_FILE or CHKPT_DIR environment variables be set.</td>
<td>Set the CHKPT_FILE variable (or both variables), then resubmit the job.</td>
</tr>
<tr>
<td>2512-118</td>
<td>A job_type = parallel with checkpoint = system_initiated is not valid.</td>
<td>A parallel LoadLeveler job may not use system initiated checkpointing.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-119</td>
<td>Root cannot run a LoadLeveler job.</td>
<td>The root user (id = 0 ) is not allowed to submit a job command file to LoadLeveler.</td>
<td>Log on as a different user, then resubmit the job command file.</td>
</tr>
<tr>
<td>2512-120</td>
<td>The directory directory_name does not exist.</td>
<td>The specified directory either does not exist, or is not accessible by the user.</td>
<td>Either create the directory with the proper access permissions, or change the directory specified in the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-121</td>
<td>Syntax error: keyword = keyword_value invalid keyword value or it cannot be evaluated.</td>
<td>The value of the keyword contains a macro (user-defined variable) that either cannot be evaluated, or is not a valid date.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-122</td>
<td>Unable to get passwd entry for uid user_uid</td>
<td>The system call getpwuid failed for the specified uid.</td>
<td>Verify that the user has read access to the /etc/passwd file, and that the user has an entry in /etc/passwd.</td>
</tr>
<tr>
<td>2512-123</td>
<td>The command was unable to set the built in macros.</td>
<td>LoadLeveler failed to process a macro. This message is preceded by a message describing the cause of the failure.</td>
<td>Correct the problem indicated by the preceding message.</td>
</tr>
<tr>
<td>2512-124</td>
<td>Duplicate step names step_names are not allowed.</td>
<td>All step names in the job command file must be unique.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-125</td>
<td>Unable to convert keyword = keyword_value to a valid date/time format.</td>
<td>The value of the specified keyword is not a valid date/time.</td>
<td>Correct the date/time value in the job command file, then resubmit the job.</td>
</tr>
</tbody>
</table>
2512-126  Syntax error: The keyword *keyword* is required in the job command file.

**Explanation:** This job type requires that the specified keyword appear in the job command file.

**User Response:** Correct the job command file, then resubmit the job.

2512-127  Unable to calculate the image size. The *keyword* keyword is in error.

**Explanation:** The job’s image size was not stated explicitly using the executable keyword in the job command file. LoadLeveler must be able to calculate the job’s image size.

**User Response:** Consult the preceding message for more information on the error in the executable keyword. Correct the job command file, then resubmit the job.

2512-128  Unable to obtain the request name to build the standard output filename.

**Explanation:** This is an internal LoadLeveler error.

**User Response:** Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-129  The NQS keywords *keyword1* and *keyword2* are in conflict.

**Explanation:** Two of the NQS keywords are in conflict with each other.

**User Response:** Correct the job command file, then resubmit the job.

2512-130  The *keyword* is required in the configuration file.

**Explanation:** This is an internal LoadLeveler error.

**User Response:** Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-132  The *step_name* *step_name* in the requirements statement is not being referenced in the dependency statement.

**Explanation:** A requirements statement refers to a machine on which another step will run. To evaluate the requirements statement, the referenced step must run prior to the referencing step. A dependency statement within the referencing step is necessary to insure that the steps are run in the proper order.

**User Response:** Add a dependency statement to the referencing step, then resubmit the job.

2512-133  The *machine.stepname* cannot be specified for parallel type job step.

**Explanation:** The *machine.stepname* cannot be specified in the requirements statements for a parallel type job step.

**User Response:** Correct the job command file, then resubmit the job.

2512-134  The *adapter_name* adapter cannot be requested by name. Use sn_single or sn_all.

**Explanation:** A network keyword referenced an adapter name that was not found in the administration file. The adapter cannot be requested by name.

**User Response:** Use either sn_single or sn_all in the job command file, or have the LoadLeveler administration define the network_type or adapter_name in the administration file.

2512-135  For the *keyword* keyword, maximum number of nodes requested is greater than allowed for this *stanza_name*.

**Explanation:** The requested maximum number of nodes exceeds the maximum allowed by the specified administration stanza.

**User Response:** Either reduce the maximum number of nodes in the job command file, or have the LoadLeveler administrator increase the number allowed.
For the *stanza_name* keyword, the total number of tasks requested is greater than allowed for this *keyword*.

**Explanation:** The requested total number of tasks exceeds the maximum allowed by the specified administration stanza.

**User Response:** Either reduce the total number of tasks in the job command file, or have the LoadLeveler administrator increase the number allowed.

The number of *request_nodes* requested nodes exceeds the number of *requested_tasks* requested tasks.

**Explanation:** The requested number of nodes is greater than the requested total tasks.

**User Response:** Correct the job command file, then resubmit the job.

Syntax error: the *keyword1* and *keyword2* keywords are not allowed in the same step.

**Explanation:** Both of these keywords are not allowed in the same job step.

**User Response:** Correct the job command file, then resubmit the job.

The *keyword* keyword is not valid for job_type = pvm3 job steps.

**Explanation:** The specified keyword is not allowed in a pvm3 job.

**User Response:** Correct the job command file, then resubmit the job.

The *keyword* keyword is only valid for job_type = pvm3 job steps.

**Explanation:** This keyword is only valid when the job type is pvm3.

**User Response:** Correct the job command file, then resubmit the job.

Syntax error: Multiple "*keyword value*" keywords are not allowed in a "*keyword type*" statement.

**Explanation:** Only one of the specified keywords is allowed in the specified statement.

**User Response:** Correct the job command file, then resubmit the job.

Syntax error: Invalid Adapter operation in a *keyword type* statement.

**Explanation:** Only the equality operator "==" can be used with Adapter in the specified statement.

**User Response:** Correct the job command file, then resubmit the job.

Syntax error: Invalid adapter name in a *keyword type* statement.

**Explanation:** The name specified in the Adapter requirement is not valid.

**User Response:** Correct the job command file, then resubmit the job.

The *keyword* keyword is not valid when the node keyword contains minimum and maximum values which are not equal to each other.

**Explanation:** This keyword is not valid when the minimum and maximum values specified on the node keyword are not equal to each other.

**User Response:** Correct the job command file, then resubmit the job.
2512-145  The *keyword* keyword is not compatible with min_processors and/or max_processors.

Explanation: The keywords (min_processor and max_processor) cannot be used within the same job step that specifies the node keyword.

User Response: Correct the job command file, then resubmit the job.

2512-146  The *keyword* keyword is not valid for job_type = serial job steps.

Explanation: The specified keyword is not valid in a serial job.

User Response: Correct the job command file, then resubmit the job.

2512-147  Job command file, *file*, cannot be a directory.

Explanation: This message is self-explanatory.

User Response: Specify a file that is not in the same directory as the job command file.

2512-148  Syntax error: environment param *parameter*.

Explanation: The specified parameter in the environment statement is not valid.

User Response: Refer to LoadLeveler: Using and Administering for information about environment statement parameters.

2512-149  Cannot create environment string.

Explanation: LoadLeveler cannot duplicate the environment string.

User Response: This is a system error; contact IBM service.

2512-150  Not enough available filesystem space for *file name*. Transfer from *host* aborted.

Explanation: There was insufficient system space or insufficient access rights to write transferred data sent from the specified host.

User Response: Try one of the following: 1) Check that the specified directory exists, 2) check that the specified directory is accessible to the user executing the command, 3) check that the file system contains sufficient disk space to create the file. Rerun the command. If this was not successful, 4) try to reissue the llaacctmrg command, but specify a different history file name in a different file system; or use the statvfs man page to check for other possible problems. If the problem persists, contact the LoadLeveler administrator.

2512-151  Error receiving history file from *host*.

Explanation: An error occurred during the file transfer.

User Response: Check the communication paths to that host. Rerun the command, and if the problem persists, then contact the LoadLeveler administrator.

2512-152  GLOBAL_HISTORY is not specified in config file and user did not specify output directory.

Explanation: The GLOBAL_HISTORY directory is not specified in the LoadLeveler configuration file, and no directory was specified as a command line parameter to llaacctmrg.

User Response: Add the directory for the global history file to the GLOBAL_HISTORY entry of the LoadLeveler configuration file, or specify the directory as a command parameter to llaacctmrg.

2512-176  Internal errors detected. Exiting.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.
Unable to obtain machine status information from the central manager.

**Explanation:** The specified command cannot obtain information from the central manager about machines in the LoadLeveler cluster.

**User Response:** Verify that the central manager host is up and that the LoadL_negotiator is running on it.

---

No class information is available in the LoadLeveler administration file.

**Explanation:** LoadLeveler cannot find class information in the administration file.

**User Response:** Verify that LoadLeveler is running, and that it is configured correctly.

---

No machinelist specified for purge. Command was not sent.

**Explanation:** No machine names were passed to the purge command.

**User Response:** Reissue the command with the names of the LoadL_schedd hosts you wish to purge.

---

The keyword *keyword* is not valid.

**Explanation:** A keyword for the llctl command was specified that is not valid.

**User Response:** Refer to LoadLeveler: Using and Administering for a list of valid keywords.

---

Error occurred sending *command_name* command to *hostname*.

**Explanation:** An error occurred while sending the specified command to the specified host.

**User Response:** Verify that the intended host is available over the network, and that LoadLeveler is running. If necessary, contact a LoadLeveler administrator.

---

Unknown class *class_name* specified in classlist.

**Explanation:** A class name was specified with either the drain, or the resume keyword, that does not exist within the LoadLeveler configuration.

**User Response:** Reissue the command with a valid class name.

---

No event name specified for capture. Command was not sent.

**Explanation:** No event name was passed to the capture command.

**User Response:** Reissue the command with the name to be used to capture the event.

---

Cannot evaluate StartdAvail state.

**Explanation:** LoadLeveler cannot determine if a LoadL_startd is in the drain state.

**User Response:** Verify that the command passes a valid host list.

---

Error allocating machine object for *machine name*.

**Explanation:** LoadLeveler cannot allocate an object corresponding to the specified machine.

**User Response:** Verify that the command passes a nameserver-resolvable host name.

---

No schedd host was specified.

**Explanation:** No schedd host name was specified when using the purgeschedd option of the llctl command.

**User Response:** Retry the command, but be sure to specify a schedd host name.
2512-190  DCE is enabled for this LoadLeveler cluster. However, command_name is unable to determine your DCE identity. Your DCE credentials may have expired.

Explanation:  LoadLeveler cannot determine the DCE identity of the user.
User Response:  Verify that the DCE credentials of the user have not expired.

2512-191  security_method is enabled for this LoadLeveler cluster. The keyword of the configuration file must be assigned a value.

Explanation:  security_method indicates the security mechanism that is in use. When this security mechanism is used, the keyword indicated by keyword must be assigned a value that identifies the group.
User Response:  Specify the name of the appropriate group for the value of keyword in the LoadLeveler configuration file.

2512-193  security_method is enabled for this LoadLeveler cluster. Only members of the security_method group group_name are permitted to issue this command.

Explanation:  The ID issuing the command is not a member of the admin group for the security mechanism in use.
User Response:  When DCE is enabled, login as a member of the DCE LoadLeveler administrative group, then reissue the command. When cluster security services is enabled, login as a member of the cluster security services LoadLeveler administrative group, then reissue the command.

2512-194  The requested operation did not complete since the remaining lifetimes of your DCE credentials are less than 5 minutes.

Explanation:  Your DCE credentials expired before the operation could complete.
User Response:  dce_login again to get new credentials then reissue the command.

2512-195  Unable to determine the existence of the DCE group group_name associated with the keyword keyword.

Explanation:  LoadLeveler cannot find the DCE group name specified.
User Response:  Assign a valid DCE group name to the appropriate LoadLeveler keyword then reissue the command.

2512-196  The 64-bit interface of API name is not available when DCE is enabled.

Explanation:  This LoadLeveler API cannot be invoked from a 64-bit application when DCE is enabled.
User Response:  Compile and link the application as a 32-bit application if necessary.

2512-199  illegal option is an unrecognized option.

Explanation:  An unrecognized option was specified.
User Response:  Reissue the command, specifying only valid options.

2512-200  Errors encountered, processing halted.

Explanation:  LoadLeveler encountered errors while processing the command line.
User Response:  Correct the reported errors, then reissue the command.

2512-201  Unable to open the files file1, file2.

Explanation:  lldbconvert is either not being run in the local spool directory, or the user running the program has insufficient permissions to write in the local spool directory. LoadLeveler cannot open the specified files.
User Response:  Verify that the paths are correct, and that the files have the appropriate permissions.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-202</td>
<td>Unable to convert job job number, job name. Previous messages may indicate cause.</td>
<td>LoadLeveler cannot convert the specified job step from its old format to the new format.</td>
<td>Make a note of the job number. Earlier messages may indicate the reason for the failure.</td>
</tr>
<tr>
<td>2512-203</td>
<td>Unable to store job job number, job name in queue file names files.</td>
<td>LoadLeveler cannot store job job number.</td>
<td>Verify that there is disk space available in the local spool directory’s file system, and that the associated permissions are appropriate.</td>
</tr>
<tr>
<td>2512-204</td>
<td>Cannot rename file name file1 to file2. Error (error number) was: error message.</td>
<td>Cannot rename the file from string1 to string2.</td>
<td>Use the information in the error explanation to correct the problem.</td>
</tr>
<tr>
<td>2512-205</td>
<td>The job_queue files to be converted are in old LoadLeveler version format, not in 1.3 format.</td>
<td>Spool files are not in the expected original format or in the desired format.</td>
<td>Ilpdbconvert cannot be used. Delete or rename all spool files before bringing up the new version of LoadLeveler.</td>
</tr>
<tr>
<td>2512-206</td>
<td>function failed for job = job_num , step = job_step_num.</td>
<td>LoadLeveler failed to fetch the specified job step at the XDR level. Ilpdbconvert will discard an entire job if it fails to convert one of its job steps.</td>
<td>Make a note of the job number. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2512-207</td>
<td>Incorrect PROC version number (version_num). Converting to NULL PROC.</td>
<td>Ilpdbconvert cannot ascertain the version of a job step, and will try to continue processing other job steps.</td>
<td>Keep track of the job and job step numbers. If Ilpdbconvert succeeds, issue llq (after you have started the new version of LoadLeveler) to see what data was lost. Also, pay attention to additional error messages issued by Ilpdbconvert. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2512-220</td>
<td>Favorjob command has not been sent to the central manager.</td>
<td>The favorjob command was not sent to the central manager.</td>
<td>Verify that the central manager host is up, and that the LoadL_negotiator is running on it.</td>
</tr>
<tr>
<td>2512-225</td>
<td>Favoruser command has not been sent to the central manager.</td>
<td>The favoruser command was not sent to the central manager.</td>
<td>Verify that the central manager host is up, and that the LoadL_negotiator is running on it.</td>
</tr>
<tr>
<td>2512-229</td>
<td>Only a LoadLeveler administrator is permitted to use the -s option of this command.</td>
<td>A non-administrator is attempting to specify the -s option of this command.</td>
<td>Do not use the -s option unless you are a LoadLeveler administrator.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2512-230</td>
<td>Can not find password entry for user <em>uid</em> number.</td>
<td>A matching entry for the <em>uid</em> number does not exist in the <code>/etc/password</code> file.</td>
<td>Check the entries in the <code>/etc/passwd</code> file.</td>
</tr>
<tr>
<td>2512-231</td>
<td>Hold command has not been sent to the central manager.</td>
<td>The <code>hold</code> command was not sent to the central manager.</td>
<td>Verify that the central manager host is up, and that the LoadL_negotiator is running on it.</td>
</tr>
<tr>
<td>2512-232</td>
<td>The format of character string specified (= LoadLeveler job or job step name) is not valid for a LoadLeveler job or job step.</td>
<td>A string having the format: <code>[hostname.]job_id[.step_id]</code> is expected.</td>
<td>Specify a string of the expected format.</td>
</tr>
<tr>
<td>2512-238</td>
<td>Length of “environment” string must be less than 8191 bytes.</td>
<td>This message is self-explanatory</td>
<td>Verify that the environment string contains less than 8191 bytes.</td>
</tr>
<tr>
<td>2512-239</td>
<td>Syntax error: When JCL keyword is specified, the JCL keyword must also be specified.</td>
<td>Both of the specified keywords are required to appear within the same job step.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-240</td>
<td>Syntax error: “JCL keyword = value” keyword value must be greater than or equal to the value specified for Blocking.</td>
<td>The specified keyword value must be greater than or equal to the value set for Blocking.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-241</td>
<td>A “communication level” can only be specified with a communication subsystem mode of US.</td>
<td>A communication level was specified in a network statement which did not also specify user space. Communication level is only valid on network statements which specify user space communication.</td>
<td>Either remove the communication level specification, or change the mode to user space in the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-242</td>
<td>A “communication level” cannot be specified for a communication protocol of PVM.</td>
<td>A communication level was specified in a network statement for a PVM job. Communication levels are not supported for PVM jobs.</td>
<td>Remove the communication level specification from the job command file's PVM network statement, then resubmit the job.</td>
</tr>
<tr>
<td>2512-243</td>
<td>Priority command has not been sent to the central manager.</td>
<td>The <code>priority</code> command was not sent to the central manager.</td>
<td>Verify that the central manager host is up, and that the LoadL_negotiator is running on it.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>2512-244</td>
<td>Blank space is not allowed between + or - sign and priority adjustment specification.</td>
<td>There should be no blank space between the +/- sign and the integer specified in a priority adjustment.</td>
<td>Remove the blank space. For example: specify +30, not + 30.</td>
</tr>
<tr>
<td>2512-250</td>
<td>No hostlist was specified. A hostlist is required with the -h option.</td>
<td>The <code>llq -h</code> command was issued without a hostlist.</td>
<td>Reissue the command with a hostlist.</td>
</tr>
<tr>
<td>2512-251</td>
<td>No userlist was specified. A userlist is required with the -u option.</td>
<td>The <code>llq -u</code> command was issued without a userlist.</td>
<td>Reissue the command with a userlist.</td>
</tr>
<tr>
<td>2512-253</td>
<td>The -u option and the -s option are incompatible.</td>
<td>The <code>llq</code> command was issued with conflicting options.</td>
<td>Reissue the <code>llq</code> command using either the -s, or the -u option (not both).</td>
</tr>
<tr>
<td>2512-255</td>
<td>A job list must be specified if the -s option is used.</td>
<td>The <code>llq -s</code> command was issued with no job ids.</td>
<td>Specify one or more job ids with the <code>llq -s</code> command.</td>
</tr>
<tr>
<td>2512-261</td>
<td>The -u option cannot be used when a job list has already been specified.</td>
<td>The -u option of the <code>llq</code> command cannot be used when a job list has already been specified.</td>
<td>Do not use the -u option when a job list has been specified.</td>
</tr>
<tr>
<td>2512-262</td>
<td>Encountered one or more errors while processing the list of host names.</td>
<td>The <code>llq</code> command encountered errors while processing the arguments of the -h option.</td>
<td>Verify that the host names associated with the -h option are valid.</td>
</tr>
<tr>
<td>2512-263</td>
<td>Encountered one or more errors while processing the list of user names.</td>
<td>The <code>llq</code> command encountered errors while processing the arguments of the -u option.</td>
<td>Verify that the user names associated with the -u option are valid.</td>
</tr>
<tr>
<td>2512-264</td>
<td>The -c option and the -s option are incompatible.</td>
<td>Conflicting options were specified for the <code>llq</code> command.</td>
<td>Reissue the <code>llq</code> command using either the -s or the -c option, but not both.</td>
</tr>
<tr>
<td>2512-265</td>
<td>No class list was specified. A class list is required with the -c option.</td>
<td>The <code>llq -c</code> command was issued without a class list.</td>
<td>Reissue the command with a class list.</td>
</tr>
<tr>
<td>Error Code</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-266</td>
<td>Encountered one or more errors while processing the list of class names.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>The <code>llq</code> command encountered errors while processing the arguments of the <code>-c</code> option.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Verify that the class names associated with the <code>-c</code> option are valid.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-267</td>
<td>The <code>-x</code> option is not compatible with the <code>-s</code>, <code>-r</code>, or <code>-f</code> options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>Conflicting options were specified for the <code>llq</code> command.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command using only valid combinations of options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-268</td>
<td>The <code>-s</code> option is not compatible with the <code>-u</code>, <code>-x</code>, <code>-r</code>, <code>-f</code>, or <code>-c</code> options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>Conflicting options were specified for the <code>llq</code> command.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command using only valid combinations of options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-269</td>
<td>The <code>-l</code> option is not compatible with the <code>-r</code>, or <code>-f</code> options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>Conflicting options were specified for the <code>llq</code> command.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command using only valid combinations of options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-270</td>
<td>The <code>-r</code> option is not compatible with the <code>-l</code>, <code>-s</code>, <code>-x</code>, or <code>-f</code>, options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>Conflicting options were specified for the <code>llq</code> command.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command using only valid combinations of options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-271</td>
<td>An error was detected while processing the parameters of the <code>-r</code> or <code>-f</code> option.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>A parameter of the <code>-r</code> or <code>-f</code> option is not valid.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Use the <code>llq -H</code> command to obtain a complete list of valid parameters of the <code>-r</code> or <code>-f</code> option.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-272</td>
<td>The <code>-f</code> option is not compatible with the <code>-l</code>, <code>-s</code>, <code>-x</code>, or <code>-r</code> options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>Conflicting options were specified for the <code>llq</code> command.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command using only valid combinations of options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-273</td>
<td>A job list can be specified only once.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>More than one job list has been specified.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command with only one list of job IDs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-274</td>
<td>A job list can not be specified when a user list has also been specified.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>Conflicting options were specified for the <code>llq</code> command.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command using only valid combinations of options.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-275</td>
<td>An error was detected while processing the list of job names.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explanation:</td>
<td>A job name or job step has been specified which is not valid.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Response:</td>
<td>Reissue the <code>llq</code> command using valid job names or job step names.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2512-276</td>
<td>A long listing of schedd machine namejob_idstep_id is not available since you are not a LoadLeveler administrator or the owner of the job.</td>
<td>Only a LoadLeveler administrator, or the owner of a job, can request a long listing.</td>
<td>Do not use the -I or -x option of the llq command unless you are the owner of the job, or you are a LoadLeveler administrator.</td>
</tr>
<tr>
<td>2512-277</td>
<td>The -h option is compatible with a job list only when the -s option is also specified.</td>
<td>The -h option of the llq command cannot be used with a job list unless the -s option is also specified.</td>
<td>Do not use the -h option when a job list has been specified, unless the -s option is also specified.</td>
</tr>
<tr>
<td>2512-278</td>
<td>A step id must be specified when the -w and -h options are specified.</td>
<td>Conflicting options were specified for the llq command.</td>
<td>Reissue the llq command with only valid combinations of options.</td>
</tr>
<tr>
<td>2512-279</td>
<td>The -w option only supports a single hostname.</td>
<td>Conflicting options were specified for the llq command.</td>
<td>Reissue the llq command with only valid combinations of options.</td>
</tr>
<tr>
<td>2512-280</td>
<td>The combination of -w and -h only supports a single step id.</td>
<td>Conflicting options were specified for the llq command.</td>
<td>Reissue the llq command with only valid combinations of options.</td>
</tr>
<tr>
<td>2512-281</td>
<td>This operation did not terminate normally since a severe error had been detected.</td>
<td>The program has terminated due to a severe condition.</td>
<td>Check the LoadLeveler configuration and administration files.</td>
</tr>
<tr>
<td>2512-282</td>
<td>A userlist, hostlist or joblist must be specified.</td>
<td>The llcancel command is missing data.</td>
<td>Specify a userlist, hostlist, or joblist with the llcancel command.</td>
</tr>
<tr>
<td>2512-283</td>
<td>Cancel command has not been sent to the central manager.</td>
<td>LoadLeveler encountered an error while sending data to the central manager.</td>
<td>Verify that the central manager host is up, and that the LoadL_negotiator daemon is running on it. Retry the command; if the problem persists, then contact the LoadLeveler administrator.</td>
</tr>
<tr>
<td>2512-289</td>
<td>A duplicate category associated with -f or -r option has been specified.</td>
<td>A sub-option of the -f or -r option was specified more than once.</td>
<td>Each distinct sub-option should not be specified more than once. Use the -H option to get a list of valid sub-options.</td>
</tr>
<tr>
<td>2512-294</td>
<td>The central manager is not defined in the LoadLeveler administration file.</td>
<td>LoadLeveler cannot obtain information about the central manager machine.</td>
<td>Verify that a central manager is defined in the LoadLeveler administration file.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2512-295</td>
<td>The <code>-l</code>, <code>-r</code>, <code>-f</code> options of this command are mutually exclusive.</td>
<td>Do not specify the <code>-l</code>, <code>-r</code>, or <code>-f</code> options together in any combination.</td>
<td>Specify <code>-l</code>, or <code>-r</code>, or <code>-f</code>, but not any combination of these options.</td>
</tr>
<tr>
<td>2512-296</td>
<td>An invalid category associated with <code>-f</code> or <code>-r</code> option has been specified.</td>
<td>You have specified a non-valid sub-option of the <code>-f</code> or <code>-r</code> option.</td>
<td>Specify only valid sub-options. Use the <code>-H</code> option to get a list of valid sub-options.</td>
</tr>
<tr>
<td>2512-297</td>
<td>The arguments of this command contain characters not in the ASCII character set. Exiting.</td>
<td>The arguments of this command contain characters non-ASCII characters.</td>
<td>Specify arguments in valid ASCII characters.</td>
</tr>
<tr>
<td>2512-298</td>
<td>The <code>-l</code>, <code>-a</code>, <code>-r</code>, <code>-f</code>, <code>-R</code>, <code>-F</code> options of this command are mutually exclusive.</td>
<td>Do not specify any of the following options together: <code>-l</code>, <code>-a</code>, <code>-r</code>, <code>-f</code>, <code>-R</code>, or <code>-F</code>.</td>
<td>Specify any of the following options alone: <code>-l</code>, <code>-a</code>, <code>-r</code>, <code>-f</code>, <code>-R</code>, <code>-F</code>, but not in any combination.</td>
</tr>
<tr>
<td>2512-299</td>
<td>If <code>-F</code> option is specified then a host list can not be specified.</td>
<td>The <code>-F</code> option is not compatible with a host list.</td>
<td>Do not specify a host list if <code>-F</code> option has been specified.</td>
</tr>
<tr>
<td>2512-300</td>
<td>Program encountered an error while processing data received from the central manager.</td>
<td>Data that is not valid is returned by the central manager.</td>
<td>Check to see if the central manager is up and running.</td>
</tr>
<tr>
<td>2512-301</td>
<td>An error occurred while receiving data from the daemon on host <code>hostname</code>.</td>
<td>Data that is not valid is returned or a time-out occurred.</td>
<td>Use the <code>CLIENT_TIMEOUT</code> keyword to increase the time-out interval from the default value of 30 seconds.</td>
</tr>
<tr>
<td>2512-311</td>
<td><code>parameter</code> is not a valid option for the <code>-r</code> flag. Valid options are: all, resource, throughput, avgthroughput, minthroughput, maxthroughput, numeric.</td>
<td>The specified argument is not valid for the <code>-r</code> flag.</td>
<td>Refer to the displayed list of valid arguments.</td>
</tr>
<tr>
<td>2512-312</td>
<td>Missing date for <code>-s</code> or <code>-e</code> flag.</td>
<td>One or more dates have been omitted for the <code>-s</code> and <code>-e</code> flags.</td>
<td>Enter a date for each flag.</td>
</tr>
<tr>
<td>2512-313</td>
<td>The date range specified is not valid.</td>
<td>The Start date is later than the End date.</td>
<td>Enter a valid date range.</td>
</tr>
</tbody>
</table>
**2512-318**  
**parameter** is not a valid option for the -d flag. Valid options are: all, user, group, class, account, unixgroup, day, week, month, jobid, jobname, allocated.  
**Explanation:** The specified parameter is not a valid argument for the -d flag.  
**User Response:** Refer to the displayed list of valid arguments.

**2512-326** Syntax error found in the task\_geometry expression. Task ID(s) have to be specified.  
**Explanation:** There are no task IDs specified for a node in the task\_geometry statement. Task IDs must be unsigned integers, specified within a single set of parentheses. Additional task IDs should be included within the same parentheses, but must be separated from each other by commas.  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.

**2512-327** Syntax error found in the task\_geometry expression. The expression must start with a \"{\".  
**Explanation:** The task\_geometry statement must start with a \"{\" (open brace), and end with a \\"\") (closed brace).  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.

**2512-328** Syntax error found in the task\_geometry expression. The expression must end with a \"\\".  
**Explanation:** The task\_geometry statement must start with a \"{\" (open brace), and end with a \"\") (closed brace).  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.

**2512-329** Syntax error found in the task\_geometry expression. Extra characters are found after \"\).  
**Explanation:** The entire task\_geometry statement must be enclosed within the \"{\" (open brace), and the \"\") (closed brace).  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.

**2512-330** Syntax error found in the task\_geometry expression. Left parenthesis cannot be nested.  
**Explanation:** The list of task IDs assigned to a node in a task\_geometry statement must begin with a single open parenthesis. Nested parentheses are not allowed.  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.

**2512-331** Syntax error found in the task\_geometry expression. Expected \"{\", but another character is encountered.  
**Explanation:** The list of task IDs assigned to a node must begin with the open parenthesis; the current list of task IDs begins with another character.  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.

**2512-332** Syntax error found in the task\_geometry expression. \"{\" is encountered without a corresponding \\"\).  
**Explanation:** All of the task IDs for a node in a task\_geometry statement must be enclosed between parentheses.  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.

**2512-333** Syntax error found in the task\_geometry expression. Task ID(s) have to be specified within parentheses.  
**Explanation:** Task IDs must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.  
**User Response:** Correct the syntax error in the task\_geometry statement, then resubmit the job.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-334</td>
<td>Syntax error found in the <code>task_geometry</code> expression. The specification of task ID(s) within the parentheses is not valid.</td>
<td>Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.</td>
<td>Correct the syntax error in the <code>task_geometry</code> statement, then resubmit the job.</td>
</tr>
<tr>
<td>2512-335</td>
<td>Syntax error found in the <code>task_geometry</code> expression. A task ID has to be an unsigned integer.</td>
<td>Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.</td>
<td>Correct the syntax error in the <code>task_geometry</code> statement, then resubmit the job.</td>
</tr>
<tr>
<td>2512-336</td>
<td>Syntax error found in the <code>task_geometry</code> expression. A task ID has to be an integer from 0 to n-1, where n is the total number of tasks for the parallel job.</td>
<td>Task IDs must comprise a complete range of consecutive unsigned integers. The range must start with zero, and end with a value that is one less that the total number of tasks in the parallel job.</td>
<td>Correct the syntax error in the <code>task_geometry</code> statement, then resubmit the job.</td>
</tr>
<tr>
<td>2512-337</td>
<td>Syntax error found in the <code>task_geometry</code> expression. Duplicate task IDs are specified.</td>
<td>No task IDs may be specified more than once in the <code>task_geometry</code> statement.</td>
<td>Correct the syntax error in the <code>task_geometry</code> statement, then resubmit the job.</td>
</tr>
<tr>
<td>2512-338</td>
<td>Syntax error found in the <code>task_geometry</code> expression. A non-blank character is found between <code>)</code> and <code>)</code>.</td>
<td>No task IDs can be specified more than once in the <code>task_geometry</code> statement.</td>
<td>Correct the syntax error in the <code>task_geometry</code> statement, then resubmit the job.</td>
</tr>
<tr>
<td>2512-339</td>
<td>Syntax error: the JCL keyword <code>keyword</code> is not allowed in a step which specifies a class with the master node requirement.</td>
<td>The class which was specified for the step is configured with <code>master_node_requirement</code> set to <code>true</code>. The specified keyword cannot be used in a step that requires the master node feature.</td>
<td>Either modify the job command file to remove the specified keyword or to change the class specification, or modify the LoadLeveler administration file by setting the <code>master_node_requirement</code> keyword to <code>false</code> in the class stanza.</td>
</tr>
<tr>
<td>2512-340</td>
<td>There is a consumable resource without a value: <code>value</code>.</td>
<td>This message is self-explanatory.</td>
<td>Verify the syntax of the job command file, configuration file, or administration file.</td>
</tr>
<tr>
<td>2512-341</td>
<td>There is a consumable resource with a wrong value: <code>value</code>.</td>
<td>This message is self-explanatory.</td>
<td>Verify the syntax of the job command file, configuration file, or administration file.</td>
</tr>
<tr>
<td>2512-342</td>
<td>There is a consumable resource without units: <code>unit</code>.</td>
<td>This message is self-explanatory.</td>
<td>Verify the syntax of the job command file, configuration file, or administration file.</td>
</tr>
</tbody>
</table>
2512-343  There is a floating resource with a wrong value: value.
Explanation:  This message is self-explanatory.
User Response:  Verify the syntax of the job command file, configuration file, or administration file.

2512-344  Syntax error: the JCL keyword keyword is not allowed in the command file for an interactive session.
Explanation:  The job command file cannot have the specified keyword when the session is interactive.
User Response:  Either, remove the specified keyword from the job command file, or submit the job with a different session type.

2512-345  Syntax error: the JCL keyword keyword is not allowed in the command file for an interactive session with host list.
Explanation:  The job command file cannot contain the specified keyword with a host list, and when the session is interactive.
User Response:  Either remove the specified keyword from the job command file, or submit the job with a different session type.

2512-346  Syntax error: the keyword keyword cannot be specified more than once.
Explanation:  This message is self-explanatory.
User Response:  Remove the additional keyword from the job command file.

2512-347  Syntax error: the keyword keyword can not have a value value for an interactive session.
Explanation:  The job command file cannot contain the specified keyword with a host list, and when the session is interactive.
User Response:  Change the value of the specified keyword in the job command file.

2512-348  The keyword keyword is ignored in the command file for an interactive session.
Explanation:  The job command file cannot contain the specified keyword when the session is interactive.
User Response:  Change the value of the specified keyword in the job command file.

2512-349  Syntax error: the keyword keyword cannot contain a value other than value for an interactive session.
Explanation:  The job command file cannot contain the specified keyword with a host list, and when the session is interactive.
User Response:  Change the value of the specified keyword in the job command file.

2512-350  Syntax error: the resource name consumable resource can not have a value lesser than the value of "image_size".
Explanation:  The value for ConsumableVirtualMemory cannot be less than the value specified for the step's image_size.
User Response:  Change the value of the specified keyword in the job command file.

2512-351  Attention: The consumable resource resource name is not listed in SCHEDULE_BY_RESOURCES.
Explanation:  This warning is generated when a resource has been requested that does not appear in the SCHEDULE_BY_RESOURCES list.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-352</td>
<td>Syntax error: ( \text{keyword} = \text{keyword value keyword value must be greater than zero} ).</td>
</tr>
<tr>
<td>2512-353</td>
<td>css1 adapter cannot be used to run User Space jobs.</td>
</tr>
<tr>
<td>2512-354</td>
<td>The ENFORCE_RESOURCE_SUBMISSION keyword is true, ENFORCE_RESOURCE_USAGE is required in the job's resources keyword.</td>
</tr>
<tr>
<td>2512-355</td>
<td>The string ( \text{string} ) associated with the resources keyword contains invalid consumable resources information.</td>
</tr>
<tr>
<td>2512-356</td>
<td>The specification ( \text{data_string for keyword} ) keyword contains invalid data.</td>
</tr>
<tr>
<td>2512-357</td>
<td>The value assigned to ( \text{keyword} ) must be greater than zero.</td>
</tr>
<tr>
<td>2512-358</td>
<td>Syntax error found in the ( \text{task.geometry} ) expression. The value of a task ID can not be outside the range of ( \text{INT32_MAX} ).</td>
</tr>
<tr>
<td>2512-359</td>
<td>The character string ( \text{string} ) cannot be assigned to the ( \text{keyword} ) keyword.</td>
</tr>
<tr>
<td>2512-360</td>
<td>The string ( \text{string.value associated with the keyword} ) keyword is not a valid time specification.</td>
</tr>
</tbody>
</table>

User Response:  
- **2512-352**: Change the value of the specified keyword in either the job command file, or the LoadLeveler configuration file.  
- **2512-353**: Correct the job command file, then resubmit the job.  
- **2512-354**: Request the css0 or csss adapter for a User Space job or specify IP Mode for css1.  
- **2512-355**: Resubmit the job with the correct resources requested in the resources keyword.  
- **2512-356**: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.  
- **2512-357**: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.  
- **2512-358**: Resubmit the job with the correct specification for the task.geometry expression.  
- **2512-359**: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.  
- **2512-360**: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.
2512-361 The value assigned to the keyword keyword can not be converted to an integer.

Explanation: The user specification for this keyword is not a numeric string and hence cannot be converted to an integer.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-362 The value value assigned to the keyword keyword can not be converted to an integer.

Explanation: The user specification in value is not a numeric string and, therefore, cannot be converted to an integer.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-363 The stat64 function is unable to determine the status of the file filename.

Explanation: The stat64 system call failed for the specified file.

User Response: Verify that the file exists, and that it has the appropriate permissions.

2512-364 The size of the file filename associated with the executable keyword cannot exceed number bytes.

Explanation: The size of the file associated with the LoadLeveler executable keyword cannot be greater than the indicated number of bytes.

User Response: If the size of the executable is greater than INT32_MAX (2147483647 bytes), create a shell script that invokes this executable and submit the script to LoadLeveler.

2512-365 The keyword statement with domain names expanded cannot exceed number characters.

Explanation: The keyword statement, including all domain name expansions, cannot exceed the specified length.

User Response: Correct the job command file, then resubmit the job.

2512-366 You must have execute permission for a job step's executable file, executable file name, when checkpoint is enabled.

Explanation: LoadLeveler normally copies the executable file for a job step to the executing machine and sets execute permission for the copied file. If checkpoint is enabled for a job step, LoadLeveler cannot copy the executable file. In this case, the executable file must have execute permission for the user at submit time.

User Response: Set execute permission for the executable files for all checkpoint enabled job steps and then resubmit the job.

2512-367 This version of Illsubmit does not support type of LoadLeveler job.

Explanation: The type of job submitted is not supported by this version of LoadLeveler.

User Response: Correct the job command file, then resubmit the job.

2512-377 The SDR Class classname class does not contain any SDR objects.

Explanation: The specified command cannot extract any objects from the SDR class.

User Response: Contact the system administrator to start problem determination procedures for the SDR.

2512-378 The SDR system partition does not contain any machine definitions.

Explanation: The specified command cannot find SDR Node class entries for the machines in the system partition definition in the System Data Repository.

User Response: Contact the system administrator to start problem determination procedures for the SDR.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-379</td>
<td>The SDR function <code>function_name</code> failed with a return code of <code>return_code</code>.</td>
<td>The specified command issued a function to extract data from the SDR and the SDR function failed with the specified return code.</td>
<td>Contact the system administrator to start problem determination procedures for the SDR.</td>
</tr>
<tr>
<td>2512-380</td>
<td>The SDR attribute <code>attribute</code> was not found in the SDR class <code>classname</code> object.</td>
<td>The specified command could not find the attribute in the SDR class object.</td>
<td>Contact the system administrator to start problem determination procedures for the SDR.</td>
</tr>
<tr>
<td>2512-381</td>
<td>An SP_NAME of <code>SP_NAME</code> was found. Verify that this is a valid partition.</td>
<td>The specified command could not find the partition.</td>
<td>Contact the system administrator to start problem determination procedures for the SDR.</td>
</tr>
<tr>
<td>2512-403</td>
<td>Unable to &quot;cd&quot; into directory <code>directory</code>.</td>
<td>This message is self-explanatory.</td>
<td>Review access permissions and other possible reasons for not being able to access a directory.</td>
</tr>
<tr>
<td>2512-404</td>
<td>You must be user <code>username</code> to execute this script.</td>
<td>This message is self-explanatory.</td>
<td>Verify that you are logged in as the expected user, then retry the script.</td>
</tr>
<tr>
<td>2512-405</td>
<td>Missing parameter for <code>parameter</code>; try &quot;-help&quot;.</td>
<td>This message is self-explanatory.</td>
<td>Issue <code>llinit -help</code> for information on specifying parameters.</td>
</tr>
<tr>
<td>2512-406</td>
<td>Unable to set permission <code>permission</code> on <code>target file</code>.</td>
<td>This message is self-explanatory.</td>
<td>Verify that you have the authorization to set the desired permissions.</td>
</tr>
<tr>
<td>2512-407</td>
<td>Unable to create directory <code>target directory</code>.</td>
<td>This message is self-explanatory.</td>
<td>Verify that you have the authorization to create the desired directory.</td>
</tr>
<tr>
<td>2512-408</td>
<td>Unable to create symbolic link <code>target symbolic link</code>.</td>
<td>This message is self-explanatory.</td>
<td>Verify that you have the authorization to create the desired symbolic link.</td>
</tr>
<tr>
<td>2512-409</td>
<td>Unable to create file <code>target file</code>.</td>
<td>This message is self-explanatory.</td>
<td>Verify that the user has authorization to create the desired file.</td>
</tr>
</tbody>
</table>
2512-410  Error occurred while trying to edit file \textit{target file}, \texttt{rc=return from ed command}.

Explanation: This message is self-explanatory.
User Response: Make the corrections indicated by the return code.

2512-411  Unknown parameter=\textit{parameter} try "llinit -H".

Explanation: This message is self-explanatory.
User Response: Issue \texttt{llinit -H} for information on specifying parameters.

2512-424  A list of job names or step names must be specified when the -s option is specified.

Explanation: When -s option is specified, a list of job names or step names must also be specified.
User Response: Reissue the \texttt{llq -s} command with a valid list of job names or step names.

2512-425  Machine \textit{machine\_name} specified in the host list is not known to the Central Manager. Ignored.

Explanation: The machine specified is not known to the Central Manager.
User Response: Check the LoadLeveler administration file. Reissue the \texttt{llq} command with a valid host name.

2512-426  None of the machines in the specified host list is known to the Central Manager.

Explanation: The machines in the host list are not known to the Central Manager.
User Response: Check the LoadLeveler administration file. Reissue the \texttt{llq -h} command with a valid list of host names.

2512-427  Step \textit{step\_id} has been canceled because it was rejected \textit{num} time(s).

Explanation: The number of times that the specified step was rejected exceeds the value specified for \texttt{MAX\_JOB\_REJECT} in the configuration file, so the step was canceled.
User Response: Check for mail describing this problem, unless \texttt{NOTIFICATION} is set to \texttt{NONE} in the job command file. Also, verify that the job’s requirements can be met on the machine that rejected it, and that the user’s uid is valid.

2512-428  Step \textit{step\_id} has been put on user hold because it has been rejected \textit{num} time(s).

Explanation: The number of times that the specified step was rejected exceeds the maximum allowed in the job command file, so the step was put on user hold.
User Response: Check for mail describing this problem (unless the \texttt{NOTIFICATION} keyword is set to \texttt{NONE} in the job command file). Also, verify that the job’s requirements can be met on the machine that rejected it, and that the user’s uid is valid.

2512-429  Problem with history file.

Explanation: The \texttt{schedd} has failed to write to its local history file.
User Response: Retry the command. If the problem persists, then contact the LoadLeveler administrator.

2512-430  Error appending job \textit{job\_name} to the history file, \texttt{errno = UNIX\_error\_num}.

Explanation: This is a history file problem.
User Response: Consult the specified error number for more information.
2512-431  Accounting has been disabled on machine: machine_name.
Explanation:  This is a history file problem.
User Response:  Use the error number from message 2512-430 to correct the history file problem.

2512-432  Re-enable with: lctl -h hostname reconfig or lctl -h hostname recycle.
Explanation:  This is a history file problem.
User Response:  If you are a LoadLeveler administrator, then run lctl -h reconfig or lctl -h recycle, then retry the command; if you are not, then contact the LoadLeveler administrator.

2512-433  step_id has been put on system hold because it has been rejected num time(s).
Explanation:  The specified step was put on system hold.
User Response:  Verify that the job’s requirements can be met on at least one machine in the LoadLeveler cluster, and that the user’s uid is valid on sufficient machines in the LoadLeveler cluster, then resubmit the job. If the problem persists, contact the LoadLeveler administrator.

2512-434  There is an error attempting to write to the SAVELOGS directory. Saving log files is disabled.
Explanation:  An error occurred during the saving of old log files.
User Response:  Verify that the configuration file variable SAVELOGS points to an existing directory, that you have permission to access the directory, and that there is available space in the directory.

2512-440  Unable to malloc num bytes for list.
Explanation:  The program could not allocate virtual memory.
User Response:  Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2512-441  Specified step name step_name is not a valid name for a LoadLeveler job.
Explanation:  The error message is self-explanatory
User Response:  Reissue the command specifying a correct LoadLeveler step name.

2512-442  statvfs (hexadecimal_address) failed. Errno = error_num.
Explanation:  The statvfs system call failed.
User Response:  Correct the problem indicated by the error number.

2512-443  statfs (hexadecimal_address) failed. Errno = error_num.
Explanation:  The statfs function call failed.
User Response:  Correct the problem indicated by the error number.

2512-445  Syntax error: Blank required after end quote for keyword keyword.
Explanation:  The specified keyword requires a blank after the end quote.
User Response:  Correct the job command file, then resubmit the job.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-446</td>
<td>Syntax error: Quotes mismatched for keyword keyword.</td>
<td>The quotes are mismatched for the specified keyword.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-448</td>
<td>Syntax error: The keyword_LIMIT unit type of keyword_units is not valid.</td>
<td>The type of units in the specified keyword value is not valid</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-449</td>
<td>Syntax error: The keyword_LIMIT = keyword_value integer value has too many digits. Maximum allowed is digits.</td>
<td>The specified keyword integer value has too many digits.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-450</td>
<td>Syntax error: The keyword_LIMIT = keyword_value fraction value has too many digits. Maximum allowed is digits.</td>
<td>The specified keyword fractional value has too many digits.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-451</td>
<td>Syntax error: The keyword_LIMIT = keyword_value value must be numeric.</td>
<td>The specified keyword value must be numeric.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-452</td>
<td>Syntax error: The keyword_LIMIT = keyword_value cannot contain a value of zero.</td>
<td>The specified keyword value must be greater than zero.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-453</td>
<td>Syntax error: The keyword_LIMIT value keyword_value has too many characters.</td>
<td>The specified keyword value units has too many characters.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-454</td>
<td>Syntax error: The time keyword format is invalid.</td>
<td>The time format in the specified keyword value is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-455</td>
<td>Syntax error: line.</td>
<td>The specified line in the job command file is not valid; the syntax is unknown.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-456</td>
<td>The keyword_LIMIT = keyword_value soft limit of (limit units) exceeds user hard limit (limit units).</td>
<td>The soft limit in the specified keyword value exceeds the hard limit value.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>2512-457</td>
<td>Unable to generate a temporary file name for stdin input file.</td>
<td>The command cannot generate a temporary file name.</td>
<td>Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.</td>
</tr>
<tr>
<td>2512-458</td>
<td>Unable to open command file <em>filename</em> for output.</td>
<td>The command cannot open the specified temporary command file.</td>
<td>Verify that the user has valid file permissions. If the problem persists, report it to the system administrator.</td>
</tr>
<tr>
<td>2512-459</td>
<td>Unable to unlink file <em>filename</em>.</td>
<td>The command cannot delete the specified temporary command file.</td>
<td>Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.</td>
</tr>
<tr>
<td>2512-460</td>
<td>Unable to write stdin input file to <em>temp_filename</em>.</td>
<td>The command cannot write the stdin command file to the specified temporary command file.</td>
<td>Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.</td>
</tr>
<tr>
<td>2512-461</td>
<td>Unexpectedly large line from stdin file.</td>
<td>The stdin command file is too large.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-462</td>
<td>Write error copying input command file.</td>
<td>The command could not copy the stdin command file to the temporary command file.</td>
<td>Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.</td>
</tr>
<tr>
<td>2512-465</td>
<td>Syntax error: The time <em>keyword_value</em> contains non-numeric characters.</td>
<td>The specified time format is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-466</td>
<td>Syntax error: The start date must be 12 digits [YYMMDDhhmmss].</td>
<td>The specified date and time format is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
<tr>
<td>2512-467</td>
<td>Syntax error: For the <em>keyword</em> <em>keyword</em>, <em>month_value</em> is not a valid month.</td>
<td>The specified date format is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
</tr>
</tbody>
</table>
2512-468  Syntax error: For the *keyword* *keyword*, *day_value* is not a valid day.
Explanation:  The specified date format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-469  Syntax error: For the *keyword* *keyword*, *hour_value* is not a valid hour.
Explanation:  The specified date format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-470  Syntax error: For the *keyword* *keyword*, *minute_value* is not a valid minute.
Explanation:  The specified time format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-471  Syntax error: For the *keyword* *keyword*, *second_value* is not a valid second.
Explanation:  The specified time format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-472  Syntax error: For *keyword* = *keyword_value*, the MM is not valid MM/DD/YY.
Explanation:  The specified date format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-473  Syntax error: For *keyword* = *keyword_value*, the DD is not valid MM/DD/YY.
Explanation:  The specified date format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-474  Syntax error: For *keyword* = *keyword_value*, the YY is not valid MM/DD/YY.
Explanation:  The specified date format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-475  Syntax error: For *keyword* = *keyword_value*, the date format is not valid MM/DD/YY.
Explanation:  The specified date format is not valid.
User Response:  Correct the job command file, then resubmit the job.

2512-476  Unable to switch locale to *locale*, possibly because that locale is not installed on this system.
Using locale={*locale*} instead.
Explanation:  The specified command could not switch to the locale specified in the user’s environment variables. LoadLeveler is using the default locale specified in the error message.
User Response:  Verify that the locale specified by the LC_ALL environment variable is installed on the machine where the command is being run. The command will execute, but any locale information—including the message catalog—will come from the default locale.

2512-477  Unable to restore LC_COLLATE locale to *original_value*. It will be left as: *value used*.
Explanation:  The specified command could not restore LC_COLLATE to its original value, prior to running the command. The value from the user’s environment will be used.
User Response:  Verify that the original locale is installed on the machine on which the command is being run.
2512-478  job name could not open executable name to check for magic number.

Explanation: The Isubmit command could not open the specified executable to verify that it is in the correct extended object file format (XCOFF).

User Response: Verify that the executable file exists, and that it has appropriate access permissions.

2512-479  job name read(file descriptor, file header address, file header size) for magic number failed.

Explanation: The Isubmit command could not read the specified executable’s extended object file format header (XCOFF).

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-480  Bad magic number in xcoff header.

Explanation: The specified executable’s extended object file format (XCOFF) is not recognized as one that will run on the specified machine.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-481  Bad a.out header size in xcoff header.

Explanation: The a.out header in the job’s executable could not be read.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-482  Read: read(executable file descriptor, a.out header address, header size) failed for job name executable.

Explanation: The read action failed for the specified executable.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-483  Bad magic number in a.out header.

Explanation: The job’s executable has an inappropriate extended object file format (XCOFF).

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-484  job name nlist(executable name, nl structure array address) call fails. Return code = return code, errno = error num.

Explanation: The nlist system call failed for the specified executable.

User Response: Verify that the executable is binary, that it has been compiled on the correct operating system platform, and that it is not stripped. Consult the specified error message for more information.

2512-485  job name No symbol .MAIN found in executable (executable name).

Explanation: The specified executable is not linked to run with a pre-LoadLeveler 2.1 checkpoint library.

User Response: Link the specified executable to the correct version of LoadLeveler’s checkpoint library; use the script provided in /usr/lpp/LoadL/full/bin to compile and link the executable.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-486</td>
<td>job name could not open executable name to check for magic number.</td>
<td>The calling program could not open the specified executable.</td>
<td>Verify that the executable file exists, and that it has the correct access permissions.</td>
<td></td>
</tr>
<tr>
<td>2512-487</td>
<td>job name could not read executable name to check for magic number, errno = error num.</td>
<td>The calling program cannot read the specified executable to check its extended object file format (XCOFF) header.</td>
<td>Verify that the executable file has the correct access permissions.</td>
<td></td>
</tr>
<tr>
<td>2512-488</td>
<td>job name could not read file header of executable name to check for magic number.</td>
<td>The calling program cannot read the specified executable’s extended object file format (XCOFF) header.</td>
<td>Verify that the executable has the correct file access permissions, that it is binary, and that it has been compiled on the correct operating system platform.</td>
<td></td>
</tr>
<tr>
<td>2512-489</td>
<td>job name Magic number of executable executable name is not SHARE_MAGIC.</td>
<td>The specified executable is not in SHARE_MAGIC format.</td>
<td>Verify that the executable is binary, and that it has been compiled on the correct operating system platform.</td>
<td></td>
</tr>
<tr>
<td>2512-490</td>
<td>job name Executable executable name is not compiled for this architecture.</td>
<td>The specified executable is not compiled to run on this operating system platform.</td>
<td>Verify that the executable is binary, and that it has been compiled on the correct operating system platform.</td>
<td></td>
</tr>
<tr>
<td>2512-491</td>
<td>mbstowcs() error converting string (multibyte character input string).</td>
<td>The command, which uses the mbstowcs system call, encountered an error while attempting to convert the command line input from a multibyte character string to a wide character string.</td>
<td>Verify that the multibyte character input string is valid, then retry the command. If the problem persists, contact IBM service.</td>
<td></td>
</tr>
<tr>
<td>2512-492</td>
<td>Syntax error: error description. Discovered at line line num in file filename.</td>
<td>The command encountered an error while parsing the command input at the specified line.</td>
<td>Examine the expression on the specified line for incorrect syntax. Correct the problem, then retry the command.</td>
<td></td>
</tr>
<tr>
<td>2512-493</td>
<td>Unable to evaluate expression in function at line line num.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
<td></td>
</tr>
<tr>
<td>2512-494</td>
<td>Expression expression name expected type string, but was expression type</td>
<td>While processing a set expression, the specified command expected to find a character string, but found the specified type instead.</td>
<td>If this message has not provided sufficient information, then contact the LoadLeveler administrator.</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Explanation</td>
<td>User Response</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td>2512-495</td>
<td>Input file contains string, <code>command file line</code>, with non-ASCII characters.</td>
<td>The command detected non-ASCII characters in the specified line. LoadLeveler expects all input to be in ASCII characters.</td>
<td>Correct the job command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-496</td>
<td>Syntax error: For <code>keyword = keyword value</code>, the MM is not valid [MM/DD/YY or MM/DD/YYYY].</td>
<td>The date format for the specified keyword is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-497</td>
<td>Syntax error: For <code>keyword = keyword value</code>, the DD is not valid [MM/DD/YY or MM/DD/YYYY].</td>
<td>The date format for the specified keyword is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-498</td>
<td>Syntax error: For <code>keyword = keyword value</code>, the year is not valid [MM/DD/YY or MM/DD/YYYY].</td>
<td>The date format for the specified keyword is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-499</td>
<td>Syntax error: For <code>keyword = keyword value</code>, the date format is not valid [MM/DD/YY or MM/DD/YYYY].</td>
<td>The date format for the specified keyword is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-500</td>
<td>Syntax error: For <code>keyword = keyword value</code>, the value of YY in [MM/DD/YY or MM/DD/YYYY] cannot be in the range 39–68.</td>
<td>The date format for the specified keyword is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-501</td>
<td>Syntax error: For <code>keyword = keyword value</code>, the value of YYYY in [MM/DD/YY or MM/DD/YYYY] must be in the range 1969–2038.</td>
<td>The date format for the specified keyword is not valid.</td>
<td>Correct the job command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-502</td>
<td>Syntax error: The date specified (<code>year = year, month = month, day = day</code>) is not a valid date.</td>
<td>The specified date is not valid.</td>
<td>Correct the command file, then resubmit the job.</td>
<td></td>
</tr>
<tr>
<td>2512-601</td>
<td>Network Table could not be loaded on node <code>node_name</code> due to an internal error, <code>ntbl_load_table returned error error_msg</code>.</td>
<td>The Network Table for a job could not be loaded on the specified machine because of an internal error.</td>
<td>Report the failure to IBM service.</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Explanation</td>
<td>User Response</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>2512-602</td>
<td>The specific window <code>window_name</code> could not be unloaded on node <code>node_name</code> due to a system error, <code>ntbl_clean_window</code> returned error <code>error_msg</code>.</td>
<td>The Network Table for a job could not be unloaded on the specified machine because of a system error.</td>
<td>Examine the network table log in <code>/var/adm/sni/ntbl_log</code> for the cause of the failure.</td>
<td></td>
</tr>
<tr>
<td>2512-603</td>
<td>The specific window <code>window_name</code> could not be unloaded on node <code>node_name</code> due to an internal error, <code>ntbl_clean_window</code> returned error <code>error_msg</code>.</td>
<td>The Network Table for a job could not be unloaded on the specified machine because of an internal error.</td>
<td>Report the failure to IBM service.</td>
<td></td>
</tr>
<tr>
<td>2512-604</td>
<td>The Network Table library dynamic load failed on node <code>node_name</code> for the following reason: <code>reason</code>.</td>
<td>The Network Table library dynamic load failed on the specified machine.</td>
<td>Correct the problem indicated by the error message.</td>
<td></td>
</tr>
<tr>
<td>2512-605</td>
<td>Could not determine status for adapter <code>adapter_name</code>. Resource Monitoring and Control API failed with rc code <code>rcode</code>.</td>
<td>The switch table service (st_query_adapter) failed to obtain and return the status of the switch. The switch will be treated as NOT_READY.</td>
<td>Correct the problem indicated by the return code.</td>
<td></td>
</tr>
<tr>
<td>2512-606</td>
<td>Network Table window <code>window_name</code> could not be unloaded on node <code>node_name</code> due to a system error, <code>ntblUnloadTable</code> returned error <code>error_msg</code>.</td>
<td>The Network Table for a job could not be unloaded on the specified machine because of a system error.</td>
<td>Examine the switch table log in <code>/var/adm/sni/ntbl_log</code> for the cause of the failure.</td>
<td></td>
</tr>
<tr>
<td>2512-607</td>
<td>Previous Network Table could not be removed on node <code>node_name</code> for the following reason: <code>reason</code>.</td>
<td>The previous network table for a job could not be removed on the specified machine.</td>
<td>Correct the problem indicated by the error message.</td>
<td></td>
</tr>
<tr>
<td>2512-608</td>
<td>Network table could not be loaded on node <code>node_name</code>.</td>
<td>The network table for a job cannot be loaded on the specified machine because of a system error.</td>
<td>Examine the switch table log in <code>/var/adm/sni/ntbl_log</code> for the cause of the failure.</td>
<td></td>
</tr>
<tr>
<td>2512-609</td>
<td>Network Table could not be loaded on node <code>node_name</code> due to a system error, <code>ntblLoadTable</code> returned error <code>error_msg</code>.</td>
<td>The Network Table for a job could not be loaded on the specified machine because of a system error.</td>
<td>Examine the network table log in <code>/var/adm/sni/ntbl_log</code> for the cause of the failure.</td>
<td></td>
</tr>
<tr>
<td>Error Code</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-610</td>
<td>Attention: A css_type of value was specified in the adapter stanza name of stanza name, adapter adapter will be created.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: An adapter stanza referenced a nonexistent css_type.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Adapter stanzas should refer only to existing css_type.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-611</td>
<td>Attention: An adapter_type of type was specified in the adapter stanza name of name, adapter adapter_name will be created.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: An adapter stanza referenced a nonexistent adapter_type.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Adapter stanzas should refer only to an existing adapter_type.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-612</td>
<td>Attention: A &quot;sn&quot; adapter specified for adapter: adapter_name but no &quot;logical_id&quot; was found.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: No logical_id was associated with the specified adapter stanza.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Specify a logical_id for the specified adapter stanza.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-613</td>
<td>Attention: The adapter_type value specified for the switch adapter, adapter_name, is not valid.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: The specified adapter's adapter_type value was not valid.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Specify a valid adapter_type value, then reconfigure LoadLeveler. Refer to LoadLeveler: Using and Administering for the appropriate values.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-614</td>
<td>The adapter_type is ignored.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: The adapter_type is ignored.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Consult the previous error message for more information.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-615</td>
<td>Attention: An adapter_type value was not specified for the switch adapter: adapter.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: All switch adapters must have the adapter_type keyword specified with an appropriate value.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Specify a valid adapter_type value, then reconfigure LoadLeveler. Refer to LoadLeveler: Using and Administering for the appropriate values.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-616</td>
<td>Defaulting adapter_type to value.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: An adapter_type value was not specified for a switch adapter. LoadLeveler will use the specified default value.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Enter an adapter_type value for the switch adapter in the LoadLeveler administration file.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-617</td>
<td>Attention: A &quot;sn&quot; adapter specified for adapter: adapter_name but no &quot;network_id&quot; was found.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: No network_id was associated with the specified adapter stanza.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Specify a network_id for the specified adapter stanza.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2512-689</td>
<td>The DeviceName is missing from the returned RMC data from the IBM.NetworkInterface for adapter adapter_name with address ip_address for the OSI (machine) OSI_machine_name. This may cause errors when attempting to use the adapter or load the switch table.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation: The adapter in question requires a DeviceName for loading the switch table. The DeviceName was missing from the data retrieved from the RMC.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Response: Check the data in the IBM.NetworkInterface for the OSI to determine why the DeviceName is missing.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter 1. LoadLeveler messages

2512-690 Unable to open the file file name for processing: error information. Verify that RSCT is installed.

Explanation: The command cannot open the specified RSCT library file for processing.

User Response: Check that the RSCT package is installed on this system.

2512-691 Unable to obtain address of symbol name symbol in RSCT library RSCT library name: error information.

Explanation: The command cannot obtain the address of the symbol from the specified RSCT library.

User Response: Check that the RSCT package installed is compatible with this version of LoadLeveler.

2512-751 checkpoint or restart failed with errno error number [error message], checkpoint file = filename, checkpoint error file = filename.

Explanation: A checkpoint or restart operation failed. The reason for failure was not written to the checkpoint error file. The most likely cause of this failure is that the checkpoint file or the error file is not accessible or there is not enough space in the filesystem to create the necessary files.

User Response: Consult the specified error message for more information.

2512-777 DR_Write failed, returned return_code, fd = file descriptor, errno = error_num.

Explanation: XDR encountered an error; XDR is used to transmit data among LoadLeveler commands and daemons.

User Response: Have the system administrator verify that the LoadLeveler daemon is still running. If the problem persists, contact IBM service.

2512-835 User username is not authorized to checkpoint the job.

Explanation: Only the owner of a job or an administrator can request a checkpoint for a job.

User Response: Verify that the user has permission to checkpoint the job.

2512-836 Request to checkpoint job step job id is ignored, job step not found.

Explanation: The job step for the specified id was not found. The checkpoint request is ignored.

User Response: Verify that a valid job step id was specified and that the job step is still running.

2512-837 Request to checkpoint job step job id is ignored, a checkpoint is pending or already is in progress.

Explanation: A previous request to checkpoint the specified job step is in progress. The checkpoint request is ignored.

User Response: Verify that a job step is not already checkpointing before requesting a checkpoint.

2512-838 Request to checkpoint job step job id is ignored because the job step is not running, current state = job state.

Explanation: The specified job step could not be checkpointing because it was not in a running state.

User Response: Before requesting a checkpoint verify that a job step is running is in a running state and that job processes are actually running.

2512-839 Request to checkpoint job step job id failed because the checkpoint order cannot be sent to the daemon_name on node node_name.

Explanation: Either the connection to the specified daemon on the specified node failed or the transmission of the checkpoint order failed.
**User Response:** Verify that the LoadLeveler daemon is running on the specified host, and that the host can be accessed on the network.

<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-840</td>
<td>Request to checkpoint job step job id is ignored because checkpointing is not enabled for the job step.</td>
<td>The CHECKPOINT option in the job command file was not set to enable checkpointing.</td>
<td>Enable checkpointing for the job step by set the CHECKPOINT option in the job command file to an appropriate value.</td>
</tr>
<tr>
<td>2512-841</td>
<td>Checkpoint operation failed because the process initiating the checkpoint terminated abnormally (exit code = value signal = value).</td>
<td>Under certain circumstances LoadLeveler starts a new process to initiate a checkpoint of a job step. That process terminated with a signal or with a non zero exit code indicating that the checkpoint operation was not started.</td>
<td>Verify that the binary, lckptstarter, is installed in the same directory as the LoadL_starter binary and verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes.</td>
</tr>
<tr>
<td>2512-842</td>
<td>Step job step terminated before checkpoint status could be determined.</td>
<td>The status of a checkpoint request could not be determined because either the checkpoint status information could not be sent from the machines initiating the checkpoint, or the status information was not received before the job step terminated.</td>
<td>Examine the files in the checkpoint directory to determine if a successful checkpoint was taken. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2512-845</td>
<td>Restart from checkpoint file, filename, failed with the following error: primary error code = error_code, secondary error code = error_code2, error msg len = message_length, error msg = error_msg.</td>
<td>The restart operation for the job step failed. The job was canceled.</td>
<td>Correct the error condition indicated by the error codes and error message (if provided).</td>
</tr>
<tr>
<td>2512-901</td>
<td>Unable to set gid for user.</td>
<td>LoadLeveler could not set the user’s gid before starting the user’s job step. This message will be followed by a detailed message about the exact cause of the failure.</td>
<td>Consult the subsequent detailed error message for more information.</td>
</tr>
<tr>
<td>2512-902</td>
<td>Unable to set process limits for user.</td>
<td>LoadLeveler could not set Resource process limits before starting the user’s job step. This message will be followed by a detailed message about the exact cause of the failure.</td>
<td>Consult the subsequent detailed error message for more information.</td>
</tr>
<tr>
<td>2512-903</td>
<td>Unable to set resource limit limit for user.</td>
<td>The specified process resource limit could not be set before starting the user’s job step. This message will be followed by a detailed message about the exact cause of the failure.</td>
<td>Consult the subsequent detailed error message for more information.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2512-904</td>
<td>Cannot run a job for root, uid=uid, gid=gid.</td>
<td>LoadLeveler will not run any job with root privileges.</td>
<td>Resubmit the job as a non-root user.</td>
</tr>
<tr>
<td>2512-905</td>
<td>Cannot fork process for task_name. erno=error_num error_msg.</td>
<td>The fork system call failed for the specified process.</td>
<td>Consult the specified error message for more information.</td>
</tr>
<tr>
<td>2512-906</td>
<td>Cannot set user credentials.</td>
<td>Credentials for the user cannot be set for the job step. This message is usually followed by a detailed message about the exact cause of the failure.</td>
<td>Consult the specified error message for more information.</td>
</tr>
<tr>
<td>2512-907</td>
<td>Uid cannot be verified on hostname.</td>
<td>The starter cannot verify that the uid of the user submitting the job is valid on the machine trying to run the job step. This message will be followed by a detailed message about the exact cause of the failure.</td>
<td>The user must have the same uid on the submitting machine as on the running machine.</td>
</tr>
<tr>
<td>2512-908</td>
<td>Gid cannot be verified on hostname.</td>
<td>The starter cannot verify that the gid of the user submitting the job is valid on the machine trying to run the job step. This message will be followed by a detailed message about the exact cause of the failure.</td>
<td>The user must have the same gid on the submitting machine as on the running machine.</td>
</tr>
<tr>
<td>2512-909</td>
<td>Cannot get user credentials.</td>
<td>Credentials for the user cannot be obtained. This message will be followed by a detailed message about the exact cause of the failure.</td>
<td>Consult the subsequent detailed error message for more information.</td>
</tr>
<tr>
<td>2512-911</td>
<td>Cannot receive executable from Sched.</td>
<td>A transaction from the starter on a run machine to the sched on a submit machine has failed to retrieve the executable file.</td>
<td>Examine SchedLog and StarterLog to determine the cause of the failure.</td>
</tr>
<tr>
<td>2512-912</td>
<td>Cannot open stdin, stdout, or stderr file. error_msg.</td>
<td>The open system call failed for one of the stdio files for the job step.</td>
<td>Verify that the directory and file exist, and that the user has permission to access the directory.</td>
</tr>
<tr>
<td>2512-913</td>
<td>Unable to validate privileges for stdio.</td>
<td>The llcheckpriv program cannot access a stdio file for the job step and will not return an error message.</td>
<td>Examine the StarterLog for messages indicating the reason for the failure.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2512-914</td>
<td>Checkpointing was requested but program is not an executable.</td>
<td>Only a binary program can be checkpointed. Checkpointing is not valid with a shell script.</td>
<td>Either specify a binary program for the executable, or turn off checkpointing, then resubmit the job.</td>
</tr>
<tr>
<td>2512-915</td>
<td>Checkpointing was requested but program is not linked with LoadLeveler libs.</td>
<td>Only a binary program can be checkpointed. Checkpointing is not valid with a shell script. A program that is to be checkpointed must be linked with the LoadLeveler libraries.</td>
<td>Link the program with the LoadLeveler libraries, then resubmit the job.</td>
</tr>
<tr>
<td>2512-916</td>
<td>Program linked with LoadLeveler libs but checkpointing is not requested.</td>
<td>The program specified as the executable is linked with the LoadLeveler executables, which are used for checkpointing, but the program will not be checkpointed because checkpointing has not been specifically requested.</td>
<td>Either link the program without the LoadLeveler libraries, or turn on checkpointing, then resubmit the job.</td>
</tr>
<tr>
<td>2512-917</td>
<td>Cannot exec process for task_name. errno=error_num error_msg.</td>
<td>The execute system call failed for the specified process.</td>
<td>Consult the specified error message for more information.</td>
</tr>
<tr>
<td>2512-918</td>
<td>Unable to set uid for user.</td>
<td>The uid for the user could not be set before starting the user’s job step. This message will be followed by a detailed message about the exact cause of the failure.</td>
<td>Consult the subsequent detailed error message for more information.</td>
</tr>
<tr>
<td>2512-919</td>
<td>Cannot receive job data from schedd on hostname.</td>
<td>An error occurred as the starter was requesting the job information from the schedd on the specified host.</td>
<td>Examine the SchedLog and the StarterLog on the appropriate machines for the exact cause of the failure.</td>
</tr>
<tr>
<td>2512-920</td>
<td>Cannot send READY status to the startd, the job step will be rejected.</td>
<td>An error occurred as the starter was attempting to send the READY status to the startd. Because a parallel job step will not continue until all nodes are READY, the job step will be rejected.</td>
<td>Examine the SchedLog and the StarterLog for the exact cause of the failure.</td>
</tr>
<tr>
<td>2512-921</td>
<td>Job was not accepted by NQS.</td>
<td>An error occurred when a job was submitted to NQS.</td>
<td>Examine the output from the qsub command for the exact cause of the failure.</td>
</tr>
<tr>
<td>2512-922</td>
<td>The LoadL_starter process terminated before the job step completed. The job step is vacated.</td>
<td>The LoadL_starter process which started a job step has terminated abnormally while waiting for the job step to complete. Because the true status of the job step cannot be determined, the job step is vacated. The vacated job step will be rescheduled to run if it is marked restartable.</td>
<td>Examine the appropriate machine’s LoadLeveler logs to determine the cause of the LoadL_starter failure.</td>
</tr>
</tbody>
</table>
2512-923  Cannot create PVM control file filename, errno = error num error message.
Explanation:  The file necessary to start the PVM daemon (pvmd) could not be created.
User Response:  Consult the specified error message for more information.

2512-924  Cannot get PVM task id on host name, PVM error = PVM error num, errno=error num [error message].
Explanation:  The PVM function, pvm_mytid, failed to return the PVM task id for the specified host.
User Response:  Consult the specified error message for more information.

2512-925  Cannot get PVM socket, PVM error = PVM error num, errno= error num [error message].
Explanation:  The PVM function, pvm_getfds, failed to return the file descriptor for the socket to the PVM daemon (pvmd) on the master node.
User Response:  Consult the specified error message for more information.

2512-926  Cannot register as PVM hoster, PVM error = PVM error num, errno=error num [error message].
Explanation:  The PVM function, pvm_reg_hoster, failed. This function is used to inform PVM that LoadLeveler will select all the hosts, and start the PVM daemon (pvmd) on them.
User Response:  Consult the specified error message for more information.

2512-927  Cannot return PVM response to master starter, errno=error num [error msg].
Explanation:  A remote starter could not send a PVM message to the master starter.
User Response:  Consult the specified error message for more information.

2512-928  PVM daemon is already running on hostname, task id = PVM task ID
Explanation:  A PVM daemon (pvmd) is already running on the specified host. When running PVM under LoadLeveler, only one PVM job can be run on a host at a time.
User Response:  Stop PVM on the specified host, then resubmit the job.

2512-929  Cannot remove old PVM socket file, filename, on hostname, errno = error num [error msg].
Explanation:  The socket file left from a previous PVM session cannot be removed, so PVM cannot be started on the host.
User Response:  Consult the specified error message for more information.

2512-930  Cannot read start host message from PVM. Cannot start PVM on remote host.
Explanation:  LoadLeveler received a start host message (SM_STHOST) from PVM, but the message was not in a valid format.
User Response:  Verify that the correct version of PVM is installed properly, then resubmit the job.

2512-931  Request to start PVM on host hostname failed. The host was not found in LoadLeveler’s host list.
Explanation:  LoadLeveler received a start host message (SM_STHOST) from PVM, but the host name was not valid.
User Response:  Verify that the correct version of PVM is installed properly, then resubmit the job.
2512-932  Cannot send start PVM request to Startd on hostname,errno = error num [error msg].
Explanation: The master Starter cannot send a request—to start the PVM daemon (pvmd)—to the startd on the specified node.
User Response: Consult the specified error message for more information.

2512-933  PVM could not be started on remote host hostname,errno = error num error msg.
Explanation: Either the master Starter could not receive the start up message from the remote Starter, or the PVM daemon (pvmd) could not be started on the remote host.
User Response: If the error number indicates a network problem, then resubmit the job after the problem has been corrected. Otherwise, examine the StarterLog on the remote node for the cause of the failure.

2512-934  Unable to set uid for user on hostname.
Explanation: The uid for the user could not be set before starting the user’s job step. This message will be followed by a detailed message about the exact cause of the failure.
User Response: Consult the subsequent detailed error message for more information.

2512-935  The switch table cannot be loaded on host name because the adapter name switch adapter is not configured on the node.
Explanation: The job step requires that a switch table be loaded for the specified switch adapter, but the switch adapter has not been specified in the LoadLeveler configuration file. This error occurs if the entire LoadLeveler cluster is not reconfigured after adding or deleting switch adapters from the LoadLeveler administration file.
User Response: Add the switch adapter to the LoadLeveler administration file, then use the lctl -g reconfig command to reconfigure the entire LoadLeveler cluster.

2512-936  No switch tables were loaded on machine name for any adapters on this machine. There is a possible configuration problem.
Explanation: The job step requires a switch table to be loaded for at least one switch adapter, but none of the switch tables are for an adapter on this machine. This error will occur if switch adapters have been added or deleted from the LoadLeveler administration file and only a subset of the LoadLeveler cluster was reconfigured.
User Response: Add all of the appropriate switch adapters to the LoadLeveler administration file and reconfigure the entire LoadLeveler cluster using the lctl -g reconfig command.

2512-937  job step: Restricted Login Check - loginrestrictions returned rc=loginrestrictions return code and errno=loginrestrictions errno (AIX explanation for the errno) for users user name in registry registry name indicating login is not permitted. AIX supplemental information: returned AIX error message (if any)
Explanation: The loginrestrictions service returned a status for the user indicating the user may not log into this machine where the job was to be run. The user’s job is rejected. The configuration parameter REJECT_ON_RESTRICTED_LOGIN controls the checking of the loginrestrictions.
User Response: Check the underlying system security method and the nodes where the job was to run to determine why the user is locked out from login.

2512-976  The name for the DCE group group could not be found. Provide this name with the keyword keyword in the LoadLeveler configuration file.
Explanation: Ildegrpmain could not find the specified DCE group name for the current cluster.
User Response: Use the specified keyword to set this group name in the global LoadLeveler configuration file.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2512-977</td>
<td>No DCE host names could be found for the machines in this LoadLeveler cluster. Run the lldextSDR command and update the LoadL_admin file with the resulting output to obtain this information.</td>
<td><strong>Illdcegrpmaint</strong> could not find any DCE host names in the LoadLeveler administration file’s machine stanzas.</td>
<td>Run the lldextSDR command, then update the machine stanzas with the command’s output.</td>
</tr>
<tr>
<td>2512-978</td>
<td>The DCE service names of the LoadLeveler daemons could not be determined. Make sure that the file /usr/lpp/ssp/config/spsec exists on the current machine, and that you have access to it.</td>
<td>The specified file provides Security Services with service names that define LoadLeveler daemons to DCE.</td>
<td>Verify that Illdcegrpmaint can access the /usr/lpp/ssp/config/spsec_defaults file. If the file is not present, then verify that PSSP has been installed, and that DCE has been configured on this machine.</td>
</tr>
<tr>
<td>2512-979</td>
<td>Unable to create DCE group DCE group name. DCE returned the following message: DCE error message.</td>
<td>DCE failed to create the specified group.</td>
<td>Verify that your DCE credentials have not expired, and that the specified group does not already exist in the DCE registry.</td>
</tr>
<tr>
<td>2512-980</td>
<td>Improper format for LoadLeveler SERVICE: record in error message text file.</td>
<td>The LoadLeveler data in the spsec_defaults file is in an improper format.</td>
<td>Verify that the specified file exists, and the LoadLeveler data it contains uses the correct syntax for the spsec_defaults file.</td>
</tr>
<tr>
<td>2512-981</td>
<td>Unable to command DCE principal name daemon’s DCE principal name “to” or “from” DCE group DCE group name. DCE returned the following message: DCE message.</td>
<td>Illdcegrpmaint issued a DCE command to add or remove a principal name from the specified DCE group. DCE issued a failing return code.</td>
<td>Verify that the principal name is defined in the DCE registry.</td>
</tr>
<tr>
<td>2512-982</td>
<td>Unable to determine the name of the current DCE cell.</td>
<td>The Illdcegrpmaint command could not determine the name of the current host’s DCE cell.</td>
<td>Verify that DCE is installed and configured on the current host; if the problem persists, then contact your DCE administrator.</td>
</tr>
<tr>
<td>2512-991</td>
<td>Central Manager reported errors but specific data did not get transmitted.</td>
<td>API was expecting a list of error codes and stepids but the data members were empty.</td>
<td>Reissue the modify request.</td>
</tr>
<tr>
<td>2512-992</td>
<td>The job step job_step was not in job_state state. The modify_enum was not modified.</td>
<td>The step was not in the correct state for the requested modification.</td>
<td>Change the modify request.</td>
</tr>
</tbody>
</table>
2512-993  Request to modify job step job_step_id is ignored, job step not found.
Explanation: The job step for the specified id was not found. The modify request is ignored.
User Response: Verify that a valid job step id was specified and that the job step is in the system.

2512-994  User username is not authorized to modify the job step job_step_id.
Explanation: Only the owner of a job or an administrator can request to modify a job step.
User Response: Verify that the user has permission to modify the job.

2512-995  This version of lmodify does not support the -x option.
Explanation: This version of the command or the API does not support the -x option.
User Response: Reissue the modify request without the -x option.
## 2539 Error messages

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-001</td>
<td>Could not open input file (/dev/null) for pipe input.</td>
<td>The <code>open('/dev/null', O_RDONLY)</code> command failed.</td>
<td>Contact the LoadLeveler administrator.</td>
</tr>
<tr>
<td>2539-002</td>
<td><code>command was not executed.</code></td>
<td><code>xloadl</code> failed to execute a system command.</td>
<td>The reason for this error should be displayed immediately preceding this message.</td>
</tr>
<tr>
<td>2539-003</td>
<td>Could not create stdout pipe from <code>command</code>, <code>errno</code> = <code>error_num</code>.</td>
<td>The specified <code>pipe</code> command failed.</td>
<td>Check the <code>errno</code> to determine why the command failed.</td>
</tr>
<tr>
<td>2539-004</td>
<td>Could not create stderr pipe from <code>command</code>, <code>errno</code> = <code>error_num</code>.</td>
<td>The specified <code>pipe</code> command failed.</td>
<td>Check the <code>errno</code> to determine why the command failed.</td>
</tr>
<tr>
<td>2539-005</td>
<td>Could not fork process for <code>command</code>, <code>errno</code> = <code>error_num</code>.</td>
<td>LoadLeveler failed to fork the specified command.</td>
<td>Check the <code>errno</code> to determine why the command failed.</td>
</tr>
<tr>
<td>2539-006</td>
<td>Could not execute command <code>command</code>. <code>errno</code> = <code>error_num</code>.</td>
<td>LoadLeveler failed to execute the specified command.</td>
<td>Check the <code>errno</code> to determine why the command failed.</td>
</tr>
<tr>
<td>2539-007</td>
<td>Not a valid selection. Field is not set.</td>
<td>The field was not updated because you entered a non-valid value.</td>
<td>Reselect a value from the selection box. If you typed a value, then verify that the spelling matches a valid value.</td>
</tr>
<tr>
<td>2539-008</td>
<td>Logging has already been started to file <code>filename</code>.</td>
<td>Logging cannot be started because commands are already being logged to the specified file.</td>
<td>If you want commands logged to the specified file, you do not need to do anything. If you want to begin logging to another file: select <code>Stop Logging</code>, then select <code>Start Logging</code> with your new file specified.</td>
</tr>
<tr>
<td>2539-009</td>
<td>No jobs are selected.</td>
<td>The tasks that you want to perform require that you select at least one job step.</td>
<td>Select a job step, then invoke the command again.</td>
</tr>
<tr>
<td>2539-010</td>
<td>Could not get details for selected jobs.</td>
<td>The information for the selected jobs was not returned.</td>
<td>Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.</td>
</tr>
</tbody>
</table>
2539-011  Could not get Status for selected jobs.
Explanation: The information for the selected jobs was not returned.
User Response: Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.

2539-012  Could not get Report for selected jobs.
Explanation: The information for the selected jobs was not returned.
User Response: Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.

2539-013  No host specified. No selection performed.
Explanation: Although one of the by_host parameters for job_filter has been indicated, there is no indication of which machines have been provided.
User Response: The previous setting for filtering jobs will be used. Respecify the new filter by using Select on the menu bar.

2539-014  The selection parameter was not changed.
Explanation: No matches were found, so the jobs were not filtered. There may be a problem with the regular expression, or there may not be any machines which match the regular expression.
User Response: If there is a problem with the regular expression, then a message explaining that will precede this one. You may need to adjust the regular expression.

2539-015  No user specified. No selection performed.
Explanation: Although one of the by_user parameters for job_filter has been indicated, there is no indication of which users have been provided.
User Response: The previous setting for filtering jobs will be used. Respecify the new filter by using Select on the menu bar.

2539-016  No group specified. No selection performed.
Explanation: Although one of the by_group parameters for job_filter has been indicated, there is no indication of which groups have been provided.
User Response: The previous setting for filtering jobs will be used. Respecify the new filter by using Select on the menu bar.

2539-017  No job specified. No selection performed.
Explanation: Although a job_filter has been indicated, there is no indication of which job step ids have been provided.
User Response: The previous setting for filtering jobs will be used. Respecify the new filter by using Select on the menu bar.

2539-018  Internal error: filter_type is not a valid filter.
Explanation: A non-valid filter type has been selected.
User Response: Exit and restart xloadl.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-019</td>
<td>No user specified. Order user not performed.</td>
<td>A Favor User command cannot be issued with a blank user name.</td>
<td>Type a user name in the text field of the prompt dialog box.</td>
</tr>
<tr>
<td>2539-020</td>
<td>Only the LoadLeveler administrator may order users.</td>
<td>You must be a LoadLeveler administrator to order users.</td>
<td>Have a LoadLeveler administrator issue this command.</td>
</tr>
<tr>
<td>2539-021</td>
<td>Unknown pulldown number: <code>pulldown_num</code>.</td>
<td>The item selected on the pulldown menu has translated into an unrecognized number.</td>
<td>Exit and restart <code>xloadl</code>.</td>
</tr>
<tr>
<td>2539-022</td>
<td>Could not get tasks for selected jobs.</td>
<td>The information for the selected jobs was not returned.</td>
<td>Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.</td>
</tr>
<tr>
<td>2539-025</td>
<td>No machine is selected.</td>
<td>The task you want to perform requires that you select at least one machine.</td>
<td>Select a machine from the <code>Machines</code> window, then invoke the command again.</td>
</tr>
<tr>
<td>2539-026</td>
<td>No schedd machine specified. No purge performed.</td>
<td>The <code>Purge</code> command requires that you specify a <code>schedd</code> machine.</td>
<td>Enter a machine name into the <code>Purge Machine</code> dialog box.</td>
</tr>
<tr>
<td>2539-027</td>
<td>No machines selected. No machines will be purged.</td>
<td>The <code>Purge</code> command requires that you specify at least one machine.</td>
<td>Select a machine from the <code>Machines</code> window, then invoke the <code>Purge</code> command again.</td>
</tr>
<tr>
<td>2539-028</td>
<td>No host is selected for details.</td>
<td>The <code>Details</code> command requires that you specify at least one machine.</td>
<td>Select a machine from the <code>Machines</code> window, then invoke the command again.</td>
</tr>
<tr>
<td>2539-029</td>
<td>Could not get details for selected machines.</td>
<td>No details were returned for the selected machines.</td>
<td>Consult the preceding error messages for reason details were not returned.</td>
</tr>
<tr>
<td>2539-031</td>
<td>No host selected for Version.</td>
<td>The <code>Version</code> command requires that you specify at least one machine.</td>
<td>Select a machine from the <code>Machines</code> window, then invoke the command again.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2539-032</td>
<td>Could not get Version for selected machines.</td>
<td>No version information was returned for the selected machines.</td>
<td>Consult the preceding error messages for reason details were not returned.</td>
</tr>
<tr>
<td>2539-033</td>
<td>No host selected for Collecting data.</td>
<td>The Capture Data command requires that you specify at least one machine.</td>
<td>Select a machine from the Machines window, then invoke the command again.</td>
</tr>
<tr>
<td>2539-034</td>
<td>No Operating System specified. No selection performed.</td>
<td>To change the selection filter to by OpSys, you must specify an operating system. The value returned was NULL, so the filter was not changed.</td>
<td>To reset the selection filter, use the Select pulldown menu in the Machines window.</td>
</tr>
<tr>
<td>2539-035</td>
<td>No Architecture specified. No selection performed.</td>
<td>To change the selection filter to by Arch, you must specify an architecture. The value returned was NULL, so the filter was not changed.</td>
<td>To reset the selection filter, use the Select pulldown menu in the Machines window.</td>
</tr>
<tr>
<td>2539-036</td>
<td>No host selected for Capture.</td>
<td>The Capture Data command requires that you specify at least one machine.</td>
<td>Select a machine from the Machines window, then invoke the command again.</td>
</tr>
<tr>
<td>2539-038</td>
<td>Value of resource_name is not valid, resetting from resource_value to default_value.</td>
<td>The value of the specified Resource is not valid, so a default value is being used.</td>
<td>If the default value is not acceptable to you, then exit xloadl, change the value of the Resource in your Xloadl or .Xdefaults file, and reinvoke xloadl.</td>
</tr>
<tr>
<td>2539-039</td>
<td>No ADMIN_FILE specified in LoadL_config. Cannot start LoadLeveler.</td>
<td>LoadLeveler cannot start without an administration file.</td>
<td>Add an ADMIN_FILE keyword and value to your configuration file. For example, &quot;ADMIN_FILE = /u/loadl/LoadL_admin&quot;.</td>
</tr>
<tr>
<td>2539-041</td>
<td>Can not get configuration information. xloadl cannot continue.</td>
<td>xloadl cannot start because it could not get configuration information.</td>
<td>Verify that the LoadLeveler administration and configuration files are available and accessible.</td>
</tr>
<tr>
<td>2539-043</td>
<td>Unable to malloc() num bytes of memory.</td>
<td>The program could not allocate virtual memory.</td>
<td>Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>Error Code</td>
<td>Description</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>2539-044</td>
<td>Error returned on regular expression match.</td>
<td>LoadLeveler encountered an error while trying to match a regular expression that is being used as a By User, By Machine, or By Group job selection filter.</td>
<td>Try setting the job selection filter again. You may need to modify the regular expression you enter.</td>
</tr>
<tr>
<td>2539-046</td>
<td>Error receiving job data.</td>
<td>A request for job information has been unsuccessful. Any data that was returned may be incomplete.</td>
<td>Reissuing the command, or refreshing the Jobs window, may resolve the problem. If the problem persists, then try exiting and reinventing xloadl.</td>
</tr>
<tr>
<td>2539-047</td>
<td>Cannot read machine information from central manager.</td>
<td>An error occurred while the central manager was sending machine information to xloadl.</td>
<td>Redo the action.</td>
</tr>
<tr>
<td>2539-048</td>
<td>Could not send command to cm host.</td>
<td>xloadl can connect to the central manager, but cannot send the central manager a command.</td>
<td>Consult the preceding error message for the reason for the failure.</td>
</tr>
<tr>
<td>2539-049</td>
<td>Could not connect to daemon_name on hostname. Will reconfig xloadl and retry.</td>
<td>On the first failure to contact a daemon, xloadl will reconfig itself and try to contact the daemon again. The cluster may have been reconfigured since xloadl was invoked.</td>
<td>No action is needed.</td>
</tr>
<tr>
<td>2539-050</td>
<td>Could not connect to daemon_name on hostname. Will retry later.</td>
<td>The Machines window was not updated because the specified daemon was not contacted. Another attempt will be made after the automatic refresh interval.</td>
<td>No action is needed.</td>
</tr>
<tr>
<td>2539-051</td>
<td>Access to this job is denied.</td>
<td>You cannot issue commands for this job.</td>
<td>Do not try to issue commands for this job.</td>
</tr>
<tr>
<td>2539-052</td>
<td>You do not own Job job_id step_id. Access to this job denied.</td>
<td>You cannot issue commands for a job step that you do not own.</td>
<td>Contact the job owner or an administrator.</td>
</tr>
<tr>
<td>2539-053</td>
<td>Job job_id step_id in System Hold. Access to this job denied.</td>
<td>You cannot access this job because a system hold has been put on it.</td>
<td>Contact the LoadLeveler administrator.</td>
</tr>
<tr>
<td>2539-054</td>
<td>Only the LoadLeveler administrator may order jobs.</td>
<td>Only LoadLeveler administrators have the authority to order jobs using the Favor Job command.</td>
<td>Contact the LoadLeveler administrator.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2539-055</td>
<td>Unrecognized ORDER type order_type. No action taken.</td>
<td>The order type is not valid for Favor Jobs or Favor Users.</td>
<td>Reissue the command; if the same message occurs, then exit from xloadl and restart it.</td>
</tr>
<tr>
<td>2539-057</td>
<td>Only the LoadLeveler administrator may order users.</td>
<td>You do not have the authority to issue this command.</td>
<td>Only a LoadLeveler administrator can issue this command.</td>
</tr>
<tr>
<td>2539-058</td>
<td>Error receiving machine data.</td>
<td>A request for machine information has been unsuccessful. Any data that was returned may be</td>
<td>Reissuing the command, or refreshing the Machines window, may resolve the problem. If the problem</td>
</tr>
<tr>
<td></td>
<td></td>
<td>incomplete.</td>
<td>persists, then try exiting and reinvoking xloadl.</td>
</tr>
<tr>
<td>2539-059</td>
<td>Only the LoadLeveler administrator may issue LoadLeveler control commands.</td>
<td>You do not have the authority to do this action.</td>
<td>Only a LoadLeveler administrator has the authority to do this.</td>
</tr>
<tr>
<td>2539-060</td>
<td>Can not find name of executable for LoadL_master in config file.</td>
<td>LoadLeveler did not find the name of the executable for LoadL_master in the configuration file.</td>
<td>Update the keyword MASTER in the configuration file (for example, MASTER = $(BIN)/LoadL_master), then</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>reconfigure or restart LoadLeveler.</td>
</tr>
<tr>
<td>2539-062</td>
<td>No machines selected. No machines purged.</td>
<td>At least one machine must be selected for a purge to occur.</td>
<td>Select at least one machine, then rerun the command.</td>
</tr>
<tr>
<td>2539-063</td>
<td>Could not get class information for machine name.</td>
<td>Due to internal errors, no classes were returned for the specified machine.</td>
<td>Reissuing the command, or refreshing the Machines window, may resolve the problem. If the problem</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>persists, then try exiting and reinvoking xloadl.</td>
</tr>
<tr>
<td>2539-064</td>
<td>Cannot obtain this host name. Job not submitted.</td>
<td>The official hostname for this machine is not set.</td>
<td>Ensure the host name for this machine is set.</td>
</tr>
<tr>
<td>2539-067</td>
<td>User priority, input, is not valid. It is ignored.</td>
<td>The value you typed in the text field for user priority is not valid.</td>
<td>Type a value between 0 and 100 into the user priority field.</td>
</tr>
<tr>
<td>2539-068</td>
<td>Previously set user priority value, user_priority, is used.</td>
<td>The replacement user priority value is not valid, so the previously set value is used.</td>
<td>If you want to change the value, then type a value between 0 and 100 into the user priority field.</td>
</tr>
</tbody>
</table>
2539-069 The maximum value for user priority, 100, is used instead of input_value.

Explanation: The value you typed is greater than 100 (the maximum value for user priority), so the user priority has defaulted to 100.

User Response: If you want the user priority to be a value other than 100, then type a value between 0 and 100 into the user priority field.

2539-070 min_processors value of num is not valid. It is ignored.

Explanation: The value specified for min_processors is not valid. The value has defaulted to 1.

User Response: Enter a non-negative number in the Min # of Nodes field.

2539-071 max_processors value of num is not valid. It is ignored.

Explanation: The value specified for max_processors is not valid. The value has defaulted to 1.

User Response: Enter a non-negative number in the Max # of Nodes field.

2539-072 Unrecognized job primary sort request: sort_type.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart xloadl.

2539-073 Unrecognized job secondary sort request: sort_type.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart xloadl.

2539-074 Unrecognized machine primary sort request: sort_type.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart xloadl.

2539-075 Unrecognized machine secondary sort request: sort_type.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart xloadl.

2539-076 Central manager is defined on machine_name. Cannot connect to LoadLeveler Central Manager.

Explanation: The central manager is defined on the specified machine, but xloadl cannot connect to it.

User Response: Verify that the central manager is active.

2539-077 Cannot find a central manager.

Explanation: xloadl did not locate any central manager.

User Response: Exit and restart xloadl, then rerun the command. If no central manager is found when running the command, then contact your LoadLeveler administrator.

2539-078 Entire Script may not have been saved.

Explanation: The number of bytes that were saved is less than the number of bytes in the file.

User Response: Verify that there is enough space, then try to save the script again.
2539-079  Unable to save Script. Error in creating tempfile.
Explanation: The script could not be saved to a temporary file.
User Response: Verify that there is adequate space and permission to save a file to /tmp.

2539-080  You are not a LoadLeveler Administrator. You cannot access Job machine_name job_id step_id.
Explanation: You need to be a LoadLeveler administrator to perform this task.
User Response: You cannot perform this task.

2539-081  You do not have the needed admin privileges and you do not own this job. You cannot access Job machine_name job_id step_id.
Explanation: To perform this task you need to own the job or have sufficient privileges.
User Response: You cannot perform this task.

2539-082  You do not have the needed admin privileges. You cannot access Job machine_name job_id step_id.
Explanation: To perform this task, you need to have sufficient LoadLeveler, group or class administrative privileges.
User Response: You cannot perform this task.

2539-083  No valid jobs selected. Command not sent.
Explanation: The command was not executed because there were no valid jobs selected for it.
User Response: Select at least one job, then reissue the command. You may want to refresh the Jobs window before doing so to ensure that the status presented in the window is more up to date.

2539-084  The length of the regular expression must be less than 1024 bytes.
Explanation: Regular expressions entered in xloadl must be less than 1024 bytes long.
User Response: Enter a shorter regular expression.

2539-085  Problem with regular expression, regular_expression : error_msg.
Explanation: error_msg describes a problem with the regular expression.
User Response: Use the message in error_msg to determine the cause of the error and correct it.

2539-086  Problem with regular expression, regex.h error no. = error_code.
Explanation: The specified error code describes a problem with the regular expression.
Explanation: Consult /usr/include/regex.h for the error codes and their meanings.

2539-087  Problem with regular expression: [error message].
Explanation: The specified error message describes a problem with the regular expression.
User Response: Use the specified message to determine the cause of the error.

2539-088  Both Tasks Per Node and Total Tasks are set. Total tasks is ignored.
Explanation: You cannot have both Tasks Per Node and Total Tasks on a job step in your job command file. Both were set in the Build a Job window, so Total Tasks is ignored when the job command file is created.
User Response: Unset either Total Tasks or Tasks Per Node.
2539-089  Min # of Nodes must be less than Max # of Nodes.
Explanation: The value you have specified in the Nodes window is greater than that specified for Max # of Nodes.
User Response: Modify one of the values.

2539-090  A range of nodes is not valid when Total Tasks is specified.
Explanation: You have entered values for the Min # of Nodes and Max # of Nodes, as well as Total Tasks, in the Nodes window. A range of nodes is not valid when Total Tasks are specified.
User Response: Either modify the values so that the Max # of Nodes and Min # of Nodes are the same, or unset the values so that the conflict no longer exists.

2539-091  Minimum number of nodes, field value, is not valid. It is ignored.
Explanation: The value in the Min # of Nodes text field is not valid.
User Response: Change the value to an integer that is greater than zero.

2539-092  Maximum number of nodes, field value, is not valid. It is ignored.
Explanation: The value in the Max # of Nodes text field is not valid.
User Response: Change the value to an integer that is greater than the Min # of Nodes.

2539-093  Tasks Per Node, field value, is not valid. It is ignored.
Explanation: The value in the Tasks per Node text field is not valid.
User Response: Change the value to an integer that is greater than zero.

2539-094  Total Tasks, field value, is not valid. It is ignored.
Explanation: The value in the Total Tasks text field is not valid.
User Response: Change the value to an integer that is greater than zero.

2539-095  Minimum number of processors, field value, is not valid. It is ignored.
Explanation: The value in the Min # of Processors text field is not valid.
User Response: Change the value to an integer that is greater than zero.

2539-096  Maximum number of processors, field value, is not valid. It is ignored.
Explanation: The value for the Max # of Processors text field is not valid.
User Response: Change the value to an integer that is greater than the Min # of Processors.

2539-097  Node Usage, field value, is not valid. It is ignored.
Explanation: The value for the Node Usage text field is not valid.
User Response: Change the value in the Node Usage text field to either shared, or not_shared.

2539-098  The number of nodes (number of nodes) exceeds the number of tasks (number of tasks).
Explanation: The requested number of nodes cannot be greater than the requested total tasks.
User Response: Correct the job command file, then resubmit the job.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-099</td>
<td>Hold, value for Hold field, is not valid. It is ignored.</td>
<td>The specified value is not valid.</td>
<td>Change the value to one of the following: user, system, or usersys.</td>
</tr>
<tr>
<td>2539-100</td>
<td>Could not get adapter information for selected machines.</td>
<td>No details were returned for the selected machines.</td>
<td>Consult the preceding messages to find out why adapter information was not returned.</td>
</tr>
<tr>
<td>2539-101</td>
<td>Open failed for file filename, errno = error_number.</td>
<td>The open system call failed for the specified file.</td>
<td>Verify that the directory exists, and that you have permission to access it and create a file.</td>
</tr>
<tr>
<td>2539-102</td>
<td>Unable to write to file filename.</td>
<td>Could not write a line into the specified file.</td>
<td>Verify that the directory and file exist, and that you have permission to access them.</td>
</tr>
<tr>
<td>2539-103</td>
<td>The length of the ckpt file full path name exceeds 255 characters: ckpt_file_full_path_name.</td>
<td>The full path name for the ckpt file developed from Ckpt File, Ckpt Dir, and when needed the ckpt_dir of the class and current working directory, is longer than the 255 characters which can be handled by AIX.</td>
<td>Change the Ckpt File and Ckpt Dir to ensure the length of your file name is less than 255 characters.</td>
</tr>
<tr>
<td>2539-104</td>
<td>Cannot start Checkpoint Monitor for job_step_name because java was not found.</td>
<td>No Java™ executable was found.</td>
<td>Ensure Java is located in the standard directory or that your $PATH environment variable points to it.</td>
</tr>
<tr>
<td>2539-105</td>
<td>Cannot start Gang Matrix Monitor because java was not found.</td>
<td>No Java executable was found.</td>
<td>Ensure Java is located in the standard directory.</td>
</tr>
<tr>
<td>2539-106</td>
<td>Large Page, value, is not valid. It is ignored.</td>
<td>The specified value is not valid.</td>
<td>Change the value to one of the following: &quot;N&quot; for no, do not use Large Page memory, &quot;Y&quot; for use Large Page memory if available; otherwise use regular memory, and &quot;M&quot; for mandatory use of Large Page memory.</td>
</tr>
<tr>
<td>2539-107</td>
<td>Cannot set instances in a network.PVM statement. It is ignored.</td>
<td>An instances specification cannot be used in a network.PVM statement.</td>
<td>Update the network information in the PVM window of the Job Builder, as needed.</td>
</tr>
<tr>
<td>2539-108</td>
<td>Instances, value, is not valid. It is ignored.</td>
<td>The value you typed in the text field for instances is not valid.</td>
<td>Type a positive integer or the string &quot;max&quot; in the instances field.</td>
</tr>
</tbody>
</table>
2539-109  name is not a configured job command file keyword name. Verify the job command file keyword statement before submitting the job.

Explanation: Your file includes a name for the specified job command file keyword that is not known to LoadLeveler. The name is not defined in the current configuration and is not recognized.

User Response: Verify that the specified name for the job command file keyword is defined. The names are defined in the stanza labels in the LoadL_admin file.

2539-120  Could not get classes for task name.

Explanation: The classes that apply to the task you are trying to perform were not returned due to internal errors.

User Response: Consult the preceding messages for the reason.

2539-130  Adapter preference is not supported. It is ignored.

Explanation: Your input contains a preferences line which has an unsupported Adapter preference in it, so the preferences line will be ignored.

User Response: Remove the Adapter preference from the input.


Explanation: The open system call failed for the specified file. Defaults will be used in the Build a Job window, instead of information from your file.

User Response: Verify that the directory and file exist, and that the user has permission to access the directory.

2539-132  notification option is not a valid notification option. It is ignored.

Explanation: Your file specifies an unrecognized option for the notification keyword.

User Response: Specify a valid option. The choices are: always, error, start, never, and complete.

2539-133  checkpoint option is not a valid checkpoint option. It is ignored.

Explanation: Your file specifies an unrecognized option for the checkpoint keyword.

User Response: Specify a valid option. The choices are: user_initiated, system_initiated, and no.

2539-134  restart option is not a valid Restart option. It is ignored.

Explanation: Your file specifies an unrecognized option for the restart keyword.

User Response: Specify a valid option. The choices are: yes and no.

2539-135  Requirements line in input file is not valid. It is ignored.

Explanation: The requirements line specified in your file is not valid. The line is ignored, and its information is not displayed in the Build a Job window.

User Response: Verify that the line includes only the following keywords: Memory, Feature, Machine, Disk, Arch, OpSys, Adapter, Pool. The line must be in the form of a Boolean expression.

2539-136  Adapter can only occur once in a valid Requirements line. The Requirements line is ignored.

Explanation: A requirements line is not valid if it specifies more than one adapter.

User Response: Either rewrite the line so that it specifies only one adapter, or remove the Adapter preference from the requirements line, and use the network specification instead.
2539-137  The "Preferences" line in input file is ignored because Adapter Preferences are not valid.
Explanation: The preferences line specified in your file is not valid. The line is ignored, and its information is not
displayed in the Build a Job window.
User Response: Remove Adapter from the preferences line.

2539-138  Preferences line in input file is not valid. It is ignored.
Explanation: The preferences line specified in your file is not valid. The line is ignored, and its information is not
displayed in the Build a Job window.
User Response: Verify that the line includes only the following keywords: Memory, Feature, Machine, Disk, Arch,
OpSys, Pool. The line must be in the form of a Boolean expression.

2539-139  option is not a valid job type option. It is ignored.
Explanation: Your file specifies an unrecognized option for the job_type keyword.
User Response: Specify a valid option. The choices are: pvm3, parallel, and serial.

2539-140  Problem setting network network protocol from input file name. It is ignored.
Explanation: There was a problem transforming the network information in your file into the Build a Job window.
User Response: Set the information in the Network window (for mpi, lapl) or the PVM window (for pvm).

2539-141  network type is not a configured adapter name or valid network type. The network keyword is ignored.
Explanation: Your file specifies an adapter name or network type that is not valid.
User Response: Verify that you have specified a valid adapter name or network type from the Adapter stanzas in
the LoadLeveler administration file.

2539-142  adapter_info is not a valid adapter usage, mode, level, or instance. It is ignored.
Explanation: Your file specifies an adapter usage, mode, communication level, or instances in a network statement
that is not valid.
User Response: Verify that you have specified a valid value. The choices for usage are: shared and not shared.
The values for mode are: IP and US. The values for level are: Low, Medium, and High. The values for instances are
positive integers.

2539-143  The adapter usage or node keyword in filename is not supported by the job builder.
Explanation: Your file specifies an unrecognized keyword; the keyword is ignored by the job builder.
User Response: Specify a valid value.

2539-144  Cannot read the default file, xloadl default file.
Explanation: Cannot open the specified file.
User Response: Check for various conditions: the file might not exist, the permissions might prohibit opening it, no
file descriptors may be available, and so on. To change the defaults file, modify the Xloadl resource "skelfile".

2539-145  Could not get details for selected class.
Explanation: The information for the selected jobs was not returned.
User Response: Consult the preceding error messages for possible causes. If there are not any other messages,
either attempt to run the command again, or run the llclass -l classname from the command line.
2539-146  No Class Choices are available.
Explanation:  No classes were returned for display in the Class Choices selection box.
User Response:  This message appears if no Classes are configured in the LoadLeveler administration file. Preceding error messages may indicate if a problem has occurred obtaining the data.

2539-147  Cannot View this job.
Explanation:  No job command file information was returned for display by the Job Builder.
User Response:  A file is created in the /tmp directory with a random name to hold this information. Check to see that the permissions in the /tmp directory allow this file to be read. If this file is empty, you will see this message.

2539-148  No input to append from script file script file name.
Explanation:  No lines for appending were obtained from the script file you specified for "Append Script".
User Response:  Preceding messages may give an indication of why the input was not available (problem opening or reading the file). If file is empty, you will see this message.

2539-149  You must select or enter a value for the Adapter/Network Selection Box.
Explanation:  A network toggle has been turned on, but no Adapter/Network type, which is required, has been selected or entered in the Adapter/Network Selection Box.
User Response:  Either turn off the network toggle, or select or enter a type from the Adapter/Network Selection Box.

2539-150  The Adapter adapter name or network type in the Requirements line is ignored because there is already a network keyword in the job cmd file.
Explanation:  A network statement has already been restored into the Build a Job window. Because only one network keyword can be supported per step in a job command file, the Adapter statement will be ignored.
User Response:  Do one of the following: 1) update your job command file so that it contains either a network keyword, or an Adapter requirement; or 2) verify that the Network or PVM window in the job builder reflects the adapter you wish to use.

2539-151  The Adapter adapter name or network type in the Requirements line is ignored because it is not recognized.
Explanation:  The Adapter name referred to in the requirements line is not recognized. It must be an Adapter name or network type from an Adapter stanza in the administration file.
User Response:  Set the Adapter using the Network or PVM window in the job builder.

2539-152  The Adapter adapter name or network type in the Requirements line is ignored because it is not configured.
Explanation:  The Adapter type referred to in the requirements line is non-valid. It must be an Adapter name, or network type, from an adapter stanza in the administration file.
User Response:  Set Adapter/Network in the Network or PVM window in the job builder.

2539-153  The Requirements line is ignored because there is already a network keyword in the input file.
Explanation:  A network keyword has already been restored into the Build a Job window. Because only one requirements statement is supported in a job command file, the Adapter preference cannot be converted into a network keyword.
User Response:  Either update your job command file so that it contains only one network keyword or Adapter requirement, or verify that the Network or PVM window in the job builder reflects the adapter you wish to use, then update the Requirements window as needed.
2539-154  Cannot set both Adapter Requirement and Network.

Explanation: There is already an Adapter preference on the Requirements line. Because only one or the other (Adapter requirement or Network keyword) is supported per step in any job command file, entering adapter information into the Network or PVM window is prevented. This message will only appear once.

User Response: If you wish to enter adapter information, then use the Network or PVM window.

2539-155  The keyword keyword from your input file is not supported by the scheduler type scheduler. It is ignored.

Explanation: The specified keyword from your job command file is not supported by the scheduler which is currently running. The keyword is ignored, and will not appear in the Build a Job window.

User Response: None.

2539-156  The Adapter adapter type in the Requirements line is ignored. It cannot be converted to a network.PVM statement.

Explanation: The Adapter type referred to in the Requirements line cannot be converted to a network.PVM statement. It is ignored, and will not appear in the Build a Job window.

User Response: Update the network information in the PVM window of the job builder, as needed.

2539-157  Cannot set US Mode in a network.PVM statement. Mode is ignored.

Explanation: The Adapter type referred to in the Requirements line cannot be converted to a network.PVM statement. It is ignored, and will not appear in the Build a Job window.

User Response: Update the network information in the PVM window of the job builder, as needed.

2539-158  The network statement in your input file is ignored because an Adapter Requirement was converted to a network statement.

Explanation: While filling the Build a Job window fields from your input file, an Adapter keyword on the Requirements line was converted to a network keyword. Because only one of these two options (Adapter requirement/network statement) is supported per step in any job command file, the network statement is ignored.

User Response: Adjust the settings in the Network window, as needed.

2539-159  This input file line contains non-ASCII characters, line. It will be ignored.

Explanation: While filling Job Builder fields from your input file, non-ASCII characters have been encountered. Since only ASCII text is supported, this input line is ignored.

User Response: Adjust Job Builder fields as needed. Use files for input to the Job Builder that contain only ASCII characters.

2539-160  The value for LL_Version is not valid because it must be quoted in the input file. It is ignored.

Explanation: While filling Job Builder fields from your input file, a value for LL_Version that is not valid was found. Values for LL_Version in the job command file must be enclosed in double quotes to be valid. The LL_Version value is ignored, and will not appear in the Job Builder.

User Response: Update the LL_Version information in the Requirements or Preferences window of the Job Builder by entering the value without double quotes (double quotes are not used in the Job Builder), or add the double quotes to the input file to correct the LL_Version and reissue the Restore from file command.

2539-161  Could not get consumable floating resources.

Explanation: No floating resources were returned.

User Response: Consult additional messages for the reason floating resources were not returned.
2539-162  Could not get consumable machine resources.
Explanation:  No machine resources were returned.
User Response:  Consult additional messages for the reason machine resources were not returned.

2539-163  A task ID is needed for Node node number.
Explanation:  You have not indicated a task ID for the specified node. Each node must have at least one task ID assigned to it.
User Response:  Type a task ID into the input field for the specified node.

2539-164  Task ID task ID number on Node node number is a duplicate.
Explanation:  The task ID specified for this node is already being used on another node. Each task ID must be assigned to one, and only one, node.
User Response:  Verify that each task ID appears only once in the Custom Geometry window.

2539-165  These task IDs are missing from the specified range: list of task ID numbers.
Explanation:  The listed task IDs fall within the range of task IDs that you specified in the Task Geometry window, but they have not been assigned to nodes.
User Response:  You must assign the complete range (from 0 to n - 1, where n is the total number of tasks for your parallel job) of task IDs to nodes. For example, if you have entered task ID 6 into a Node field, then task IDs 0-5 must be assigned to nodes, as well.

2539-166  For Task Geometry, task ID(s) have to be specified.
Explanation:  There are no task IDs specified for a node in the Task Geometry field. Task IDs must be unsigned integers specified within a single set of parentheses. Additional task IDs should be included within the same parentheses, but must be separated from each other by commas.
User Response:  Correct the syntax error in the Task Geometry field.

2539-167  For Task Geometry, the expression must start with a "{".
Explanation:  The Task Geometry statement must start with a "{" (open brace), and end with a "}" (closed brace).
User Response:  Correct the syntax error in the Task Geometry field.

2539-168  For Task Geometry, the expression must end with a "}".
Explanation:  The Task Geometry statement must start with a "{" (open brace), and end with a "}" (closed brace).
User Response:  Correct the syntax error in the Task Geometry field.

2539-169  For Task Geometry, extra character(s) are found after "}".
Explanation:  The entire task-geometry statement must be enclosed within the "{" (open brace) and "}" (closed brace).
User Response:  Correct the syntax error in the Task Geometry field.

2539-170  For Task Geometry, left parenthesis cannot be nested.
Explanation:  The list of task IDs assigned to a node in the Task Geometry field must begin with a single open parenthesis. Nested parentheses are not allowed.
User Response:  Correct the syntax error in the Task Geometry field.
2539-171 For Task Geometry, expected ")", but another character is encountered.
Explanation: The list of task IDs assigned to a node must begin with the open parenthesis; the current list of task IDs begins with another character.
User Response: Correct the syntax error in the Task Geometry field.

2539-172 For Task Geometry, ")" is encountered without a corresponding ")."
Explanation: All of the task IDs for a node in a task-geometry statement must be enclosed between parentheses.
User Response: Correct the syntax error in the Task Geometry field.

2539-173 For Task Geometry, task ID(s) have to be specified within parentheses.
Explanation: Task IDs must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.
User Response: Correct the syntax error in the Task Geometry field.

2539-174 For Task Geometry, the specification of task ID(s) within the parentheses is not valid.
Explanation: Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.
User Response: Correct the syntax error in the Task Geometry field.

2539-175 For Task Geometry, a task ID has to be an unsigned integer.
Explanation: Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.
User Response: Correct the syntax error in the Task Geometry field.

2539-176 For Task Geometry, the range of task IDs (0 - largest task ID) is not complete.
Explanation: Task IDs must comprise a complete range of consecutive unsigned integers. The range must start with zero and end with a value that is one less that the total number of tasks in the parallel job.
User Response: Correct the syntax error in the Task Geometry field.

2539-177 For Task Geometry, duplicate task IDs are specified.
Explanation: No task IDs can be specified more than once in the Task Geometry field.
User Response: Correct the syntax error in the Task Geometry field.

2539-178 For Task Geometry, a non-blank character is found between ")" and "]".
Explanation: There should not be any characters between the closed parenthesis after the last of the task IDs assigned to a node and the curly brace that ends the task-geometry statement.
User Response: Correct the syntax error in the Task Geometry field.

2539-179 Task geometry, text in the task geometry expression, is not valid. It is ignored.
Explanation: Task IDs must comprise a complete range of consecutive unsigned integers. The range must start with zero and end with a value that is one less that the total number of tasks in the parallel job. Task IDs must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.
User Response: Type a valid value for task geometry in the Task Geometry field.
### 2539-180
**Blocking, expression, is not valid. It is ignored.**

**Explanation:** You have specified a value for `Blocking` which is not valid. The acceptable values are either a positive integer, or "unlimited."

**User Response:** Either enter a valid value in the `Blocking` field in the `Nodes` window, or correct the job command file; then reissue the `Restore From File` command from the `Tools` menu choice.

### 2539-181
**The value for blocking blocking exceeds the number of tasks tasks.**

**Explanation:** The specified blocking factor is greater than the total number of tasks that have been requested.

**User Response:** Correct the values in the `Build a Job` window before you submit or save the job.

### 2539-182
**When keyword is specified, keyword must also be specified.**

**Explanation:** When the first keyword is specified, the second keyword must also be specified.

**User Response:** Correct the values in the `Build a Job` window.

### 2539-183
**The resources statement is not valid. It is ignored.**

**Explanation:** The value specified for resources in your input file is not valid.

**User Response:** Either enter a valid value into the `Resources` window, or update the resources expression in your input file, then reissue the `Restore From File` command from the `Tools` menu.

### 2539-184
**The resource requirement resource does not have a value.**

**Explanation:** Your input file does not contain a value for the specified resource.

**User Response:** Either enter a valid value into the `Resources` window, or update the resources expression in your input file, then reissue the `Restore From File` command from the `Tools` menu.

### 2539-185
**The resource requirement resource does not have a valid value: value.**

**Explanation:** Your input file does not contain a value for the specified resource.

**User Response:** Either enter a valid value into the `Resources` window, or update the resources expression in your input file, then reissue the `Restore From File` command from the `Tools` menu.

### 2439-186
**The resource requirement resource must have a value greater than or equal to zero.**

**Explanation:** The value for the specified resource in your input file must be a positive integer.

**User Response:** Either enter a valid value into the `Resources` window, or update the resources expression in your input file, then reissue the `Restore From File` command from the `Tools` menu.

### 2539-187
**The value of the resource requirement resource is not followed by a ).**

**Explanation:** The value for the specified resource in your input file is not followed by a closing parenthesis. Resource requirement values must be enclosed by parenthesis.

**User Response:** Either enter a valid value into the `Resources` window, or update the resources expression in your input file, then reissue the `Restore From File` command from the `Tools` menu.

### 2539-188
**The consumable resource resource is not defined. It is ignored.**

**Explanation:** The specified resource in your input file is not defined in this LoadLeveler cluster.

**User Response:** All of the defined resources appear in the Resource window. If a new resource needs to be defined, then consult your LoadLeveler administrator.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-189</td>
<td>Unexpected value <em>value</em> is found in input field for <em>resource</em>.</td>
</tr>
<tr>
<td></td>
<td><strong>Explanation:</strong> The value in the specified input field is not a valid integer or integer-unit pair.</td>
</tr>
<tr>
<td></td>
<td><strong>User Response:</strong> Correct the value in the input field. The value can be either an integer, or an integer followed by one of the following units: &quot;b&quot;, &quot;w&quot;, &quot;kb&quot;, &quot;kw&quot;, &quot;mb&quot;, &quot;mw&quot;, &quot;gb&quot;, &quot;gw&quot;, &quot;tb&quot;, &quot;tw&quot;, &quot;pb&quot;, &quot;pw&quot;, &quot;eb&quot;, or &quot;ew&quot;.</td>
</tr>
</tbody>
</table>

| 2539-190 | The value *string* in the input field for *resource* does not start with an integer. |
|          | **Explanation:** The specified input field must contain a string that begins with a positive integer. |
|          | **User Response:** Verify that the input field begins with a positive integer. |

| 2539-191 | Syntax error in resource requirement: *value*.                        |
|          | **Explanation:** The value in the specified input field is not a valid integer or integer-unit pair. |
|          | **User Response:** Correct the value in the input field. The value can be either an integer, or an integer followed by one of the following units: "b", "w", "kb", "kw", "mb", "mw", "gb", "gw", "tb", "tw", "pb", "pw", "eb", or "ew". |

| 2539-192 | A value is required for Blocking Integer.                             |
|          | **Explanation:** You have chosen the radio button indicating that you will enter a blocking factor expressed as an integer, but no value has been entered in the Integer field. |
|          | **User Response:** Enter a positive non-zero value into the Integer field. |

| 2539-193 | Cannot start LoadLeveler Wizard.                                    |
|          | **Explanation:** A problem was encountered while attempting to start the LoadLeveler Wizard for Configuration Tasks from xloadl. |
|          | **User Response:** Contact your LoadLeveler administrator to verify that the setup for the wizard is correct. |

| 2539-194 | Cannot set communication level in a network.PVM statement. It is ignored. |
|          | **Explanation:** A communication level (Low, High, or Medium) cannot be used in a network.PVM statement. It is ignored, and will not appear in the Job Builder. |
|          | **User Response:** Update the network information in the PVM window of the Job Builder, as needed. |

| 2539-195 | Cannot set a communication level with a communication mode of IP. It is ignored. |
|          | **Explanation:** A communication level was specified in a network statement which did not specify a mode of user space. Communication level is only valid on network statements which request user space. |
|          | **User Response:** Update the network information in the Network window of the Job Builder, as needed. |

| 2539-196 | *option* is not a valid Start From Ckpt option. It is ignored.       |
|          | **Explanation:** Your file specifies an unrecognized option for the `restart_ckpt_file` keyword. |
|          | **User Response:** Specify a valid option. The choices are: yes and no. |

<p>| 2539-197 | <em>option</em> is not a valid Same Nodes option. It is ignored.            |
|          | <strong>Explanation:</strong> Your file specifies an unrecognized option for the <code>ckpt_same_nodes</code> keyword. |
|          | <strong>User Response:</strong> Specify a valid option. The choices are: yes and no. |</p>
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-198</td>
<td>option is not a valid Save Ckpt File option. It is ignored.</td>
<td>Your file specifies an unrecognized option for the <code>save_ckpt_file</code> keyword.</td>
<td>Specify a valid option. The choices are: always and never.</td>
</tr>
<tr>
<td>2539-199</td>
<td>More than one job is selected. Select only one and rerun the command.</td>
<td>This command requires that just one job step is selected.</td>
<td>Select just one job step and rerun the command.</td>
</tr>
<tr>
<td>2539-200</td>
<td>The string <code>string_name</code> is not a valid consumable resource name.</td>
<td>The name of a consumable resource can contain only alphanumeric characters or “_”</td>
<td>Redefine the consumable resource name.</td>
</tr>
<tr>
<td>2539-201</td>
<td>The file <code>AFS_loadable_object_path</code> was not found. If this is a submit only machine using AFS then the file must exist.</td>
<td>LoadLeveler uses a loadable object to store code for fetching and setting AFS® tokens. LoadLeveler could not find the loadable object when attempting to load it.</td>
<td>Verify that the LoadLeveler AFS loadable object is installed, then repeat the command.</td>
</tr>
<tr>
<td>2539-231</td>
<td>Job Switch Resource Table could not be loaded on node <code>node_name</code> for the following reason:<code>[error message]</code>.</td>
<td>The Job Switch Resource Table for a job could not be loaded on the specified machine.</td>
<td>Correct the problem indicated by the error message.</td>
</tr>
<tr>
<td>2539-232</td>
<td>Job Switch Resource Table could not be loaded on node <code>node_name</code> because the switch is in use and can not be freed.</td>
<td>The Job Switch Resource Table for a job could not be loaded on the specified machine because the switch is already in use and attempts to free the switch have failed.</td>
<td>Examine the switch table log in the <code>/var/adm/SP/logs/st/st_log</code> for the cause of the failure.</td>
</tr>
<tr>
<td>2539-233</td>
<td>Job Switch Resource Table could not be loaded on node <code>node_name</code> due to a system error, <code>st_load_table returned error return_code</code>.</td>
<td>The Job Switch Resource Table for a job could not be loaded on the specified machine because of a system error.</td>
<td>Examine the switch table log in <code>/var/adm/SP/logs/st/st_log</code> for the cause of the failure.</td>
</tr>
<tr>
<td>2539-234</td>
<td>Job Switch Resource Table could not be loaded on node <code>node_name</code> due to an internal error, <code>st_load_table returned error return_code</code>.</td>
<td>The Job Switch Resource Table for a job could not be loaded on the specified machine because of an internal error.</td>
<td>Report the failure to IBM service.</td>
</tr>
</tbody>
</table>
2539-235  Job Switch Resource Table could not be unloaded on node node_name due to a system error, st_unload_table returned error return_code.

Explanation: The Job Switch Resource Table for a job could not be unloaded on the specified machine because of a system error.

User Response: Examine the switch table log in /var/adm/SP/logs/st/st_log for the cause of the failure.

2539-236  Job Switch Resource Table could not be unloaded on node node_name due to an internal error, st_unload_table returned error return_code.

Explanation: The Job Switch Resource Table for a job could not be unloaded on the specified machine because of an internal error.

User Response: Report the failure to IBM service.

2539-237  Job Switch Resource Table could not be unloaded on node node_name for the following reason: [error message].

Explanation: The Job Switch Resource Table for a job could not be unloaded on the specified machine.

User Response: Correct the problem indicated by the error message.

2539-238  Job Switch Resource Table could not be removed on node node_name due to a system error, st_clean_table returned error return_code.

Explanation: The Job Switch Resource Table for a job could not be removed on the specified machine because of a system error.

User Response: Examine the switch table log in /var/adm/SP/logs/st/st_log for the cause of the failure.

2539-239  Job Switch Resource Table could not be removed on node node_name due to an internal error, st_clean_table returned error return_code.

Explanation: The Job Switch Resource Table for a job could not be removed on the specified machine because of an internal error.

User Response: Report the failure to IBM service.

2539-240  Job Switch Resource Table could not be removed on node node_name for the following reason: [error message].

Explanation: The Job Switch Resource Table for a job could not be removed on the specified machine.

User Response: Correct the problem indicated by the error message.

2539-241  Could not determine status for switch adapter adapter_name. st_query_adapter failed with rc return_code.

Explanation: The switch table service (st_query_adapter) failed to obtain and return the status of the switch. The switch will be treated as NOT_READY.

User Response: Correct the problem indicated by the return code.

2539-242  Could not determine status for switch adapter adapter_name for the following reason: [error message].

Explanation: The status of the switch could not be determined due to the indicated error. The switch will be treated as NOT_READY.

User Response: Correct the problem indicated by the error message.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-243</td>
<td><strong>Failed to route specification</strong> for <em>specification name</em> <em>(specification number)</em>.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-244</td>
<td><strong>Failed to route expression</strong> for <em>specification name</em> <em>(specification number)</em>.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-245</td>
<td><strong>Internal error, cannot find tree for configuration type</strong> <strong>configuration type</strong>.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-246</td>
<td><strong>Unknown stanza type</strong> <strong>configuration type</strong>.</td>
<td>A value has been defined for the specified stanza type that is not valid.</td>
<td>Verify that the stanzas in the LoadLeveler administration file are correct.</td>
</tr>
<tr>
<td>2539-247</td>
<td><strong>Cannot make a new stanza of type</strong> <strong>stanza type</strong>.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-248</td>
<td><strong>Error refreshing stanza name stanza with defaults.</strong></td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-249</td>
<td><strong>Error merging first stanza name stanza with second stanza name stanza.</strong></td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-250</td>
<td><strong>Error inserting intlist. Element is not an array.</strong></td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-251</td>
<td><strong>Error inserting stringlist. Element is not an array.</strong></td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-252</td>
<td><strong>Error writing stanza stanza name.</strong></td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
</tbody>
</table>
2539-253  Cannot write config file config file name.
Explanation: LoadLeveler failed to write to the configuration file.
User Response: Verify that the specified file exists, and that it has the appropriate access permissions.

2539-254  Cannot write final record for file file name.
Explanation: LoadLeveler failed to write to the specified file.
User Response: Verify that the specified file exists, and that it has the appropriate access permissions.

2539-255  Verify is not implemented for the stanza name stanza.
Explanation: This is an internal LoadLeveler error.
User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-256  Error writing stanza type stanza type.
Explanation: This is an internal LoadLeveler error.
User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-257  Error reading file file name.
Explanation: LoadLeveler failed to read the user’s preferred configuration file.
User Response: Verify that the specified file exists, and that it has the appropriate access permissions.

2539-261  Unable to obtain name of operating system from configuration file.
Explanation: LoadLeveler cannot find the value for OpSys in the configuration file.
User Response: Define a value for OpSys.

2539-262  Error processing config file configuration file name at line line number.
Explanation: LoadLeveler failed to parse the configuration file.
User Response: Examine the configuration file syntax at the specified line number.

2539-263  Local configuration file not specified in LoadL_config. Proceeding...
Explanation: No local LoadLeveler configuration file was defined in the global LoadLeveler configuration file.
User Response: Define local LoadLeveler configuration files on machines which are meant to override defaults in the global LoadLeveler configuration file.

2539-264  Error processing local configuration file file name! Proceeding ...
Explanation: LoadLeveler failed to process the local LoadLeveler configuration file. Values will be used from the global LoadLeveler configuration file, instead.
User Response: Examine the local LoadLeveler configuration file’s syntax.

2539-265  The above line in config file is too long. It must be less than 2048 bytes.
Explanation: The identified line is too long.
User Response: Keep individual line lengths under 2K bytes.
2539-266  Exiting ...
Explanation: The specified program is exiting.
User Response: Refer to the previous error messages to determine the cause.

2539-267  Error in configuration file file name, line line number: Illegal identifier: illegal string.
Explanation: There is a syntax error in the configuration file.
User Response: Examine the specified line number to find the error.

2539-268  Attention: keyword keyword from local configuration file, filename, will be ignored.
Explanation: LoadLeveler encountered a keyword that is not valid.
User Response: Examine the configuration file for keywords that are not valid.

2539-272  Attention: Line length is greater than 8191 bytes. Input data may be truncated.
Explanation: A line in the configuration file is longer than 8191 bytes.
User Response: Check the configuration file for lines that are longer than 8191 bytes.

2539-273  Error in configuration file file name, line line number: Syntax error.
Explanation: The specified line in the configuration file contains a syntax error.
User Response: Check the specified line number for errors.

2539-274  gethostname routine failed, errno = errno.
Explanation: The gethostname system call failed.
User Response: Correct the problem indicated by the error number. If the problem persists, contact IBM Service.

2539-275  host.domain string length exceeds length.
Explanation: A domain name has a length that is not valid in the LoadLeveler administration file.
User Response: Verify that the machine domain names in the LoadLeveler administration file are correct.

2539-276  Unable to calloc number of bytes bytes for new hostent h_aliases array.
Explanation: The program could not allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-277  Unable to re-allocate number of bytes bytes for new hostent h_aliases array.
Explanation: The program cannot allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-278  Unable to calloc number of bytes bytes for new hostent h_addr_list array.
Explanation: The program could not allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-279</td>
<td>Unable to re-allocate number of bytes bytes for new hostent h_aliases array.</td>
<td>The program cannot allocate virtual memory.</td>
<td>Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-280</td>
<td>Unable to malloc number of bytes bytes for interface address array.</td>
<td>The program cannot allocate virtual memory.</td>
<td>Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-287</td>
<td>The value pool_list value is invalid for pool_list in the machine name machine stanza. Ignored.</td>
<td>The specified value is not valid.</td>
<td>Verify that the stanzas in the LoadLeveler administration file are correct.</td>
</tr>
<tr>
<td>2539-288</td>
<td>The negative number pool_list value found in pool_list of the machine name machine_stanza is not allowed. Ignored.</td>
<td>The specified value is not valid.</td>
<td>Do not use negative numbers in a machine pool list.</td>
</tr>
<tr>
<td>2539-290</td>
<td>Feature statement with number of characters characters exceeds limit of 1024.</td>
<td>A feature statement in the configuration file is too long.</td>
<td>Do not allow configuration file feature lines to exceed 1024 bytes.</td>
</tr>
<tr>
<td>2539-291</td>
<td>Feature values are not set.</td>
<td>Feature values will not take effect due to syntax errors.</td>
<td>Consult the preceding error message for more information.</td>
</tr>
<tr>
<td>2539-292</td>
<td>Class statement with number of characters characters exceeds limit of 1024.</td>
<td>A class statement is too long.</td>
<td>Do not specify class stanzas longer than 1024 bytes.</td>
</tr>
<tr>
<td>2539-293</td>
<td>Default No_Class assumed.</td>
<td>A default class value of No_Class will be used.</td>
<td>Consult the preceding error message for more information.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2539-299</td>
<td>A value of <code>value</code> was specified for <code>max_adapter_window</code> in the <code>stanza_type</code> stanza. Valid values are “1 - 4” inclusive. Default value of “4” will be used.</td>
<td>A default value of 4 will be used in place of a user-supplied value for <code>max_adapter_window</code> in the specified stanza.</td>
<td>Refer to LoadLeveler: Using and Administering for proper value ranges.</td>
</tr>
<tr>
<td>2539-300</td>
<td>An adapter stanza name of <code>adapter stanza name</code> was specified in the <code>machine stanza name</code> machine stanza, but an adapter stanza with that name does not exist.</td>
<td>A machine stanza referenced a nonexistent adapter stanza.</td>
<td>Machine stanzas should refer only to existing adapter stanzas.</td>
</tr>
<tr>
<td>2539-302</td>
<td>Attention: A value for both <code>SCHEDULER_TYPE</code> and <code>SCHEDULER_API</code> has been specified. <code>SCHEDULER_TYPE</code> will be used.</td>
<td>Two conflicting keywords (<code>SCHEDULER_TYPE</code>, and <code>SCHEDULER_API</code>) were used in the configuration file.</td>
<td>Of the two keywords, only use <code>SCHEDULER_TYPE</code> in the configuration file.</td>
</tr>
<tr>
<td>2539-303</td>
<td><code>DCE_AUTHENTICATION</code> is not valid. <code>DCE</code> authentication will not be transmitted with job.</td>
<td><code>DCE_AUTHENTICATION</code> is not a valid keyword.</td>
<td>Do not specify <code>DCE_AUTHENTICATION</code>.</td>
</tr>
<tr>
<td>2539-304</td>
<td>The configuration keyword <code>keyword name</code> contains the invalid value <code>keyword value</code>. The default value will be used instead.</td>
<td>A keyword value has been specified incorrectly.</td>
<td>Refer to LoadLeveler: Using and Administering for correct values.</td>
</tr>
<tr>
<td>2539-305</td>
<td>More than one stanza identified as <code>stanza name</code> has been found. The first stanza in the LoadL_admin file will be used. All others having the same name will be ignored.</td>
<td>Duplicate stanzas were specified in the LoadLeveler administration file.</td>
<td>Verify that all LoadLeveler administration file stanzas have unique names.</td>
</tr>
<tr>
<td>2539-306</td>
<td><code>keyword</code> specified in default <code>stanza type</code> stanza. Ignored.</td>
<td>The identified keyword should not be specified in the default stanza.</td>
<td>Refer to LoadLeveler: Using and Administering for LoadLeveler administration file stanza syntax.</td>
</tr>
<tr>
<td>2539-308</td>
<td>Attention: Invalid value entered for <code>spacct_exclude_enable</code> for machine stanza <code>machine name</code>. Default value will be used.</td>
<td>The specified machine stanza contains a incorrect value for <code>spacct_exclude_enable</code>.</td>
<td>Refer to LoadLeveler: Using and Administering for correct values.</td>
</tr>
</tbody>
</table>
2539-309  **Attention:** Value missing for *keyword* *keyword* in *stanza* type *stanza*.  
**Explanation:** A stanza was defined without the specified keyword.  
**User Response:** Ignore this message if you do not wish to define the associated keyword for this stanza; otherwise, add the keyword, then reconfigure LoadLeveler.

2539-310  **Attention:** Invalid value for *keyword* in LoadL_admin file: *keyword* *value*.  
**Explanation:** The specified keyword’s value is not valid.  
**User Response:** Refer to LoadLeveler: Using and Administering for correct values.

2539-311  **RESERVED KEYWORD USED:** The reserved keyword *keyword* has been used as a class name. LoadLeveler may not function properly with this reserved keyword used as a class name.  
**Explanation:** A LoadLeveler reserved keyword was used as the name of a job class.  
**User Response:** Refer to LoadLeveler: Using and Administering for a list of reserved keywords, and verify that no job classes use reserved keywords as names.

2539-312  **Attention:** A value for keyword *keyword* is required for stanza *stanza* *name*. Stanza is ignored.  
**Explanation:** A required keyword is missing from the specified stanza.  
**User Response:** Add the required keyword to the specified stanza, then reconfigure LoadLeveler.

2539-313  **Attention:** A css adapter was specified for adapter: *adapter* *stanza* name but no *switch_node_number* was found. Default value will be used.  
**Explanation:** No *switch_node_number* was associated with the specified adapter stanza. A default value will be used.  
**User Response:** If you do not want to use the default value, then specify *switch_node_number* for the specified adapter stanza.

2539-314  **Duplicate central manager specified. Stanza for machine* *machine* name will be ignored.**  
**Explanation:** The specified machine was defined as a duplicate central manager.  
**User Response:** Define only one machine stanza in the LoadLeveler administration file with central_manager = yes.

2539-315  **RM_HOST ignored for machine stanza *machine* name.**  
**Explanation:** The keyword *rm_host* was used in a machine stanza, but it is obsolete.  
**User Response:** Do not use the *rm_host* keyword any longer. Refer to LoadLeveler: Using and Administering for update information about parallel job scheduling.

2539-316  **Attention:** The keyword adapter_stanzas is used but no value is specified in stanza *machine* name.  
**Explanation:** The specified keyword has no value.  
**User Response:** Either specify an appropriate value for the keyword, or remove the keyword, then reconfigure LoadLeveler.

2539-317  **Cannot specify submit_only for a central manager.**  
**Explanation:** The submit_only keyword was set to true for a central manager machine.  
**User Response:** Do not define a primary or alternate central manager as a submit-only machine.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-318</td>
<td>Alias specified in default machine stanza. Ignored.</td>
<td>An alias was defined for the default machine stanza.</td>
<td>Only define aliases for stanzas that are associated with real machines.</td>
</tr>
<tr>
<td>2539-319</td>
<td>central_manager specified in default machine stanza. Ignored.</td>
<td>The default machine stanza was defined as a central manager.</td>
<td>Only define real machines as central managers.</td>
</tr>
<tr>
<td>2539-320</td>
<td>No central manager defined in LoadL_admin machine list.</td>
<td></td>
<td>Define one primary central manager for your LoadLeveler cluster. This is the only required field in the LoadLeveler administration file.</td>
</tr>
<tr>
<td>2539-321</td>
<td>resource limit name resource limit has a value that is too long: value</td>
<td>The specified resource limit has a syntax error.</td>
<td>Refer to LoadLeveler: Using and Administering for correct resource limit values.</td>
</tr>
<tr>
<td>2539-322</td>
<td>Invalid stanza stanza name. Ignored.</td>
<td>The specified stanza has a type that is not valid.</td>
<td>Refer to LoadLeveler: Using and Administering for correct LoadLeveler administration file stanza types.</td>
</tr>
<tr>
<td>2539-323</td>
<td>Unable to obtain resource limit name resource limit.</td>
<td>The getrlimit system call failed for the indicated resource limit.</td>
<td>Verify that the resource limit name is correct. If the name is correct, report the machine that issued the error to IBM Service.</td>
</tr>
<tr>
<td>2539-324</td>
<td>Unable to create central manager list, no machine list provided.</td>
<td>A list of central managers cannot be created because there are no machine stanzas in the LoadLeveler administration file.</td>
<td>Define at least one machine as the primary central manager in the LoadLeveler administration file.</td>
</tr>
<tr>
<td>2539-325</td>
<td>Unable to find a central manager in the LoadL_admin file.</td>
<td>No central manager machine stanza exists in the LoadLeveler administration file.</td>
<td>In the LoadLeveler administration file, define at least one machine as the primary central manager.</td>
</tr>
<tr>
<td>2539-326</td>
<td>Job Switch Resource Table could not be loaded because the switch node number for node node name is invalid or has not been set.</td>
<td>The switch node number is not set in the file /spdata/sys1/st/switch_node_number or the number in the file is not valid.</td>
<td>Run the command /usr/lpp/ssp/bin/st_set_switch_number to set the switch node number.</td>
</tr>
</tbody>
</table>
2539-327  An invalid FEATURE statement in the configuration file was found.
Explanation:  There is a syntax error in a FEATURE keyword in the configuration file.
User Response:  Check the syntax of each feature statement in the configuration file; verify that each feature has a pair of double quotes surrounding it. Refer to LoadLeveler: Using and Administering for more information on the syntax of the feature statement.

2539-328  An invalid CLASS statement in the configuration file was found.
Explanation:  There is a syntax error in a CLASS keyword in the configuration file.
User Response:  Check the syntax of each class statement in the administration file; verify that each class has a pair of double quotes surrounding it. Refer to LoadLeveler: Using and Administering.

2539-329  Attention: Default stanzas for adapters are obsolete. Values specified in "default adapter stanzas" are ignored.
Explanation:  Default adapter stanzas are no longer supported for adapter stanzas.
User Response:  Default values specified in a default adapter stanza are not applied to other adapter stanzas. Remove the default adapter stanza.

2539-330  Attention: The switch name switch adapter, adapter name, must have a css_type of value.
Explanation:  For an adapter with the specified adapter_name, the css_type must be the specified value.
User Response:  You must change the css_type value to the specified value, then reconfigure LoadLeveler; otherwise, this stanza will be ignored.

2539-331  The adapter stanza or css_type value is ignored.
Explanation:  Either the adapter stanza, or the css_type is ignored.
User Response:  Consult the preceding error message for more information.

2539-332  Attention: The css_type value was specified for the switch adapter, adapter stanza, is not valid.
Explanation:  The specified adapter's css_type value was not valid.
User Response:  Specify a valid css_type value, then reconfigure LoadLeveler. Refer to LoadLeveler: Using and Administering for the appropriate values.

2539-333  Attention: A css_type value was not specified for the switch adapter: adapter stanza.
Explanation:  All switch adapters must have the css_type keyword specified with an appropriate value.
User Response:  Specify a valid css_type value, then reconfigure LoadLeveler. Refer to LoadLeveler: Using and Administering for the appropriate values.

2539-334  Defaulting css_type to: default_css_type.
Explanation:  A css_type value was not specified for a switch adapter. LoadLeveler will use the specified default value.
User Response:  Enter a css_type value for the switch adapter in the LoadLeveler administration file.

2539-335  Attention: The switch name of adapter_name was specified for adapter, adapter stanza, and is not valid.
Explanation:  An incorrect switch name was specified.
User Response:  You must specify a valid switch name, then reconfigure LoadLeveler; otherwise, this stanza will be ignored.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-336</td>
<td>Attention: The css_type keyword specified in adapter stanza, <em>adapter stanza</em>, is not valid for non-switch adapters.</td>
<td>The css_type is not needed for non switch adapters.</td>
<td>Remove the css_type keyword from the adapter stanza, then reconfigure LoadLeveler.</td>
</tr>
<tr>
<td>2539-337</td>
<td>The machine stanza <em>machine stanza</em> lists more than one adapter with the same adapter_name of <em>adapter name</em>. <em>Adapter stanza adapter stanza</em> is ignored.</td>
<td>A machine cannot reference more than one adapter stanza of the same name.</td>
<td>Remove one of the adapter stanzas listed for that machine.</td>
</tr>
<tr>
<td>2539-338</td>
<td>There is a consumable resource without a value: <em>value</em>.</td>
<td>This message is self-explanatory.</td>
<td>Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.</td>
</tr>
<tr>
<td>2539-339</td>
<td>There is a consumable resource with a wrong value: <em>value</em>.</td>
<td>This message is self-explanatory.</td>
<td>Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.</td>
</tr>
<tr>
<td>2539-340</td>
<td>There is a consumable resource without units: <em>units</em>.</td>
<td>This message is self-explanatory.</td>
<td>Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.</td>
</tr>
<tr>
<td>2539-341</td>
<td>There is a floating resource with a wrong value: <em>value</em>.</td>
<td>This message is self-explanatory.</td>
<td>Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.</td>
</tr>
<tr>
<td>2539-342</td>
<td>There are more than one consumable resource with same name: <em>value</em>.</td>
<td>This message is self-explanatory.</td>
<td>Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.</td>
</tr>
<tr>
<td>2539-343</td>
<td><em>resource</em> can not be a “FLOATING_RESOURCE”</td>
<td>ConsumableCpus, ConsumableMemory and ConsumableVirtualMemory can only be defined as</td>
<td>Check the LoadLeveler configuration and administration files for the specified resource, remove it from the global configuration file, and reconfigure LoadLeveler.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>machine resources, which are specified in the LoadLeveler administration file.</td>
<td></td>
</tr>
<tr>
<td>2539-344</td>
<td>Could not create a striped adapter.</td>
<td>A striped adapter was requested at job submission but could not be created.</td>
<td></td>
</tr>
</tbody>
</table>
2539-345  Could not find a striped adapter.
Explanation: A striped adapter was requested at job submission but does not exist.
User Response: Ensure your LoadLeveler environment has a striped adapter.

2539-346  The *keyword* keyword will be ignored.
Explanation: Since one or more errors were reported in previous messages regarding this keyword, the keyword and all its specified resources and their values will be ignored.
User Response: Check the LoadLeveler global configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.

2539-347  The *keyword* keyword contains an out of range value *value*. *default_value* will be used instead.
Explanation: The value of the specified keyword is out of range.
User Response: Refer to LoadLeveler: Using and Administering for correct values.

2539-348  The reserved word specified for the ENFORCE_RESOURCE_USAGE keyword must be defined in the SCHEDULE_BY_RESOURCES keyword. No resources will be enforced.
Explanation: A resource was defined in the ENFORCE_RESOURCE_USAGE keyword that was not defined in the SCHEDULE_BY_RESOURCES keyword.
User Response: Redefine the resources for ENFORCE_RESOURCE_USAGE keyword.

2539-349  The "deactivate" reserved word cannot be specified with any other reserved words in the ENFORCE_RESOURCE_USAGE keyword. No resources will be enforced and WLM will not be deactivated.
Explanation: The deactivate keyword was specified with other resources for the ENFORCE_RESOURCE_USAGE keyword.
User Response: Redefine the resources for the ENFORCE_RESOURCE_USAGE keyword.

2539-350  ENFORCE_RESOURCE_USAGE resource *resource_name* cannot be enforced. No enforcement of any resources will be done.
Explanation: Only ConsumableCpus, ConsumableMemory or deactivate can be specified for the ENFORCE_RESOURCE_USAGE keyword.
User Response: Redefine the resources for the ENFORCE_RESOURCE_USAGE keyword.

2539-351  The ENFORCE_RESOURCE_USAGE keyword already has *reserved_word* defined. This definition will be ignored.
Explanation: A reserved word was specified more than once for the ENFORCE_RESOURCE_USAGE keyword.
User Response: Redefine the resources for the ENFORCE_RESOURCE_USAGE keyword.

2539-352  The ALL reserved word is not valid with the resource *resource_name*.
Explanation: The resource name specified does not support the ALL reserved word.
User Response: Redefine the machine resources keyword.

2539-353  *value* is an incorrect value for keyword *keyword*.
Explanation: This value is not one of the valid values allowed for this keyword.
User Response: Specify a valid value for the keyword.
2539-354  Circular preemption detected for class class_name under schedule_type scheduling.

Explanation: If a class preempt itself after applying the preemption rules repeatedly, then it is circular preemption which is not permitted. If this message is displayed for class allclasses, it means that two or more PREEMPT_CLASS rules contain "ALL {allclasses}" which is also circular preemption.

User Response: Remove circular preemption from preemption rules.

2539-355  Error processing configuration file filename.

Explanation: A severe error is encountered while processing the configuration file. The configuration process is stopped.

User Response: Correct the errors in the configuration file and try again. lctl reconfig or lctl stop may provide more details about the error than lctl start in certain situations.

2539-356  keyword_name=keyword_value is not valid under schedule_type scheduling.

Explanation: The value of the specified keyword is not valid for this scheduler.

User Response: Specify a valid keyword value for this scheduler.

2539-357  The following error(s) occurred while processing error_list...

Explanation: The processing of the information encountered errors/problems.

User Response: See the messages following this message for more information.

2539-358  Redundant and/or incorrect information found in the above statement. It is ignored.

Explanation: Errors were found processing information in message 2539-357. The statement is ignored. Example: START_CLASS[allclasses] and PREEMPT_CLASS[allclasses] configuration statements are incorrect as allclasses is not allowed in the left hand side of those statements.

User Response: Correct the errors in the original input.

2539-359  Syntax error - expected value1 and found value2 instead.

Explanation: Syntax errors were found processing information in message 2539-357.

User Response: Correct errors in the original input.

2539-360  value is not a valid integer. The value will be interpreted as value2.

Explanation: A string that should have represented an integer was parsed but errors were found. The value that the string will be interpreted as is displayed in the message. An integer must be a contiguous string of digits, optionally preceded by whitespace and at most one sign and optionally followed by whitespace.

User Response: Correct errors in the original input.

2539-361  string is not a valid number pair. The value will be interpreted as value1,value2.

Explanation: A string that should have represented two integers separated by a comma was parsed but errors were found. The value that the string will be interpreted as is displayed in the message. An integer must be a contiguous string of digits, optionally preceded by whitespace and at most one sign and optionally followed by whitespace.

User Response: Correct errors in the original input.

2539-362  The previous message refers to the keyword keyword.

Explanation: A message was displayed while parsing the value for the specified keyword. This message serves to identify the keyword to which the previous message applies.

User Response: Refer to the previous message for more information.
The string **string_name** of **resource name** is not a valid consumable resource name.

**Explanation:** The name of a consumable resource can contain only alphanumeric characters or "_".

**User Response:** Redefine the consumable resource name.

The string **string_name** associated with the **keyword_name** keyword of **resource_type** contains invalid data.

**Explanation:** Resource information specified does not have the format: `name(value units) ... name(value units)`.

**User Response:** Redefine the consumable resource specification.

The resource name **resource_name** of **resource_type** has already been defined as a floating resource.

**Explanation:** Resource name specified is a duplicate of a previously defined floating resource.

**User Response:** Redefine the consumable resource name.

The consumable resource **resource_name** of **resource_type** is specified more than once.

**Explanation:** The resource name is specified multiple times in the same statement.

**User Response:** Redefine the consumable resource name.

The value specified for the consumable resource **resource_name** of **resource_type** is not a valid specification.

**Explanation:** The resource value assigned to a given resource is not valid. It must be a positive number.

**User Response:** Redefine the consumable resource value.

The **keyword_name** keyword of **resource_type** contains one or more errors.

**Explanation:** Resource information specified does not have the format: `name(value units) ... name(value units)`.

**User Response:** Redefine the consumable resource specification.

The name **resource_name** has already been defined as a resource name in a LoadLeveler machine stanza.

**Explanation:** Resource name specified is a duplicate of a previously defined resource name of a machine stanza.

**User Response:** Redefine the consumable resource name.

The keyword **keyword1** is not compatible with the keyword(s) **keyword2**

**Explanation:** The keyword indicated by **keyword1** cannot be used with the keyword or keywords indicated by **keyword2**.

**User Response:** Update the file in error, then reconfigure LoadLeveler.

Unable to `malloc` **num** bytes for Security credentials file.

**Explanation:** The program could not allocate virtual memory for the credentials file for the security mechanism in use.

**User Response:** Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.
2539-382 Cannot read filename. Cannot fetch DCE security credentials.
Explanation: LoadLeveler cannot read the specified DCE credentials file.
User Response: Verify that the permissions on the files and credentials cache are appropriate.

Explanation: LoadLeveler cannot open the specified DCE credentials file.
User Response: Verify that the permissions on the files and credentials cache are appropriate.

2539-384 Cannot open directory directory_name. Cannot fetch DCE security credentials.
Explanation: LoadLeveler cannot open the directory containing the DCE credentials files.
User Response: Verify that the permissions on the credentials cache and on the specified directory are appropriate.

2539-386 Unable to malloc num bytes for opaque object.
Explanation: The program cannot allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-387 Unable to create opaque credentials object.
Explanation: LoadLeveler cannot martial DCE credentials into XDR format.
User Response: Contact IBM Service.

2539-388 DCE_AUTHENTICATION_PAIR keyword is not valid.
Explanation: An incorrect keyword was entered.
User Response: Correct the specified keyword in the LoadLeveler configuration file.

Explanation: LoadLeveler cannot fork and execute the llgetdce process to fetch DCE credentials.
User Response: Correct the problem indicated by the error number.

2539-390 Unable to read length of opaque object from process pipe, read returned return_code.
Explanation: The llsubmit command could not read the length of the DCE credentials fetched by the llgetdce process.
User Response: Contact IBM service.

2539-391 Unable to malloc num bytes for opaque object.
Explanation: The program cannot allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-392 Unable to read opaque object from process pipe, read returned return_code.
Explanation: The llsubmit command cannot read the DCE credentials fetched by the llgetdce process.
User Response: Contact IBM service.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-393</td>
<td>Unable to read stderr from child, read returned <code>return_code</code>.</td>
<td>LoadLeveler failed to read from the <code>stderr</code> pipe when attempting to get to the <code>llgetdce</code> process.</td>
<td>This problem requires the attention of an administrator.</td>
</tr>
<tr>
<td>2539-394</td>
<td>Failed to write size of opaque object ((object_size)) to stdout, <code>errno</code> = <code>error\_num</code>.</td>
<td>The opaque object contains DCE credentials fetched by the <code>llgetdce</code> process.</td>
<td>Contact IBM service.</td>
</tr>
<tr>
<td>2539-395</td>
<td>Failed to write opaque object to stdout, <code>errno</code> = <code>error\_num</code>.</td>
<td>The opaque object contains DCE credentials fetched by the <code>llgetdce</code> process.</td>
<td>Contact IBM service.</td>
</tr>
<tr>
<td>2539-396</td>
<td>The DCE principal of this daemon, DCE principal name of daemon, is not a member of the LoadLeveler DCE services group</td>
<td>This message is self-explanatory.</td>
<td>DCE login as “cell_admin” and add the DCE principal name of this daemon to the LoadLeveler DCE services group.</td>
</tr>
<tr>
<td>2539-397</td>
<td>The environment variable KRB5CCNAME is not in the correct format of <code>\&quot;FILE:~/dce credentials cache directory\&quot;</code>.</td>
<td>The referenced environment variable is not in the correct format.</td>
<td>Correct the KRB5CCNAME environment variable for user.</td>
</tr>
<tr>
<td>2539-416</td>
<td>User failed username security validation. Username did not match expected name, expected <code>username</code>.</td>
<td>The user name did not match the primary LoadLeveler user name (for example, ”loadl”).</td>
<td>Ensure that <code>/etc/LoadL.cfg</code> contains the same LoadLeveler user name for all of the machines in the cluster.</td>
</tr>
<tr>
<td>2539-417</td>
<td>Cannot receive hostname from client.</td>
<td>LoadLeveler failed to receive the hostname from the connecting host. This is an internal LoadLeveler routing error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-418</td>
<td>Cannot send hostname.</td>
<td>LoadLeveler failed to send the hostname to another host. This is an internal LoadLeveler routing error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-419</td>
<td>Attention: Host name returned by validate_connection ((hostname)) does not match caller host name ((hostname)).</td>
<td>The name server returned a different name for this host than the name that was expected. Processing continues.</td>
<td></td>
</tr>
</tbody>
</table>
2539-420 Connection from hostname rejected; not in machine list.

Explanation: The specified host failed validation because MACHINE_AUTHENTICATE is set to TRUE, and the host is not in the LoadLeveler administration file.

User Response: If you want the host to participate in the LoadLeveler cluster, then add a machine stanza to the LoadLeveler administration file.

2539-421 Cannot receive remote host name (IP address port port number) errno = error num

Explanation: gethostbyaddr() system call failed for the specified IP address.

User Response: Either set MACHINE_AUTHENTICATE to FALSE (to allow all hosts to participate), or verify the validity of the IP address.


Explanation: This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-423 ProtocolReset: Cannot send machine name.

Explanation: LoadLeveler failed to send the host name. This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-424 Cannot send step job step name.

Explanation: This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-425 Cannot send end of record for step job step name.

Explanation: LoadLeveler failed to send the transaction end-of-record marker.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-426 Cannot send step id job step name.

Explanation: LoadLeveler failed to send the job step ID.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-427 Error receiving acknowledgment for step job step name.

Explanation: LoadLeveler failed to receive transaction acknowledgement for a job step.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.


Explanation: LoadLeveler cannot receive the protocol version from the connecting machine.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-429 ProtocolReset: Cannot receive machine name.

Explanation: LoadLeveler cannot receive the name of a connecting machine.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-430</td>
<td><strong>Attention: Routing default machine.</strong></td>
<td>Routing an entire machine object rather than transaction-specific machine data.</td>
<td></td>
</tr>
<tr>
<td>2539-431</td>
<td><strong>Unrecognized specification:</strong> specification name (specification value)</td>
<td>LoadLeveler encountered erroneous machine data.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-432</td>
<td><strong>Invalid value defined in the stanza type stanza stanza name for keyword = value.</strong></td>
<td>The specified keyword has an incorrect value.</td>
<td>Verify that the LoadLeveler administration file stanzas are correct.</td>
</tr>
<tr>
<td>2539-433</td>
<td><strong>Invalid keyword keyword specified in the stanza type stanza stanza name.</strong></td>
<td>The specified keyword is not valid.</td>
<td>Verify that the LoadLeveler administration file stanzas are correct.</td>
</tr>
<tr>
<td>2539-434</td>
<td>The keyword keyword specified in the stanza type stanza stanza name cannot be NULL.</td>
<td>The specified keyword has an incorrect NULL value.</td>
<td>Verify that the LoadLeveler administration file stanzas are correct.</td>
</tr>
<tr>
<td>2539-435</td>
<td>Cannot append to keyword in the stanza name stanza_type stanza.</td>
<td>LoadLeveler failed to append a value to a keyword in the named stanza.</td>
<td>Verify that you are not treating a non-list stanza keyword as a list type.</td>
</tr>
<tr>
<td>2539-436</td>
<td><strong>Cannot find central manager. Unable to queue command (command number) to central manager.</strong></td>
<td>The central manager machine could not be found in this daemon’s configuration.</td>
<td>Verify that the central manager is defined in the LoadLeveler administration file, and that it, or an alternate, is running.</td>
</tr>
<tr>
<td>2539-437</td>
<td><strong>No log directory specified in the LoadL_config file for this daemon.</strong></td>
<td>There is no log directory specified for this daemon in the LoadLeveler configuration file.</td>
<td>Specify a log file for this daemon in the LoadLeveler configuration file, then reconfigure LoadLeveler.</td>
</tr>
<tr>
<td>2539-438</td>
<td><strong>Attention: Cannot chdir to directory name. Attempting to continue...</strong></td>
<td>LoadLeveler cannot change to the specified log directory.</td>
<td>Verify the existence of the directory, and that it has the appropriate permissions.</td>
</tr>
<tr>
<td>2539-439</td>
<td><strong>No spool directory specified in the LoadL_config file.</strong></td>
<td>The path for the local spool directory was not specified in the LoadLeveler configuration file.</td>
<td>Add a path for the local spool directory to the LoadLeveler configuration file, then reconfigure LoadLeveler.</td>
</tr>
</tbody>
</table>
2539-440  No execute directory specified in the LoadL_config file.

Explanation: The path for the local execute directory was not specified in the LoadLeveler configuration file.

User Response: Add a path for the local execute directory to the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-441  Attention: Cannot set userid to uid number (user name). Attempting to continue...

Explanation: LoadLeveler failed to set the effective user ID.

User Response: Verify that the daemon runs as root, and that the uid is valid.

2539-442  Attention: Cannot set groupid to gid number (group name). Attempting to continue...

Explanation: LoadLeveler failed to set the effective group ID.

User Response: Verify that the daemon runs as root, and that the gid is valid.

2539-443  No history file specified in the LoadL_config file.

Explanation: There is no history file specified in the LoadLeveler configuration file.

User Response: Add a history file to the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-444  Attention: Value specified for cm_heartbeat_interval is invalid. Default value (= default cm_heartbeat_interval value) will be used.

Explanation: The value specified for cm_heartbeat_interval is not valid.

User Response: Refer to LoadLeveler: Using and Administering for correct cm_heartbeat_interval settings.

2539-445  Attention: Value specified for cm_timeout is invalid. Default value (default cm_timeout value) will be used.

Explanation: The value specified for cm_timeout is not valid.

User Response: Refer to LoadLeveler: Using and Administering for the correct cm_timeout settings.

2539-446  No central manager defined. Cannot continue.

Explanation: No central manager is defined in the LoadLeveler administration file.

User Response: Define a central manager in the LoadLeveler administration file, then restart LoadLeveler.

2539-447  LINetProcess: Unable to instantiate L1Config object.

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-448  Syntax error in LoadLeveler configuration files.

Explanation: There is a syntax error in the administration or configuration files.

User Response: Verify that the syntax of the LoadLeveler configuration and administration files is valid.

2539-449  Unable to instantiate this_machine object.

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.
2539-450  Unable to instantiate this_cluster object.
Explanation: The program cannot allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-451  Attention: No administrator list specified in LoadL_config file.
Explanation: There is no administrator list specified in the global LoadLeveler configuration file.
User Response: To enable administrative functions, specify an administrator list in the global LoadLeveler configuration file.

2539-452  daemon name is orphaned! Exiting...
Explanation: The specified daemon is no longer a child of the LoadL_master daemon.
User Response: Check the logs to diagnose the problem. Restart LoadLeveler.

2539-453  Illegal protocol (sender process’ protocol version ), received from another process on this machine - machine name. This daemon daemon name is running protocol version (version).
Explanation: Two daemons on this machine have different protocol versions.
User Response: Run lctl -v to verify the daemon and command versions. If a software upgrade is needed, then contact the LoadLeveler administrator.

2539-454  Illegal protocol (protocol version of sending machine ), received from name of sending machine. This machine receiving machine is running protocol version (version).
Explanation: LoadLeveler daemons on two different machines are at different protocol levels.
User Response: Run lctl -v to verify the daemon and command versions on all of the machines. If a software upgrade is needed, then contact the LoadLeveler administrator.

2539-455  Attention: Allocating base Machine object.
Explanation: LoadLeveler is allocating a generic machine, not a LoadLeveler-defined machine. This is an internal LoadLeveler error.
User Response: Contact IBM service.

2539-456  Cannot allocate Machine object for new machine: machine name.
Explanation: The program cannot allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-457  Cannot gethostbyname for machine: machine name.
Explanation: The gethostbyname() routine returned an error for the specified machine.
User Response: Verify that the specified machine exists, that the name being used is resolvable, and that the LoadLeveler administration file contains valid machine names.

2539-458  Unable to find or allocate Machine object for machine (machine name or IP address).
Explanation: LoadLeveler failed to locate data for the specified machine.
User Response: Verify that adequate memory is available on the specified machine, and that the LoadLeveler administration file contains valid machine names.
### 2539-459 Cannot gETH0byaddr for machine: `machine name`

**Explanation:** The gETH0byaddr() routine returned an error for the specified machine.

**User Response:** Verify that the machine exists, that the address being used is resolvable, and that the LoadLeveler administration file contains valid machine names.

### 2539-460 Cannot start thread for service `service` type on port `port` number. rc = return code

**Explanation:** LoadLeveler failed to create a thread.

**User Response:** Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

### 2539-461 Attention: Connection to `machine name` port `port` number reset. Retrying ...

**Explanation:** LoadLeveler is attempting to reconnect to named machine via indicated port.

**User Response:** Attention message - no action.

### 2539-462 Attention: Connection to `machine name` path `socket path` reset. Retrying ...

**Explanation:** LoadLeveler is attempting to reconnect to named machine via indicated socket path.

**User Response:** Attention message - no action.

### 2539-463 Cannot connect to `machine name` service `name` on port `port` number. `errno` = `errno`

**Explanation:** LoadLeveler failed to connect to the specified service on the specified machine and port.

**User Response:** Correct the problem indicated by the error number.

### 2539-464 Cannot connect to `machine name` path `socket path`. `errno` = `errno`.

**Explanation:** LoadLeveler failed to connect to the specified machine via the specified socket path.

**User Response:** Correct the problem indicated by the error number.

### 2539-465 sendFile: Cannot get file size. `errno` = `errno`

**Explanation:** This is an internal LoadLeveler error.

**User Response:** Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

### 2539-466 sendFile: Cannot send file size. `errno` = `errno`.

**Explanation:** This is an internal LoadLeveler error.

**User Response:** Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

### 2539-467 sendFile: Cannot flush file size. `errno` = `errno`

**Explanation:** This is an internal LoadLeveler error.

**User Response:** Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

### 2539-468 sendFile: Cannot read ready-to-receive. `errno` = `errno`

**Explanation:** This is an internal LoadLeveler error.

**User Response:** Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-469</td>
<td>sendFile: Requestor refuses file.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-470</td>
<td>sendFile: Cannot flush file. errno = errno</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-471</td>
<td>sendFile: No FileDesc specified.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-472</td>
<td>receiveFile: Cannot receive file size. errno = errno</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-473</td>
<td>receiveFile: Cannot send status. errno = errno</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-474</td>
<td>receiveFile: Cannot flush file size. errno = errno</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-475</td>
<td>Cannot receive command from client machine name, errno = errno</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-476</td>
<td>Got unknown command (command value)</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-477</td>
<td>Cannot fork child process. errno = errno</td>
<td>The fork system call failed to fork a child process.</td>
<td>Correct the problem indicated by the error number.</td>
</tr>
<tr>
<td>2539-478</td>
<td>Cannot change process group. errno = errno</td>
<td>The setpgid system call failed to change a process group.</td>
<td>Correct the problem indicated by the error number.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2539-479</td>
<td>Cannot listen on port \textit{port number} for service \textit{service name}.</td>
<td>LoadLeveler cannot listen on the specified port for the specified service.</td>
<td>Verify that the specified service is not already running on the machine, and that the port is not already in use.</td>
</tr>
<tr>
<td>2539-480</td>
<td>Cannot start main socket. errno = erro.</td>
<td>The listen system call failed to start a socket.</td>
<td>Correct the problem indicated by the error number.</td>
</tr>
<tr>
<td>2539-481</td>
<td>Cannot start new TransAction thread. rc = return code.</td>
<td>LoadLeveler failed to start a thread.</td>
<td>Verify that sufficient memory is available, then recycle LoadLeveler. If the problem persists, then contact IBM service.</td>
</tr>
<tr>
<td>2539-482</td>
<td>Cannot start new Stream Connection thread. rc = return code.</td>
<td>LoadLeveler failed to start a thread.</td>
<td>Verify that sufficient memory is available, then recycle LoadLeveler. If the problem persists, then contact IBM service.</td>
</tr>
<tr>
<td>2539-483</td>
<td>Cannot perform chmod on input socket \textit{socket path}. errno = erro.</td>
<td>The \texttt{chmod} system call failed to change permissions on the specified socket path.</td>
<td>Verify that the socket path exists, and that the process attempting \texttt{chmod} has been authenticated.</td>
</tr>
<tr>
<td>2539-484</td>
<td>Cannot start UNIX socket on path \textit{socket path}. errno = erro.</td>
<td>LoadLeveler failed to start a UNIX socket.</td>
<td>Correct the problem indicated by the error number.</td>
</tr>
<tr>
<td>2539-485</td>
<td>Cannot start new UNIX Connection thread. rc = return code.</td>
<td>The program could not allocate virtual memory.</td>
<td>Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.</td>
</tr>
<tr>
<td>2539-486</td>
<td>Cannot start new datagram Connection thread. rc = return code.</td>
<td>The program could not allocate virtual memory.</td>
<td>Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.</td>
</tr>
<tr>
<td>2539-487</td>
<td>DCE authentication requested but unable to initialize Security Services. LoadLeveler is terminating. Security Services issued the following error message: \textit{error message}.</td>
<td>A command or daemon cannot communicate with Security Services.</td>
<td>Verify that the security mechanism is installed on the host, and that the daemons are running.</td>
</tr>
</tbody>
</table>
The daemon name daemon must be run as root.

Explanation: The specified daemon can only be run by the root user.
User Response: su to root, then run the daemon.

Unable to open /dev/null (errno = errno) to re-direct stdin. Continuing.

Explanation: The open system call failed.
User Response: Correct the problem indicated by the error number.

Unable to open /dev/null (errno = errno) to re-direct stdout. Continuing.

Explanation: The open system call failed.
User Response: Correct the problem indicated by the error number.

Cannot start main thread. rc = return code

Explanation: The program could not allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

Unable to set_user_euid(uid number)

Explanation: LoadLeveler failed to set the effective user ID.
User Response: Verify that the daemon binary file has the appropriate permissions.

Unable to set_user_ruid(uid number)

Explanation: LoadLeveler failed to set the real user ID.
User Response: If the problem persists, then contact the LoadLeveler administrator.

Unable to chdir to /tmp: return code.

Explanation: LoadLeveler failed to change to the /tmp directory.
User Response: Use the strerror() output to diagnose the problem.

Failed to set host_entry for machine: machine name.

Explanation: LoadLeveler encountered an error while setting host entry information for the specified machine. Problems communicating with the machine may result.
User Response: Verify that the specified machine is known to the name server; if the problem persists, then contact IBM service.

Machine name, machine, exceeds number characters.

Explanation: The specified machine name exceeds the maximum number of characters allowed for a host name.
User Response: Verify that the host name is valid; if necessary, update the LoadLeveler administration file.

Program Error: error message.

Explanation: A LoadLeveler daemon or command detected corrupted internal data.
User Response: If the problem persists, then contact IBM service.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| 2539-498 | **Security Services error. The following error message was issued:** \textit{error message.}

**Explanation:** An error was reported by Security Services.

**User Response:** If DCE security is enabled for LoadLeveler, check the DCE configuration on your system. If cluster security services is enabled for LoadLeveler, check the cluster security services configuration. Correct the problem based on the information provided in the message returned by Security Services. If the problem persists, then contact IBM service.

| 2539-499 | **Unable to obtain client credentials. Security Services issued the following error message:** \textit{error message.}

**Explanation:** Either the client or the LoadLeveler daemon has failed DCE security checks.

**User Response:** Make sure you have logged into DCE using the "dce_login" command before running LoadLeveler commands or APIs. If the problem persists, then contact IBM service.

| 2539-500 | **Unable to authenticate server. Security Services issued the following error message:** \textit{error message.}

**Explanation:** A LoadLeveler daemon has failed security checks.

**User Response:** Check the DCE configuration on your system and correct the problem based on the information provided in the message returned by Security Services. If the problem persists, then contact IBM service.

| 2539-501 | **Unable to authenticate client. Security Services issued the following error message:** \textit{error message.}

**Explanation:** A connection to a LoadLeveler daemon has failed security checks.

**User Response:** Make sure you have logged into DCE using the \texttt{dce_login} command before running LoadLeveler commands or APIs. Check the DCE configuration on your system. If the problem persists, then contact IBM service.

| 2539-502 | **Client not authorized for transaction. Security Services issued the following error message:** \textit{error message.}

**Explanation:** Command or daemon cannot successfully initiate communication with Security Services.

**User Response:** Make sure that the client is a member of the specified DCE group.

| 2539-503 | **Unable to determine client identity. Security Services issued the following error message:** \textit{error message.}

**Explanation:** Command or daemon cannot successfully initiate communication with Security Services.

**User Response:** Make sure DCE daemons are running and that the DCE server is responding. If the problem persists, contact your DCE Administrator.

| 2539-504 | **Connection with daemon daemon was broken.**

**Explanation:** A LoadLeveler daemon or command detected an internal error.

**User Response:** If the problem persists, then contact IBM service.

| 2539-510 | **Unable to determine authentication methods on host. This machine will be dropped from the cluster.**

**Explanation:** An error occurred while trying to determine the authentication methods defined on the current machine.

**User Response:** Check the DCE and Security Services configuration on your system. If the problem persists, then contact your DCE Administrator.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-511</td>
<td>DCE authentication has NOT been requested, but only DCE authentication has been authorized on this host. This machine will be dropped from the cluster.</td>
<td>“Compat” authentication mode has been requested, but the current host only supports “DCE” authentication.</td>
<td>If the problem persists, then contact the DCE Administrator.</td>
</tr>
<tr>
<td>2539-512</td>
<td>Daemon daemon unable to log in to DCE. Make sure that the DCE Registry has been set up to recognize LoadLeveler and that DCE keyfiles exist for the LoadLeveler daemons.</td>
<td>The specified daemon cannot log into DCE. This may mean that DCE initialization required for LoadLeveler has not been performed.</td>
<td>Verify that DCE Registry setup required for LoadLeveler has been performed. Keyfiles will exist for the daemons if this has been done. If the problem persists, then contact your DCE Administrator.</td>
</tr>
<tr>
<td>2539-513</td>
<td>The authentication mechanism is not available. CTSEC requires security_level or greater be installed. The machine will be dropped from the cluster.</td>
<td>When the cluster security services component of RSCT is enabled, a minimum level of the security services library is required. The machine will be dropped from the cluster.</td>
<td>The system administrator should be contacted to install the level of software indicated, or a higher level.</td>
</tr>
<tr>
<td>2539-515</td>
<td>The LoadLeveler configuration file specifies login restriction checking (REJECT_ON_RESTRICTED_LOGIN) but the version of AIX installed does not support the LoadLeveler usage. The restriction checking will not be performed.</td>
<td>The LoadLeveler configuration file specifies login restriction checking (REJECT_ON_RESTRICTED_LOGIN), but the version of AIX installed does not support the LoadLeveler usage. Restriction checking will not be performed.</td>
<td>Turn off the loginrestrictions checking in the configuration file until the version of AIX that supports this checking for LoadLeveler has been installed.</td>
</tr>
<tr>
<td>2539-556</td>
<td>Failed to route field (specification code) in location</td>
<td>An error occurred attempting to route between daemons. The problem may be a network or TCP problem, or an internal LoadLeveler problem.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-557</td>
<td>object fetch function does not recognize specification field(specification code)</td>
<td>CA field was requested from an object, but the field identifier is not known by the object. This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-558</td>
<td>function name is returning a NULL element for specification specification name (specification value)</td>
<td>An unexpected NULL value is being returned for a specification. This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-559</td>
<td>Internal Error: Specification specification name is not recognized.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
</tbody>
</table>
2539-591  *internal context (specification number) not recognized by fetch()*
Explanation: LoadLeveler encountered an unrecognized data type.
User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-592  *internal context (specification number) not recognized by insert()*
Explanation: LoadLeveler encountered an unrecognized data type.
User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-593  Cannot rename file name to new file name. Logging may be incomplete. errno = errno
Explanation: The rename system call failed to rename the specified file to the new name with a .old extension.
User Response: Verify that there is enough files system space, and that the files have the appropriate permissions. Correct the problem indicated by the error number.

2539-594  Cannot open input file file name for copy, errno = errno.
Explanation: The fopen system call failed to open the specified file for input.
User Response: Verify the existence of the file, and that it has the appropriate permissions. Correct the problem indicated by the error number.

2539-595  Cannot open log file file name, errno = errno. Logging will remain unchanged.
Explanation: The fopen system call failed to open the specified log file.
User Response: Verify the existence of the file, and that it has the appropriate permissions. Correct the problem indicated by the error number.

2539-596  No name specified for log file. Logging will go to stderr.
Explanation: There is no log file name specified in the LoadLeveler configuration files for this daemon.
User Response: If you want logging to write to a specific file, then specify a log file in the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-597  Error non-translated error line source line number file file name.
Explanation: This is an internal LoadLeveler error.
User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-599  Job job number .step number - Unable to malloc number of bytes bytes for a MACH_USAGE struct.
Explanation: The program could not allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

2539-600  Unable to create string for copy of file name.
Explanation: The program could not allocate virtual memory.
User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-601</td>
<td>Incorrect status file name - file name.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Drain, then recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-602</td>
<td>status file, file name, already exists</td>
<td>The specified status file already exists.</td>
<td>None.</td>
</tr>
<tr>
<td>2539-603</td>
<td>Cannot create status file, file name, errno = errno [error message].</td>
<td>LoadLeveler cannot create the specified file.</td>
<td>Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space.</td>
</tr>
<tr>
<td>2539-604</td>
<td>Cannot open status file, file name, errno = errno [error message].</td>
<td>LoadLeveler cannot open the specified file.</td>
<td>Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space.</td>
</tr>
<tr>
<td>2539-605</td>
<td>Cannot remove status file, file name, errno = error number [error message].</td>
<td>LoadLeveler could not delete the specified file.</td>
<td>Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.</td>
</tr>
<tr>
<td>2539-606</td>
<td>Cannot write number bytes to status file, filename, errno = errno [error message].</td>
<td>LoadLeveler failed to write to the specified file.</td>
<td>Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space available.</td>
</tr>
<tr>
<td>2539-607</td>
<td>lseek failed for status file, file name, offset = file offset, whence = offset usage flag, errno = errno [error message].</td>
<td>lseek failed to set a file pointer.</td>
<td>Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.</td>
</tr>
<tr>
<td>2539-608</td>
<td>Cannot remove usage file, file name, errno = error [error message ]</td>
<td>LoadLeveler failed to delete the specified file.</td>
<td>Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.</td>
</tr>
<tr>
<td>2539-609</td>
<td>Cannot open usage file filename to read. errno = error num.</td>
<td>LoadLeveler cannot open the specified file.</td>
<td>Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space.</td>
</tr>
</tbody>
</table>
2539-610  Cannot route dispatch usage for file *filename*.
Explanation: The *startd* cannot read or write accounting information to the job usage file.
User Response: Examine the specified file to determine why the *startd* is failing to read or write to it.

2539-611  Cannot open usage file *filename* to write. *errno* = *error num*
Explanation: LoadLeveler cannot open the specified file.
User Response: Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.

2539-612  Cannot write dispatch usage file *filename*.
Explanation: LoadLeveler cannot write to the specified file.
User Response: Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.

2539-751  *getrlimit* or *setrlimit* for system call limit failed. *errno* = *error number* [error message].
Explanation: The *getrlimit* or *setrlimit* system call failed.
User Response: Consult the specified error message for more information.

2539-752  The *system call name* system call failed for user *username*. *errno* = *error num* [error msg].
Explanation: The specified system call failed.
User Response: Consult the specified error message for more information.

2539-753  The uid for user, *user name*, on the executing machine (*uid*) does not match uid on submitting machine (*uid*).
Explanation: The user must have the same *uid* on both the submitting and the executing machines.
User Response: Either configure LoadLeveler to allow the user only to run on machines with the same *uid*, or change the *uid*s on machines in the LoadLeveler cluster.

2539-754  The gid (*gid*) for user, *user name*, on the submitting machine was not found in the group list for the user on the executing machine.
Explanation: The user’s gid on the submitting machine must also be valid group on the executing machine.
User Response: Either configure LoadLeveler to allow the user only to run on machines where the *gid* is valid, or add the *gid* to the user’s group list on all of the machines in the LoadLeveler cluster.

2539-755  The system call to set the real or effective uid to *uid* failed. *errno* = *error num* [error msg].
Explanation: The specified system call failed.
User Response: Consult the specified error message for more information.

2539-756  The *setregid* system call failed for gid *gid*. *errno* = *error num* *error msg*.
Explanation: The *setregid* system call failed.
User Response: Consult the specified error message for more information.
2539-757  object ID does not have a StepVars object.

Explanation: The specified object was asked for its global keyword value structure, but one does not exist. The object can be a Job, a Step, or a StepList.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-758  object ID does not have a TaskVars object.

Explanation: The specified object was asked for its global keyword value structure, but one does not exist. The object can be a: Job, Step, StepList, Node, Task or TaskInstance.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-759  object type object num is not contained and cannot return StepVars.

Explanation: The specified object was asked for its global keyword value structure, but it does not keep one locally, and it is not contained by another object that does.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-760  Attempt to reassign Task instances to Step step name.

Explanation: LoadLeveler tried to create the task instances for the specified step after machine assignments were made, but the step already had task instances. This indicates a failure in the LoadLeveler process.

User Response: Report the error to the LoadLeveler administrator.

2539-761  object type object num is not contained and cannot return TaskVars.

Explanation: The specified object was asked for its global keyword value structure, but it does not keep one locally, and it is not contained by another object that does.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-762  Failed to set AFS credentials. errno=error num error msg.

Explanation: LoadLeveler failed to establish AFS tokens.

User Response: Verify that AFS is installed on the executing machine, and that llafs.shr.o exists in the same directory which contains LoadL_master.

2539-763  Unable to set DCE security credentials. Job will proceed without DCE credentials. errno=error num [error msg].

Explanation: LoadLeveler failed to establish DCE credentials.

User Response: Verify that DCE is installed on the executing machine, and that the executables specified in DCE_AUTHENTICATION_PAIR exist. Consult the specified error message for more information.

2539-764  Unable to import DCE context. Will continue without credentials. errno=error num error msg.

Explanation: LoadLeveler cannot import the DCE credentials returned by the Ilsetdce executable.

User Response: Verify that Ilsetdce, or its replacement, exists, and that it matches the interface for a LoadLeveler DCE authentication exit.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2539-765</td>
<td>Unable to remove DCE credentials.</td>
<td>LoadLeveler cannot remove DCE credentials.</td>
<td>Monitor the DCE credential cache to see if LoadLeveler is leaving excess credentials.</td>
</tr>
<tr>
<td>2539-766</td>
<td>Unable to fetch DCE credentials. DCE credentials will not be included in job submission.</td>
<td>The error message is self-explanatory.</td>
<td>Verify that DCE is installed, and that the <code>DCE_AUTHENTICATION_PAIR</code> keyword is set correctly in the configuration file.</td>
</tr>
<tr>
<td>2539-767</td>
<td>STARTER not specified in config file.</td>
<td>The full path for the starter program must be specified in the configuration file.</td>
<td>Verify that the <code>STARTER</code> keyword is specified correctly in the configuration file.</td>
</tr>
<tr>
<td>2539-768</td>
<td>Unable to open database for job queue job queue because: <code>errno=error code (error description)</code></td>
<td>The job queue file could not be opened.</td>
<td>Consult the specified error message for more information.</td>
</tr>
<tr>
<td>2539-769</td>
<td>Function name: Error retrieving Job StepList from Queue. Unable to route step type.</td>
<td>The job in the job queue has been damaged, and could not be retrieved.</td>
<td>Contact the LoadLeveler administrator.</td>
</tr>
<tr>
<td>2539-770</td>
<td>Function name: Error retrieving Job Steps from Queue. <code>object type (encoding of object)</code> is not a valid type.</td>
<td>The job in the job queue has been damaged, and could not be retrieved.</td>
<td>Contact the LoadLeveler administrator.</td>
</tr>
<tr>
<td>2539-771</td>
<td>Invalid data type= <code>data type</code> in <code>function name</code>.</td>
<td>This is an internal LoadLeveler error.</td>
<td>Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.</td>
</tr>
<tr>
<td>2539-772</td>
<td>Error returned from Security Services <code>[message]</code>. Processing will continue without security credentials.</td>
<td>Security Services returned an error when LoadLeveler tried to establish the user’s DCE or cluster security services security credentials. LoadLeveler will attempt to run the job without security credentials.</td>
<td>Correct the problem indicated by the Security Services error message provided.</td>
</tr>
<tr>
<td>2539-773</td>
<td>Error returned from Security Services <code>[message]</code>. The job will not be run.</td>
<td>Security Services returned an error when LoadLeveler tried to establish the user’s DCE or cluster security services security credentials. LoadLeveler will not attempt to run the job.</td>
<td>Correct the problem indicated by the Security Services error message provided, then rerun the job.</td>
</tr>
</tbody>
</table>
2539-774  Error returned by kvalid_user indicating DCE user DCE user name may not access the AIX account of user AIX user name. The job will not be run.

Explanation: The kvalid_user AIX service routine denied the DCE user access to the listed AIX user’s account. When the cluster security services component of RSCT is enabled, the SP service used to verify the users security identity can access the user’s account denied access.

User Response: Either add the DCE principal to the $HOME/.k5login file, or verify that the DCE principal is the same as the AIX user, then re-run the job. If the problem persists, then contact your DCE Administrator.

2539-775  Error returned by resurok indicating user AIX user name may not access host AIX host name. The job will not be run.

Explanation: The ruserok AIX service routine denied the AIX user access to the AIX host. Such access is allowed if the /etc/host.equiv and $HOME/.rhosts files are configured properly.

User Response: Refer to the AIX documentation on /etc/host.equiv and $HOME/.rhosts files to correct the problem, then rerun the job.

2539-778  Invalid data type=invalid_data_type in function.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.
# 2544 Error messages

<table>
<thead>
<tr>
<th>Code</th>
<th>Error Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2544-850</td>
<td>Cannot allocate storage for array of machines.</td>
<td>The program could not allocate virtual memory.</td>
<td>Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.</td>
</tr>
<tr>
<td>2544-851</td>
<td>Wall_clock_limit not specified, but is required when using this scheduler.</td>
<td>No value could be found in the job command file, or in the administration file, for <code>wall_clock_limit</code>. This limit must be specified when using this scheduler. The job step will not be run.</td>
<td>Specify a value for this limit in either the job command file you are submitting, or the administration file. Refer to <code>LoadLeveler: Using and Administering</code> for more information on <code>wall_clock_limit</code>.</td>
</tr>
<tr>
<td>2544-852</td>
<td>The default scheduler does not support multiple tasks per node.</td>
<td>The default LoadLeveler scheduler does not support the scheduling of multiple tasks on a node, but this has been requested in the submitted job. The job step will not be run.</td>
<td>Use the Backfill (or some other) scheduler that supports multiple tasks per node. Refer to <code>LoadLeveler: Using and Administering</code> for more information on the <code>scheduler_type</code> keyword in the configuration file.</td>
</tr>
<tr>
<td>2544-853</td>
<td>The default scheduler does not support multiple adapter requirements.</td>
<td>The default LoadLeveler scheduler does not support multiple <code>Adapter</code> requirements specified in multiple network keywords (as in the submitted job). The job step will not be run.</td>
<td>Use the Backfill (or some other) scheduler that supports multiple adapter requests. Refer to <code>LoadLeveler: Using and Administering</code> for more information on the <code>scheduler_type</code> keyword in the configuration file.</td>
</tr>
<tr>
<td>2544-854</td>
<td>The default scheduler does not support interactive jobsteps.</td>
<td>The default LoadLeveler scheduler does not support the scheduling of interactive jobsteps. The job step will not be run.</td>
<td>Use the Backfill (or some other) scheduler that supports interactive job steps. Refer to <code>LoadLeveler: Using and Administering</code> for more information on the <code>scheduler_type</code> keyword in the configuration file.</td>
</tr>
<tr>
<td>2544-855</td>
<td>Class class name with number of defined initiators initiators defined and number of used initiators currently in use is too busy to run Step step id requiring number of initiators initiators.</td>
<td>The specified interactive job step could not be scheduled because there were not enough free initiators available.</td>
<td>Either increase the number of initiators, or wait until some jobsteps of this class complete, then resubmit the job.</td>
</tr>
<tr>
<td>2544-856</td>
<td>User user name running number of steps steps with maximum of max number of steps when Step step id is being considered.</td>
<td>The specified user has reached the maximum number of steps allowed by the <code>maxjobs</code> keyword in the user stanza in the administration file. The jobstep will not be run.</td>
<td>The user can wait until some of the jobs complete, or the administrator can increase the value for the <code>maxjobs</code> keyword.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User Response</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2544-857</td>
<td>Group <em>group name</em> running <strong>number of steps steps with maximum of</strong> <strong>maximum steps when Step</strong> <strong>step id</strong> <strong>is being considered.</strong></td>
<td>The specified group has reached the maximum number of steps allowed by the <strong>maxjobs</strong> keyword in the group stanza in the administration file. The step will not be run.</td>
<td>The user can wait until some of the group’s jobs complete, or the administrator can increase the <strong>maxjobs</strong> keyword.</td>
</tr>
<tr>
<td>2544-858</td>
<td>Class <em>class name</em> is busy: <strong>steps running= number of steps, max= maximum steps when Step</strong> <strong>step id</strong> <strong>is being considered.</strong></td>
<td>The specified class has reached the maximum number of steps allowed by the <strong>maxjobs</strong> keyword in the class stanza in the administration file. The step will not be run.</td>
<td>The user can wait until some of the class’s jobs complete, or the administrator can increase the <strong>maxjobs</strong> keyword.</td>
</tr>
<tr>
<td>2544-859</td>
<td>Schedd machine <em>machine name</em> is running <strong>number of steps steps with maximum of</strong> <strong>maximum steps when Step</strong> <strong>step id</strong> <strong>is being considered.</strong></td>
<td>The schedd has reached the maximum number of steps allowed by the <strong>max_jobs Scheduled</strong> keyword in the administration file's machine stanza.</td>
<td>The user can wait until some of the schedd’s jobs complete, or the administrator can increase the <strong>max_jobs Scheduled</strong> keyword.</td>
</tr>
<tr>
<td>2544-860</td>
<td>Machine <em>machine name</em> in hostlist is not in the cluster when Step <strong>step id</strong> <strong>is being considered.</strong></td>
<td>The specified machine name does not match any known machines in the cluster. The step will not be run.</td>
<td>Either add the specified machine to the cluster, or remove it from the hostlist, then resubmit the job.</td>
</tr>
<tr>
<td>2544-861</td>
<td>Machine <em>machine name</em> in hostlist is unavailable when Step <strong>step id</strong> <strong>is being considered.</strong></td>
<td>The specified machine is not available. The step will not be run.</td>
<td>Either wait until that machine becomes available, or remove it from the hostlist, then resubmit the job.</td>
</tr>
<tr>
<td>2544-862</td>
<td>Machine <em>machine name</em> is running steps, Step <strong>step id</strong> asks for not shared nodes.</td>
<td>A machine in the hostlist is already busy running steps, but the step being considered is set not to share nodes with other tasks (it is specified as <strong>not_shared</strong>). The step will not be run.</td>
<td>Either wait until the specified machine frees up, or remove the machine from the hostlist, then resubmit the job.</td>
</tr>
<tr>
<td>2544-863</td>
<td>Machine <em>machine name</em> is busy running steps and is being used exclusively when Step <strong>step id</strong> <strong>is being considered.</strong></td>
<td>A machine in the hostlist is already busy running steps, and has been allocated to another job exclusively. The step will not be run.</td>
<td>Either wait until that machine frees up, or remove it from the hostlist, then resubmit the job.</td>
</tr>
<tr>
<td>2544-864</td>
<td>Machine <em>machine name</em> is running <strong>number of steps steps with max_starters of</strong> <strong>maximum steps when Step</strong> <strong>step id</strong> <strong>is being considered.</strong></td>
<td>The machine has reached the maximum number of steps allowed by the <strong>max_starters</strong> keyword in the configuration file. The specified step will not be run.</td>
<td></td>
</tr>
</tbody>
</table>
**User Response:** The user can wait until some of the machines’s jobs complete, or the administrator can increase the `max_starters` keyword.

<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2544-865</td>
<td>Machine <code>machine name</code> in hostlist is not currently allowed to run steps when Step <code>step id</code> is being considered.</td>
<td>When the specified step was being considered, the specified machine was prevented from running jobs by the coding in the configuration file’s execution window. The step will not be run.</td>
<td>Either modify the execution window for the given machine, or remove the machine from the hostlist, then try again.</td>
</tr>
<tr>
<td>2544-867</td>
<td>Machine <code>machine name</code> does not have free adapter to run the Step <code>step id</code>.</td>
<td>The adapter on the specified machine is in use.</td>
<td>Wait until the jobsteps using the adapter complete, then resubmit the job.</td>
</tr>
<tr>
<td>2544-868</td>
<td>Step <code>step id</code> cannot be scheduled at this time because it requires resources already reserved for a higher priority step.</td>
<td>The specified step has been superseded by a higher priority step, which required some of the same resources.</td>
<td>Try running the jobstep again.</td>
</tr>
<tr>
<td>2544-869</td>
<td>Step <code>step id</code> was marked “not runnable” at time due to dependency.</td>
<td>The specified step cannot run because its dependency condition evaluated to false.</td>
<td>Fix, or eliminate, the failing dependency condition.</td>
</tr>
<tr>
<td>2544-870</td>
<td>Step <code>step id</code> was not considered to be run in this scheduling cycle due to its relatively low priority or because there are not enough free resources.</td>
<td>The specified step was not considered because higher priority jobs already consumed all of the available resources.</td>
<td>Increase the priority of the job step, or wait until higher priority job steps complete, then resubmit the job. Also, verify that you are requesting valid resources (machines, adapters, classes, and so on).</td>
</tr>
<tr>
<td>2544-871</td>
<td>The default scheduler does not support task geometry function.</td>
<td>The default LoadLeveler scheduler does not support task geometry specification in the job just submitted. The job step will not be run.</td>
<td>Use the Backfill (or some other) scheduler that supports task geometry function. Refer to <code>LoadLeveler: Using and Administering</code> for more information on the <code>scheduler_type</code> keyword in the configuration file.</td>
</tr>
<tr>
<td>2544-872</td>
<td>The default scheduler does not support the blocking function.</td>
<td>The default LoadLeveler scheduler does not support the blocking specification in the recently submitted job.</td>
<td>Use the Backfill (or some other) scheduler that supports the blocking function. Refer to <code>LoadLeveler: Using and Administering</code> for more information on the <code>scheduler_type</code> keyword in the configuration file.</td>
</tr>
<tr>
<td>2544-874</td>
<td>Unable to find a common switch fabric among the machines in the hostlist.</td>
<td>LoadLeveler cannot find a switch fabric that connects all machines in the hostlist for this jobstep. The jobstep cannot be scheduled at this time.</td>
<td>Determine why a common fabric cannot be found, or wait until all switch fabrics are available and resubmit the job.</td>
</tr>
</tbody>
</table>
2544-875  Interactive step cannot run on machine hostname, machine mode is machine_mode.

Explanation: One of the machines in specified in the hostlist for the jobstep is not configured to accept interactive jobsteps. The jobstep cannot be scheduled at this time.

User Response: Change the hostlist to exclude the machine, or reconfigure the machine to accept interactive jobsteps and resubmit the job.

2544-876  The default scheduler does not support the restart on same nodes option.

Explanation: The default LoadLeveler scheduler does not support the restart_on_same_nodes specification in the recently submitted job.

User Response: Use the Backfill (or some other) scheduler that supports restart_on_same_nodes. Refer to LoadLeveler: Using and Administering for more information on the scheduler_type keyword in the configuration file.

2544-877  Machine hostname has number steps running. Scheduling a new step new_step_number would exceed the number of allowed steps maximum allowable steps.

Explanation: With WLM enabled a single machine can only run a maximum number of steps. A new step cannot be scheduled to run.

User Response: Job will remain idle until running jobs complete.

2544-878  The default scheduler does not support adapter requests for more than one instance.

Explanation: The default LoadLeveler scheduler does not support adapter requests for more than one instance in the recently submitted job.

User Response: Use the Backfill (or some other) scheduler that supports the adapter requests for multiple instances. Refer to LoadLeveler: Using and Administering for more information on the scheduler_type keyword in the configuration file.
Chapter 2. Error logging facility

LoadLeveler performs error recording by using the AIX error logging facility.

Error logging overview

Subsystems that perform a service or function on behalf of an end user often need to report important events (primarily errors). Because these subsystems cannot communicate directly with the user, they write messages to persistent storage. This process is called error logging, and the logged information is used for debugging.

LoadLeveler uses AIX error log facilities to report events on a per-machine basis. The AIX error log should be the starting point for diagnosing system problems. For more information on AIX error log facilities, see AIX General Programming Concepts: Writing and Debugging Programs.

Error log reports include a “DETECTING MODULE” string, which contains information identifying the exact point from which a specified error was reported (for example, software component, module name, module level, and line of code or function). The DETECTING MODULE string’s format depends on the user’s particular logging facility. For example, the AIX Error Log facility information appears as:

```
DETECTING MODULE
LPP=LPP name Fn=filename SID_level_of_the_file L#=Line number
```

What events are recorded

The LoadLeveler error logging facility records the following events:

- A LoadLeveler daemon fails its initial start up
- LoadLeveler is improperly customized
- The LoadL_master detects a crashing daemon
- A daemon changes state

Viewing LoadLeveler error log reports

Enter the following command to view a machine’s LoadLeveler error reports:
```
errpt -a -N LoadLeveler
```

Clearing all LoadLeveler error log entries

Enter the following command to clear all of a machine’s LoadLeveler error log entries:
```
errclear -N LoadLeveler 0
```

Error notification

You can use the AIX Error Notification Facility to notify you of a LoadLeveler error when it occurs. This facility will perform an ODM method defined by the administrator when a particular error occurs or a particular process fails. AIX General Programming Concepts: Writing and Debugging Programs explains how to use the AIX Error Notification Facility.
How error log events are classified

Each error report begins with the error’s label; every label has a suffix which categorizes each error by type (for example, unknown). Table 1 shows each error log suffix, what type of error the suffix implies, and a brief description of what this means to the user.

Table 1. LoadLeveler error label suffixes mapped to AIX error log

<table>
<thead>
<tr>
<th>Error label suffix</th>
<th>AIX error log error type</th>
<th>AIX error log description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER</td>
<td>PERM</td>
<td>There can be no recovery from this condition. A permanent error occurred.</td>
</tr>
<tr>
<td>ST</td>
<td>UNKN</td>
<td>It is not possible to determine the severity of the error.</td>
</tr>
</tbody>
</table>

Sample error log

The following is a sample LoadLeveler error report:

LABEL: LL_CRASH_ER
IDENTIFIER: FDD5FA3A

Date/Time: Fri May 7 10:39:51 2004
Sequence Number: 344133
Machine Id: 000019804C00
Node Id: c94n13
Class: S
Type: PERM
Resource Name: LoadLeveler

Description
Abnormal daemon termination

Probable Causes
Daemon received a signal

Failure Causes
Daemon coredump

Recommended Actions
Examine LoadLeveler logs for details
Examine resulting coredump
Call IBM service

Detail Data
DETECTING MODULE
DIAGNOSTIC EXPLANATION
The LoadL_startd (process 23772) died.

Figure 1. Sample LoadLeveler error log

Possible causes for LoadLeveler errors

Table 2 on page 103 contains 13 common error labels; for each error label, the table provides: a description of the symptom, a list of likely causes, and the appropriate user response.
Table 2. Possible causes for LoadLeveler failure

<table>
<thead>
<tr>
<th>Label</th>
<th>LL_START_ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Type</td>
<td>PERM</td>
</tr>
<tr>
<td>Diagnostic Explanation:</td>
<td>LoadL_master owner must be root, and set-user-id bit set. Exiting.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The ownership and permissions of the LoadL_master file are incorrect.</td>
</tr>
<tr>
<td>Cause:</td>
<td>This error occurs for one of the following reasons:</td>
</tr>
<tr>
<td></td>
<td>- The LoadL_master file is not owned by the root user</td>
</tr>
<tr>
<td></td>
<td>- The LoadL_master file does not have Set User ID permission (the -s flag)</td>
</tr>
<tr>
<td>Action:</td>
<td>Perform the following actions:</td>
</tr>
<tr>
<td></td>
<td>- Issue the command: chown root LoadL_master</td>
</tr>
<tr>
<td></td>
<td>- Issue the command: chmod u+s LoadL_master</td>
</tr>
<tr>
<td></td>
<td>- Restart LoadLeveler</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>LL_START_ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Type</td>
<td>PERM</td>
</tr>
<tr>
<td>Diagnostic Explanation:</td>
<td>This machine is not in the machine list. Exiting.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>You attempted to start LoadLeveler on a machine that is not defined in the LoadL_admin file, and MACHINE_AUTHENTICATE = TRUE is set in the LoadL_config file.</td>
</tr>
<tr>
<td>Action:</td>
<td>Do one of the following:</td>
</tr>
<tr>
<td></td>
<td>- Define the machine in the LoadL_admin file</td>
</tr>
<tr>
<td></td>
<td>- Set MACHINE_AUTHENTICATE = FALSE in the LoadL_config file</td>
</tr>
<tr>
<td></td>
<td>Then, restart LoadLeveler on the machine where the problem occurred.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>LL_DAEMON_ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Type</td>
<td>UNKN</td>
</tr>
<tr>
<td>Diagnostic Explanation:</td>
<td>START_DAEMONS flag was set to value. Exiting.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>LoadL_master could not start the LoadLeveler daemons.</td>
</tr>
<tr>
<td>Cause:</td>
<td>The START_DAEMONS keyword was not defined, or was set to False.</td>
</tr>
<tr>
<td>Action:</td>
<td>Set START_DAEMONS = true.</td>
</tr>
</tbody>
</table>
Table 2. Possible causes for LoadLeveler failure (continued)

<table>
<thead>
<tr>
<th>Label:</th>
<th>LL_START_ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Type:</td>
<td>PERM</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified keyword is not defined correctly.</td>
</tr>
<tr>
<td>Cause:</td>
<td>This error occurs for one of the following reasons:</td>
</tr>
<tr>
<td></td>
<td>• The keyword value is equal to a blank</td>
</tr>
<tr>
<td></td>
<td>• The keyword is misspelled</td>
</tr>
<tr>
<td></td>
<td>• The keyword is commented out</td>
</tr>
<tr>
<td></td>
<td>• The keyword is missing</td>
</tr>
<tr>
<td>Action:</td>
<td>Define the keyword correctly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label:</th>
<th>LL_START_ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Type:</td>
<td>PERM</td>
</tr>
<tr>
<td>Diagnostic Explanation:</td>
<td><code>keyword=value</code> cannot execute</td>
</tr>
<tr>
<td>Explanation:</td>
<td>LoadLeveler was unable to execute the specified keyword (binary).</td>
</tr>
<tr>
<td>Cause:</td>
<td>This error occurs for one of the following reasons:</td>
</tr>
<tr>
<td></td>
<td>• The binary does not have execute permission</td>
</tr>
<tr>
<td></td>
<td>• The binary name was misspelled</td>
</tr>
<tr>
<td></td>
<td>• The binary does not exist</td>
</tr>
<tr>
<td>Action:</td>
<td>Correct the problem, then reissue the keyword.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label:</th>
<th>LL_FILE_IO_ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Type:</td>
<td>PERM</td>
</tr>
<tr>
<td>Diagnostic Explanation:</td>
<td>Cannot open file <code>filename</code></td>
</tr>
<tr>
<td>Explanation:</td>
<td>LoadLeveler was unable to open the specified file.</td>
</tr>
<tr>
<td>Cause:</td>
<td>This error occurs for one of the following reasons:</td>
</tr>
<tr>
<td></td>
<td>• Incorrect permissions are set for the file</td>
</tr>
<tr>
<td></td>
<td>• The file does not exist</td>
</tr>
<tr>
<td>Action:</td>
<td>Correct the problem with the file.</td>
</tr>
</tbody>
</table>
Table 2. Possible causes for LoadLeveler failure (continued)

<table>
<thead>
<tr>
<th>Label</th>
<th>Error Type</th>
<th>Diagnostic Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL_CRASH_ER</td>
<td>PERM</td>
<td>The daemon_name (process pid) died</td>
</tr>
</tbody>
</table>
|               |            | **Explanation:** The specified daemon died. 
|               |            | **Cause:** This error occurs for one of the following reasons:  
|               |            |   • The daemon received a signal  
|               |            |   • The daemon experienced an unrecoverable error  
|               |            | **Action:** Examine the LoadLeveler error logs for more information. |
| LL_DAEMON_ST  | UNKN       | Started daemon_name, pid and pgroup=pid |
|               |            | **Explanation:** The specified daemon started. 
|               |            | **Action:** None. This is an informational message. |
| LL_DAEMON_ST  | UNKN       | Received SHUTDOWN command. 
|               |            | Received RECONFIG command. 
|               |            | **Explanation:** LoadL_master received the specified commands. 
|               |            | **Cause:** The llctl command was issued with either the stop, or the reconfig keyword. 
|               |            | **Action:** None. This is an informational message. |
| LL_CMR_ST     | UNKN       | Alternate central manager cent_manager will become active central manager. 
|               |            | **Explanation:** LoadLeveler performed central manager recovery. 
|               |            | **Cause:** The backup central manager was unable to contact the primary central manager. 
|               |            | **Action:** Examine the LoadLeveler error logs and the administrator mail for more information. |
### Table 2. Possible causes for LoadLeveler failure (continued)

<table>
<thead>
<tr>
<th>Label</th>
<th>Error Type</th>
<th>Diagnostic Explanation</th>
<th>Explanation</th>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL_CMR_ST</td>
<td>UNKN</td>
<td>Alternate central manager <code>cent_manager</code> will return to stand-by state.</td>
<td>LoadLeveler performed central manager recovery.</td>
<td>The backup central manager gave control back to the primary central manager.</td>
<td>None. This is an informational message.</td>
</tr>
<tr>
<td>LL_CMR_ST</td>
<td>UNKN</td>
<td><code>machine</code> is unable to serve as alternate central manager.</td>
<td>The specified machine cannot be the alternate central manager because the appropriate negotiator keyword is either defined incorrectly, or not defined for this machine.</td>
<td>The specified machine was defined as the central manager.</td>
<td>Define the appropriate keywords.</td>
</tr>
<tr>
<td>LL_FILE_IO_ER</td>
<td>PERM</td>
<td>Status file I/O error occurred in execute directory.</td>
<td>An error occurred while accessing the Status file.</td>
<td></td>
<td>Examine the LoadLeveler logs for details. Correct the problem with the file.</td>
</tr>
</tbody>
</table>
Chapter 3. Problem determination and resolution procedures

Related documentation

1. LoadLeveler: Using and Administering. The following sections contain useful information for diagnosing problems:
   - Submitting and managing jobs - Job command file keywords
   - Special considerations for parallel jobs - Keyword considerations for parallel jobs
   - Administering and configuring LoadLeveler - Administering LoadLeveler, Configuring LoadLeveler, and Keyword summary
   - LoadLeveler command line interface - Summary of LoadLeveler commands
   - Troubleshooting

2. Installation Memo for IBM LoadLeveler:
   - Starting LoadLeveler - includes some problem diagnosis information and mentions sample jobs which can be used to verify the configuration.
   - Troubleshooting - why won't LoadLeveler start - provides checks the administrator can perform to identify reasons why LoadLeveler does not start, and indicates how to obtain additional messages from LoadL_master which will help diagnose the problem.

3. Using Job Switch Resource Table Services of the PSSP: Administration Guide, which describes the Job Switch Resource Table (JSRT).

4. Diagnosing Job Switch Resource Table Services problems of the PSSP: Diagnosis Guide, which describes problem determination and resolution procedures for the Job Switch Resource Table (JSRT).

5. Switch Network Interface for eServer pSeries High Performance Switch Guide and Reference, which describes the NTBL services and related error messages.


7. Understanding and Administering Cluster Security Services in RSCT for AIX 5L: Administration Guide, which describes how to administer cluster security services for an RSCT peer domain.

   - Refer to the Myrinet Web site to download Myrinet software and to access Myrinet documentation.

Requisite function

TCP/IP is used to provide communication between LoadLeveler daemons.

LoadLeveler optionally uses the following:

- The LoadLeveler command, llextrPD, uses the Resource Monitoring and Control (RMC) API to extract information from the Reliable Scalable Cluster Technology (RSCT) peer domain.
- LoadLeveler, when running on an SP, uses the Job Switch Resource Table and associated APIs, provided as the ssp.st component of PSSP, to manage switch resources.
- The LoadLeveler command, llextSDR, accesses the System Data Repository (SDR) using associated APIs provided in PSSP, to extract information from the SDR.
• When running DCE, LoadLeveler uses SP Security Services.
• LoadLeveler uses the cluster security services component of RSCT.

Error information

The primary sources of error information elicited from LoadLeveler are:
• LoadLeveler log files
• Output to standard output and standard error from LoadLeveler commands and APIs
• Mail notification to the LoadLeveler user or administrator
• AIX error log files

The following sections give detailed information on these error conditions, including information on transient error data warnings.

LoadLeveler log files

Error information
LoadLeveler log files.

Description
Messages indicating what the daemon or process is doing and when that processing is occurring, using timestamps. This includes what transactions being received from and sent to other daemons or processes, and indication of error conditions encountered. Indication of transactions sent to daemons as a result of invoking LoadLeveler commands are also included in the daemon logs.

Scope
There is a separate log for each LoadLeveler daemon and one for the starter process on each machine in the LoadLeveler cluster.

Transient error data warnings
Files are copied to .old such that data will eventually be lost, and there is not "warning" to the administrator when data in the logs are about to wrap, and when a recent log is copied to the .old file, overwriting any existing .old file. The SAVELOGS keyword can be used to archive log files, instead of overwriting them.

Refer to Administering and configuring LoadLeveler - record and control log files in LoadLeveler: Using and Administering for a definition of the syntax and behavior of the SAVELOGS keyword.

Tips for use
Refer to LoadLeveler: Using and Administering for how to control log file contents and maximum size as discussed in Administering and Configuring LoadLeveler - Record and Control Log Files. You can find a job step by name in the logs by using the vi editor and looking for JOB_START or other job states.

Translation warnings
LoadLeveler log files are not translated.
Output to standard output and standard error from LoadLeveler commands or APIs

**Description**
LoadLeveler commands write messages to the standard output and standard error file descriptors. The APIs will not write to standard output and standard error unless the error is severe. If more information is needed during the execution of an API, you can set the LLAPIERRORMSGS environment variable to yes in the environment that is invoking the API. Messages written to standard output are generally informational, while those written to standard error generally identify and provide information about a problem encountered while executing the command or API call.

**Scope**
The messages are limited in scope to the execution of the command or API call.

Mail notification to the LoadLeveler user about job steps

**Description**
Jobs can be submitted to request that e-mail be sent to a specified user whenever a job step starts, completes, or incurs error conditions, or to request that no e-mail is sent. The e-mail includes the specific date and time that the job step started, completed or encountered an error. Upon job step completion, the exit status returned from the job is included in the notification e-mail.

**Scope**
Notification of job step start, completion or error condition for a particular job step to a specified userid.

Mail notification to the LoadLeveler administrators

**Description**
LoadLeveler will automatically send e-mail to the list of administrator ids specified in the LoadLeveler global configuration file to notify of error conditions in the LoadLeveler cluster.

**Scope**
Notification is limited to a given LoadLeveler cluster and its administrators.

AIX error log

**Description**

**Scope**
Specific errors recorded by LoadLeveler, as documented in Chapter 2, “Error logging facility,” on page 101.

Dump information

LoadLeveler daemon dumps leave core files in /tmp named "core". On Linux, the name of a core file is either "core" or "core.nnnn", where nnnn is a string of digits representing the process ID of the associated core file. LoadLeveler command dumps leave core files in the present working directory. Subsequent core dumps will
overwrite an existing core file. This is particularly likely in /tmp. For this reason, if a
core dump is encountered, it is a good idea to copy the file to another directory,
preserving or noting its time of creation. You can preserve the original time and date
by using the -p option on the copy command.

You can specify alternate directories to contain core files for the different
LoadLeveler daemons and processes using the following LoadLeveler configuration
file keywords.

- MASTER_COREDUMP_DIR
- NEGOTIATOR_COREDUMP_DIR
- SCHEDD_COREDUMP_DIR
- STARTD_COREDUMP_DIR
- GSMONITOR_COREDUMP_DIR
- KBDD_COREDUMP_DIR
- STARTER_COREDUMP_DIR

**Note:** When specifying core file directories, you must ensure that the access
permissions are set so that the LoadLeveler daemon or process can write to the
core file directory. The simplest way to be sure that the access
permissions are set correctly is to make them the same as they are for the
/tmp directory.

Refer to *LoadLeveler: Using and Administering* for additional information on
configuration file keywords.

**Missing dump data warnings**

A core file may not be able to be written, or written completely, if the directory
becomes full. This can happen easily to /tmp if many programs are writing to /tmp
or if excessive data is saved to /tmp. If LoadLeveler cannot write the core file to
/tmp for a daemon core dump, no core file is saved. For keywords allowing you to
specify directories other than /tmp, see "Dump information" on page 109.

On Linux, a core file is not generated when a LoadLeveler daemon terminates
abnormally, unless you run the daemons as root or change the default kernel core
file creation behavior of setuid programs.

Although a LoadLeveler daemon begins its existence as a root process, it uses the
system functions seteuid() and setegid() to switch to effective user ID of loadl and
effective group ID of loadl immediately after start up if the file /etc/LoadL.cfg is not
defined. If this file is defined, the user ID associated with the LoadLUserId keyword
and the group ID associated with the LoadLGroupId keyword are used instead of
the default loadl user and group IDs.

On Linux systems, unless the default kernel runtime behavior is modified, the
standard kernel action for a process that has successfully invoked seteuid() and
setegid() to have a different effective user ID and effective group ID is not to dump
a core file. So, if you want Linux to create a core file when a LoadLeveler daemon
terminates abnormally, you must use the file /etc/LoadL.cfg to set both
LoadLUserId and LoadLGroupId to root.

On Red Hat Enterprise Linux 3.0 systems, the command:

```
sysctl -w kernel.core_setuid_ok=1
```
can be used to change the default kernel core file creation behavior of setuid programs. If the `core_setuid_ok` option is enabled, the values of `LoadLUserid` and `LoadLGroupid` in the `/etc/LoadL.cfg` file do not have to be `root` for the successful creation of LoadLeveler core files.

**Error data translation warnings**

LoadLeveler daemon logs are not translated.

**Trace information**

The content of LoadLeveler daemon and process log files can be controlled by the LoadLeveler administrator by specifying debug control statements in the local and global configuration files. The debug control statements contain debug flags which tell LoadLeveler what type of output to include in the specified log file. This is described in detail in *LoadLeveler: Using and Administering*, “Record and Control Log Files”.

**Trace data translation warnings**

LoadLeveler logs are not translated.

**Information to collect prior to contacting IBM Service**

Having the following information ready before calling IBM Service will help to isolate problem conditions.

- A description of the problem or failure, and an indication of what workload was occurring when the problem or failure occurred
- The level of LoadLeveler installed. On AIX, use `lspp -h filesset_name`. On Linux, use `rpm -qa | grep LoadL` to determine the level of LoadLeveler installed. If different levels of LoadLeveler are being run in the cluster, indicate which level is being run on each machine.
- `llctl` version output to identify level of LoadLeveler running on all machines
- The LoadLeveler configuration and administration files. If local configuration files are being used on machines that are involved in the specified problem, include them also.
- Description of configuration - `/etc/LoadL.cfg LoadL_config`, local config and `LoadL_admin` files
- The LoadLeveler daemon and process log files. These files will exist for each machine running LoadLeveler daemons. They may exist in a file system on the machine, or in a shared file system such as GPFS; their location and maximum size are configurable by the LoadLeveler administrator(s).
- Job output and error files.
- Output to standard output and standard error from LoadLeveler commands and APIs. This output must be manually re-created and saved to file.
- The core dump files from LoadLeveler daemons or commands; these will exist on the system if a daemon or command died and was able to write a core file.
- The AIX Error Log; this will exist on the system.
- Whether the LoadLeveler cluster is reading config files from a shared file system, or if the config files reside on each node. Are the `LoadL_config` files the same on each node? How about the `LoadL_admin` file?
- Is AFS being used?
• Is DCE being used?
• Is the LoadLeveler cluster on an SP or RSCT peer domain, or on a cluster of
  TCP/IP-connected workstations?
• Is GPFS being used?
• Is there a switch on the SP or RSCT peer domain? If so, what kind?
• Is the problem occurring with the daemons or the commands?
• Are daemons running as expected?
• Are jobs being submitted as expected?
• Are jobs running as expected?

Diagnostic procedures

Test description
Submit a series of jobs to verify that LoadLeveler is operating properly.

Instructions for performing test

1. Configure LoadLeveler and bring up the LoadLeveler cluster.
2. Start LoadLeveler as detailed in the Installation Memo for IBM LoadLeveler
3. Check that all the expected machines are running the LoadLeveler daemons; use the
   liststatus command to do this.
4. If you intend to run parallel jobs and your LoadLeveler cluster includes an SP or
   RSCT peer domain with a switch, then you should verify that the machine and
   the adapters are configured and operating correctly by running the parallel jobs
   in the samples directory, /usr/lpp/LoadL/full/samples, (ipen0.cmd, ipcss0.cmd,
   uscss0.cmd). You must read the parallel job command files because a C
   program must be compiled to use them. Instructions are provided in the job
   command files.
5. If you intend to run MPICH or MPICH-GM parallel jobs on your LoadLeveler for
   Linux cluster, you should use the mpich_cmp.sh and mpich_gm_cmp.sh shell
   scripts. These shell scripts are located in the
   /opt/ibml/Load/full/samples/linux/lmpich
   directory and are used to compile
   the appropriate binaries before submitting the mpich_ivp.cmd and
   mpich_gm_ivp.cmd job command files to LoadLeveler.

Table 3. Diagnosis tests to run

<table>
<thead>
<tr>
<th>Suite</th>
<th>Test</th>
<th>Job Command File</th>
<th>Test Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test1</td>
<td>job1.cmd</td>
<td>Simple serial job running a shell</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>script in the job command file</td>
</tr>
<tr>
<td></td>
<td>Test2</td>
<td>job2.cmd</td>
<td>Checkpointing job</td>
</tr>
<tr>
<td></td>
<td>Test3</td>
<td>job3.cmd</td>
<td>Simple serial job running a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>compiled C program</td>
</tr>
<tr>
<td>Parallel</td>
<td>Test4</td>
<td>ipen0.cmd</td>
<td>Parallel job using IP over en0</td>
</tr>
<tr>
<td></td>
<td>Test5</td>
<td>ipcss0.cmd</td>
<td>LoadLeveler for AIX parallel job</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>using IP over css0</td>
</tr>
<tr>
<td></td>
<td>Test6</td>
<td>uscss0.cmd</td>
<td>LoadLeveler for AIX parallel job</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>using US over css0 one task per</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>node</td>
</tr>
<tr>
<td>Suite</td>
<td>Test</td>
<td>Job Command File</td>
<td>Test Description</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Test 7</td>
<td>musppacss0.cmd</td>
<td>LoadLeveler for AIX parallel job using US over css0 multiple tasks per node</td>
</tr>
<tr>
<td></td>
<td>Test 8</td>
<td>mpich_ivp.cmd</td>
<td>LoadLeveler for Linux parallel MPICH job</td>
</tr>
<tr>
<td></td>
<td>Test 9</td>
<td>mpich_gm_ivp.cmd</td>
<td>LoadLeveler for Linux parallel MPICH-GM job using the Myrinet switch</td>
</tr>
</tbody>
</table>

**Instructions to verify test**

If the jobs do not run, then use `llq -s` to find out why. See *LoadLeveler: Using and Administering*, Appendix A: Troubleshooting. If the jobs do run, use `llq` to monitor their status. When the jobs have completed, inspect output and error files from the jobs; see the job command files for where the output and error files will be written.

**Actions to take if test failed**

If the jobs did not run or if they ran but terminated with a non-zero exit code, consult *LoadLeveler: Using and Administering*, Appendix A: Troubleshooting. If the problem persists, then contact IBM Service.
This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user’s responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM 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:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION 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 states 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. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM 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 IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.
Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
Intellectual Property Law
2455 South Road, P386
Poughkeepsie, New York 12601-5400
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements, or other publicly-available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrates programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. You may copy, modify, and distribute these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to IBM’s application programming interfaces.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

**Trademarks**

The following terms are trademarks of the International Business Machines Corporation in the United States, other countries, or both:

- AFS
- AIX
- AIX 5L
- DFS
- @server
eServer
IBM
IBM (logo)
IBMLink
LoadLeveler
MVS
POWER
pSeries
RS/6000
SP

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

LoadLeveler incorporates Condor, which was developed at the University of Wisconsin-Madison, and uses it with the permission of its authors.

Other company, product, and service names may be trademarks or service marks of others.
Glossary of Terms and Abbreviations

A

AFS. Andrew File System.

AIX. Abbreviation for Advanced Interactive Executive, IBM's licensed version of the UNIX operating system. AIX is particularly suited to support technical computing applications, including high function graphics and floating point computations.

Authentication. The process of validating the identity of a user or server.

Authorization. The process of obtaining permission to perform specific actions.

Berkeley Load Average. The average number of processes on the operating system's ready to run queue.

C

C. A general purpose programming language. It was formalized by ANSI standards committee for the C language (X3J11) in 1984 and by Uniforum in 1983.

client. (1) A function that requests services from a server, and makes them available to the user. (2) An address space in MVS™ that is using TCP/IP services. (3) A term used in an environment to identify a machine that uses the resources of the network.

cluster. (1) A group of processors interconnected through a high speed network that can be used for high performance computing. (2) A group of jobs submitted from the same job command file. (3) A set of machines with something in common between them. This commonality could be that they are all backed up by one machine or they are all in the LoadLeveler administration file.

Cluster 1600. See IBM @server Cluster 1600.

cluster security services. A component of RSCT that is used by RSCT applications and other RSCT components to perform authentication within peer domains.

CtSec. Cluster security services.

D

daemon. A process, not associated with a particular user, that performs system-wide functions such as administration and control of networks, execution of time-dependent activities, line printer spooling, and so on.

datagram. A protocol known as the User Datagram Protocol (UDP). It is an internet standard protocol that allows an application program on one machine to send a datagram to an application program on another machine. UDP uses the Internet Protocol to deliver datagrams. Conceptually, the important difference between UDP and IP is that UDP messages include a protocol port number, allowing the sender to distinguish among multiple destinations (application programs) on the remote machines. In practice, UDP also includes a checksum over the data being sent.

DCE. Distributed Computing Environment.

default. An alternative value, attribute, or option that is assumed when none has been specified.


H

host. A computer connected to a network, and providing an access method to that network. A host provides end-user services.

IBM @server Cluster 1600. An IBM @server Cluster 1600 is any PSSP or CSM-managed cluster comprised of POWER™ microprocessor based systems (including RS/6000 SMPs, RS/6000 SP nodes, and pSeries SMPs).

menu. A display of a list of available functions for selection by the user.

Motif. The UNIX industry's standard user interface, originally developed by the Open Systems Foundation. Motif is based on the X-Window system and is a Presentation Manager look-alike. Motif is available for all IBM AIX workstations.

MPICH. A portable implementation of the full Message-Passing Interface (MPI) standard. MPICH was developed by Argonne National Laboratory to be highly portable and is used by a large number of providers of MPI implementations.
MPICH-GM. A port of MPICH on top of Myrinet GM code. Myrinet-GM is a low level message-passing system for Myrinet networks.

N

network. An interconnected group of nodes, lines, and terminals. A network provides the ability to transmit data to and receive data from other systems and users.

NFS. Network File System.

node. In a network, the point where one or more functional units interconnect transmission lines. A computer location defined in a network.

NQS. Network Queueing System.

O

OSI. Operating System Instance. In the LoadLeveler documentation, OSI and node are used interchangeably.

P

parameter. (1) A variable that is given a constant value for a specified application and that may denote the application. (2) An item in a menu for which the operator specifies a value or for which the system provides a value when the menu is interpreted. (3) A name in a procedure that is used to refer to an argument that is passed to the procedure. (4) A particular piece of information that a system or application program needs to process a request.

process. (1) A unique, finite course of events defined by its purpose or by its effect, achieved under defined conditions. (2) Any operation or combination of operations on data. (3) A function being performed or waiting to be performed. (4) A program in operation. For example, a daemon is a system process that is always running on the system.

peer domain. A set of nodes configured for high availability by the configuration resource manager. Such a domain has no distinguished or master node. All nodes are aware of all other nodes, and administrative commands can be issued from any node in the domain. All nodes also have a consistent view of the domain membership.

R

Reliable Scalable Cluster Technology. A set of software components that together provide a comprehensive clustering environment for AIX. RSCT is the infrastructure used by a variety of IBM products to provide clusters with improved system availability, scalability, and ease of use.

RSCT. See Reliable Scalable Cluster Technology.

RSCT peer domain. See peer domain.

S

SDR. Abbreviation for System Data Repository. A repository of system information describing SP hardware and operating characteristics.

server. (1) A function that provides services for users. A machine may run client and server processes at the same time. (2) A machine that provides resources to the network. It provides a network service, such as disk storage and file transfer, or a program that uses such a service.

shell. The shell is the primary user interface for the UNIX operating system. It serves as command language interpreter, programming language, and allows foreground and background processing. There are three different implementations of the shell concept: Bourne, C and Korn.

stream. An internet standard transport level protocol that provides the reliable, full duplex, stream service on which many application protocols depend. TCP allows a process on one machine to send a stream of data to a process on another. It is connection-oriented in the sense that before transmitting data, participants must establish a connection. Software implementing TCP usually resides in the operating system and uses the IP protocol to transmit information across the Internet. It is possible to terminate (shut down) one direction of flow across a TCP connection, leaving a one-way (simplex) connection. The Internet protocol suite is often referred to as TCP/IP because TCP is one of the two most fundamental protocols.

System Administrator. The user who is responsible for setting up, modifying, and maintaining LoadLeveler.

U

user. Anyone who is using LoadLeveler.

W

working directory. All files without a fully qualified path name are relative to this directory.

workstation. (1) A configuration of input/output equipment at which an operator works. (2) A terminal or microcomputer, usually one that is connected to a mainframe or to a network, at which a user can perform applications.
Index

A
AIX error log 101
  sample formatted output 101
AIX Error Notification Facility 101

D
debugging
  error logging facility 101
diagnostic procedures 112
dump information 109

E
error information
  AIX error log 109
  LoadLeveler log files 108
  mail notification to the administrator 109
  mail notification to the user 109
  output to standard output and standard error 109
  sources for 108
error logging
  classifying events 102
  clearing entries 101
  definition 101
  DETECTING MODULE 101
  events recorded 101
  getting notified 101
  overview 101
  possible causes for errors 102
  sample formatted output 102
  viewing reports 101

P
problem determination
  diagnostic procedures 112
  related documentation 107

T
trace information 111
trademarks 116
Readers’ Comments — We’d Like to Hear from You

IBM LoadLeveler for AIX 5L and Linux
Diagnosis and Messages Guide
Version 3 Release 2

Publication No. GA22-7882-02

Overall, how satisfied are you with the information in this book?

<table>
<thead>
<tr>
<th>Overall satisfaction</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How satisfied are you that the information in this book is:

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy to find</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy to understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well organized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applicable to your tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please tell us how we can improve this book:

Thank you for your responses. May we contact you?  □ Yes  □ No

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you.

Name

Address

Company or Organization

Phone No.
Program Number: 5765-E69 and 5724-I23

Printed in USA