



POWERFACTORY

PowerFactory 2021

Error Codes

F2021

POWER SYSTEM SOLUTIONS
MADE IN GERMANY

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1 Introduction

This document is intended to be a reference manual for common problems and errors that may occur when working with *DlgSILENT PowerFactory*. In addition to listing the errors, it contains further explanation of the problem and mentions possible actions that help to resolve the issue.

The list does not claim to be complete. It contains only those errors that have been classified by a dedicated error code number. Most of these errors are currently related to installation and configuration.

2 Installation Errors

1000 - Application initialisation failed

- ✎ Application could not be properly initialised.
- ✓ This is a general error that could have various reasons. More details can be found in the **PowerFactory** log file.

1001 - Cannot load DLL XXX

- ✎ The requested .dll file was not found or could not be loaded.
- ✓ This commonly happens if the installation is incomplete or corrupt. Please check that the file exists on disk and is readable. A re-installation or repair installation of the application normally solves the problem.

1002 - DLL file XXX appears not to be valid.

- ✎ Given file is not a valid Windows .dll and cannot be loaded.
- ✓ The file is probably corrupted and does not have the required information and format of a Windows linked library. This commonly happens if the installation is corrupt. A re-installation or repair installation of the application normally solves the problem.

3 Configuration Errors

2000 - Configuration contains errors

- ✎ The **PowerFactory** configuration file (`PowerFactory.ini`) contains errors
- ✓ The **PowerFactory** configuration is stored in a normal .ini file located in the installation directory. For advanced users, this file can directly be edited with any text editor, e.g. Windows notepad. It should be encoded in ANSI format, and not e.g. UTF-16. A configuration dialogue is shown at application start-up, and the user is asked to fix the errors.

2001 - Configuration file XYZ is missing.

- ✎ There is no `PowerFactory.ini` in the **PowerFactory** installation directory, or the specified `/ini` command line parameter is invalid.
- ✓ Ensure that there is a `PowerFactory.ini` in the installation directory, or ensure that the `/ini` parameter is correct.

2002 - Windows has to be configured with "XYZ" as the "Language for Non-Unicode Programs" for the selected application language "ABC".

- ✎ Since **PowerFactory** is a non-Unicode application, it requires that Windows is configured accordingly.
- ✓ Open Windows's Regional settings, on the "Administrative" page select the "Language for non-Unicode programs" as follows:
 - English: works always.
 - Chinese: requires "Chinese (Simplified, China)"
 - French: requires "French (France)"
 - German: requires "German (Germany)"

- Russian: requires "Russian (Russia)"
- Spanish: requires "Spanish (Spain)"
- Turkish: requires "Turkish (Turkey)"

4 Licence Errors

3000 - No PowerFactory licence found or the selected licence "X@Y" is invalid.

- ✎ Licence cannot be read for some reason.
- ✓ Double check that a valid licence is available on the current PC (softkey activated, USB dongle connected). If you're using a licence server, double check that a correct licence is configured.
If the problem persists, please create a licence support package using the respective button in the Licence Manager and send it to *DlgSILENT* support for investigation.

3001 - Licence is invalid.

- ✎ The used licence is incomplete.
- ✓ Open the Licence Manager and run the activation again. If this does not solve the problem open <http://lc.codemeter.com/23827/depot/index.php> and enter your activation code into the ticket field. Press next. Scroll down and have a look at the available buttons. Click on "Continue License Transfer" if available or on "Activate Licenses". Otherwise contact *DlgSILENT* support team and send a licence support package generated from the Licence Manager.

3002 - Your licence requires online access to verify its validity.

- ✎ Every licence requires online validation at least every 30 days.
- ✓ Make sure the PC is connected to the internet and (if required) proxy settings are correct. You can verify the internet connection in the Licence Manager: Click on Network Settings and then on Check Connection. If the connection is established **PowerFactory** will automatically validate the licence during start-up

3003 - This floating licence was not generated by PowerFactory tools.

- ✎ The system has detected that a floating licence has been generated with tools different to the **PowerFactory** standards.
- ✓ In theory it is possible to generate a floating licence with general WIBU tools. However such a licence will be detected by the system and **PowerFactory** will not accept such a licence. Return the floating licence to the server (or wait until it expires) and generate a new one from within **PowerFactory**.

3004 - You are about to access a hot-standby licence. Please use a full licence instead.

- ✎ A hot-standby licence has been configured in `PowerFactory.ini` by accident. Use another licence instead.
- ✓ *DlgSILENT* offers hot standby licences for disaster recovery systems. These licences cannot be accessed directly but are only active after a critical failure in the primary licence server. Open the Licence Manager and click on "Select Licence". Select a full licence, save it and start **PowerFactory** again.

3005 - An internal licence error occurred.

- ✎ Some internal error has occurred in the licence system that cannot be further specified.
- ✓ Please contact our support team providing a licence support package. To create a licence support package, please open the LicenceManager and press the button on the lower left hand side.

3006 - Failed to update the activation file.

- ✎ For some reason the activation file could not be updated automatically. Please update it manually instead.
- ✓ Follow these steps to update the activation file manually:
 - Open the download area <https://www.digsilent.de/index.php/downloads.html>
 - Enter your email and password
 - Go to PowerFactory Releases - PowerFactory 20XX - Installation Files
 - Download the activation file called "cmApm.bin".
 - Replace the file with the same name in the **PowerFactory** installation directory (typically C:\Program Files\DlgSILENT PowerFactory 20XX).

3007 - The currently used licence is not included in the licence activation file of your PowerFactory installation.

- ✎ The started **PowerFactory** version is not covered by your maintenance contract or you have to update your licence activation file.
- ✓ In case your maintenance contract has already ended, you possess the right to start every **PowerFactory** version that has been released before your maintenance contract ended. When starting newer versions you will receive this error message. In case you have recently got a new licence or extended your maintenance contract, you might need to update the licence activation file (cmApm.bin). In case of a network licence, this update needs to be done on every client installation. The message dialogue offers you to perform the update automatically, but you can also get the latest file from our download area. It simply has to be replaced in the **PowerFactory** installation directory. (see procedure described under error code 3006).

3008 - You are using an engine licence.

- ✎ This licence type supports starting PowerFactory in GUI-less, non-interactive mode only.
- ✓ Engine licences are special licence types allowing for automated processes or API connection without graphical user interface only. Open the LicenceManager, choose "Select Licence" and select a **PowerFactory** standard licence instead.

3009 - Function multi-user database not included in licence.

- ✎ The Multi-user database function is not included in the currently used licence configuration.
- ✓ There are two possible reasons for this error: 1) your licence simply does not include the required licence. 2) the required licence has not been requested for the current session due to the licence settings in IntUser / IntGroup. In this case log in as **PowerFactory** administrator and edit the respective user settings.

3010 - Function Scripting and Automation not included in licence.

- ✎ The scripting and automation function is not included in the currently used licence configuration.
- ✓ There are two possible reasons for this error: 1) your licence simply does not include the required licence. 2) the required licence has not been requested for the current session due to the licence settings in IntUser / IntGroup. In this case log in as **PowerFactory** administrator and edit the respective user settings.

3011 - Error during initialization of licence thread.

- ✎ Some system internal functions failed.
- ✓ This rare error indicates problems in the communication between **PowerFactory** the operating system and the licence service.

3012 - Connection to licence module has been lost.

- ✎ Connection between **PowerFactory** and the licence service has been interrupted.
- ✓ In case of using a network licence please verify that the connection to the licence server is established and stable. Additionally check that the windows service "CodeMeter Runtime Server" is running. A restart of this service might help to solve the problem.

3013 - Windows Service CodeMeter.exe is not running.

- ✎ Windows Service CodeMeter.exe is not running.
- ✓ The **PowerFactory** licence system is based on a windows service called CodeMeter.exe. It seem that this service is not running properly. Please open "services" in your windows configuration and try to restart the service manually.

3014 - Licence system runtime not installed.

- ✎ Licence system runtime not installed.
- ✓ For unknown reasons, the underlying licence system seems to be missing on your PC. Please download and install the newest version of CodeMeter User Runtime for Windows from <https://www.wibu.com/downloads-user-software.html>

3015 - Floating licence expired.

- ✎ The floating licence has expired.
- ✓ Renew the licence or select another one.

3016 - Checkpoint licence requires update.

- ✎ You are using a checkpoint licence that requires a regular checkpoint update.
- ✓ A checkpoint licence should be update by the LicenceValidationService automatically on a regular basis. Please make sure, that this service is correctly installed, running and your network settings are up to date. Alternatively (or for testing purposes) you can update the checkpoint manually using the LicenceManager. Open "Select Licence" page and select the concerned licence. A button "Renew" will appear above the shown licence information. Use it to perform the update manually.

3017 - Selected licence has expired.

- ✎ Your licence has expired, i.e. the time-limit of your temporary licence has been reached.
- ✓ If your licence has been converted in a non-time-limited version meanwhile, please check the LicenceManager - Update Licence functionality for available updates. In case you would like to extend the validity of your licence, please contact our sales team.

3018 - User maximum of the licence is reached.

- ✎ The licensed user limit has already been reached.
- ✓ Please close one **PowerFactory** instance in order to be able to start a new one.

3019 - Licence became invalid.

- ✎ Your licence has become invalid.
- ✓ Please contact our sales team.

5 Database Errors

4000 - Required database initialisation was rejected.

- ✎ A multi-user database must be initialized before it can be used. Similarly a new Offline session has to be initialized. The user cancelled the initialisation process.
- ✓ Don't cancel the initialisation process.

4001 - Database migration failed.

- ✎ A new **PowerFactory** version requires a database migration. **PowerFactory** terminates because the migration process failed.
- ✓ There are many reasons why a database migration fails, especially for big multi-user databases, where a complete migration could take several days. Possible reasons are network connection timeouts, automatic Windows session termination, or a application or database server restart due to maintenance.
Usually the migration process can be restarted. Then the migration continues where it was interrupted.

4002 - Another **PowerFactory instance already accesses this single-user database.**

- ✎ (Local database only) A local (i.e. single-user) database is used, but another instance of **PowerFactory** is already started and using it.
- ✓ Ensure that **PowerFactory** is not started twice.

4003 - Required database repairing due to records of a future date was rejected.

- ✎ (Local database only) A local i.e. single-user database contains records of a future date, probably due to a modified computer system time, and should be repaired. The user refused to start the repair process
- ✓ Do repair the database as suggested.

4004 - The database contains records of a future date, and can't be used.

- ✎ (Multi-user database only) A multi-user database contains records of a future date probably due to a modified computer system time on database server.
- ✓ Wait until the system time reaches the time of the database records.

4005 - Database cannot be read with PowerFactory AAA. Please use PowerFactory BBB or higher to access it.

- ✎ You're trying to start **PowerFactory** version AAA with a database used for version BBB, and a data migration is not possible.
The database version is probably newer than your **PowerFactory** version, or older than version 14.0.
- ✓ Use the suggested **PowerFactory** version
If the database is older than version 14.0: start **PowerFactory** version BBB and manually export your data to DZ files. Create and initialise a 2nd database with **PowerFactory** version AAA and import the files.

4006 - The database cannot be read with this version, and database migration was rejected.

- ✎ User refused to migrate the database to the current **PowerFactory** version.
- ✓ Do migrate the database as suggested.

4007 - Database is in an invalid migration state.

- ✎ A database migration was initiated but did not finish properly.
- ✓ There are many reasons why a database migration fails, especially for big multi-user databases, where a migration could take several days. Possible reasons are to network connection timeouts or regular server maintenance restarts.
Usually the migration process can be restarted. Then the migration continues where it was interrupted.

4008 - Migration failed due to incorrect Administrator password.

- ✎ (Multi-user database only) A migration was initiated, but the user provided a wrong **PowerFactory** Administrator password.
- ✓ Provide the correct password.

4009 - Starting Offline session failed.

- ✎ The Offline session could not be initialized.
- ✓ Review the **PowerFactory** configuration, especially the server and port on the Database page. Verify that the Offline Proxy Server is configured correctly and is up and running. Verify that the network configuration allows connections to the server.

4010 - Internal database error: ...

- ✎ Some internal database-related functionality fails.
- ✓ If the problem persists: create a support package and consult *DigSILENT* support.

4011 - No more objects can be created in Offline mode because the Id contingent is exhausted.

- ✎ (Offline mode only) For each new object in the database **PowerFactory** needs a new Id which must be synchronised with the multi-user database behind the Offline Proxy server. The application holds a pool of IDs which is replenished during synchronisations when needed. In this case the ID pool is exhausted.
- ✓ Synchronize and try again. In order to avoid this problem: increase the "Id contingent size" on the "Offline" page in the user settings.

4012 - Oracle client library cannot be loaded. Please ensure that the Oracle client runtime is installed correctly, and that PowerFactory is configured accordingly.

- ✎ (Oracle only) **PowerFactory** uses the Oracle Client Runtime for the communication with the Oracle database server. **PowerFactory** is not able to load the DLL files from the Oracle Runtime installation directory.
- ✓ Ensure that the correct Oracle Client is installed e.g. **PowerFactory** 64 bit requires the 64 bit version of Oracle Client.
- ✓ Ensure that the **PowerFactory** configuration is correct: the parameters "Database - Database Driver" and "Advanced - Additional directories in PATH" are relevant. Find all details in the *Advanced Installation and Configuration Manual* PDF document.

4013 - Error in local database: ...

- ✎ A critical problem with the local database occurred.
- ✓ There are several reasons for this error.
 - Sqlite Error 26: file is not a database...: The mentioned file exists but it's probably no database file, or the database file is encrypted and there is no password configured, or the configured password is wrong.
 - Sqlite Error 11: The database disk image is malformed: The database file is probably corrupt. It should be restored from a workspace export.
 - Sqlite Error 13: Insertion failed because database is full. No space left on device: the workspace containing the local database is usually on the C: drive. Ensure that there is enough free space.
 - Missing file access rights: ensure that the Windows user has the appropriate access rights.

4014 - Cancelled reset database unlock key

- ✎ User tried to set an Administrator password with the database unlock key (DUK) and cancelled the operation.
- ✓ Don't cancel the operation.

4015 - Empty Administrator password.

- ✎ User tried to set an empty Administrator password with the database unlock key (DUK) function.
- ✓ Try a non-empty Administrator password instead.

4016 - Incorrect database unlock key.

- ✎ User tried to reset the Administrator password with the database unlock key (DUK) function but the key was not valid.
- ✓ Use the correct key.

4017 - Incorrect administrator password.

- ✎ The used Administrator password is not correct.
- ✓ Use the correct password.

4018 - Cannot migrate database while running in read-only mode.

- ✎ You're trying to use a database in read-only mode which needs a migration. It's not possible to migrate a database in read-only mode.
- ✓ Start the application in normal (i.e. not in read-only) mode and migrate the database.

4019 - Local database is encrypted and cannot be read with the provided password.

- ✎ You're trying to use an encrypted database and provided an invalid password.
- ✓ Provide the correct password.

4020 - Database migration blocked due to illegal command line parameter.

- ✎ You're trying to unlock a database that has not yet been migrated.
- ✓ Unlock the database using a PowerFactory version that matches the database.

4021 - Database schema is invalid.

- ✎ There is an object (e.g. table, table column, index, index column, or sequence) missing in the database. Possible reasons:
 - Some object could not be created in a previous database migration due to spacing problems.
 - A database backup was not fully restored.
- ✓ Create a support package and consult *DigSILENT* support.

6 Startup Errors

5000 - User couldn't be logged on.

- ✎ The user authentication failed.
- ✓ Verify that user credentials (i.e. user name and password) are correct. Verify that the user account is enabled.

5001 - Logon is currently restricted to a limited user group.

- ✎ The **PowerFactory** environment is in maintenance mode and only a restricted group of users is allowed to use the system.
- ✓ Consult the **PowerFactory** Administrator

5002 - No Profile found.

- ✎ There is no profile configured for this user.
- ✓ Consult the **PowerFactory** Administrator

5003 - Workspace export failed.

- ✎ The workspace export with `PowerFactory.exe /exportworkspace` did not succeed.
- ✓ If the problem persists consult *DlgSILENT* support.

5004 - User did not change password at log on.

- ✎ The Administrator configured this user account to need a new password. When asked for a new password the user cancelled the dialog.
- ✓ Log on and provide a new password.

5005 - Administrator log in is required.

- ✎ Non-Administrator users aren't allowed to log in right now. The database requires that the Administrator logs on and resolves some pending issue.
- ✓ Log on as Administrator and resolve the pending issue.

5006 - Initial setup has been canceled.

- ✎ Initial database setup has been cancelled.
- ✓ Run PowerFactory again to complete the initial database setup.

5007 - User did not select a working user.

- ✎ Because the current user is configured to be able to work as a different user, a dialogue was shown with all possible user names. The user did not choose any user but cancelled this dialogue.
- ✓ Select a user.

7 Runtime Errors

6000 - Signal buffer size exceeded.

- ✎ A simulation needs different ComInc settings.
- ✓ Increase parameter signal buffer on page: Advanced Options in calculation of initial conditions (ComInc). Simulation can be restarted after **PowerFactory** restart.

6001 - Fatal error occurred.

- ✎ An unexpected error occurred.
- ✓ If the problem persists: create a support package and consult *DlgSILENT* support.

6002 - User session has been terminated.

- ✎ (Multi-user database only) The current **PowerFactory** session was terminated.
- ✓ You accidentally might have started a 2nd session, or someone else started a session with your credentials, or the **PowerFactory** Administrator terminated your session e.g. due to maintenance purposes.

6003 - Application is closed due to idle session timeout.

- ✎ The application was closed automatically because it was not used for some time.
- ✓ The **PowerFactory** Administrator is able to change the user's idle session configuration.

6004 - Application is closed due to internal error.

- ✎ The application was closed automatically due to an internal error.
- ✓ If the problem persists: create a support package and consult *DigSILENT* support.

8 API/Python Errors

Such errors occur when using **PowerFactory** through the C++ API or Python.

7000 - PowerFactory cannot be started again in the same process.

- ✎ **API:** **PowerFactory** was started by calling `CreateApilInstanceV2()` and terminated by calling `DestroyApilInstanceV2()`. Now user code tries to call `CreateApilInstanceV2()` again within the same process, but this is prohibited.
Python: **PowerFactory** was started by calling `powerfactory.GetApplicationExt()` or `powerfactory.GetApplicationSecuredExt()` and terminated since the `powerfactory.Application` object was deleted. Now user code tries to call `powerfactory.GetApplicationExt()` or `powerfactory.GetApplicationSecuredExt()` again within the same process, but this is prohibited.
- ✓ **API:** Do not call `CreateApilInstanceV2()` after `DestroyApilInstanceV2()` within the same process.
Python: Do not call `powerfactory.GetApplicationExt()` or `powerfactory.GetApplicationSecuredExt()` after the destruction of `powerfactory.Application` object within the same process.

7001 - Function XYZ called with invalid argument.

- ✎ User code called the API/Python function XYZ with invalid arguments.
- ✓ Review your code and the API/Python documentation.