Job Scheduler Messages Manual

A component of Mark Dickinsons Unix Job Scheduler

This manual covers the server daemon component of Mark Dickinsons unix Job Scheduler.
This manual is for version V1.13 of Marks Job Scheduler

Other reference material available

jobsched_cmd User guide

Job Scheduler Daemon Configuration Manual

Job Scheduler Security Manual

Job Scheduler Utilities Manual (jobsched_take_snapshot/jobutil)

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Tested under Linux (Fedora, CentOS), and Solaris (2.8, 10 and OpenSolaris)

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Overview of this manual

This manual is intended for users who are fully familiar with the application. For example some recovery actions are resolve problem then re-enable execution of jobs; this manual will not tell you how to re-enable execution of jobs as that is fully covered in other manuals. There are many recovery actions in the same vein, the manual assumes you know the commands to use to follow the simple recovery actions and it will not detail the commands needed.

Please note that even if you have the scheduler loglevel set to suppress informational messages you will still see some informational messages appearing in the log, these will be job events or security and authorisation events that are always logged for audit purposes.

This manual covers only messages from the job scheduler server task, these messages are those found in the job scheduler daily log file.

It is important to note that the informational messages as a general rule are only displayed if you have the job scheduler loglevel set to informational, the recomeded setting is warning which will suppress those.

Do not expect to find any messages from utility programs in here !.

Message Numbering Format

Messages are prefixed with the class of the message (JOB, AUTH, INFO, WARN etc) and then followed by the message number and message text.

This manual is indexed by message number. All message numbers follow the format XYnnn

* X indicates the subsystem the message is from
* Y idicates the message type and will be one of
    - E an error message
    - W a warning message
    - I an informational message
* nnn is a unique message number.

AEnnn - Alert module errors

The Alerts module is the secion of the application dedicated to managing any alerts that occur. This module is responsible for managing the alerts database, restarting jobs from a failed state, and forwarding alerts to external scripts as required.

Debugging of this module can be turned on using the jobsched_cmd program with the command 'sched debug alerts n'.

AE001-Unable to create alerts file %s, error %d (ALERTS_initialise)

The alerts.dbs file did not exist and the program was not able to create it.
Check the security permissions for the directory.

AE002-Open of alerts file %s failed, errno %d (ALERTS_initialise)

The alerts.dbs file did not exist and has just been created, but the server was unable to open it.
Check the security permissions of the file, and check the umask of the user that started the job scheduler to avoid a repeat.
The job scheduler should run as root.

AE003-Open of alerts file %s failed, errno %d (ALERTS_initialise)

The alerts.dbs file was not able to be opened.
Check the security permissions on the file.
The job scheduler should run as root.

AE004-ALERTS_Terminate called with no open alerts files, fclose ignored (ALERTS_terminate)

The program logic required a close of the alerts.dbs file, but the file was not open; so the close was ignored. This should onle ever occur when the server has experienced startup problems and is doing a fast shutdown, attempting to close anything that could possibly have been opened.
No action required.

AE005-Seek to start of alerts file failed (ALERTS_read_alert)

A fseek request failed, this should be impossible. You may have an umounted or damaged filesystem, OR the scheduler may have overwritten the file handle (which has never occured on any site before).
Check the filesystem, and stop and restart the scheduler.

AE007-Read error occurred on alerts file (ALERTS_read_alert)

The server was unable to read a specifically selected alert record from the alert file. The most probable causes are that the alert no longer exists, or if triggered in response to a client interactive

command you may have mis-spelt the alert name.

AE008-Unable to allocate memory for alert read (ALERTS_add_alert)

Refer to the section of this document that covers memory allocation errors.

AE009-Unable to allocate memory for alert read (ALERTS_update_alert)

Refer to the section of this document that covers memory allocation errors.
NOTE: An alert update is to either acknowledge or delete an alert, if acknowledge it's liveable with; if a delete request has failed however you may have an alert in existence for an error event that is no longer present. This will not be cleared by a scheduler restart so you must take action to manually clear the alert once the memory shortage has been corrected.

AE010-File seek error (ALERTS_write_alert_record)

The scheduler got an IO error doing a file seek to an alert record. This could have been either a seek to a specific record address for an update or a seek to EOF to add a new alert.
The effects are the request to either add, update or delete an alert record has failed.
Check your filesystem for space and errors.
NOTE: If this was a delete request that failed you may have an alert in existence for an error event that is no longer present. If an alert add request you will have a job in a failed state with no associated alert record available to do a restart from. Neither of these conditions will be cleared by a scheduler restart so you must take action to manually clear the alert once the memory shortage has been corrected.

AE011-Unable to run external task to forward alert for %s

The scheduler is configured to run an external program when an alert is updated (normally for interfacing with other alert monitoring applications). The shell script to be run was not able to be run, so no alert information was able to be forwarded.
Check the scheduler configuration to make sure the spelling of the external command forwarding program is correct. Check the file permissions of the external alert forwarding program to ensure the file is executable.
NOTE: %s is the jobname in this case.

AE012-File write error into alerts file (ALERTS_write_alert_record)

There was an IO error writing to the alerts.dbs file.
Check the filesystem is not full.

AE013-Seek to start of alerts file failed (ALERTS_display_alert)

This is impossible unless you have managed to unmount the filesystem or your filesystem has become corrupt.

Check the filesystem is ok.

AE014-Unable to allocate %d bytes of memory (ALERTS_display_alert)

Refer to the section of this document that covers memory allocation errors.
The client will have recieved an incomplete or no response (the users client has probably hung by now).

A015-Read error occurred on alerts file (ALERTS_display_alert)

The scheduler encountered an IO error while reading sequentially though the alerts file. Either the file alerts.dbs has become corrupt or you have problems with the filesystem itself. The users client program will recieve an incomplete or empty response to their command. Make sure nobody has deleted or EOF'ed '>' out the file.
Check the filesystem.

AE016-Seek to start of alerts file failed (ALERTS_count_alerts)

A fseek request failed, this should be impossible. You may have an umounted or damaged filesystem, OR the scheduler may have overwritten the file handle (which has never occured on any site before).
Check the filesystem, and stop and restart the scheduler.

AE017-Unable to allocate memory for alert read (ALERTS_count_alerts)

Refer to the section of this document that covers memory allocation errors.
This specific error message number does not impact server operation but a client response to display the server status will show 0 alerts exist while there may in reality be many.

AE018-Read error occurred on alerts file (ALERTS_count_alerts)

A read error occurred on the alerts.dbs file during a sequential read of the file. This can only be caused by problems with the filesystem (or somebody deleting the file while it was being read).
Check the filesystem.

AE019-Unable to allocate %d bytes of memory required (ALERTS_show_alert_detail)

Refer to the section of this document that covers memory allocation errors.

AE020...JOB %s

This is associated with one of the alerts AE022, AE023 or AE024 and provides detail on the alert being processed at the time one of those ocurred.

AE021...ALERT TEXT: %s

This is associated with one of the alerts AE022, AE023 or AE024 and provides detail on the alert being processed at the time one of those ocurred.

AE022-UNABLE TO ALLOCATE MEMORY FOR ALERT: ALERT DETAILS FOLLOW...

Refer to the section of this document that covers memory allocation errors.
Your unix server is running so low on memory that the scheduler was unable to allocate memory needed to create an alert record. You will now have a job in a failed state with no matching alert record available to doa job restart from. You will need to manually recover from this as stopping and starting the scheduler will not clear this condition.
Refer to the messages AE020 and AE021 that were generated at the same time as this message which detail the alert that was being processed at the time.

AE023-UNABLE TO ALLOCATE MEMORY FOR ALERT: ALERT DETAILS FOLLOW...

Refer to the section of this document that covers memory allocation errors.
Your unix server is running so low on memory that the scheduler was unable to allocate memory needed to create an alert record. You will now have a job in a failed state with no matching alert record available to doa job restart from. You will need to manually recover from this as stopping and starting the scheduler will not clear this condition.
Refer to the messages AE020 and AE021 that were generated at the same time as this message which detail the alert that was being processed at the time.

AE024-UNABLE TO ALLOCATE MEMORY TO CLEAR ALERT: ALERT DETAILS FOLLOW...

Refer to the section of this document that covers memory allocation errors.
Your unix server is running so low on memory that the scheduler was unable to allocate memory needed to create an alert record. The effect for this message number is that no request to clear the alert was able to be forwarded to the configured external alert forwarding task; it will still show the alert as outstanding wheras it is actually no over.
Refer to the messages AE020 and AE021 that were generated at the same time as this message which detail the alert that was being processed at the time.

AE025-Failed to fork during alert program call

An alert state change was attempted to be forwarded by running the configured alert forwarding external command program. The program was unable to be run.
Check the scheduler configuration to ensure there are no spelling mistakes in the alert forwarding program name.
Check the file permissions on the alert forwarding program to ensure it is executable.
Check memory on the server, is it low.

AE026-Unable to allocate 2048 bytes of memory (in ALERTS_CUSTOM_set_alert_text)

Refer to the section of this document that covers memory allocation errors.
A job has exited with a return code within the customisable text range, the scheduler is trying to allocate memory to read the site customised error text.
The server has insuffcient free memory to allocate a 2K buffer to read from the site customised alert description file.

AInnn - Alert module informational messages

The Alerts module is the secion of the application dedicated to managing any alerts that occur. This module is responsible for managing the alerts database, restarting jobs from a failed state, and forwarding alerts to external scripts as required.

Informational messages are only logged by the job scheduler if the server job scheduler loglevel has been set to 'info'.

Debugging of this module can be turned on using the jobsched_cmd program with the command 'sched debug alerts n'.

AI001-Created alerts file %s

The alerts.dbs file did not exist in the directory you were in at the time you started the scheduler. A new one has been created.
No action required.

AI002-Open of alerts file %s completed

The alerts.dbs file was sucessfully opened.
No action required.

AI003-Closed: Alerts file

The alerts.dbs file has been closed by the server.
No action required.

AI004-Running external alert forwarder for %s, alerttype %d

The alert described in the message is being passed to the external alert forwarding program.
No action required.

BEnnn - Bulletproof module errors

The Bulletproof module is the secion of the application dedicated to sanity checking any input to

the server program, and is also used by the jobsched_cmd program to sanitise user input there before it is passed to the server.

Debugging of this module can be turned on using the jobsched_cmd program with the command 'sched bulletproof n'.

BE001-INTERNAL ERROR IN BULLETPROOF_API_Buffer variable datalen = %d*

BE001, BE002 and BE003 always appear together. Refer to BE003

BE002- This is obviously in error, so resetting to 10 to assist debugging

BE001, BE002 and BE003 always appear together. Refer to BE003

BE003- it was worked out from length string '%s'

This is an internal program error. At some point a data buffer has become larger than expected by the internal routines and now exceeds the 4K buffer limit, or a buffer length string variable has not been terminated correctly.
The length is forced to 10 bytes so the scheduler may continue processing.
This implies a programming logic error, raise a fault with the author detailing what you were trying to do at the time and provide the log records for five minutes either side of the error message.

BE004-BULLETPROOF_jobsfile_record: Invalid info_flag in the job record definition

Sanity checking a job record found an illegal value in the job record. Probably triggered by a user data input error.
No action required, no processing will be done on an invalid record.

BE005-BULLETPROOF_jobsfile_record: Invalid use_calendar (%c) in the job record definition for %s

Sanity checking a job record found an illegal value in the job record. Probably triggered by a user data input error.
No action required, no processing will be done on an invalid record.

BE006-BULLETPROOF_jobsfile_record: user_calendar set to use days, but no days selected

A user attempted to add a calendar entry with no valid execution dates.
No action required, no processing will be done on an invalid record.

BE007-BULLETPROOF_dependency_record: bad header info flag, set to DELETED

An invalid entry was found in a dependency record. The record has been deleted.
No action required, the invalid record has been deleted.

BE008-BULLETPROOF_dependency_record: Null dependecy key index %d, turning it off

An empty active dependecy entry was found. It has been inactivated so no dependency checks will be carried out against the empty entry.
No action required, the invalid entry has been disabled.

BE009-User name is not legal

A client application submitted an add user request with an invalid user name. The add request is discarded.
No action required, the record will be ignored.

BE010-User password is not legal

A client application submitted an add user request with an invalid password. The add request is discarded.
No action required, the record will be ignored.

BE011-User record state flag is not A or D

A client application submitted an add user request with an invalid state flag in the record. The add request is discarded.
NOTE: This will happen if you are running a customised client (one you have written or customised yourself). It will never be generated from programs origionally supplied by the author.

BE012-User authority level is not legal

A client application submitted an add user request with an invalid authority level. The add request is discarded.
No action required, the record will be ignored.

BE013-Local auto-login authority is not legal

A client application submitted an add user request with an invalid auto-login entry. The add request is discarded.
No action required, the record will be ignored.

BE014-Local allowed_to_add_users setting is not legal

A client application submitted an add user request with an invalid authority flag. The add request is discarded.
No action required, the record will be ignored.

BE015-Meaningfull info in user details must be provided

A client application submitted an add user request with no user details description provided. The add request is discarded.
No action required, the record will be ignored.

BE016-In user add, uid table check, user %s does not exist on server

A client application submitted an add user request with the user defined as being able to auto-login, but the user does not as a valid unix userid. The add request is discarded.
No action required, the record will be ignored.

BE017-Illegal calendar type value

A client application submitted an add calendar for a calendar that was neither a job or a holiday calendar. The request is discarded.

BE018-No days were selected for the calendar to run on

A client application submitted an add calendar that had no valid execution dates. The request is discarded.

BE019-Job is to observe holidays but no holiday calendar was selected

A client application submitted an add job request for a job defined to use a holiday calendar, but no holiday calendar was provided in the request. The request is discarded.

BE020-The year in the calendar is not legal

A client application submitted an add calendar request that did not have a legal year. The request is discarded.

BE021-Calendar record sanity checks failed, request discarded !

When the scheduler recieved an add calendar request it found errors inthe calendar record. No action required, the calendar with errors will not be processed.

BE022-The description field is not initialised, clearing it

The scheduler recieved an add calendar request with an empty description field. The scheduler initialises it to an empty string.
No action required, processing continues; the calendar will still be processed without a description.

BE023-BULLETPROOF_jobsfile_record: repeating job requeue interval is < 5

A job record was beingchecked, either as a result of a user requested job add or as an internal sanity check. The job requeue interval was found to be less than 5 minutes. This is not permitted (are you trying to drive your system to its knees ?). Actions: Check the job and ensure you do not add jobs with a repeat interval of less than five minutes.

BE024-BULLETPROOF_jobsfile_record: repeating job requeue interval is > %d

A job record was beingchecked, either as a result of a user requested job add or as an internal sanity check. The job requeue interval was found to be greater than the maximum interval allowed (currently 999). As there are only 1440 hours in a day this is a perfectly acceptable limit as it allows twice a day or more.
If you want a daily job to run once a day every day, add it without a repeat interval and it will.
Actions: check the job, do not add jobs with repeat intervals larger than the maximum.

CEnnn - Calendar module errors

The Calendar module is the secion of the application dedicated to managing the calendar database.

Debugging of this module can be turned on using the jobsched_cmd program with the command 'sched calendar n'.

CE001-Unable to create Calendar file %s failed, errno %d (CALENDAR_Initialise)

No calendar file existed in the default directory when the scheduler was started, and when a new one was attempted to be created the file creation failed.
The scheduler will not start
. Check the directory permissions to ensure files can be created by the scheduler; the scheduler should run as root so this should not be a problem, check directory permissions first I guess.

CE002-Open of Calendar file %s failed, errno %d (CALENDAR_Initialise)

The scheduler was unable to open the calendar file. The scheduler cannot start.
Check the file permissions on the calendar.dbs file.
Check for filesystem problems.

CE003-CALENDAR_Terminate called with no calendar files open, fclose ignored ! (CALENDAR_Terminate)

A request was made by the program logic to close the calendar file, but calendar file was not open.
The file close is not attempted.
No action required.

CE004-Seek to start of calendar file %s failed (CALENDAR_read_record)

A seek to the start if the calendar file failed. As this is a seek to byte 0 that failed either the file has been deleted while the scheduler was using it of a filesystem error has occurred.
The calendar record requested could not be read.
Check the file still exists.
Check the file permissions have not changed.
Check the filesystem has no errors.

CE005-Unable to allocate memory required for read operation (CALENDAR_read_record)

Refer to the section of this document that covers memory allocation errors.
The record could not be read because there is not enough free memory on the server to allocate a record buffer.

CE006-Read error on calendar file %s (CALENDAR_read_record)

An IO error occurred reading from calendar.dbs. The record requested was unable to be read.
Check the file has not been deleted while the program was trying to use it.
Check the file permissions on the file have not changed.
Check the filesystem is OK.

CE007-Holiday calendar %s does not exist, calendar write rejected (CALENDAR_write_record)

A user client submitted an add calendar request to the server, the calendar record submitted contained a reference to a holiday calendar that does not exist, making the record invalid.
The calendar add request is rejected by the server.
No action required.

CE008-Seek error on calendar file %s (CALENDAR_write_record)

A seek to a specific record position in the calendar.dbs file failed.
Check the file has not been deleted while the scheduler was using it.
Check the file permission on the file are still correct.
Check the filesystem has no errors.

CE009-Write error on calendar file %s (CALENDAR_write_record)

An attempt to write tothe calendar.dbs file has failed. The write may have been to add or update a record.
If the write failed during an update attempt check the file has not been deleted, the file permissions have not changed, and there are no filesystem errors.
If the write failed during an add request check the filesystem is not full, if not full check for filesystem errors.

CE010-Unable to allocate memory for update operation (CALENDAR_update_record)

Refer to the section of this document that covers memory allocation errors.

CE011-Unable to write to calendar file %s (CALENDAR_update_record)

An error occurred trying to write a record to the calendar.dbs file. The write may have been for either an add or update. The add or update has failed.
Check the file has not been deleted while the scheduler was using it.
Check the file permission on the file are still correct.
Check the filesystem has no errors.

CE012-Unable to determine if other calendars refer to %s

During a calendar delete request an attempt is made to determine if the calendar being deleted is referenced by any other calendars. The search failed due to IO errors. There should have been other error messages issued prior to this that will help narrow down where the file errors occurred.
The calendar delete request will not be attemped.
Check the file has not been deleted while the scheduler was using it.
Check the file permission on the file are still correct.
Check the filesystem has no errors.

CE013-Rejected DELETE of calendar %s, it is used by %d other calendars

A calendar delete request was submitted by a client user for a calendar that is referenced by other calendars. You cannot delete a calendar referenced by other calendars until all calendars that reference it have first been deleted.
The calendar delete request is rejected.
No action required.

CE014-Unable to determine if any jobs refer to %s

During a calendar delete request an attempt is made to determine if the calendar being deleted is referenced by any jobs. This search failed due to IO errors. There should have been other error messages issued prior to this that will help narrow down where the file errors occurred.

The calendar delete request will not be attemped.
Check the file has not been deleted while the scheduler was using it.
Check the file permission on the file are still correct.
Check the filesystem has no errors.

CE015-Rejected DELETE of calendar %s, it is used by %d jobs

A calendar delete request was submitted by a client user for a calendar that is still referenced by some jobs. You cannot delete a calendar referenced by existing jobs until all jobs that reference it have first been deleted.
The calendar delete request is rejected.
No action required.

CE016-Unable to determine if any jobs refer to %s

During a calendar delete request an attempt is made to determine if the calendar being deleted is referenced by any jobs. This search failed due to IO errors. There should have been other error messages issued prior to this that will help narrow down where the file errors occurred.
The calendar delete request will not be attemped.
Check the file has not been deleted while the scheduler was using it.
Check the file permission on the file are still correct.
Check the filesystem has no errors.

CE017-Rejected DELETE of calendar %s, it is used by %d jobs

A calendar delete request was submitted by a client user for a calendar that is still referenced by some jobs. You cannot delete a calendar referenced by existing jobs until all jobs that reference it have first been deleted.
The calendar delete request is rejected.
No action required.

CE018-Unable to allocate memory required for merge operation (CALENDAR_merge)

Refer to the section of this document that covers memory allocation errors.
A data buffer could not be allocated to merge calendar dates because there is not enough free memory on the server to allocate a record buffer.
The calendar merge is not performed.

CE019-Unable to allocate memory required for reschedule operation (CALENDAR_next_runtime_timestamp)

Refer to the section of this document that covers memory allocation errors.
Impact: At least one job using a calendar has been unable to be rescheduled correctly. You will have to manually identify the job in error and delete/add the job again with the correct next rundate.

CE020-Error on holiday calendar for %s, year %d

A job that is scheduled by calendar was unable to locate a valid holiday calendar. The holiday calendar has probably expired (no more dates left).
The job will be placed into a calendar error state and will not be scheduled on for future newday runs.
Check the calendar, add more dates if required or add a new calendar of the same name for the next year.
Fix the calendar, when fixed the job will automatically reschedule itself correctly.

CE021-CALENDAR %s has no scheduled run dates in the next 5 years !

A job that is scheduled by calendar was unable to locate a valid next rundate. The calendar has probably expired (no more dates left).
The job will go into a calendar error state and will not be scheduled on for future newday runs.
Check the calendar, add more dates if required or add a new calendar of the same name for the next year.
Fix the calendar, when fixed the job will automatically reschedule itself correctly.

CE022-Unable to allocate memory required calendar check (CALENDAR_check_holiday_setting)

Refer to the section of this document that covers memory allocation errors.
When jobs are rescheduled on sucessfull completion, or when added, or when a calendar is changed; the job next rundate and time is recalculated. If a job uses a holiday calendar then the holiday calendar needs to be checked to see if it overrides the next scheduled date. This error occurs when the server doesn't have enough memory for the check to be performed.
The job is placed in calendar error state.

CE023-Read of calendar %s, type %c, year %s failed

A read of the holiday calendar identified in the message has failed. The calendar may not exist. The job that required the calendar checks will be placed into a calendar error state until the issue is resolved unless a calendar for a later year (within 5yrs) is found that satisfies the search.
Check and correct your holiday calendar.

CE024-Insufficient free memory for requested CALENDAR operation

Refer to the section of this document that covers memory allocation errors.

CE025-Insufficient free memory for Holiday calendar check, allowing check to pass

Refer to the section of this document that covers memory allocation errors.
The job will be treated as if it has no calendar and be scheduled into the next execution window.

CE026-Insufficient free memory to count entries using calendar, returning -1

Refer to the section of this document that covers memory allocation errors.
Any calendar modification or job rescheduling events being carried out by the scheduler will fail.

CE027-Insufficient free memory to run obsolete entry check

Refer to the section of this document that covers memory allocation errors.
Obsolete calendar entries are not able to be deleted.

CE028-Calendar %s has an invalid year entry of %s

A corrupt calendar entry has been detected.
Check the calendar and delete it.
Add a new correct one if it should still exist.

CInnn - Calendar module informational messages

The Calendar module is the secion of the application dedicated to managing the calendar database.

Informational messages are only produced from the job scheduler is the job scheduler loglevel has been set to 'info'.

Debugging of this module can be turned on using the jobsched_cmd program with the command 'sched calendar n'.

CI001-Open of calendar file %s completed

The scheduler opened the calendar file sucessfully.
No action is required.

CI002-Closed: Calendar file

The scheduler closed the calendar file without problem.
No action required.

CI003-Holiday Calendar %s overrides date %d/%d/%d, date %d/%d/%d skipped for job

A job whos calendar would of scheduled the job on has had scheduling deferred because the calendar had a holiday calendar entry that overrode the jobs calendar.
No action required.

CI004-Calendar record %s for year %s expired, removing

A calendar entry for a previous year is being deleted.

No action required.

FEnnn - Configuration module errors

The configuration module manages updates to the configuration database and performs license checking.

License checking will be removed in a later release now the application is released as GPLV2.

FE001-Unable to open config file %s

Issued by CONFIG_Initialise. The scheduler was unable to open the configuration file, without this file the server cannot start.
Check you were in the correct directory when you started the scheduler.
Check the directory and file permissions allow the file to be created, opened and read.

FE002-Read error on configuration file %s

Issued by CONFIG_Initialise. The scheduler was unable to read from the configuration file, without the information in this file the server cannot start.
Check the directory and file permissions allow the file to be created, opened and read.

FE003/004/005-Invalid license key messages, no jobs will run !

The license key in the configuration file is invalid. Additional errors will have been logged explaining why, either FE004 or FE005 error messages.
Impact: The scheduler starts (so you can add a registered key), but you are unable to run jobs until you have entered a valid key.
FE004-###
FE004-# This release expired on yyyy/mm/dd #
FE004-# Please obtain a new license key ! #
FE004-# SERVER DISABLED #
FE004-# No jobs will start execution ! #
FE004-###

The license key in the configuration file has expired. For the DEMO version this should not be until Dec 2036.
Impact: The scheduler starts (so you can add a registered key), but you are unable to run jobs until you have entered a valid key.
FE005-###
FE005-# SERVER DISABLED #
FE005-# No jobs will start execution ! #
FE005-# LICENSE VIOLATION #
FE005-###
FE005-This license key was installed for server %s
FE005-It is running on server %s

FE005-Obtain a new license key or only run on the licensed server.

The cause seems to be that you have copied the application from one server to another and expect it to run, it won't. You can install the full functional DEMO on as many servers as you like but it must be INSTALLED on the servers, copying between servers will not work.
The only other cause is you have played with the license key and entered an invalid value.
Impact: The scheduler starts (so you can add a registered key), but you are unable to run jobs until you have entered a valid key.

FWnnn - Configuration module warnings

The configuration module manages updates to the configuration database and performs license checking.

FW001-Empty configuration file %s, initialising with defaults

The configuration file either did not exist or was empty. It is being initialised to default entries.
No action required.

FW002-Please use the command interface to add your license key.

The default license key is still being used by the scheduler. You will need to pay the shareware registration fee to obtain a valid key for this server.

FW003-Version change detected, updating config version !

The scheduler version and the configuration file version differ.
The assumption is made you have upgraded to a newer version of the scheduler.
The configuration file is automatically updated to contain all the configuration information required for the newer version of the scheduler you have just started.
No action required.

FInnn - Configuration module informational messages

The configuration module manages updates to the configuration database and performs license checking.

Informational messages are only logged if the job scheduler has been set to loglevel 'info'.

FI001-Last newday job completed time is set to %s

Issued in conjunction with FW001 always.
The configuration file has been re-initialised from scratch, the last successful newday time had to be given a value, this message reports what that value was set to.
No action required.

FI002-Configuration loaded from %s ok

Informative only, logged at server initialisation or at newday time rollovers. The configuration file was loaded sucessfully into memory.
No action required.

FI003-License key verified.

Informative only, logged at server initialisation or at newday time rollovers. Your license key is still valid.
No action required.

FI004-Last completed newday execution was %s

Informative only, logged at server initialisation or at newday time rollovers. Reports the time the last sucessfull newday job ran.
No action required.

FI005-Reloading configuration data

A configuration update has been made. It has been recorded to disk OK so the scheduler will refresh it's in-memory copy.
No action required.

FI006 – Copyright message

FI006-**********
FI006-* JobScheduler release date July 21, 2002 *
FI006-* Version Date August 19, 2003 *
FI006-* (c)Mark Dickinson, all rights reserved. *
FI006-**********

Self explainatory. No action required.

JEnnn - Job library module errors

Job job module is responsible for all maintenance and updates of the scheduler job database.

JE001-Unable to create jobs file %s, errno %d (JOBS_Initialise)

The scheduler was unable to create the job definition file. This is a fatal error and the server will not start. The server will attempt to create the file in the directory the scheduler was started from if one did not already exist, and must be able to do so.
Check that you started the program from the correct directory.
Check the file permissions on the job definition file are correct.

Check the directory permissions are correct.
Check the filesystem is OK.

JE002-Unable to open jobs file %s, errno %d (JOBS_Initialise)

The scheduler was unable to open the job definition file. This is a fatal error and the server will not start.
Check the file permissions on the job definition file are correct.
Check the directory permissions are correct.
Check the filesystem is OK.

JE003-JOBS_Terminate called when no jobs files were open, fclose ignored ! (JOBS_Terminate)

The program logic required a close of the jobs definition file, but it was not currently open. The close request is not actioned.
This should only occur if there were errors during server startup in which case the scheduler does a fast shutdown and attempts to close any file that could possibly have been open.
No action required.

JE004-Buffer size passed in call is too small, contact programmer (JOBS_format_for_display)

This implies a programming logic error. Contact the author to resolve this.

JE005-Buffer space exhausted, contact programmer (JOBS_format_for_display)

This implies a programming logic error. Contact the author to resolve this.

JE006-Insufficicent memory for requested JOB operation (JOBS_format_listall_for_display_API)

Refer to the section of this document that covers memory allocation errors.
There was insufficient free memory for the scheduler to allocate a data block to build a display buffer. The client program will recieve no response or a partial response.

JE007-Unable to schedule on job %s

A job that should have beenscheduled on for execution was unable to be scheduled on. Previous error messages will have been written to the log detailing why, refer to those for problem resolution.

JE008-JOBS_Newday_Forced, New day request failed, requested date is in the future !

A manual attempt was made to force the newday job to run, but the newday time had not yet been reached. The request is denied.
No action required.

JE009-JOBS_Newday_Forced, Seek to start of job definiton file failed

A reposition of the file pointer to record zero failed. This should be impossible.
Check the file has not been deleted.
Check the file permissions are OK.
Check the filesystem.

JE010-JOBS_Newday_Forced, Unable to allocate memory required for read operation

Refer to the section of this document that covers memory allocation errors. The newday job was unable to run.

JE011-JOBS_Newday_Forced, Read error on jobs definition file

An IO error ocurred reading from the job definition file. Check the file has not been deleted.
Check the file permissions have not been inapropriately modified.
Check the filesystem.

JE012-JOB %s: UNABLE TO READ JOB RECORD

A job has completed running and the scheduler was trying to update the job record for the completed job. The job record was not found however. An alert is raised.
If the job has been deleted, delete the alert.
If the job still exists check the job record is still OK and the job completed OK. If so delete the alert with the forceok option.
If the job record exists and is OK and the job failed to complete, restart it from the alert screen.

JE013-Internal logic error events

JE013-INTERNAL CATCHUP PROCESSING LOGIC ERROR, KEY=CATCHP_001
JE013-JOB %s WILL BE PROCESSED WITH CATCHUP ALLOWED
JE013-CONTACT VENDOR, DETAILS %d %d %d %d

JOBS_completed_jobs_time_adjustments, sanity logic check on job rescheduling did not match any expected types, allowing it to catchup.
This implies a programming logic error or database corruption. Contact the author to resolve this. (you could run a filesystem check first).

JE014-CONTACT VENDOR, SANITY FORCED DETAILS %d %d %d %d

A record was being processed that was so far outside acceptable sanity checks that the scheduler had to make adjustments to it to allow the scheduler to keep processing. The details of the changes made are recorded in the message in a form the author can use to diagnose the problem. This is a check left in from the early beta days that stays in in the hope you will never see it, but if you do the author needs the information reported.
This implies a programming logic error or database corruption. Contact the author to resolve this.

JE015-JOB %s CALENDAR ERROR, Will not be able to reschedule on until resolved

The job record refers to a calendar that is no longer valid, or the jobs calendar refers to a holiday calendar that is no longer valid. Check the job details, calendar details and any associated holiday calendar details todetermine which is in error, and fix it.
There may have been calendar [CE] errors logged at the same time that will help you identify the problem.

JE016-Unable to find a next run DAY, check server log (JOBS_completed_job_time_adjustments)

A job that is scheduled to run on specific days by a calendar, can;t find any valid days in the calendar that it is to run on.
Check the job details, calendar details and any associated holiday calendar details todetermine which is in error, and fix it.

JE017-JOB %s: UNABLE TO UPDATE JOB MASTER RECORD (JOBS_completed_job_time_adjustments)

A job completed execution OK, but the scheduler was unable to locate the job definition record for the job that just completed, so was unable to set the next time the job is to run. An alert is raised for the job.
This message should never be seen, as logic has since been added to the program to prevent a job being deleted from the job definition file if it is on the scheduled/active queue. It has been retained for the unlikely ocurrence of the job being deleted while in 'mid-flight' changes of state.
If the job record has been deleted, delete the alert. using the alert forceok option.
If the job record has not been deleted, check whether the job completed sucessfully and either rerun from the alert queue or delete the alert as appropriate.

JE018-Alerts raised for repeating job %s, not requeued on

A repeating job was unable to be rescheduled on due to errors in obtaining job details. There will have been previous errors reported identifying what the problem was, refer to those for problem resolution.

JE019- Invalid calendar events

JE019-Unable to find a next day to run job on after checking 7 days (JOBS_find_next_run_day)
JE019-...Job name %s, Job day flags are %c %c %c %c %c %c %c

A job that is scheduled to run on specific days by a calendar, can't find any valid days in the calendar that it is to run on. The calendar has been updated so days mon-sun are set to don't run. The job day flags are the seven possible days the job can run, at least one of these needs to be set for the job to be scheduled on.
Check the job details, calendar details and any associated holiday calendar details todetermine which is in error, and fix it.

JE020-Insufficicent memory to allocate %d bytes (JOBS_count_entries_using_calendar)

Refer to the section of this document that covers memory allocation errors. In this instance a calendar delete request will be rejected as the scheduler cannot allocate memory required to determine if the calendar is in use anywhere.

JE021-Insufficicent memory to determine if any jobs use the calender, DELETE REJECTED

Refer to the section of this document that covers memory allocation errors. In this instance a calendar delete request will be rejected as the scheduler cannot allocate memory required to determine if the calendar is in use anywhere.

JE022-Insufficicent memory to recheck calendars, needed %d bytes (JOBS_recheck_job_calendars)

Refer to the section of this document that covers memory allocation errors. In this instance a calendar change has been committed, but there is insuffient memory available for the scheduler to update the rundates of any jobs that use the calendar.
After resolving the memory problem you will have to manually identify any jobs that use the calendar and manually reschedule them as appropriate.

JE023-Unable to update job %s with new runtime (calendar change), error %d

A calendar change has been made that affects this job, but errors prevented the job from being updated with a new next rundate. There will have been prior errors logged identifying what the problem was.
Refer to the prior errors to resolve the initial problem.
Delete/re-add the job to correct the scheduling, or make another calendar change to reschedule all the jobs.

JE024-Insufficicent memory to recheck calendars, needed %d bytes (JOBS_recheck_every_job_calendar)

Refer to the section of this document that covers memory allocation errors. In this instance a HOLDAY calendar change has been committed, but there is insuffient memory available for the scheduler to check the job calendars to see if any are affected.
After resolving the memory problem you will have to manually do another change to the holiday calendar to force a resyncronisation. If that is not done jobs will run on the old job calendar dates at least once.

JE025-Unable to update job %s with new runtime (calendar change), error %d

A holiday calendar was updated, resulting in one or more job calendars being updated, all jobs that use the calendar need to be updated with new rundates as a result of the change; the job in the message was unable to be updated. There will have been prior error messages identifying the problem, refer to those to resolve the problem that caused the error.
You will also need to manually delete/add the affected job to recschedule it correctly (or do another calendar adjustment to sync everything up).

JE026-ILLEGAL REPEAT INTERVAL=0, JOB %s (JOBS_completed_job_time_adjustments)

While trying to requeue back on a job that is configured for repeating execution a repeat interval of zero was found to be set in the job record. The server will try to place the job into an alert state.
Actions: check the job, delete and re-add it if necessary.

JE027-FATAL, SERVER IMMEDIATE ABORT (JOBS_completed_job_time_adjustments)

This message number is issued after JE026 if the scheduler did not correctly perform the 'return (2)' request but has fallen through to the next executable statement in the current procedure.
I have never seen this issue in the scheduler (written in C) but have experienced in Delphi before. As the result of falling through the code block instead of returning will be an endless loop the program will perform an imediate application exit (it will stop running) immediately.
Actions: issue 'sync' a couple of times to ensure the database cache is flushed, try to correct the job in error from JE026 before restarting the scheduler; then restart the scheduler.

JE028-ILLEGAL REPEAT INTERVAL=0, JOB %s (JOBS_completed_job_time_adjustments)

While trying to requeue back on a job that is configured for repeating execution a repeat interval of zero was found to be set in the job record. The server will try to place the job into an alert state.
Actions: check the job, delete and re-add it if necessary.

JE029-FATAL, SERVER IMMEDIATE ABORT (JOBS_completed_job_time_adjustments)

This message number is issued after JE026 if the scheduler did not correctly perform the 'return (2)' request but has fallen through to the next executable statement in the current procedure.
I have never seen this issue in the scheduler (written in C) but have experienced in Delphi before.
As the result of falling through the code block instead of returning will be an endless loop the program will perform an imediate application exit (it will stop running) immediately.
Actions: issue 'sync' a couple of times to ensure the database cache is flushed, try to correct the job in error from JE026 before restarting the scheduler; then restart the scheduler.

JWnnn - Job library module warnings

Job job module is responsible for all maintenance and updates of the scheduler job database.

JW001-Repeating job next runtime after newday time, defered scheduling for %s

A job scheduled to run every nn minutes is next scheduled to run after the newday time. It is not rescheduled on as the newday processing will do that for the job.
It is logged as a warning as if the batch window is running late the newday may run late, so the repeating job will miss execution periods.

JW002-Job %s placed into calendar error state due to calendar %s update (no days left to run)

A job being run based on calendars has exhausted all possible rundates defined by the calendars (there are no dates left for it to run).
Either add new calendar dates, or a calendar for the following year with valid dates; or if the job is no longer required delete it.
If a valid calendar date is entered for sometime in the next five years the job will automatically reschedule and clear the error.

JW003-Job %s placed into calendar error state due to holiday calendar update (no days left run)

A holiday calendar was updated, resulting in one or more job calendars being updated. All jobs are updated and rescheduled as necessary when this occurs.
In this instance the update of the holiday calendar has resulted in no days left in the next five years for the job identified in the message to run.
Either correct the calendars so the job has a date to run on within the next five years, or if the job is no longer required delete it.

JInnn - Job library module informational messages

Job job module is responsible for all maintenance and updates of the scheduler job database.

Informational messages are only written if the job scheduler is set to loglevel 'info'.

JI001-Open of jobs file %s completed

The scheduler opened the job defintion database sucessfully.
No action required.

JI002-Closed: Jobs file

The scheduler closed the job defintion database sucessfully.
No action required.

JI003-Job %s has an invalid next rundate %s, not scheduled on

During the newday processing a job definition record was read that does not have a valid next rundate. The job will not be scheduled on to run.
Check the job record, delete and add a corrected entry.

JI004-Job due to run, cleared for schedule on

Issued during newday processing. A job that is a candidate to be run during the next 24hr window was found and has been approved for addition to the scheduler active run queue file.
No action required.

JI005-%s next runtime scheduled for %s

A job has completed successfully. This informational messages just advises what the next calculated runtime for the job is to be.
No action required.

JI006-Job %s rescheduled due to calendar %s being updated

A request to update a calendar was sucessfully completed, all jobs that use that calendar are checked to se if they need to be rescheduled. If a job is rescheduled due to a calendar change this message is logged (if you are logging informational mesaages) to advise you the job has changed its next rundate.
No action required.

JI007-Job %s rescheduled due to holiday calendar being updated

A holiday calendar was updated, resulting in one or more job calendars being updated, resulting in

all jobs that use the updated job calendars being rescheduled to new times as a result of the holiday calendar change. This is just an informational message advising you that this is one of the jobs that use the calendar.
No action required.

Jl008-%s has catchup off at job level, skipping catchup

The scheduler has been down for over 24hrs and is configured to do catchup processing for each job that missed its execution time. The job identified in the message has the catchup override flag set to omit this job from catchup processing.
The message is logged as an advisory message only, in case you may have wondered why this job did not schedule on.
No action requried.

LEnnn - Scheduler library module errors

The library module is the central module that ties the others together, and provides a common set of routines to allow interaction between the other modules.

LE001-Unable to create active jobs file %s, errno %d

The scheduler was unable to create a file to manage the active jobs queue.
Check that you were in the correct directory when you started the job scheduler, and that the directory permissions are correct.
Note: as the job scheduler must be run as the root user to function correctly you should not see this message, so check the filesystem structure as well.

LE002-Open of active jobs file %s failed, errno %d (I created it OK though)

The scheduler was unable to open a file used to manage the active job queue, the scheduler has however only just created this file.
Check the umask of the user running the scheduler to ensure files are creates 6xx.
Note: as the job scheduler must be run as the root user to function correctly you should not see this message, so check the filesystem structure as well.

LE003-Open of active jobs file %s failed, errno %d

The scheduler was unable to open a file used to manage the active job queue.
Check that the directory and file permissions allow access to the file.
Note: as the job scheduler must be run as the root user to function correctly you should not see this message, so check the filesystem structure as well.

LE004-Unable to create dependency queue file %s, errno %d

The scheduler was unable to create a file to manage the active jobs queue.
Check that you were in the correct directory when you started the job scheduler, and that the directory permissions are correct.
Note: as the job scheduler must be run as the root user to function correctly you should not see this message, so check the filesystem structure as well.

LE005-Open of dependency queue file %s failed, errno %d (I created it OK though)

The scheduler was unable to open a file used to manage the active job queue, the scheduler has however only just created this file.
Check the umask of the user running the scheduler to ensure files are creates 6xx.
Note: as the job scheduler must be run as the root user to function correctly you should not see this message, so check the filesystem structure as well.

LE006-Open of dependency queue file %s failed, errno %d

The scheduler was unable to open a file used to manage the active job queue.
Check that the directory and file permissions allow access to the file.
Note: as the job scheduler must be run as the root user to function correctly you should not see this message, so check the filesystem structure as well.

LE007-SCHED_Terminate called when no active jobs file was open, fclose ignored !

The program logic required a close of the alerts.dbs file, but the file was not open; so the close was ignored. This should onle ever occur when the server has experienced startup problems and is doing a fast shutdown, attempting to close anything that could possibly have been opened.
No action required.

LE008-SCHED_Terminate called when no dependency file was open, fclose ignored !

The program logic required a close of the alerts.dbs file, but the file was not open; so the close was ignored. This should onle ever occur when the server has experienced startup problems and is doing a fast shutdown, attempting to close anything that could possibly have been opened.
No action required.

LE009-Unable to allocate memory required for read operation

Refer to the section of this document that covers memory allocation errors. The effect of this specific error is that an attempt to schedule a job onto the active queue will fail. There will be at least one job supposed to run in the next 24hrs that has not been loaded into the active job queue. AFTER fixing your servers memory problems you will have to manually compare the active job

queue against the job database to determine which jobs need to be submitted and manually submit them. There may have been other messages logged along with this message that can help you identify which jobs were affected.

LE010-A job with this jobname is already scheduled on.

A job submit request failed, as the job requested had already been submitted. You cannot have more than one copy of a job on the active queue.
No action required. The request was rejected.

LE011-Job could not be added to active jobs file.

A job could not be scheduled onto the active job queue due to write errors on the active job file. There will have been previous errors logged providing more information on the IO error; refer to those to resolve the problem.

LE012-Unable to allocate memory required for dependency storage

Refer to the section of this document that covers memory allocation errors.
The message number occurs after a job has been loaded onto the scheduler active job queue, while the dependency records for the job are being created.
As the dependency records could not be created the job is removed from the active job queue assuming there was enough memory available for that operation. Check the job was able to be removed, if not remove it manually as without depency entries loaded it will run as soon as the runtime is reached which may be before jobs or files it is supposed to be dependant upon have completed.
Then fix the memory errors, and manually submit the affected job(s).

LE013-Unable to write dependency record

The job scheduler was unable to add or update a dependency record for a job. Previous error messages will have been logged identifying why.
If this was during a job submit refer to LE012 for checks you need to make.
If the write was requested due to a dependecy for a job being satisfied then the job will still be waiting on the dependency, so AFTER you have resolved the memory issues manually remove the dependency from the job.

LE014-Unable to allocate memory required for workspace

Refer to the section of this document that covers memory allocation errors.
This message number occurs when a job delete request has been attempted. It will have failed.
AFTER you have resolved the memory issues perform the delete request again.

LE015-MAX_API_DATA_LEN too small for display, cant even return an error in it

SCHED_show_schedule, MAX_API_DATALEN < 100 bytes This indicated a programmer error. A defined constant for a buffer size has been altered to below 100 bytes, as this value is used all over the place you will undobtable have many other buffer-too-small messages appearing in the log. Contact the author to resolve this, or if you are a registered user with the source code please undo the change you have just made to the constant MAX_API_DATALEN.

LE016-Unable to allocate %d bytes of memory for a record buffer

Refer to the section of this document that covers memory allocation errors.
This message number occures when memory pressure prevents a clients request for a schedule status display from being processed. The client will have an incomplete or empty reply returned. How this is handled by the client is client specific.

LE017-UNABLE TO READ DEPENDENCY DETAILS FOR %s

An IO error occurred on the depency queue file while trying to build a display response to a clients show schedule request. The client will have an empty or incomplete response returned.
Check the dependency_queue.dbs file or the filesystem have not become damaged.

LE018-Unable to access active jobs file, job %s not scheduled on

While trying to execute a job on the active queue the job scheduler had an IO error on the active job queue file and was unable to update the job to a running status; so too keep the databases consistent the job was not run.
As if it's not possible to change to run state it's a safe guess the scheduler won't be able to change it to alert state either, so to prevent looping as this job would keep trying to schedule on all scheduler execution activity is disabled until you have time to resolve the problem.
Refer to previous messages in the log that will provide details on what the IO error was and resolve it, the re-enable execution of jobs.

LE019-Job %s not run, user %s no longer exists

While doing pre-checks for submitting a job the scheduler found the job it was about to run was for a userid that no longer exists on the unix server.
The job is not scheduled on and all scheduler execution activity is disabled. While disabling scheduler activity in this case may seem a bit excessive this is the only case in all scheduling failures that could be possibly recovered from, all other scheudling failures indicate a major problem. The author doesn't intend to waste time putting code in place for this one special condition simply because your server administrators don't keep track or users.
Recovery from this is to either add the user back on and re-enable the scheduler, or delete the job and re-enable the scheduler.

LE020-Unable to fork a new process to run the job

The job scheduler was unable to initate a fork request required to launch a job. The job is placed into an alert state and all scheduler execution activity is disabled. It is pointless for the scheduler to try to run any futher jobs until the problem is resolved.
Recovery is to correct the problem preventing fork activity, this is most likely memory pressure. One other think I have seen that causes this is a security product that only allowed designated processes to fork.
After the problem has been resolved re-enable execution of jobs.

LE021-Seek to start of active jobs file failed

This particular message is issued when a scan of active jobs is being processed for the purpose of counting the active jobs.
If this is for a scheduler status display the client will get an erroneous response indicating no jobs are on the active queue.
If this is for a scheduler shutdown request, as the scheduler cannot determine what jobs are active the shutdown will be allowed to proceed.
If this is for newday processing then the newday job is not executed, and and alert is raised; also all scheduler execution activity is disabled.
Check the active queue file for errors, if necessary check the filesystem. When you have resolved the problem manually clear the alert and re-enable execution of jobs.

LE022-Unable to allocate %d bytes of memory for record buffer

Refer to the section of this document that covers memory allocation errors.
This message is specific to a scan of active jobs by reading the active job queue file.
If this is for a scheduler status display the client will get an erroneous response indicating no jobs are on the active queue.
If this is for a scheduler shutdown request, as the scheduler cannot determine what jobs are active the shutdown will be allowed to proceed.
If this is for newday processing then the newday job is not executed, and and alert is raised; also all scheduler execution activity is disabled.
Check the active queue file for errors, if necessary check the filesystem. When you have resolved the problem manually clear the alert and re-enable execution of jobs.

LE023-Read error occurred on active jobs file

This particular message is issued when a scan of active jobs is being processed for the purpose of counting the active jobs.
If this is for a scheduler status display the client will get an erroneous response indicating no jobs are on the active queue.
If this is for a scheduler shutdown request, as the scheduler cannot determine what jobs are active the shutdown will be allowed to proceed.
If this is for newday processing then the newday job is not executed, and and alert is raised; also all scheduler execution activity is disabled.
Check the active queue file for errors, if necessary check the filesystem. When you have resolved

the problem manually clear the alert and re-enable execution of jobs.

LE024-Seek to start of active jobs file failed (SCHED_internal_add_some_dependencies)

The scheduler newday job was scheduled to run, but there were still jobs on the active queue. The server configuration is set so that the newday job goes into dependency wait on one of the jobs still remaining to run. While trying to add a dependency record onto the newday job an I-O error occurred on the active job file.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
Check the active queue file for errors, if necessary check the filesystem. When you have resolved the problem manually clear the alert and re-enable execution of jobs.

LE025-Unable to allocate memory for active job read (SCHED_internal_add_some_dependencies)

Refer to the section of this document that covers memory allocation errors. The scheduler newday job was scheduled to run, but there were still jobs on the active queue. The server configuration is set so that the newday job goes into dependency wait on one of the jobs still remaining to run.
There was insufficient free memory on the server to allocate a buffer for this to be achieved.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
When you have resolved the memory shortage problem manually re-enable execution of jobs.

LE026-Read error occurred on active jobs file (SCHED_internal_add_some_dependencies).

The scheduler newday job was scheduled to run, but there were still jobs on the active queue. The server configuration is set so that the newday job goes into dependency wait on one of the jobs still remaining to run. While trying to read a record from the active jobs file an I-O error occured.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
Check the active queue file for errors, if necessary check the filesystem. When you have resolved the problem manually clear the alert and re-enable execution of jobs.

LE027-Unable to allocate memory required for dependency storage

Refer to the section of this document that covers memory allocation errors.
The scheduler newday job was scheduled to run, but there were still jobs on the active queue. The server configuration is set so that the newday job goes into dependency wait on one of the jobs still remaining to run. There was insufficient free memory on the server to allocate a buffer for this to be achieved.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
When you have resolved the memory shortage problem manually re-enable execution of jobs.

LE028-Unable to write dependency record (SCHED_internal_add_some_dependencies)

The scheduler newday job was scheduled to run, but there were still jobs on the active queue. The server configuration is set so that the newday job goes into dependency wait on one of the jobs still remaining to run. While trying to create a dependency record for the SCHEDULER-NEWDAY job an I-O error occured on the dependency queue file.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
Check the dependency queue file for errors, if necessary check the filesystem. When you have resolved the problem manually clear the alert and re-enable execution of jobs.

LE029-Unable to set job %s to dependency wait state

The scheduler newday job was scheduled to run, but there were still jobs on the active queue. The server configuration is set so that the newday job goes into dependency wait on one of the jobs still remaining to run. It was not possible for the SCHEDULER-NEWDAY job to be placed into dependency wait.
There will have been previous errors issued that provide more information on why this job could not be placed into a dependency wait state.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
When you have resolved the problem manually clear the alert and re-enable execution of jobs.

LE030- Unable to find any jobs to add as a dependency

LE030-Unable to find any jobs to add as a dependency ?
(SCHED_INTERNAL_add_some_dependencies)
LE030-...CHECKING ALERT QUEUE

The scheduler newday job was scheduled to run, but there were still jobs on the active queue; *but no jobs in a non-error state*. The server configuration is set so that the newday job goes into dependency wait on one of the jobs still remaining to run. No jobs were found on the active queue however. In this case the alert queue will be scanned for any job that can be used. This will result in ether a LE031 or LE032 message being written.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
When you have resolved the problem manually clear the alert and re-enable execution of jobs.
Caution: It may be possible that only system alerts are on the alert queue, in which case the scheduler newday job may go dependant upon itself. As this condition cannot occur if you follow the problem resolution steps for whatever caused the system alert to be raised you will never see this problem, will you ?; if you do it's your problem not the applications.

LE031...There are alerts on the alert queue, please investigate

The scheduler newday job was scheduled to run, but while there were no jobs on the active queue there were still alerts outstanding. Resolve all the alerts except one for the SCHEDULER-NEWDAY. When all alerts have been sorted out rerun the scheduler newday job from the alert restart option.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
When you have resolved the problem manually clear the alert and re-enable execution of jobs.

LE032-...Unable to find any alerts either; investigate, scheduler may need 'bouncing'

Issued in conjuction with LE030 is there is a major problem with newday scheduling.
The problem that caused this log message is that when a search of both the active job queue and alert queue was done no valid jobs were found in either category. This implies that the only alerts left are internally generated ones requiring action are left, but either no action has been taken on them or they were no cleared when the probelm was resolved.
This requires manual intervention so all scheduler execution activity is disabled until the problem is fixed and you manually re-enable job execution.
When you have resolved the problem manually clear the alert and re-enable execution of jobs.
The only other possible cause of the problem is a program logic/synhronisation issue, which should be impossible; but if all else fails try stopping and restarting the job scheduler as this will force the database consistency checks to be performed.

LE033-Seek to start of active job file failed

A search was being made to locate the next job scheduled to run, bit I-O errors on the active job queue file caused the search to fail. In this case it was just a repostion to record 0 that was being attempted.
Check the filesystem, then stop and restart the scheduler.

LE034-Unable to allocate memory required for read operation (SCHED_ACTIVE_get_next_job_to_run)

Refer to the section of this document that covers memory allocation errors.
No jobs will be selected to run. However as job selection it done about every two seconds your log file is going to start filling up rapidly with this message until you resolve the memory problem.
This application will not throttle-down in this instance as it assumes this temporary condition will clear.

LE035-Read error occurred on active jobs file

A read error occurred while trying to locate the next job to run from the active queue file. This operation will be retried aproximately every two seconds so I would suggest shutting down the scheduler and fixing the problem with the file or filesystem before restarting the job scheduler.

LE036-Cannot delete %s, this job is now executing

A client application attempted to delete a job off the scheduler active queue, as the job had already started executing this was not possible so the request has been discarded.
No action required.

LE037-UNABLE TO DELETE JOB FROM ACTIVE QUEUE, LOOPING POTENTIAL FOR %s

A request was made to delete a job from the scheduler active queue, either manually by a user, or internally by the job scheduler after the job had sucessfully completed execution for the day. The request failed due to an IO error on the active queue file.
If the delete failed as the scheduler was trying to delete the job due to job completion there is a slight possibility of the job looping as it will still be on the active queue available to run immediately; THIS SHOULD NO LONGER OCCUR as with the record unable to be updated it will most likely remain as 'executing' even though it has actually finished.
The recovery for this is to

* Turn execution of jobs off.
* Wait until all jobs running have completed (they will end up in the same state as the acitive job queue file is obviously no longer useable).
* Shutdown the scheduler with a forced stop. This will force it down even though it believes jobs are still executing.
* Fix the IO error on the active_queue file before doing anything else.
* Normally restart the scheduler. All jobs the scheduler still though were executing at shutdown time will be placed onto the alert queue for review.
* Delete the alerts for the jobs with the forceok option.

LE038-Unable to malloc %d bytes, dependency record not checked for %s (SCHED_ACTIVE_delete_record)

Refer to the section of this document that covers memory allocation errors.
This message is issued when a job is being deleted from the active scheduler queue, if any jobs are dependant upon the job being deleted the scheduler will try to clear the dependencies from those jobs to prevent them from waiting on a non-existant job. In this case there is insuffient free memory available for the scheduler to perform checks on the dependency queue to release any jobs that were dependant on the job just deleted.
You will have to manually release the dependeny on the job that was deleted from all jobs that are waiting on it, however you should fix the memory shortage problem first.

LE039-Unable to allocate memory for record buffer (SCHED_DEPEND_freeall_for_job)

Refer to the section of this document that covers memory allocation errors.
This message is issued when a job has completed executioni or a client application has requested

that all dependencies for a job be cleared; there is insuffient free memory available for the scheduler to perform checks on the dependency queue to release any jobs that were dependant on the job just completed (or file just arrived).
You will have to manually release the dependeny on the job that just completed from all jobs that are waiting on it, however you should fix the memory shortage problem first.

LE040-Unable to read active queue record for job %s (SCHED_DEPEND_freeall_for_job)

There was an IO error on the active job queue file for a job record that a client program request all dependencies be cleared from, or the user on the client application mis-spelt the job name.
There will be previous messages issued to identify the problem, refer to those for resolution.

LE041-Unable to update active queue record for job %s (SCHED_DEPEND_freeall_for_job)

There was an IO error on the active job queue file for a job record that a client program request all dependencies be cleared from.
There will be previous messages issued to identify the problem, refer to those for resolution.

LE042-SCHED_depend_check_job_dependencies, insufficient free memory to malloc %d bytes

Refer to the section of this document that covers memory allocation errors.
This message is issued when a job is being deleted from the active scheduler queue due to sucessfull completion or a client requested delete, if any jobs are dependant upon the job being deleted the scheduler will try to clear the dependencies from those jobs to prevent them from waiting on a non-existant job. In this case there is insuffient free memory available for the scheduler to perform checks on the dependency queue to release any jobs that were dependant on the job just deleted.
You will have to manually release the dependeny on the job that was deleted from all jobs that are waiting on it, however you should fix the memory shortage problem first.

LE042-...unable to check dependency completion.

When a job completed execution or was manually deleted bt a client application the scheduler attempts to clear dependencies for the completed/deleted job from any jobs that are dependant upon it's completion. Errors occurred that prevented this from being done.
There will be previous errors in the log identifying why, refer to those for problem resolution. You will probably also need to manually clear the dependencies from waiting jobs now.

LE043-Unable to delete dependency record for job %s, continuing

A job has now had all dependencies satisfied but the dependency record for the job was unable to be deleted from the dependency queue file. Check the log for other relevant messages, but this should

not prevent the job waiting on the dependencies from being scheduled on correctly unless there were also errors in the log for the active queue file.
At newday time the dependency file will be re-initialised so the undeleted record will be cleared then.

LE044-Unable to read active queue record for job %s, CANNOT FREE JOB TO RUN

All dependencies for a job have been satisfied, but an IO error occurred on the active job file when trying to change the job from dependency-wait state to time-wait state.
Resolve the problem with the active queue file (file permissions etc), and at an appropriate time for the job manually force it to run.
There will be other messages in the log that may help identify why there was an IO error.

LE055-Unable to update active queue record for job %s, CANNOT FREE JOB TO RUN

All dependencies for a job have been satisfied, but an IO error occurred on the active job file when trying to change the job from dependency-wait state to time-wait state.
Resolve the problem with the active queue file (file permissions etc), and at an appropriate time for the job manually force it to run.
There will pre other messages in the log that may help identify why there was an IO error.

LE056-SCHED_DEPEND_delete_all_relying_on_files, unable to allocate memory for file checks

Refer to the section of this document that covers memory allocation errors.
A regular five minute check is being made to see if any files have arrived on the system that will satisy a file dependency wait. There is not enough free memory available on the system for the file checks to be performed.
While this is not an immediate problem as the check will be retried every five minutes you should resolve the memory shortage problem.

LE057-Unable to stat file %s (error %d)

A regular five minute check is being made to see if any files have arrived on the system that will satisy a file dependency wait. In this case the stat command failed when trying to check a file for a reason other than file does not exist.
The most likely cause of this is that either the directory for the file does not exist or file permissions down the directory path do not allow the scheduler to perform the check.
Check the directory exists and that the file permissions are correct.

LE058-Data buffer is < 2K, programmer error (SCHED_DEPEND_listall_waiting_on_dep)

This is a programming error. If you get this message contact the author, unless you are a registered user/site with the source code in which case undo the change you have recently made to it.

LE059-Unable to malloc %d bytes (SCHED_DEPEND_listall_waiting_on_dep)

Refer to the section of this document that covers memory allocation errors.
Occurs when a client application requests a display of jobs waiting on a specific dependency. The client will have recieved an incomplete or empty response.

LE060-SCHED_depend_listall, insufficient free memory to malloc %d bytes

Refer to the section of this document that covers memory allocation errors.
Occurs when a client application requests a display of jobs waiting on a specific dependency. The client will have recieved an incomplete or empty response.

LE061-insufficient memory available to allocate %d bytes

Refer to the section of this document that covers memory allocation errors.
Occurs when a client application requests a scheduler status display. The client will have recieved an incomplete or empty response.
You should fix the memory problems asap. The client was probably requesting a scheduler status dispay because problems were occuring with the scheduler, in this case 100% likely to be memory shortage caused.

LE062- --- INSUFFICIENT MEMORY TO SCHEDULE NEW DAY JOB CHECKS

Refer to the section of this document that covers memory allocation errors.
This is about as fatal as it can get. There was insufficient memory available to do newday processing. If this is the only error you got you are lucky, the effect is that no newday job has been scheduled to load the jobs and do required cleanup for the next window. As this is an internally managed job you cannot issue any commands to recover from this.
Fix the memory problem before doing anything else.
Then try stopping and restarting the scheduler, if you are lucky the newday job will be created at that time. If it's not you had better refer to the job scheduler application recovery manual (to be written, contact the author if you are a registered user).

LE063-Got an error return adding the newday job to the active job queue

This is about as fatal as it can get. IO errors on the active job queue prevented the newday job from being added. The effect is that no newday job has been scheduled to load the jobs and do required cleanup for the next window. As this is an internally managed job you cannot issue any commands to recover from this.
First fix the IO problems with the active queue file.
Then try stopping and restarting the scheduler, if you are lucky the newday job will be created at that time. If it's not you had better refer to the job scheduler application recovery manual (to be written, contact the author if you are a registered user).

LE064- license error messages

LE064-Job Scheduler license for this system has expired
LE064-Please check your license keys
LE064-Server initialisation continuing but JOBS WILL NOT RUN until license is corrected

Your license has expired. As the demo license doesn't expire until 2036 you have either beeen playing with the license command, or have incorrectly entered a valid license.
The impact is that the scheduler is fully operational for everything except job execution; you can check the license, continue adding jobs etc but they will never run.
Check the license you have entered is valid. If it was one provided by the author contact the author. In either case (if before 2036) to get the scheduler working again immediately you will need to follow the steps in the job scheduler application recovery manual (to be written, contact the author if you are a registered user).

LE065-Seek error %d on dependency handle, ABORTING out of SCHED_DEPEND_delete_all_relying_on_dependency

A job completed, or file arrived, that may satisfy a job dependency contition. IO errors occurred on the dependency queue file that prevented any checks on dependency matching being performed.
The impact is that jobs may be left waiting on jobs that have already completed or files that may already have arrived.
Fix the problem that is preventing acces to the dependency queue file (security permissions, filesystem errors etc). Then manually release any dependencies that may already have been satisfied.

LE066-File write error on dependency handle, error %d\n (SCHED_DEPEND_delete_all_relying_on_dependency)

A job completed, a file arrived, or a client user manualy issued a dependency clear command that HAS SATISFIED a job dependency contition. IO errors occurred on the dependency queue file that prevented the dependency being cleared.
Resolve the errors that caused an IO error on the dependency queue file (security permissions, filesystem errors etc). Then manually release the depndency.

LE067-Unable to allocate memory required for read operation

Refer to the section of this document that covers memory allocation errors.
This message number occurs during a client initiated hold on/off request for a job. The request is not actioned.
Resolve the memory shortage problem.

LE068-Job '%s' unable to be held, write error

A user client session requested that a job be held, but a file IO error prevented the operation being carried out.
Resolve the IO problem with the active queue file (security permissions, filesystem errors etc) then retry the command.

LE069-Job '%s' unable to be released, write error

A user client session requested that a job be released from hold state, but a file IO error prevented the operation being carried out.
Resolve the IO problem with the activ queue file (security permissions, filesystem errors etc) then retry the command.

LE070-Job hold actionflag illegal %d (SCHED_hold_job)

A user client session requested a change to the hold state of a job, but the request was neither hold on or hold off. The most likely cause of this is that your site is running a customised client interface that has 'made a mistake'.
The job hold state flag is not changed.

LE071-Job '%s' unable to be held/released, not found

A user client session requested a change to the hold state of a job, but the job was not found. This can be an IO error on the file in which case there will have been previous messages logged, but the most likely cause is that the client user MIS-SPELT the jobname.

LWnnn - Scheduler library module warnings

The library module is the central module that ties the others together, and provides a common set of routines to allow interaction between the other modules.

LW001-Job not found in active jobs file

A client user session issued a delete command against a job on the active job queue, but the job was not found. The most likely cause is that the client user MIS-SPELT the jobname. The job is not removed from the active job queue.

LW002-Job %s is not in dependency wait, not altered (SCHED_DEPEND_freeall_for_job)

A user client session requested that a depency be removed for a job, but the job had no dependencies.
User error, no action required.

LW003-Restarting at start of file due to bad return from SCHED_DEPEND_delete_record

This is associated with message LE043. An IO error caused an operation failure. Rather than put in a lot of code to muck about with remembering and adjusting file pointers the entire operations is restarted from the beginning of the file search. Refer to LE043.

LW004-Newday job scheduled for time in past, catchup is in progress

The job scheduler has been shutdown for a few days. Catchup processing has been configured so the scheduler will schedule a newday job for each missed day.
No action required, normal catchup activity.

LInnn - Scheduler library module informational messages

The library module is the central module that ties the others together, and provides a common set of routines to allow interaction between the other modules.

LI001-Created active jobs file %s

On scheduler initialisation the active jobs file was not found in the current directory. It has been created.
No action required.

LI002-Open of active jobs file %s completed

The active jobs file was opened without error.
No action required.

LI003-Open of dependency queue file %s completed

The dependency queue file was opened without error.
No action required.

LI004-Closed: Active jobs file

The active jobs file was closd without problem in preparation for newday processing or a scheduler shutdown.

No action required.

LI005-Closed: Dependency Queue file

The dependency queue file was closd without problem in preparation for newday processing or a scheduler shutdown.
No action required.

LI006-SCHED_schedule_on, job %s scheduled on

In response to scheduler newday processing, or a manually entered submit command from a user client; the idendentified job has been scheduled onto the active job queue without problem.
No action required.

LI007-Job required exclusive access but other jobs are running, requeued +5mins %s

A job using the reserved NULL-* jobname class for jobs that require exclusive access to the job scheduler environment (no other jobs can be running while this is) was ready to run, but at least one job was exeuting at the time.
The job is requed to five minutes in the future.
Note: this does not prevent other jobs from starting within that five minute grace period, if they do the NULL-* job will keep scheduling itself out at five minute intervals until a period is reached when no jobs are running.
No action required.

LI008-Job %s not run, prevented by calendar checks

A job that would have normally been scheduled on by date or calendar scheduling has not been scheduled on due to a holiday calendar overriding/suppressing the rundate for this particular job. This message is logged if you have informational logging enabled just in case you wondered why it hadn't run.
No action required.

LI009-Forked PID %d for job %s

A job has started execution. The PID is logged if you have the loglevel set to info.
No action required.

LI010-JOB %s, now has excusive exection, other jobs will wait

A special NULL-* job has started running. These jobs require exclusive access so no other jobs will start executing until this job has finished.
No action required, other jobs will start running when this job completes.

LI011-REQUEUE - Dependency record for job %s created, value %s

The scheduler newday job was ready to run. The scheduler newday has been configured to go into a dependency wait start rather than a fail/alert state if jobs are still waiting to run.
Guess what, some of the previous windows jobs are either still waiting to run or are in a failed state.
The scheduler newday job will add a dependency record to itself for one of these jobs, and delay any execution retry of itself until that dependency is satisfied.
If external alert forwarding is configured an alert will be forwarded advising that newday processing has been delayed. An alert clear for this event will also be sent when the newday job does finally execute.
No action required.

LI012-REQUEUE - Dependency wait flag set for job %s

The scheduler newday job was ready to run. The scheduler newday has been configured to go into a dependency wait start rather than a fail/alert state if jobs are still waiting to run.
Guess what, some of the previous windows jobs are either still waiting to run or are in a failed state.
This message just indiactes that a dependency record was sucessfully added to the newday job, and what the job it is now waiting on is.
No action required.

LI013-Job %s moved to top of run queue at %s

This message simply identified the job that has been moved to the top of the run queue. The job will be run when it's scheduled execution time is reached.
The message will be displayed for every change of run queue state (job start/completion, calendar modification etc) if you have the scheduler loglevel set to informational.
No action required.

LI014-JOB %s, HAS ALL DEPENDENCIES SATISFIED

The job idendified in the message has had all dependency waits satisfied, It will be moved from a dependency wait state to a time wait state.
No action required.

LI015-JOB %s, DEPENDENCY WAIT FOR FILE %s SATISFIED

The job identified in the message was waiting for the file also identified in the message. The file has arrived and has remained unmodified for at least five minutes so the dependency on the file is considered satisfied. The dependency entry for this file is cleared for all jobs waiting on the file, one message will be issued for each job affected.
No action required.

LI016-WATCHED FILE %s on system, still being written to so. Recheck in five minutes

The file identified in the message is one which will satisfy a dependency for one or more jobs. The file has appeared on the system but is still being written to, or has been written to within the last five minute.
No action required. The scheduler will re-check the file in five minutes.

LI017-SCHEDULER-NEWDAY job already exists, no need to schedule on a new one

At sheduler startup time it will attempt to add a newday job, unless this is a cold start or a recovery start the job will still exist.
No action required, it is already on the active queue.

LI018-Scheduler last newday run time was %s

Written at scheduler initialisation or newday time. Simply advises what the next newday runtime is expected to be.
No action required.

LI019-Scheduler next newday run time is %s

Written at scheduler initialisation or newday time. Simply advises what the last newday runtime was.
No action required.

LI020-SCHEDULER-NEWDAY Job added to active job queue

Written during newday processing when the newday job selects and submits a job to the active queue.
No action required.

LI021-Clearing all dependency waits for %s

A job has completed or a file has arrived, all jobs will be checked to see if this clears one of their dependencies.
No action required.

LI022-JOB %s, DEPENDENCY WAIT FOR %s SATISFIED

A dependency for the job identified in the message has been satisfied.
No action required.

LI023-Hold turned ON for job %s

A user client has turned HOLD ON for a job, it will not run until hold has been released.
No action required, user initiated change.

LI024-Hold turned off for job %s

A user client has turned HOLD OFF for a job. It will run when it's scheduled execution time is reached, or as soon as possible if the time is in the past.
No action required, user initiated change.

MEnnn – Memory Module Error Messages

ME001-maximum malloc chain exceeded, check code

There is a maximum number of mallocs supported by the job schedulers memory management libbrary, the maximum has been reached. This should be impossible with the code as shipped.

If you have customised the code, check your changes.
If you have not customised the code contact the vendor.

ME002-malloc of %d bytes failed for %s

There was insufficient free memory on the server to malloc memory needed.
Check your server, it is low on free memory.

ME003-No slot matching memory pointer, freeing memory anyway (unknown mem size released)

A request was made to the job scheduler memory management library to release memory that it was not managing.
The request to release the memory was performed as requested; the error message is written as there should be no memory management in this application performed outside the memory management libraries control, but someone has made a code change that is doing so.

ME004-null pointer passed to MEMORY_free, ignored

I call was made to the memory management library to free memory, but the pointer to the memory to be released was NULL.
This is a programming error that needs to be investigated, contact the vendor.

MInnn – Memory Module Information Messages

MI001 – MI006 Memory display messages

MI001-Memory display requested
MI002- Caller=%s, Memory used=%d bytes
MI003-Using %d slots, out of %d total slots, currently malloced %d bytes in total
MI004-Memory display ended
MI005-No memory slots are currently in use
MI006-Since last newday - %d malloc and %d free calls from stack calls

These messages are all logged in response to a user requesting a 'sched status mem' display using the jobsched_cmd utility, or some other interface passing the API request to display memory statistics.

The memory statistics are written to the log using these six message numbers.

They are only generated in response to a user request, never as part of normal scheduler operation. As such these informational messages will be written to the log file even if the scheduler loglever is set to not display informational messages... they are in response to a user request and must be honoured.

MWnnn – Memory Module Warning Messages

MW001-Memory useage now at %d, warn threshold is %d

The job scheduler memory management library has a fixed size table for tracking memory malloc requests, wjich is more than large enough for normal operation.
If you see this message you scheduler server is under extensive (probably user generated, not batch generated) load.
You may wish to display the number of connected user sessions if you see this message.
No action required.
Note: if the load drops off you will see MW002 when the issue clears, if the load increases you will see ME001.

MW002-Memory useage now below warning level at %d, previous warning cancelled

The extreme load condition that caused a previous MW001 to be generated has ended, the warning condition no longer exists.
This message is logged as a warning simple because it makes reporting from the log file far easier.

MW003-malloc counter reset to 0 to avoid overflow, reached

For memory management statistics the number of memory malloc calls is being incremented.
This message just means the counter reached a number high enough to require being reset to zero.

No action is required.

MW004-free counter reset to 0 to avoid overflow, reached %d

For memory management statistics the number of memort free calls is being incremented.
This message just means the counter reached a number high enough to require being reset to zero.
No action is required.

SEnnn - API and Server module errors

The server code is the main program. This is also the component that accepts all incoming tcpip requests so if the component that inplements the user API traffic.

SE001-API_add_to_api_databuf: Reply data discarded, string to add was > 2K limit

From api.c, API_add_to_api_databuf.
A request was passed to the procedure requesting that a buffer greater then 2048 bytes be appended to the existing buffer. That is too large to be supported so the data buffer to be appended has been discarded instead.
This implies a programming logic error, raise a fault with the author detailing what you were trying to do at the time and provide the log records for five minutes either side of the error message.

SE002-API_add_to_api_databuf, Unable to write data buffer block of a continuation stream

From api.c, API_add_to_api_databuf.
The job scheduler was unable to write a data buffer to the tcpip socket connection. This buffer, and further data that may be required for the client response are discarded.
The most likely cause is that the client disconnected part-way through the data request/reply session for the clients socket.
NOTE: The scheduler will not clean up the socket connection on this event, it will wait for a disconnect from the client or tcpip layer before considering a session closed.

SE004-Unable to allocate memory required to print API buffer

SE004-Unable to allocate memory required to print API buffer
SE004-API_DEBUG_dump_api not performed

Refer to the section of this document that covers memory allocation errors.
Insufficient free memory was available to dump the contents of the API buffer being processed to the logfile when the server attempted to log a debugging message. An API contents dump will only be attempted if you are doing debugiing, so I guess you changed something in your copy of the source code, I would suggest changing it back.

*SE010-***FATAL*** A fatal server error has occurred. Cannot continue.*

SE010-***FATAL*** A fatal server error has occurred. Cannot continue.
SE010-%s

A non-recoverable error ocurred, the server has done a fast shutdown to try to avoid any damage to the databases. This will generally only be seen at startup if there are problems accessing any of the files it needs, although that doesn't preclude it from being called in mid-flight if severe problems are encountered.
The second line of the message provides addition detail, and there will have been previous messages logged that give a clear idea of what caused the problem, refer to those for problem resolution before attempting to restart the scheduler.

SE011-Unable to find a match for killed job pid=%d, killing signal was %d

The scheduler recieved a terminination message for a child process it started, but the scheduler no longer knows about the child process.
This message is logged if the child was killed by an external command (ie: a root user using the kill command).
The message is logged to provide an audit trail of the job stopping.
If this was a job that other jobs were dependant upon you will have to identify what job it was and manually clear the dependency. If not no further action is required for the scheduler to continue processing.
You may wish to raise the issue with the author if you are a registered user as this should not occur, all jobs should be tracked correctly.

SE012-Unable to find a match for completed job pid=%d, exit code was %d

The scheduler recieved a completion message for a child process it started, but the scheduler no longer knows about the child process.
This message is logged if the child terminated normally (including non-zero exit codes).
: The message is logged to provide an audit trail of the job stopping.
If this was a job that other jobs were dependant upon you will have to identify what job it was and manually clear the dependency. If not no further action is required for the scheduler to continue processing.
You may wish to raise the issue with the author if you are a registered user as this should not occur, all jobs should be tracked correctly.

SE013-Unable to read record for %s to set failure flag

This is issued in conjunction with SW004.
A job terminated with either a non-zero exit code, or was killed by an external task (such as the kill command). It was not possible for the scheduler to read the record for the job from the active queue file in preparation to place the job into a failed state.
There will have been other messages logged indentifying what the read error was, you will need to

refer to those and correct the error conditions that caused the read failure.
Message SW004 logged with this message will identify the name of the job affected and what the status or kill code for the job was.

SE014-Unable to write active queue file failure info for %s

A job terminated with either a non-zero exit code, or was killed by an external task (such as the kill command). It was not possible for the scheduler to update the record for the job in the active queue file to place the job into a failed state.
There will have been other messages logged indentifying what the write error was, you will need to refer to those and correct the error conditions that caused the write failure.
Message SW004 logged with this message will identify the name of the job affected and what the status or kill code for the job was.

SE015-Delete off active queue for completed job failed, JOB %s

A job completed normally, but errors prevented the job from being marked as completed in the active queue file.
There will have been other messages logged indentifying what the write error was, you will need to refer to those and correct the error conditions that caused the write failure.
The impact is that the job will remain recorded in an executing state in the active queue file. To clear this you will need to

* Fix the problems that prevented the active queue record being updated
* Wait until no other jobs are executing
* Stop the scheduler with a force-stop command
* Restart the scheduler, the 'hung' job will be placed onto the alert queue with an alert of 'running when scheduler stopped'
* Forceok the alert to clear the alert and update the job database record.

SE016-Unable to requeue a repeating job request, job %s

A job has completed that is a 'repeating' job scheduled to run at nn minute intervals. Errors prevented the active queue record for the job being rescheduled correctly.
There will have been other messages logged indentifying what the write error was, you will need to refer to those and correct the error conditions that caused the write failure.
The impact is that the job will remain recorded in an executing state in the active queue file. To clear this you will need to the recovery instructions for message SE015 above.

SE017-Active job queue file %s is corrupt (seek failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
In this case the active job queue file was found to be unuseable.

Refer to the job scheduler application recovery manual (to be written, contact the author if you are a registered user).

SE018-Unable to allocate memory for server startup, need %d bytes !

Refer to the section of this document that covers memory allocation errors.
There is insuffiecient free memory available for the scheduler to perform database consistency checks at startup, the scheduler cannot start.

SE019-Active job queue file %s is corrupt (read failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
In this case the active job queue file was found to be unuseable while records were being read from it, at least one record was damaged.
Refer to the job scheduler application recovery manual (to be written, contact the author if you are a registered user).

SE020-Unable to mark job %s as failed, continuing

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
For this message the server found a record on the active queue that was marked as still executing at the time the server was stopped, the scheduler tried to alter the job state to failed but was unable to do so due to errors.
There will have been other messages logged prior to this message identifying what the errors were that caused this. This message is logged to identify the impact of the earlier failures.

SE021-File seek error on %s, aborting checks

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
For this message the server found a record on the active queue that was marked as still executing at the time the server was stopped, it sucessfully altered the job state to failed.
It then failed to reposition the file pointer back to the record just updated as needed to continue checking the active job file. It stops checking the active job queue file when this error occurs, but allows the server to continue starting, note to me:change this to stop the server starting at some point.

SE022-Active job queue file %s is corrupt (seek failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
This particular message means a seek to file postion zero (0) for the active jobs file failed, which should be pretty much impossible so there is a real nasty problem with the file.
The server will not start.
Fix the problem with the active job queue file before trying to restart the scheduler.

SE023-Unable to allocate memory for consistency checks, need %d bytes !

Refer to the section of this document that covers memory allocation errors.
This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
There was insufficient free memory available on the server for the checks to be performed.
Fix the issue of insufficient free memory before attempting to restart the server.

SE024-Unable to allocate memory for consistency checks, need %d bytes !

Refer to the section of this document that covers memory allocation errors.
This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
There was insufficient free memory available on the server for the checks to be performed.
Fix the issue of insufficient free memory before attempting to restart the server.

SE025-Active job queue file %s is corrupt (read failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
This message is logged when an IO error ocurred reading from the active job queue file.
Fix the problem with the active job queue file before trying to restart the scheduler.

SE026-Alerts file %s is corrupt (seek failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
This particular message means a seek to file postion zero (0) for the alert queue file failed, which

should be pretty much impossible so there is a real nasty problem with the file.
The server will not start.
Fix the problem with the alert queue file before trying to restart the scheduler.

SE027-Alerts file %s is corrupt (read failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
This message is logged when an IO error ocurred reading from the alert queue file.
Fix the problem with the alert queue file before trying to restart the scheduler.

SE028-Alerts file %s is corrupt (update failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
This message occurred when an alert was found in the alert queue file but there was no matching job entry on the active job queue, the server tried to delete the unrequired alert but there were errors deleting the alert.
Previous messages will have been logged identifying what caused the delete failure, resolve those before trying to restart the scheduler.

SE029-Active Job queue file %s is corrupt (update failure), cannot start server !

This is logged during a server restart. All the databases are consistency checked at server startup to correct problems where the server may have been shutdown with a force, or had the server rebooted while the scheduler was still processing jobs.
This message is logged when an alert record is found for a job but the job entry in the active queue file was not in an alert state, so the scheduler needs to place the job record on the active queue file into an alert state, but it was unable to do so due to errors. Previous messages will have been logged identifying what caused the delete failure, resolve those before trying to restart the scheduler.

SE030-Unable to open log file %s, continuing using STDOUT for messages

The scheduler uses a new logfile for each day, the first job activity for a new day will cause the logfiles to roll over. While the server was switching to a new log file it was unable to open/create the log file.
As it presumably had created previous log files the most likely cause for this is that the directory permissions have changed, although if you are running the scheduler as root as recomended that will move the most likely prolem to be a damaged filesystem.
Check the directory permissions and if necessary check the filesystem.
The impact of this message is that the server will continue running but log all messages to its standard output, if that happens to be a telnet session that is no longer connected the results will be

unpredictable.

SE031-One or more fatal errors detected, TERMINATING ABNORMALLY

During scheduler startup the alerts library component failed its initialisation checks, the server will not be permitted to start.
There will have been previous messages logged identifying what the errors were, resolve those before attempting to restart the scheduler.

SE032-One or more fatal errors detected, TERMINATING ABNORMALLY

During scheduler startup the calendar library component failed its initialisation checks, the server will not be permitted to start.
There will have been previous messages logged identifying what the errors were, resolve those before attempting to restart the scheduler.

SE033-One or more fatal errors detected, TERMINATING ABNORMALLY

During scheduler startup the jobs library component failed its initialisation checks, the server will not be permitted to start.
There will have been previous messages logged identifying what the errors were, resolve those before attempting to restart the scheduler.

SE034-One or more fatal errors detected, TERMINATING ABNORMALLY

During scheduler startup the scheduler library component failed its initialisation checks, the server will not be permitted to start.
There will have been previous messages logged identifying what the errors were, resolve those before attempting to restart the scheduler.

SE035-One or more fatal errors detected, TERMINATING ABNORMALLY

During scheduler startup the user library component failed its initialisation checks, the server will not be permitted to start.
There will have been previous messages logged identifying what the errors were, resolve those before attempting to restart the scheduler.

SE036-Unable to delete alerts file, continuing (SERVER_newday_cleanup)...

During the scheduler newday processing the scheduler was unable to delete the alerts file to reclaim space.
This is not a fatal error, the server can run with the old alerts file, but the file is going to start growing in size and will eventually slow down server response.
Try to identify and correct why the scheduler could not delete the file prior to the next newday run.

SE037-Unable to delete active jobs file, continuing (SERVER_newday_cleanup)...

During the scheduler newday processing the scheduler was unable to delete the active job queue file to reclaim space.
This is not a fatal error, the server can run with the old job queue file, but the file is going to start growing in size and will eventually slow down server response. Also if the server is configured to show deleted entries the query responses will be showing previous days jobs also so eventually the command response buffers will reach a size where the client applications may not be able to handle the responses.
Try to identify and correct why the scheduler could not delete the file prior to the next newday run.

SE038-Unable to delete job dependency file, continuing (SERVER_newday_cleanup)...

During the scheduler newday processing the scheduler was unable to delete the dependency queue file to reclaim space.
This is not a fatal error, the server can run with the old dependency file, but the file is going to start growing in size and will very quickly start slowing down server response.
Try to identify and correct why the scheduler could not delete the file prior to the next newday run.

SE039-Compress of jobs database failed !; FAST SHUTDOWN (SERVER_newday_cleanup)...

During newday processing the job definition file is compressed to reclaim space. Errors ocurred during this operation so the scheduler is no longer sure of the correctness of the contents of the file.
The scheduler will shut itself down immediately.
There will have been previous messages logged identifying what the errors were and those should be refered to for recovery actions. Resolve all the problems identified in the earlier error messages before attempting to restart the scheduler.

SE040-Compress of calendar database failed !; FAST SHUTDOWN (SERVER_newday_cleanup)...

During newday processing the calendar file is compressed to reclaim space. Errors ocurred during this operation so the scheduler is no longer sure of the correctness of the contents of the file.
The scheduler will shut itself down immediately.
There will have been previous messages logged identifying what the errors were and those should be refered to for recovery actions. Resolve all the problems identified in the earlier error messages before attempting to restart the scheduler.

SE041-Compress of user database failed !; FAST SHUTDOWN (SERVER_newday_cleanup)...

During newday processing the user file is compressed to reclaim space. Errors ocurred during this operation so the scheduler is no longer sure of the correctness of the contents of the file.
The scheduler will shut itself down immediately.
There will have been previous messages logged identifying what the errors were and those should be refered to for recovery actions. Resolve all the problems identified in the earlier error messages before attempting to restart the scheduler.

SE042-Unable to read SCHEDULER job entry from active jobs file, SUSPENDING SERVICES*

An internally managed scheduler job (reserver SCHEDULER* jobname) was scheduled to run, prior to running any scheduler internal job the full job details are requsted from the scheduler active queue file as a sanity check; the check failed, the job was not found on the active queue.
This implies a rather large failure somewhere, most likely causes being memory shortages or IO errors on the file (or possibly a programming logic error).
The scheduler disables the running of further jobs, manual intervention is required to resolve the problem and re-enable job execution.
Review the log for previous errors preceeding this message to identify and resolve the problem before re-enabling the execution of jobs. If it appears to be a problem with the internal scheduler task itself refer to the job scheduler application recovery manual (to be written, contact the author if you are a registered user).

SE043-Suspending Server activity until the problem is resolved

The scheduler newday job was scheduled to run, and the scheduler is configured so that if jobs are outstanding the newday job should be rescheduled to wait on them completing rather than going immediately into an alert/action-required state. Errors occured adding a dependency entry onto the newday job.
The scheduler disables the running of further jobs, manual intervention is required to resolve the problem and re-enable job execution.
Refer to the messages logged just prior to this message, and resolve them before re-enabling job execution.

SE044-Unable to update SCHEDULER-NEWDAY to failed status in active jobs file, SUSPENDING SERVICES

The scheduler newday job was scheduled to run, *and the scheduler is configured so that if jobs are outstanding the newday job be placed into an alert state*. Errors occured trying to update the scheduler newday entry in the active queue file.
As this is a critical requirement, the scheduler has no option but to disable the running of further jobs, manual intervention is required to resolve the problem and re-enable job execution.
There will have been previous messages identifying the problem, correct all errors identified in the previous messages before re-enabling the execution of jobs.

SE045-SCHEDULER-NEWDAY, JOBS ARE STILL ON THE ACTIVE QUEUE, RESTART WHEN ALL JOBS COMPLETED

The scheduler newday job was scheduled to run, *and the scheduler is configured so that if jobs are outstanding the newday job be placed into an alert state*.
This has been done. Manual intervention will be required to do an restart of the scheduler newday from the alert queue when all jobs for the previous window have completed.
Note: normal operation, you have configured it to do this.

SE046-Unable to update config record with last newday run time, continuing...

The scheduler newday job has run sucessfully, but the scheduler was unable to update the configuration file with that usefull piece of informatiom.
The scheduler will continue to run, try to resolve the problem before the next scheduler newday run and do not stop/start the scheduler until the problem has been resolved and at least one newday run completed that does update the timestamp or the scheduler will play catchup and rerun jobs from the date and time it was last able to record the information.

SE047-INTERNAL JOB TASK %s IS NOT RECOGNISED, DELETING IT !

A job using the scheduler internal reserved naming convention of SCHEDULER* that is actually not a legal internal job somehow got into the job queue.
It has been deleted off the job queue.
Check your job database to ensure you have no jobs starting with the text SCHEDULER. The scheduler as shipped will not allow this, but if you are a registered user with the source code you may be trying something new, without understanding the code.

SE048-DELETE OF JOB %s FAILED

Issued in conjunction with SE047. The job was unable to be deleted.
Your scheduler is probably looping by now, try to shut it down, or if necessary kill it.
Refer to the job scheduler application recovery manual (to be written, contact the author if you are a registered user) to determine how to restart the scheduler without the job you have inadvertently (hopefully inadvertently) managed to add to the scheduler with your code enhancements.

SE049-process_client_request_alert, the data buffer is too small to use this procedure, PROGRAMMER ERROR

Programming error. Presumably you are a registered user with the source code and have made a rather silly mistake of lowering the value for the constant MAX_API_DATALEN.
The impact is that all commands associated with alert management will be rejected.
Return the constant to its original value.
If you are not a registered user and have obtained the code from someone other that the author, go beat them up; this error does not occur in any distributions from the author.

SE050-Unable to read alert record for %s !

A user client program requested an alert be acknowledged, but the record was not able to be located in the alert queue file.
The most common cause of this is that the user has mis-spelt the alert name.
If that is not the case refer to previous messages that will have been logged identifying the problem details.

SE051-Unable to update alert record for %s!

A user client program requested an alert be acknowledged, but while the record was able to be read from the alert queue it was not able to be updated in the alert queue file.
Check the file permissions on the alert queue file to ensure the scheduler has write access.
There will have been other messages logged in conjunction with this message giving more details on what the problem actually was (insufficient free memory etc). Refer to those for problem resolution.

SE052-process_client_request_alert, Unable to allocate %d bytes of memory

Refer to the section of this document that covers memory allocation errors.
A user client application has requested that a job in alert state be re-queued back onto the active queue to rerun. There was insufficient free memory available on the server to process the request.
Impact: you will not be able to rerun any jobs until the memory shortage problem is resolved.

SE053-process_client_request_alert, Unable to delete alert for %s

A user client application has requested that a job in alert state be re-queued back onto the active queue to rerun. There was an error deleting the alert record for the job.
There will have been previous messages written to the log identifying what the errors were. Refer to those for problem resolution. Impact: The job is not restarted.

SE054-process_client_request_alert, Unable to read active queue for %s to reset failure flag

A user client application has requested that a job in alert state be re-queued back onto the active queue to rerun. The scheduler sucessfully deleted the alert record for the job, but was then unable to find a matching job entry available for restart in the active queue file.
There will have been previous messages written to the log identifying what the errors were.
Impact: if the job still exists in a failed state it will remain in a failed state, restart is no longer possible. You will need to delete the job from the active queue and manually re-submit it onto the queue.
If the job no longer exists in the active queue file it was presumably a redundent or system generated alert and no further action is required.

SE055-process_client_request_alert, Unable to reset failure flag on %s in active queue file

A user client application has requested that a job in alert state be re-queued back onto the active queue to rerun. The scheduler sucessfully deleted the alert record for the job, managed to read the job record from the active queue file, but was then unable to update the job record in the active queue file from a filed state to an available state.
There will have been previous messages written to the log identifying what the errors were. Resolve these immediately.
Impact: restart is no longer possible as there is no alert record. You will need to delete the job from the active queue and manually re-submit it onto the queue.

SE056-API request for %s, request code %s not recognised !

A user client application requested action from the alert subsystem, but the command header did not contain a valid request code.
It is most likely your user is using a client version designed for a more recent version of the scheduler.
No action is required, the command will be rejected. You may wish to identify what version of the client application the user is using to pheraps uograde the scheduler itself to a matching or later version.

SE057-process_client_request_calendar, the data buffer is too small to use this procedure, PROGRAMMER ERROR

This implies a programmer error. If you are a registered user with the source code please undo the changes you have just made. If not, and you are running the scheduler as supplied by the author in binary form; contact the author for resolution if you are a registered user.
If you are not a registered user, try to obtain a later binary distribution version.

SE058-process_client_request_calendar Retrieval for display not yet implemented

A bit of an incorrect message, the function has not been implemented as it has been obsoleted.
A user client program requested a calendar retrive operation using an api header request that is no longer supported by the calendar library (it is still supported by other subsystems, but not the calendar), the request is rejected by the scheduler. No further action is required, unless you want to track down the user and suggest they update their client.

SE059-API request for %s, request code %s not recognised !

A user client program requested a calendar operation that is not recognised by the scheduler. The request is rejected.
No further action is required, unless you want to track down the user and suggest they update their client.

SE060-Insufficient memory to allocate %d bytes of memory (process_logon_request)

Refer to the section of this document that covers memory allocation errors.
A user client application ws attepting to logon to the scheduler but there is insufficient free memory available on the server to process the request.
This is a bit of a major problem as if you can't logon you can't even shut the server down cleanly.
Recomended actions are to try to free up enough memory (by stopping other applications) until you can logon and shutdown the scheduler; then resolve the memory issues before attempting to restart the scheduler.

SE061-Unable to update last logged on timestamp for '%s'

A user has sucessfully logged onto the scheduler using a client application, but the last logged on timestamp for the user was unable to be updated.
The logon proceeds, You should try to determine what the problem was was preceeding messages, and fix the problem.
Note: If you site runs the user activity report the user will eventually fall into the not-logged-on-in-nn-days category and be mistakenly deleted by your security department, you should fix this problem quickly.

SE062-REQUEUE (RUNNOW) FAILED FOR JOB %s

A client user requested an immediate 'run now' for a job on the active queue, the request was not able to be processed.
Refer to messages logged just prior to this event to determine the cause, most likely causes are the job already executing or the job being in a failed state.

SE063-NEW LICENSE REQUEST FAILED CHECKS, LICENSE REJECTED

A client user attempted to add a new license key, that was invalid. The request is rejected.
Warning: the new license will have been stored in memory, just not written to disk; any other configuration change will store the invalid key into the scheduler configuration file (yes this could be considered a bug). Either stop/start the server to clear the invalid key from memory, or avoid further config changed until after the next scheduled newday has run (which refreshed back the original key from the configuration file).

SE064-API request for %s, request code %s not yet implemented !

A user client application requested a scheduler configuration change using an api command that was not recognised by the scheduler, the command is rejected.
The user is presumably using a client application for a later version of the scheduler, or you are using an in-house written client that has a bug.

SE065-Unable to workout start date from the calendar

A user client application is defining a new job to the scheduler, but the job is being added to use a calendar that either does not exist or has no legal execution dates.
No action required, the user needs to sort out what they are doing.

SE066-process_client_request_job, unable to allocate memory for job activity check

Refer to the section of this document that covers memory allocation errors.
A client user application requested that the scheduler delete a job from the job definition database, but there was insufficient free memory available on the server to process the request.
The request is rejected, the job is not deleted.
Resolve the memory issue befor it impacts other server operations.

SE067-Unable to bind to configured interface(s)

The server has been configured to bind to an interface using a specific ip-address, but was unable to do so.
The ip-address is either not associated with any interface on the current system, or the interface is down. Use ifconfig to identify valid interface addresses.
Note: the scheduler default is to bind to all available addresses, so the address has been specifically set by the sysadmin or security group; contact them to resolve the problem.

SE068-Unable to run as a deamon task, running as a normal task !

A call to the daemon function has failed on this server, the function may be suppressed by a site security policy.
The scheduler will continue running, but in the foreground, *which may cause problems for your systems startup scripts*. Running in the foreground is not ideal, so stop the scheduler and either resolve the security problem or change the startup script to run the scheduler in the background.
Note: If you have a binary version of the solaris distribution you will never see this message as solaris doesn't support the daemon call (not in Solaris 2.7 anyway), so you will of course already be running it as a background task.

SE069-error finding next job to run, job processing suspended until error is corrected

Something has gone seriously wrong with the active job queue file. There are no jobs readable from the active job queue, including the newday job which will always be present.
There should be many prior messages identifying the problem, resolve all issues identified by the prior messages before restarting job execution.
Impact: The scheduler will disable all job execution until the problem is resolved and the scheduler job execution is manually re-enabled.

SE070-job %s failed to run, job processing suspended until problem corrected !

The scheduler has failed to fork a child task to run a job that is scheduled to run. As this is a critical problem in that the scheduler must assume all jobs that it is going to try to run will fail the scheduler will disable all job execution until the problem is resolved and the scheduler job execution is manually re-enabled.
There will have been previous messages logged identifying why the scheduler could not fork a child task, the most likely being insufficient free memory. Refer to the previous messages and resolve the problem before re-enabling execution of jobs.

SE071-SHUTTING DOWN DUE TO UNEXPECTED MAIN TERMINATION

Something horrible has happened.
* If you are a registered user with the source code, undo whatever it was you have done.
* If you are running a binary version ensure you have one supplied by the author and not from a third party, if from a third party ask them to undo the changes they have done, or obtain correct binaries from the author.
* If you are running binaries from the author then another application has just walked all over your memory stack.

This message only occurs if the program falls through the mainline loop to the catchall message SE071. It is not possible for code supplied to the author to do this as program termination is always done from within the endless loop. The only way this message can be produced outside the main processing loop is if the procedure/data stack pof the running application has been corrupted.

SE072-SCHEDULER-NEWDAY, DATABASE PROBLEMS PREVENT EXECUTION

The scheduler newday job can only run if there are no outstanding jobs or alerts remaining to be handled. Errors occured trying to check the active queue or alert queue files.
Previous messages will have been logged identifying what the problems were. Resolve these before re-enabling job execution.
Impact: The scheduler will not run any further jobs until the problem has been resolved and you manually re-enable the execution of jobs.

SE073-Server has EXECJOBS OFF, retained from last shutdown

When the scheduler was last shutdown execution of all jobs was suspended. As there may be a good reason for this the setting is retained but an alert is raised so the state is reported, just in case the person starting the scheduler was not aware of that.
Impact: no jobs will run.
Actions: Use the command SCHED EXECJOBS ON when you are ready to let the scheduler start running jobs again.

SWnnn - API and Server module warnings

The server code is the main program. This is also the component that accepts all incoming tcpip requests so if the component that inplements the user API traffic.

SW001-Shutdown in progress

The server is shutting down. No action needed.

SW002-Killing PID %d, Job will go into alert status

The server is shutting down in response to a shutdown force command, this means it will not wait for running jobs to finish. The assumption is that you want to force the scheduler down including all child jobs the scheduler has started.
To achieve this the scheduler will send a kill signal to every running child process it is currently managing.

This message number records every pid a kill signal is sent to, you can then if you wish review the logs afterward to match it to a jobname if you really want to.
Note:The kill is sent only to the job the scheduler started, if the job/script started other tasks then the scheduler doesn;t know about them, they will probably continue running without the parent job/ script.

SW003-ERROR, number of running jobs < 0; adjusted to 0

Somewhere in the program logic the scheduler determined that more jobs have completed than the scheduler actually started. The scheduler just resets the number of running jobs flag to zero.
No action is required.
Note: this is a catchall case, the author has never seen it issued.

SW004-Job %s has status code %d, kill signal %d, setting failure notifications

A child job started by the scheduler has either terminated with a non-zero exit code or has been killed by an external task (ie: root issuing a kill on it). The message records the exit code and kill signal values the child terminated with.
The scheduler will place the job into a failed state and create an alert record for it.
No action required.

SW005-JOB %s WILL BE DELETED AS EXEC STATE, CAN NOT SET COMPLETE FLAG

This is a non-fatal error, although a fatal will probably follow.
As the scheduler allows you to see what state a job was in when it was deleted from the active queue, when a job completes the scheduler tries to set the job to a completed state.
This message indicates an update of the job record on the active queue failed.

No action required, the scheduler will continue processing and try to delete the record anyway as a bad state in an info display is not considered critical.
Note: you will probably get a fatal anyway as if the record cannot be updated it is unlikely it can be deleted either.

SW006-JOB %s WILL BE DELETED AS EXEC STATE, CAN NOT SET COMPLETE FLAG

This is a non-fatal error, although a fatal will probably follow.
As the scheduler allows you to see what state a job was in when it was deleted from the active queue, when a job completes the scheduler tries to set the job to a completed state.
This message indicates the job record could not be read from the active queue.
No action required, the scheduler will continue processing and try to delete the record anyway as a bad state in an info display is not considered critical.
Note: you will probably get a fatal anyway as if the record cannot be read it is unlikely it can be deleted either.

SW007----- %s FLAGGED AS FAILED, CHECK IT

This message is issued during scheduler startup processing. At startup the scheduler found a record in the active queue file indicating the job identified in the message has been running at the time the scheduler was stopped.
The job is placed into a failed state.
Actions: Check the job to see if it needs to be rerun, if so rerun from the alert function, if not forceok from the alert function.

SW008----- %s NO ALERT REC FOUND, ONE HAS BEEN CREATED

This message is issued during scheduler startup processing. At startup the scheduler found a job in a failed state but the job had no matching alert record. Somebody killed thescheduler in mid-processing apparently.
An alert record is created for the job.
No action required. An alert record is created for the job.

SW009----- %s ALERT REC FOUND, NO MATCHING JOB ON QUEUE SO DELETED ALERT

This message is issued during scheduler startup processing. At startup the scheduler found an alert record for a non-existant active queued job. Someone killed the scheduler in mid-processing apparently.
No action required. The alert record is deleted.

SW010----- %s ALERT REC FOUND, JOB ADJUSTED TO FAIL STATE

This message is issued during scheduler startup processing. At startup the scheduler found an alert record for a job, but the job was not in a failed state on the active job queue. Someone killed the

scheduler in mid-processing apparently.
No action required. The job on the active job queue is adjusted to a failed state.

SW011- not licensed for this system messages

SW011-Job Scheduler is not licensed for this system
SW011-Please check your license keys
SW011-Server initialisation continuing but JOBS WILL NOT RUN until license is corrected

Let me guess, you installed the scheduler on the current system by tar'ing it up from a working one and copied it onto a new system.
Doesn't work that way.
If you want it to run on a new system install it from the supplied distribution onto the new system, after all it's free so why copy it about. The scheduler knows what system it has been installed onto and will only run on that system, so if you want copies on multiple servers install it on multiple servers.
Impact: No jobs wil run until you obtain a license for the server (which is chargeable), or do a clean install from the distribution (which is free if you don't intend to register) as you should have done in the first place.

SW012-Received request to clear alert information and set completed OK for %s

A user client application has requested that an alert be forced OK. This message is just issued to provide an audit trail.
No action required.

SW013-REFUSED Logon for '%s' from %s

A client user attempted to logon to the scheduler using invalid authorisation credentials (bad username or password). The logon request is rejected bythe server.
No action required, logon is rejected.

SW014-SHUTDOWN REQUEST ACCEPTED, REQUESTED BY USER %s

A user client application, with the appropriate authority, has requested that the server shutdown. The shutdown request has been accepted. The message identifies the user that made the request for auditing purposes.
No action required.

SW015- Forced shutdown messages

SW015- -*-
SW015- SHUTDOWN F O R C E REQUEST RECEIVED
SW015- SENDING KILL SIGNAL TO %d CURRENTLY RUNNING JOBS
SW015- PENDING FAST TERMINATION...

SW015- -*-

The user client application that requested the scheduler to shutdown requested an immediate forcedown of the scheduler. This message provides an audit trail of the fact that it was a forced shutdown, and indicates the number of jobs that will be killed and end up in a failed state.
No action required.

SW016- WAITING ON %d JOBS TO COMPLETE

This is issued in conjunction with message SI051 when a user client application, with the user logged on at sufficient authority, has requested that the scheduler be shutdown.
As jobs are running the shutdown is queued to execute when the last currently running job completes. This message advises how many jobs are currently running that the server is waiting on.
No action required.

SW017-Job execution disabled for all jobs by %s

A user client application has requested the the scheduler suspend the running of any new jobs. The message identifies the user that issued the request.
Impact: Running jobs will be allowed to complete, no new jobs will be allowed to start until execution is re-enabled.
Actions: When the problem that required the scheduler to be paused is resolved, re-enable execution of jobs.

SW018-Job execution enabled for all jobs by %s

A user client application has requested the the scheduler re-enable the running of jobs. The message identifies the user that issued the request.
No action required, the scheduler will resume processing.

SW019-Command %s either unknown or a restricted command being used by an unauthorised user!

A user client program sent an api header buffer for the scheduler that was not a recognised scheduler command code. The command is discarded.
No action required.

SW020-Newday time set request in progress, time request is %s

A user client application, with the user logged on having sufficient authority, has requested a change of time for the scheduler newday job to execute.
This message is logged as an advisory message in case you wonder why your newday job is suddenly executing at an unexpected time. It is logged at warning level as it will affect scheduler operation.
Impact: The newday processing time for the scheduler is changed, and the current newday job is updated to run at the new time.

No action required.

SW021-Log level change initiated by %s

A user client application, with a user logged on with suffient authority, has changed the message logging level used by the scheduler. This message is logged as an advisory message, at warning level as it will change/impact scheduler operation.
No action required.

SW022-New day fail action changed to ALERT by %s

A user client application, with a user logged on with suffient authority, has changed the scheduler configuration so the scheduler will mark the newday job as failed and place it into an alert state if the newday job cannot run due to jobs for the previous days window are still waiting to run.
No action required, logged as a warning as the scheduler activity profile has changed, and if jobs run late in future manual recovery will be required to run the newday job.

SW023-New day fail action changed to DEPWAIT by %s

A user client application, with a user logged on with suffient authority, has changed the scheduler configuration so the scheduler will add dependencies of outstanding jobs to itself to delay its execution if outstanding jobs are still waiting to be processed at scheduler newday time. It will run when all outstanding jobs have completed.
No action required, logged as a warning as the scheduler activity profile has changed, the scheduler newday job will be allowed to run late, and will schedule on automatically after the last outstanding job from the previous day has completed.

SW024-Scheduler catchup flag changed to ALLDAYS by %s

A user client application, with a user logged on with suffient authority, has changed the scheduler catchup processing to catchup every missied day.
Impact: If the scheduler is shutdown for a few (or many) days, when it is restarted it will attempt to run every job execution missed. For example if there is a daily job and the scheduler was stopped for five days, when the scheduler is restarted a scheduler newday will be run for each day missed, possibly resulting in the job being run five times.
Note: this is the intended behaviour, a well written job will expect the date parm passed by the scheduler as a 'rundate' rather than use the system date to allow this catchup processing to occur without causing problems.
Note2:Each individual job can have a no catchup flag set so may not be impacted by this setting.
Note3:Calendar processing is still enforced for each day so jobs may not run for each missed day if calendars exclude them from the 'catchup day' being processed.
Note4:Repeating jobs are excluded from catchup processing, if a repeat job is supposed to run every tem minutes it would be stupid to try to catch up five days of processing.
No action required, scheduler catchup processing is enabled.

SW025-Scheduler catchup flag changed to NONE by %s

A user client application, with a user logged on with suffient authority, has changed the scheduler configuration that no catchup processing of missed days is done.
If thescheduler is shutdown for five days, then restarted, the jobs on the current queue will run, then the newday for the window in the next 24hrs will be run.
Note1:If the scheduler newday action is to go into a failed state the newday job will need to be manualy restarted, as it is obviously running late.
Note2:Jobs on missed days will not have run.
No action required, catchup processing is disabled.

SW026-Scheduler job full display changed to ON by %s

A user client application, with a user logged on with suffient authority, has changed the scheduler configuration so that deleted jobs are displayed when a sched listall is done.
This should only be used as a debugging tool.
Impact: A sched listall displays completed/deleted jobs as well as those still waiting to run. If you have any scripts that parse the output of the scheduler listall display they will probably start failing now. Note:The supplied html interface scripts handle this condition so will continue to work.
No action required.

SW027-Scheduler job full display changed to OFF by %s

A user client application, with a user logged on with suffient authority, has changed the scheduler configuration completed/deleted jobs are not doisplayed in response to a sched listall command.
No action required, this is the default and recomended setting.

SW028-JOB update not yet coded ! TODO

The API command for an update request was passed to the job subsystem, The job subsystem does not handle update requests.
No action required, the request is discarded.

SW029-JOB status not yet coded ! TODO

The API command for a detailed status request was passed to the job subsystem, The job subsystem does not this request, and may never do so. The normal listall shows the pid of the immediate child task and the job command will show the database definition; there is no intent to merge the two, nor to track and display every child task started by each child task etc.
No action required, the request is discarded.

SW030-API request for %s, command %s not recognised !

A user client application submitted a command to the job subsystem that was not recognised. If you are writing your own clients you have made a mistake somewhere.
Probably a version mismatch between client/server scheduler. The user has got their hands on a new

bells and whistles client and expects it to work with the current scheduler.
Action required: for the first fix your code, for the second educate the user to be happy with what they were orionally provided and not trawl the web for client updates until you want to update the scheduler server version.

SW031-API request for %s, command %s not recognised !

A user client application submitted a command to the job dependency management subsystem that was not recognised. If you are writing your own clients you have made a mistake somewhere. Probably a version mismatch between client/server scheduler. The user has got their hands on a new bells and whistles client and expects it to work with the current scheduler.
Action required: for the first fix your code, for the second educate the user to be happy with what they were orionally provided and not trawl the web for client updates until you want to update the scheduler server version.

SW032-Restricted command rejected, source = %s

A user client application tried to issue a command that the user logged onto the client was not authorised to perform. The ip address of the client is listed in the message.
No action required, the scheduler rejects the command.
Note:You can go back through the log to identify the user logged onto the connection if you really want to.

SW033-null buffer read from socket

A connected session triggered a data read by the server, but there was no data sent. Either miscoding in one of you customised client applications or a network reset somewhere.
No action required, the scheduler ignored the event apart from writing a warning that it happened.
Note: If this happens often then valuable scheduler cycles are being stolen dealing with it, identify and resolve the coding or network issue.

SW034-Unable to set SO_REUSEADDR for socket, port %d (ok if listening on all), continuing

This is logged during scheduler startup, the scheduler tries to set the SO_REUSEADDR flag for the read socket when it starts up as this resolves issues when the scheduler is stopped and restarted without a reboot.
It was added for my Linux servers as there were times when after a clean scheduler shutdown it could be ober three hours before the scheduler could be restarted on the same socket port number (even though netstat showed no sessions on the port). With the reuse address option I can stop/start at will no with no problems.
It is not a fatal error if this flag cannot be set, the scheduler will continue to start and function correctly. You will not experience problems unless you have a requirement to stop/start the scheduler often as I need on my test server.
No action required.

SW035-SHUTDOWN NOW POSSIBLE, Server is now no longer acception connections...

A shutdown request was queued, and shutdown has been in a pending state. The scheduler has been waiting for running jobs to complete (or fail) before shutting down. The last running job has completed.
The scheduler will no longer accept connections from clients, and will start shutting itself down now.
No action required, a requested shutdown.

SW036-Maximum jobs running, jobs queueing, examine schedule and try to spread out jobs

The scheduler has a limit on the number of jobs it will allow to run simultaneously. This limit has been reached.
The job that was about to be scheduled on is deferred, and the scheduler will try to schedule it on again shortly.
Examine you job scheduled and try to spread them out so a large amount of jobs don't try to run at the same time. The limit is deliberately imposed to avoid batch impacting other activity.
Message SW037 will have been logged also to advise what the maximum concurrent job execution is set to. The message SW038 will identify the job that was requeued.

SW037-Maximum of %d simultaneous jobs has been reached

Refer to SW036. No action required.

SW038-The job trying to run has been requeued and will run next

Refer to SW036. No action required.

SW039-JOBS QUEUED TO RUN CANNOT RUN, LICENSE HAS EXPIRED

When the license for the scheduler is entered incorrectly, or has expired, then execution of jobs by the scheduler is disabled until a valid license is enetered.
This message just indicated that jobs are queuing up to run, and should have run. They will run when the license is corrected.
Actions:enter a correct license. If you are an unregistered user the scheduler recovery manual (to be written) may be of help in getting around this issue.

SW040-JOBS ARE READY TO RUN BUT ARE QUEUEING as SCHEDULER EXECJOBS OFF is set

The scheduler job execution activity has been suspended, either manually by a user reuest or automatically due to problems the scheduler encountered that required manual intervention.
Actions: If disabled by a user, find out why and re-enable if appropriate. If disabled automatically by the scheduler review the log file and correct all problems that caused execution to be disabled

before re-enabling execution of jobs.

SW041-Client connection refused, server alrady has maximum connections allowed !

The maximum number of client connections permitted by the scheduler has been reached. No more client connections will be accepted.
This is currently set to 64 (MAX_CLIENTS). You should never need this many people logged into the scheduler.
Actions:Identify those users that don't logout when they have finished for the day, and remove their access.

SW042-uname error

A user has logged on from a client application from a tcpip address that cannot be resolved into a valid server name.
The message is logged as a warning so you can track down the server if you wish.

SInnn - API and Server module informational messages

The server code is the main program. This is also the component that accepts all incoming tcpip requests so if the component that inplements the user API traffic.

Informational messages are only logged if the job scheduler loglevel is set to 'info'

SI001-Server shutdown has completed

This message is issued during server abort processing, when the server has encountered a fatal error and has shut itself down as quickly as possible.
Actions: Fix the error conditions that forced the server to shut itself down before attempting to restart the server.

SI002-All databases closed, releasing memory and tcp-ip sockets

Issued during normal shutdown processing, the server has sucessfully closed it's database files, it will now terminate all tcpip connections. No action required.

SI003-Closing session to %s

Isuued during normal shutdown processing while tcpip sessions are being closed, this message is issued for each connection closed to provide an audit trail of who was logged on to the scheduler at the time it was shutdown.
No action required.

SI004-ALL OK, Server shutdown has completed

Issued during normal shutdown processing. The scheduler has completed cleanup processing and is stopping now.
No action required.

SI005-Job %s (pid %d) was killed, killed by signal %d

A job started by the scheduler was killed by an external task such as a user running a kill command against it. The scheduler records the kill signal used against the task in the log for audit purposes. The job will be placed into an alert state as expected.
No action required.

SI006-Job %s (pid %d) completed, exit code was %d

A job started by the scheduler completed. The scheduler records the exit code of the job for audit purposes.
No action required.

SI007-JOB %s, releasing exclusive control, other jobs may now run

A job that reequired exclusive access to the scheduler resources has completed execution. Other jobs will now be permitted to start.
No action required.

SI008-Job %s, requeued to %s

A repeating job, one that runs at nnn minute intervals, has completed running. It is requed onto the scheduler active queue to the next time it will run.
No action required.

SI009----- Checking for stale active queue entries

Issued during scheduler restart. The scheduler is about to perform a consitency check of the active job queue file.
No action required.

SI010----- Completed check for stale active queue entries

Issued during scheduler restart. The scheduler has completed a consitency check of the active job queue file.
No action required.

SI011----- Beginning database consistency checks

Issued during scheduler restart. The scheduler is about to perform a consitency check of all its databases.
No action required.

SI012----- Completed database consistency checks

Issued during scheduler restart. The scheduler has completed a consitency check of all its databses.
No action required.

SI013-Closing log file, rolling over to a new days log

The first message that needs to be logged for a new days date has arrived, the scheduler will roll over its log files to a new days file before writing the message.
No action required.
Note: the scheduler does this at message arrival rather than from a timer for midnight, as I consider there is more than enough activity with things rolling over logfiles at midnight in other applications, I see no need to add to that load spike. Note2:Is not done by the newday job, as if the scheduler is shutdown for nn days and you have a cron cleanup job running to delete old files the scheduler may find a logfile it needs missing, so the scheduler logfiles are always for the real date rather than the current scheduler rundate.

SI014-SCHEDULER CONFIGURED TO ONLY LOG ERROR MESSAGES

Issued during scheduler newday processing. The scheduler records the log level being used.
No action required.

SI015-SCHEDULER CONFIGURED TO LOG WARNING OR HIGHER SEVERITY MESSAGES ONLY

Issued during scheduler newday processing. The scheduler records the log level being used.
No action required.

SI016-SCHEDULER CONFIGURED AS LOG LEVEL INFO (log all messages)

Issued during scheduler newday processing. The scheduler records the log level being used.
No action required.

SI017-Scanning calendar file for obsolete entries

As part of newday processing the scheduler scans the calendar file to see if there are any obsolete entries to be removed. At present it will only delete entries for previous years.
No action required.

SI018-NEWDAY, closing all database files

During scheduler newday processing the scheduler closes all its database files so it can perform maintenance tasks on them. No action required.

SI019-NEWDAY, deleting daily queue files

During scheduler newday processing the working database files are deleted to reclaim space, the scheduler will re-create them as empty files.
Each file deleted will be identified by SI020. No action required.

SI020-Deleting file %s

During scheduler newday processing the working database files are deleted to reclaim space. This message advises what file is about to be deleted next.
No action required.

SI023-Compressing the jobs file

During newday processing non-work databases (static files than cannot be deleted to reclaim space) are compressed to reclaim space.
This message indicates the job definition database is about to be checked, and all deleted entries removed.
No action required.

SI024-Compressing the calendar file

During newday processing non-work databases (static files than cannot be deleted to reclaim space) are compressed to reclaim space.
This message indicates the calendar database is about to be checked, and all deleted entries removed.
No action required.

SI025-Compressing the user file

During newday processing non-work databases (static files than cannot be deleted to reclaim space) are compressed to reclaim space.
This message indicates the user information database is about to be checked, and all deleted entries removed.
No action required.

SI026-NEWDAY, re-opening all database files

The scheduler newday job has completed maintenance tasks on its database files, and is now re-

opening them for normal operation.
No action required.

SI027-SCHEDULER-NEWDAY EXEUCUTING

The scheduler newday job is available for execution, and has started processing.
No action required.
Note: all access to the server will queue while the scheduler newday is running.

SI028-Scheduling next NEWDAY job, catchup flag is ON

Issued during scheduler newday processing. The message indicates that catchup processing is enabled. Refer to the manuals for what this means.

SI029-Scheduling next NEWDAY job, catchup flag is OFF

Issued during scheduler newday processing. The message indicates that catchup processing is disabled. Refer to the manuals for what this means.

SI030-New day job last run time now set to %s

The scheduler records the time the last newday was run.
No action required.

SI031-New day job will next run at %s

The scheduler advises what time the next newday job will expect to start executing.
No action required.

SI032-SCHEDULER-NEWDAY COMPLETED

The scheduler newday processing has completed, the scheduler is now able to resume processing client requests.

SI033- Adjusting completion timestamp for %s

A user client application has performed an alert delete or restart for a job. The jobs completion timestamp is adjusted to the current time as required for a forceok operation. If it is a restart operation the completion timestamp will be set again when the job completes so there is no loss of auditing.
No action required.

SI034-Job Scheduler - Shareware by Mark Dickinson, 2002, all rights reserved

Startup banner issued when the server is started. No action required.

SI035-Server initialisation beginning

The server is being started. No action required.

SI044- Job %s, requeued to %s

Part of alert forceok processing, this message advises that the job has been removed from alert status and set to an OK state. This is a repeating job so it has been requeued back onto the active job queue for the next time it should run.
No action required.

SI045- Job %s being set to completed OK

Part of alert forceok processing. This message advises that the job has been moved from a failed state to an OK state and set to completed. This is as a result of a user client application forcing the job into an OK state.
No action required.

SI046- Deleting all alerts for Job %s

Part of alert forceok processing. The job has been forced from an alert state to an OK-completed state without any problem, so it is safe to delete the alert forthe job which is now being done.
No action required.

SI047- Adjusting jobs that were dependant upon Job %s

Part of alert forceok processing. The job has been forced from an alert state to an OK-completed state. All jobs that are in a dependency wait on the job just altered need to be advised that the job is now considered completed; this messages just advises that jobs waiting on this job are now being updated to indicate the depdency on this job has been satisfied.
No action required.

SI048-Auto-Logon to level %c by %s from %s (pid=%d)

A user client application has logged on using the auto-login facility. This can only happen if the user is logged onto a unix server.
The message records the granted authority level, the userid, and the tcpip address and unix pid of the client process the user is logging in from.
No action required.

SI049-Manual Logon to level %c by %s from %s (pid=%d)

A user client application has logged onto the scheduler using a userid/password combination. The message records the authority level granted, the userid and the connecting tcpip address. If the user is logging on from a unix client the pid of the client will be recorded (if the client is properly coded), if not the pid field will be populated by information provided by the client program.
Note: it is up to the client to provide the pid information, if you are using a home written client ensure this information is provided correctly. No action required.

SI050- show sessions responses logged

A use client application has issued a show sessions command. The information is recorded to the scheduler log as SI050 events as well as being returned to the user.
No action required.

SI051- Normal shutdown messages

SI051- -*-
SI051- SHUTDOWN REQUEST HAS BEEN QUEUED !!!
SI051- NO MORE JOBS WILL BE PERMITTED TO START EXECUTION
SI051- SERVER WILL SHUTDOWN WHEN LAST EXECUTING JOB COMPLETES
SI051- -*-

A user client application, logged on with sufficient authority, has requested that the server shutdown. The shutdown has been accepted.
If there are still running jobs them message SW016 will also be issued with this message to indicate the number of jobs that must complete execution before the shutdown will be performed.
No action required.

SI052- Show Sessions request, echoed for posterity

Issued in conjunction with SI050. Refer to SI050.

SI053-Job %s deleted from scheduler by %s

A user client application, with sufficient authority, has deleted a job off the scheduler active job queue.
Impact: any jobs with dependencies on the job being deleted will have the dependencied marked satisfied.
No action required.

SI054-RE-QUEUE (RUNNOW) completed for %s

A user client application, with sufficient authority, has requested that a job queued to run at a future time should start running immediately. The job has been requeued to the current time and will run as soon as possible.

No action required.

SI055-Job %s runnow executed by %s

A user client application, with sufficient authority, has requested that a job queued to run at a future time should start running immediately. This message records who by as a job event to ensure it is logged even if informational messages are being suppressed.
No action required.

SI056-Job %s placed in hold state by %s

A user client application, with sufficient authority, has requested that a job on the active job queue be placed into a hold state. The message records the event and who requested the state change.
Action: when the reason for the job being held has been resolved, release the job again.

SI057-Job %s cleared from hold state by %s

A user client application, with sufficient authority, has requested that a job in a held state be released from hold and made a candidate for job processing again. The message records the event and who requested it.
No action required.

SI058-Newday time change initiated by %s

A user client application, with sufficient authority, has requested that the scheduler newday time be changed.
Impact: scheduler configuration is updated and the scheduler newday job is re-queued to the new time.
No action required.

SI059-Server log level changed to ERR

A user client application, with sufficient authority, has requested that the scheduler loglevel be changed to only report error messages.
No action required.
Note: does not affect the logging of informational or warning messages in the JOB or AUTH category, which are always logged for audit purposes.

SI060-Server log level changed to WARN

A user client application, with sufficient authority, has requested that the scheduler loglevel be changed to only report error and warning messages.
No action required.
Note: does not affect the logging of informational messages in the JOB or AUTH category, which are always logged for audit purposes.

SI061-Server log level changed to INFO

A user client application, with sufficient authority, has requested that the scheduler loglevel be changed to log all scheduler messages.
No action required.

SI062-SCHEDULER-NEWDAY PAUSE ACTION CHANGED TO RAISE ALERT

A user client application, with sufficient authority, has requested that the scheduler action when a newday cannot be run on time be set to raise an alert.
Refer to the manual for the impacts of this.
No action required.

SI063-SCHEDULER-NEWDAY PAUSE ACTION CHANGED TO DEPENDECY WAIT

A user client application, with sufficient authority, has requested that the scheduler action when a newday cannot be run on time be set to use dependency queueing.
Refer to the manual for the impacts of this.
No action required.

SI064-License key changed by %s

A user client application, with sufficient authority, has updated the lecense key for the scheduler.
No action required.

SI065-Licence key details have been updated

New license details have been recorded to the configuration file.
No action required.

SI066-Job %s added by user %s

A user has added a new job to the job definition database. The jobname and the user requesting the new job be added are recorded.
No action required.

SI067-Job %s deleted by user %s

A user has deleted a job from the job definition database. The jobname and the user requesting the job be deleted are recorded.
No action required.

SI068- Sutdown via telnet messages

SI068- SHUTDOWN REQUESTED VIA TELNET(?), ACCEPTED
SI068- -*-
SI068- BACK-DOOR SHUTDOWN REQUEST HAS BEEN QUEUED !!!
SI068- WAITING ON %d JOBS TO COMPLETE
SI068- -*-

Used only bythe author for testing new versions, where I may have damaged the API command for a shutdown. A undocumented facility to shutdown the server using a standard telnet client exists for emergency shutdowns.
This telnet backdoor function does not exist in the shipped binaries, and is disabled by default in the shipped source code. But you bay have enabled it if you have the source, so the message is documented.
Actions: find out why this was used. The log will indentify the ipaddress of who used it if you search for connection records.

SI069-All scheduler databases available

Issued during scheduler startup. The scheduler has been able to access all the databases it needs for operation.
No action required.

SI070-Opening TCP-IP services

Issued during scheduler startup. The scheduler is getting ready to accept user connections.
No action required.

SI071-Server configured to bind to interface %s, port %d only

Issued during scheduler startup. The scheduler is configured to bind to only one interface card, the message identifies the ipaddress of the interface card to be used and the port number the scheduler will listen on.
No action required.

SI072-Server configured to bind to all interfaces, port %d

Issued during scheduler startup. The scheduler is configured to bind all available interfaces.
No action required.

SI073-Server listening on port address '%s'

Isuued during scheduler startup. The scheduler has been able to bind to the interface(s) it is configured to use and is now listening on the port number identified.
No action required.

SI074-TCP-IP Services now available

Isuued during scheduler startup. The scheduler is now accepting client connections.
No action required.

SI075-Server has initialised

Isuued during scheduler startup. The scheduler is now fully initialised and will begin doing work.
Note: this message is issued for solaris systems only, where the daemon function is not supported correctly in the solaris cc compiler (from a gcc viewpoint anyway) and the task must be backgrounded with "&" instead of going daemon.
No action required.

SI076-Server has initialised, going daemon now

Isuued during scheduler startup. The scheduler is now fully initialised and is calling the daemon function to place itself into a proper background daemon task. It will begin doing work now.
No action required.

SI077-There are no jobs available to run at present

Either there are no jobs left on the scheduler active queue to process other than the scheduler newday task, or all remaining jobs other than the scheduler newday task are in a held or failed state.
No action required.

SI079-Connection accepted from %s

A socket connection has been accepted from the ipaddress in the message.
No action required.

SI080-Connection from a host that hides its ip address

A socket connection has been accepted from a client that is hiding its ipaddress. The connection is still permitted.
No action required.

SI081-Server is now no longer acception connections...

The server has begun processing a shutdown request. It is no longer accepting connection requests from client programs.
No action required.

AUTH:SI082-Logoff to default guest level by %s from %s

A user client application has logged down to the default guest level and flushed the user values held

on the server.
This is most likely a connection pool release being performed by an external application such as the servlet interface).
No action required.

UEnnn - User module errors

The user module is responsible for managing all access and updates to the user database.

UE001-Insufficient memory to open user file (USER_Initialise)

Refer to the section of this document that covers memory allocation errors. The server was unable to allocate memory to open the user file, the scheduler cannot start running.
Actions: fix the memory shortage problem.

UE002-Unable to verify the auto-login user, file %s (USER_check_required_users)

During server startup the user file is checked to ensure that the auto-login user exists. If it does not the scheduler will create it.
This error means the scheduler was unable to create the user record. This is fatal, the server will not start.
Refer to preceeding messages that will have been logged identifying the problem for resolution.

UE003-Unable to verify the guest user, file %s (USER_check_required_users)

During server startup the user file is checked to ensure that the guest user exists. If it does not the scheduler will create it.
This error means the scheduler was unable to create the user record. This is fatal, the server will not start.
Refer to preceeding messages that will have been logged identifying the problem for resolution.

UE004-Unable to create user file %s, errno %d (USER_Initialise)

During scheduler startup no user file was found in the directory the scheduler was started from. The scheduler tried to create and initialise one with default entries, but failed to do so.
This is fatal, the server will not start.
Actions: The error number is supplied in the message, check it and resolve the error condition before restarting the scheduler.

UE005-Unable to open user file %s, errno %d (USER_Initialise)

During scheduler startup the scheduler was unable to open the user file.

This is fatal, the server will not start.
Actions: The error number is supplied in the message, check it and resolve the error condition before restarting the scheduler.

UE006-Required system users were unable to be verified (USER_Initialise)

During scheduler startup the scheduler checks to ensure that required reserved userids exist in the user file, the check failed. One or both of the messages EU002 or UE003 will have been issued identifying the user that could not be checked.
This is fatal, the server will not start.
There will have been other messages issued that identify why the user file could not be checked/accessed. Refer to these for resolution.

UE007-USER_Terminate called when no user files were open, fclose ignored ! (USER_Terminate)

This should only bee seen during a scheduler fast shutdown due to fatal errors opening one or more files. The scheduler tries to die as cleanly as possible and will attempt to close every file that could possibly be open, some will not be.
The message indicates program logic required a close of the user file, but the file was not flagged as opened. The close request is not attempted.
No action is required.

UE008-Seek error %d on user file

An IO error occurred on the user file during a seek operation. The error number that occured is recorded in the message. Action: Check the error number and take appropriate action to resolve the problem.

UE009-Write error %d on user file

An IO error occurred on the user file during a write operation. The error number that occured is recorded in the message. Action: Check the error number and take appropriate action to resolve the problem.

UE010-Flush Cache error %d on user file

An IO error occurred trying to flush cache for the user file. The error number that occured is recorded in the message. Action: Check the error number and take appropriate action to resolve the problem.

UE011-Attempt to Change auto-login rejected, reserved user

A use client application attempted to make a change to the reserved auto-login user. This is a

reserved system user that the scheduler required to run.
The request is rejected. No futher action required.

UE012-Seek error %d on user file

An IO error occurred on the user file during a seek operation. The error number that occured is recorded in the message. Action: Check the error number and take appropriate action to resolve the problem.

UE013-Write error %d on user file

An IO error occurred on the user file during a write operation. The error number that occured is recorded in the message. Action: Check the error number and take appropriate action to resolve the problem.

UE014-file seek error (User File): (USER_read)

A seek error occured reading from the user file. Whatever operation was in progress at the time will fail.
Action: determine what is wrong with the user file, and fix it.

UE015-Read error occurred (USER_read)

A read error occured reading from the user file. Whatever operation was in progress at the time will fail.
Action: determine what is wrong with the user file, and fix it.
Note:If this was caused by a client attempting to read a nonexistent user, no action is required.

UE016-Insufficient memory to allocate %d bytes of memory (USER_list_user)

Refer to the section of this document that covers memory allocation errors. The server was unable to allocate memory to build a response buffer for a list user display request. The request fails.

UE017-Unable to reply to client request (USER_proces_client_request)

A socket error occured trying to reply to a user client application request. The client has probably disconnected.
No action required.

UE018-Insufficient memory to allocate %d bytes of memory (USER_process_client_request)

Refer to the section of this document that covers memory allocation errors. The server was unable to allocate memory to process a request for the user file. The request fails.

Fix the memory shortage problem before retrying the request.

UE019-Unable to reply to client request (USER_proces_client_request)

A socket error occured trying to reply to a user client application request. The client has probably disconnected.
No action required.

UE020-Unable to reply to client request (USER_proces_client_request)

A socket error occured trying to reply to a user client application request. The client has probably disconnected.
No action required.

UInnn - User module informational messages

The user module is responsible for managing all access and updates to the user database.

Informational messages are only logged if the job scheduler is congigured with loglevel 'info'.

UI001-Open of user file %s completed

The user file was opened by the scheduler without any problems.
No action required.

UI002-Closed: User file

The user file was closed by the scheduler without any problems.
No action required.

UI003-Added user record for '%s'

A user record for user %s has been added to the user file.
No action required.

UI004-User %s added by %s

A user record for user %s has been added to the user file by the user logged on as the second %s parameter.
Unlike the informational one above that may be suppressed by a loglevel setting this one is logged as a security event which cannot be suppressed. No action required.

UI005-User %s deleted by %s

A user record for user %s has been deleted from the user file by the user logged on as the second %s parameter.
This one is logged as a security event which cannot be suppressed. No action required.

UI006-User %s password changed by %s

A user record for user %s has had a password change performed by the user logged on as the second %s parameter.
This one is logged as a security event which cannot be suppressed. No action required.

ZEnnn - Utility module errors

The utility module is a set of common utility routines shared across all the modules.

ZE001-Original error was '%s'

This message is generated by a routine called from various parts of the application to log the last fatal error condition recorded.
It is used to report errors that could not be reported at the time they ocurred due to scheduler internal activity (ie: stdout may have been redirected so the message would have gone to the wrong place).
It is also used to repeat some errors for emphasis.
Actions: take remedial action based on the content of the message.

ZE002- fatal error on record updates

ZE002-FATAL ERROR: FSEEK FAILED TO POSITION CORRECTLY
ZE002-FATAL ERROR: The record has not been updated.

A write of a record to one of the scheduler data files cannot be performed because a seek request to the required record location has failed.
The routine that called the utility function will also log error messages identifying what was being attempted and for what file, refer to those to identify the damaged file and determine the impacts.
Action: identify the file in error from associated log messages, and resolve the file error condition.

*ZE003-*ALERT** Wanted to write to record %d, actually wrote at record %d*

This message is in there as fseek was consistently returning sucess during failures during testing. A lot of additional checking as been put in place to check where the file pointer is after an fseek now before any write is attempted, so you should hopefully never see this message.
If you do see this message it means that a record other than the one intended to be updated has just been updated (that is between a ftell to check the position is correct and an immediate write the file

pointer changed in what is a single thread procedure so theoretically impossible).
Actions: determine what file activity was in progress at the time by reviewing other log messages for this time, and check the contents of the file affected are still valid.

ZE004-file seek error (%s): (UTILS_read_record)

While trying to seek to position 0 in a file the fseek returned an error. The file type the fseek was being performed on is logged in the message.
Actions: check the file has not been deleted in mid-flight, as a seek to position 0 should always work if the files still there. If it is check your filesystem for errors.

ZE005-Unable to allocate memory for read operation (UTILS_read_record)

Refer to the section of this document that covers memory allocation errors. It was not possible to allocate a buffer large enough to hold a single record from the file being read, the read operation will not be attempted.
Other messages will have been logged by the caller of the read operation identifying what action has failed.
Actions: resolve the memory shortage problem. Also you will need to review the log messages to determine what operation was in progress at the time the read was performed to determine the severity of the problem and take appropriate action to resolve.

ZE006-Read error occurred (UTILS_read_record)

An IO error ocurred reading a record from one of the scheduler data files.
Other messages will have been logged by the caller of the read operation identifying what action has failed.
Actions: review the log messages to determine what operation was in progress at the time the read was performed to determine the file affected and severity of the problem and take appropriate action to resolve.

ZE007-file %s to be compressed DOES NOT EXIST !, no compress done

During file compression processing the scheduler was asked to compress a file that no longer exists, have you deleted it ?.
Other messages logged at this time will identify what file the scheduler was trying to compress.
The scheduler will continue processing as it will re-create and initialise the missing file during normal file re-open processing.
Actions: You now have an empty database file, you will have to repopulate it (I hope you have a paper copy of the contents). Do not delete it again.

ZE008-Unable to stat file %s (stat err=%d, errno=%d), no compress done

During scheduler newday processing, prior to a file being compressed, a stat is done to check the

file exists (if not ZE007 is logged) and is accessable. If the file is not accessable this message is logged.
If you see this message the file permissions (probably on the directory) are wrong and the scheduler can no longer see the file, or you have filesystem errors.
Actions: check the permissions, and check the filesystem for errors.
Note: original file unchanged, contents are OK.

ZE009-Unable to allocate %d bytes of memory (UTILS_compress_file)

Refer to the section of this document that covers memory allocation errors. During newday processing the scheduler attempts to compress data files, there was insufficient free memory on the server to allocate a data buffer to hold a single record entry.
The compress is aborted, the file contents are unchanged.
Actions: resolve the server memory shortage immediately, it will eventually impact other operations.
Note: original file unchanged, contents are OK.

ZE010-Unable to open %s (%s) for compression (err=%d), no compression done

Around about now I would be checking the filesystem for errors.
However other messages will have been logged identifying the file to be compressed, you can check that to ensure file permissions are correct, although as the scheduler should be running as root that should not be a problem.
This message is generated when the file exists on disk, and the scheduler can access the full directory path to the file, but the scheduler cannot open the file; this condition should be almost impossible.
Actions: check your filesystem for errors.
Note: original file unchanged, contents are OK.

ZE011-Unable to open %s for compression work (err=%d), no compress done for %s

During the file compression process a work file needs to be created in the database directory, the scheduler was unable to open/create a work file.
Actions: check the filesystem is not full. Check the directory permissions. If no problems there check the filesystem for errors.
Note: original file unchanged, contents are OK.

ZE012-Write error on %s (err=%d) for compression work, no compress done for %s

During compression of a file the scheduler was unable to write to the work file it was using.
Actions: check the filesystem is not full (most likely cause). If the filesystem is not full check the filesystem itself.
Note: original file unchanged, contents are OK.

ZE013-Read error on %s (err=%d) for compression work, no compress done for %s

During file compression prpcessing the scheduler was unable to read a record from the original file. As it has had no problems reading/updating until this point there is only one action needed.
Actions: check the filesystem for errors.
Note: original file unchanged, contents are OK.

ZE014- rename error during compress messages

ZE014-Unable to rename %s to %s for compression work, no compress done for %s
ZE014-...errno=%d, lasterror value was %d

During file compression the scheduler will attempt to rename the original file to a temporary backup name. This failed.
Actions: determine why the scheduler does not have permission to rename the file, the scheduler should be running as root so this should not have happened.
Note: original file unchanged, contents are OK.

ZE015- rename error during compress messages

ZE015-Unable to rename %s to %s for compression work, backing out changes
ZE015-...errno=%d, lasterror value was %d

During file compression the scheduler will rename out the original file to a backup file, and rename the work file (compressed file) as the database file.
This message means the work file was unable to be renamed, and the original file is going to be recovered from the backup file.
Actions: no action required unless you also get message ZE016, in which case your filesystem (or disk) is failing badly. You should try to determone why the rename failed as the file is going to get to large to manage if left uncompressed for too long.

ZE016- FATAL compress failed messages, scheduler corrupt

ZE016----FATAL--- unable to recover from compression error !
ZE016-...errno=%d, lasterror value was %d
ZE016-...Unable to rename orginal %s to %s, manual recover needed !
ZE016-...Shutdown server and MANUALLY rename %s to %s !

You have filesystem or disk problems.
During file compression the scheduler will rename out the original file to a backup file, and try to rename the work file (compressed file) as the database file. You are seeing this message because it was unable to rename the work file and was also unable to rename back the original file.
For it to be unable to rename back the original file, considering it has already renamed it once, implies your filesystem is badly damaged.

Actions: shutdown the scheduler and rename back the original file as identified in the error messages. Check the filesystem before restarting the scheduler.

ZE017-Errors prevented compression of %s (%s), no compress done

Issued in conjunctiom with ZE015 if all went well. A backout of changes made to the database was sucessfull.
Actions: refer to ZE105.

ZE018-UTILS_number_to_string, fieldlen %d to large for buffer

Programming error. An external procedure called this procedure with a number so large that if converted to a string would exceed the internal 49 byte buffer size.
Actions: If you are a registered user with the source code, undo the changes you have made. If you gotthis binary distribution fromthe author please advise the author as as far as the author is aware the author's binary distribution doesn't generate numbers that large (to the best of the authors knowledge, it has never been seen/reported); if you got you distribution from someone else then advise them they have screwed up their modifications.

ZE019-Unable to allocate memory for time structure (UTILS_make_timestamp)

Refer to the section of this document that covers memory allocation errors. A scheduler routine requested the utility library format a timestamp, however there was insufficient free memory available on the server to allocate a tine little timestamp buffer.
The timestamp routine returns 0 rather than a valid timestamp.
Actions: fix the memory shortage problem, it will be affecting more than just this one routine.

ZWnnn - Utility module warnings

The utility module is a set of common utility routines shared across all the modules.

ZW001-Attempt to add duplicate record rejected !

A user client program attempted to add a record that already exists. The attempt is rejected.
Refer to additional messages logged by whatever main code called this utility function to determine what the user was trying to do if you feel it is warranted.
No action required. Note: This message is only generated for this error if you have the scheduler loglevel set to allow warning messages to be logged.

ZW002-Unable to find data record for '%s' (UTILS_read_record, called by %s)

A read request was made for a record that doesn't exist. The most likely cause for this is that a user

client application requested information on a record and mis-spelt what they were looking for.
No action required.

ZW003-License for this product expires in %d days

The license for the scheduler expires in less than 90 days.
Actions: if you are not a registered user, must be 2036, time to register. If you are a valid user with the source code this shouldn't be too big a problem for you as you can either change the source code or request a new release from the author.

ZW004-License for this product expires in %d days

The license for the scheduler expires in less than 10 days. This message is written four times to increase your chance of seeing it.
Refer to ZW003 above for actions to take.

ZW005-Calendar set by days rejected, either no days or year < current year, days %d, year %d !

A user has requested a calendar add or update using a populate by dayname request, but has not provided any legal dates that the calendar can run jobs on.
No action required, the change is not performed.

ZInnn - Utility module informational messages

The utility module is a set of common utility routines shared across all the modules.

Informational messages are only written if the job scheduler is configured to use loglevel 'info'.

ZI001-Compressing %s, %d records in original file

The file identified in the message has been compressed (obsolete records have been dropped and the space reclaimed).
No action required.

ZI002-No records need deleting, no compress required

A file to be compressed was checked and it was found compression was not required.
No action required.

ZI003-Completed compression of file %s (%s)

File file identified in the message has been compressed (obsolete records have been dropped and the space reclaimed).

No action required.

ZI004-Compressed %s, %d records dropped, %d records kept

File file identified in the message has been compressed (obsolete records have been dropped and the space reclaimed). The number of records dropped and retained is reported by this message.
No action required.

Memory Allocation Errors

Your server is too low on memory to run this application sucessfully, this is supprising as the largest malloc done anywhere in this application is 8K. As most servers have a few MB spare at least your server is in real trouble.

I would suggest using ps to identify which processes are gobbling up your memory (refer to the -o option of ps to see how you can select memory useage). If they are using more than you would expect, restart them.

You could also add a new swap partition or swapfile.

As a last resort, you could reboot your server.

Note: To the best of the authors knowledge the job scheduler application has no memory leaks. If you are paranoid about it refer to the section of the job scheduler manual to do with debugging, you can debug at the memory level to see all malloc and free statistics (this will produce a very large logfile).