

# LifeCheck V5 Technical Note

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**ID:** TN015  
**Created:** 11-May-2011  
**Modified:** 24-October-2019  
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**Description:** Importing Parts and Components into LifeCheck

The purpose of this technical note is to detail the process by which parts may be imported into the LifeCheck database from a text file in Microsoft Excel (.xlsx) format. It is highly recommended that a recent backup of the LifeCheck database is created in case of any errors which may occur while importing parts or any data inconsistencies which may result.

## Import File Format

The import file is typically created using Microsoft Excel. The import file may contain the following columns. Note however that **PART NUMBER** should always be the first column in the file.

- PART NUMBER
- MANUFACTURER NUMBER
- DESCRIPTION
- LOW STOCK 1
- LOW STOCK 2
- MIN STOCK
- LIFED
- TYPE
- SINGLEUSE
- DIRECTIONAL
- UIIL
- EXCLUDE
- LIFE CODE
- START DISTANCE
- LIFE NEW RACE
- LIFE NEW TEST
- SERVICE NEW RACE
- SERVICE NEW TEST
- SERVICE SINCE LAST
- PART CLASS
- ISSUE NUMBER
- BATCH NUMBER
- STATUS
- TEAM

- SUPPLIER
- MANUFACTURER
- COUNT
- PARENT PART NUMBER (\*deprecated use BOM Level instead)
- PARENT LIFE CODE (\*deprecated use BOM Level instead)
- BOM LEVEL
- WEIGHTED LIMIT
- WEIGHTED RUN
- NOTES
- EXPIRATION DATE
- COST
- START TIME 1
- START TIME 2
- TIME 1 NEW
- TIME 2 NEW
- SERVICE TIME NEW
- SERVICE TIME SINCE LAST
- Custom Checks (see later)
- Component Extension Fields (see later)

The first line of the import file should contain the column headers. This is then followed by individual lines which define either a part or a component as set out next.

## Excluding Lines

As the import file is often created from the Bill of Materials it may contain lines which you do not want to import. To handle this you can define a column with the name 'EXCLUDE' . Any line with a value set for this column will be skipped over and will not be imported.

## Defining Parts Only

To simply define a part within LifeCheck, the following columns must be defined within the import file:-

| Column                     | Mandatory | Type          | Description                                                                     |
|----------------------------|-----------|---------------|---------------------------------------------------------------------------------|
| <b>PART NUMBER</b>         | Y         | Text          | Must be the first column                                                        |
| <b>MANUFACTURER NUMBER</b> | N         | Text          | Manufacturers Part Number                                                       |
| <b>DESCRIPTION</b>         | Y         | Text          | Description for the part                                                        |
| <b>LOW STOCK 1</b>         | N         | Numeric       | Value for low stock 1                                                           |
| <b>LOW STOCK 2</b>         | N         | Numeric       | Must be less than Low Stock 1                                                   |
| <b>MIN STOCK</b>           | N         | Numeric       | Must be less than Low Stock 2                                                   |
| <b>LIFED</b>               | N         | Y or N        | Defaults to Y – i.e. lifed part                                                 |
| <b>TYPE</b>                | N         | A, S, SU or P | Defines the part as [A]ssembly, [S]ection, [SU]ndry or [P]art. Defaults to Part |
| <b>SINGLEUSE</b>           | N         | Y or N        | Default to 'N' not single use part                                              |
| <b>DIRECTIONAL</b>         | N         | Y or N        | Default to 'N' not directional                                                  |

|                 |   |        |                                                     |
|-----------------|---|--------|-----------------------------------------------------|
| <b>UIIL</b>     | N | Y or N | Default to 'N' not a UIIL part                      |
| <b>SUPPLIER</b> | N | Text   | Name of a supplier already defined within LifeCheck |

An example of an import file which purely defines parts is :-

PART NUMBER, DESCRIPTION, LIFED  
TTL-DRVSHAFT, DRIVESHAFT ASSY, N  
TTL-CVJOINT, CONSTANT VELOCITY JOINT, Y

This would define 2 parts, a driveshaft assembly with part number **TTL-DRVSHAFT** which is not lifed and a CV Joint which is lifed. Note that no instances of these parts (components) would be created.

## Creating Components

To create component instances of parts additional columns are required in the import file. Note however that the key column when defining Components is the life code column. Where no value is specified for Life Code a component will not be created. In this way it is possible for a single import file to both define parts and create components simply by specifying or omitting a value for the Life Code column.

When defining Components, the following columns may be specified:-

| Column                    | Mandatory | Type    | Description                                                                                                                                                                           |
|---------------------------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LIFE CODE</b>          | Y         | Text    | Must be unique<br>Specify 'XXX' to allocate a temporary life code                                                                                                                     |
| <b>START DISTANCE</b>     | N         | Numeric | Initial distance run for component, default 0                                                                                                                                         |
| <b>LIFE NEW RACE</b>      | N         | Numeric | Life Limit Race, default to LifeCheck default value                                                                                                                                   |
| <b>LIFE NEW TEST</b>      | N         | Numeric | Life Limit Test, default to LifeCheck default value                                                                                                                                   |
| <b>SERVICE NEW RACE</b>   | N         | Numeric | Service Limit Race default to LifeCheck default value                                                                                                                                 |
| <b>SERVICE NEW TEST</b>   | N         | Numeric | Service Limit Test default to LifeCheck default value                                                                                                                                 |
| <b>SERVICE SINCE LAST</b> | N         | Numeric | Distance since last service, defaults to start distance                                                                                                                               |
| <b>ISSUE NUMBER</b>       | N         | Text    | Issue Number of Component                                                                                                                                                             |
| <b>BATCH NUMBER</b>       | N         | Text    | Batch Number of Component                                                                                                                                                             |
| <b>COUNT</b>              | N         | Numeric | Creates multiple items when Type is [A]ssembly or [P]art or for [S]undries sets the count. Defaults to 1                                                                              |
| <b>PARENT PART NUMBER</b> | N         | Text    | Part Number of any parent part – used when defining components within an assembly                                                                                                     |
| <b>PARENT LIFE CODE</b>   | N         | Text    | Life Code of any parent component – used when defining components within an assembly. The component identified by PARENT PART NUMBER and PARENT LIFE CODE must already exist          |
| <b>BOM LEVEL</b>          | N         | Numeric | Used INSTEAD of PARENT PART NUMBER and PARENT LIFECODE to define the parentage of a component. For example, components with a BOM LEVEL of 1 will be created as sub-components of the |

|                        |   |         |                                                                                                                                |
|------------------------|---|---------|--------------------------------------------------------------------------------------------------------------------------------|
|                        |   |         | preceding component with BOM LEVEL 0.                                                                                          |
| <b>WEIGHTED LIMIT</b>  | N | Numeric | Weighted Life Limit will default to 0 if not specified.                                                                        |
| <b>WEIGHTED RUN</b>    | N | Numeric | Weighted distance run, will default to distance run if not specified                                                           |
| <b>EXPIRATION DATE</b> | N | Date    | Expiration date is best in yyyy-mm-dd format but LifeCheck will attempt to decode the format used based on the current locale. |
| <b>COST</b>            | N | Decimal | Cost to be set for the part / Component                                                                                        |
| <b>START TIME 1</b>    | N | Numeric | Initial time run for component (minutes), default 0                                                                            |
| <b>START TIME 2</b>    | N | Numeric | Initial time 2 run                                                                                                             |
| <b>TIME NEW RACE</b>   | N | Numeric | Time 1 limit in minutes, default 0                                                                                             |
| <b>TIME NEW TEST</b>   | N | Numeric | Time 2 limit in minutes, default 0.                                                                                            |
| <b>STATUS</b>          | N | Text    | Status to be set for this Component, must be already defined within LifeCheck                                                  |
| <b>TEAM</b>            | N | Text    | Team to be set for this Component, must be already defined within LifeCheck                                                    |

## Custom Checks

The 'standard' mechanisms allow for the importing of service level data however information for additional custom checks (such as crack testing and fatigue) is not directly supported using the above import fields.

To import data for custom checks it is necessary to add columns with the following headings :-

**CHECK>name>NEW RACE**

**CHECK>name>NEW TEST**

**CHECK>name>SINCE LAST**

...where **name** is the name of a custom check which has ALREADY BEEN DEFINED in the LifeCheck database. For example if you have added a custom check called 'Crack Testing' in LifeCheck then you must set the import column heading to **CHECK>CRACK TESTING>NEW RACE**. The **NEW RACE** column is mandatory however you can also have **NEW TEST** and **SINCE LAST** columns to import custom check data.

## Component Extension Fields

It is also possible to import values for existing Component Extension Fields noting that these fields must already have been defined within LifeCheck under Admin>Data Setup and their name must match directly with that specified in the import file.

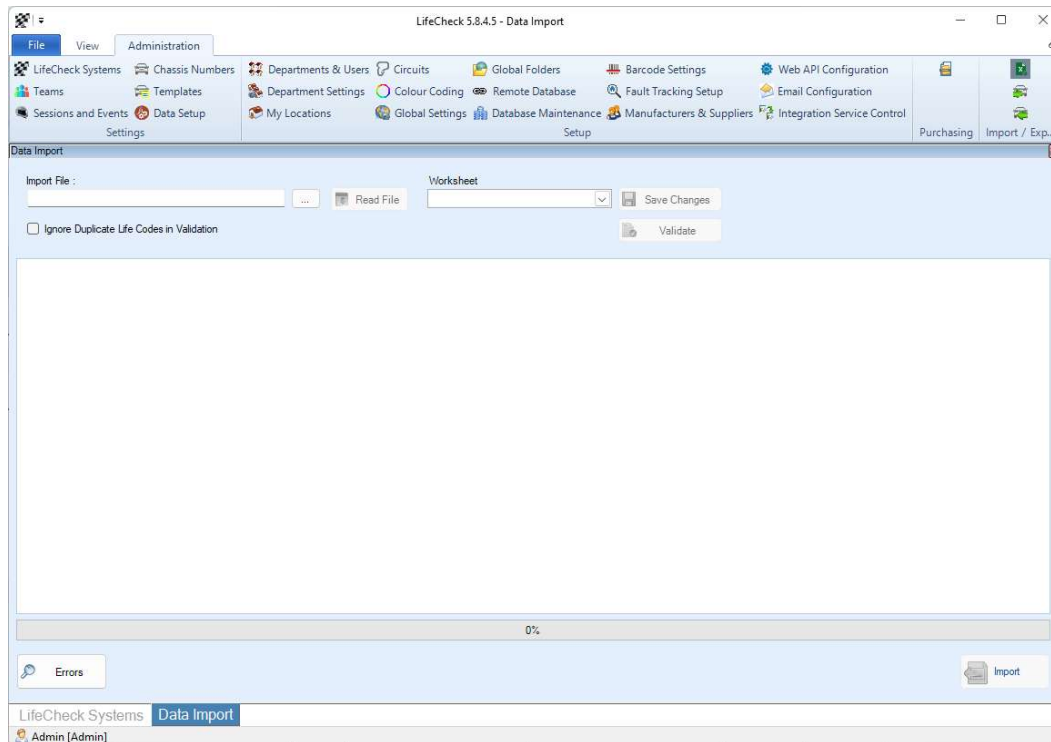
To import data for component extension fields (for specific components) add the following column to the import file :-

**CE>name**

Where 'name' is the name of the component extension field for which a component value is being imported. For example if the component extension field is named 'GAIN', the column heading should be defined as **CE>GAIN**.

## Using the Excel Data Import Function

Select **Administration>Export Data Import** from the main menu to display the following window.



The first step is to browse for or enter the name of the import file. Click on ... to browse for the import file. Once the file has been selected, click **Read File**. LifeCheck will then read and parse the import file and populate the **Worksheet** dropdown with a list of the worksheets found in the selected file. Select the worksheet containing the import data and click **Validate**. This pre-processes the import file and checks for any errors such as

**Duplicate Life Codes** – Life codes must be unique for each part. The most common issue here is where there are multiple instances of the same part (components) and the same life code is duplicated. This is especially common if **Count** is > 1 as LifeCheck will sequentially allocate new life codes for the second and subsequent component created.

**Non-Sequential BoM Levels** – Where BoM Levels are defined, these must both start from 0 and be sequential – that is a component with BoM Level 1 must follow one with a BoM level of 0. This ordering may involve intervening components so for example 0, 1, 1, 2, 1 is valid but 0,1,1,3 is not as there is no level 2 item to act as the parent for the level 3 item.

If errors are detected they will be highlighted in the display and the import may not be possible. Some errors however, such as un-recognised column names may be ignored as LifeCheck will simply ignore those columns.

Where a typographical error has been made – perhaps an incorrect part type has been specified, it is possible to directly edit the displayed data on screen and then save those changes back to the source Excel document rather than having to edit the excel document and re-read.

In some cases, you may choose to ignore duplicate life codes during the import – this allows LifeCheck to skip over the creation of any component which already exists in the database and potentially (subject to the options selected) update such things as the part description and component limits (see later). This can also be useful if additional components have been added to the end of the file and you simply want to import the new lines and ignore those that have already been processed.

Once all errors have been addressed (or ignored), you may proceed with the import. Note that if the underlying Excel source has been changed you will need to re-read and re-validate the file before proceeding.

## Importing the Data

To initiate the import, click the **Import** button at the bottom right to display the following window

Import Options

Import into Department : Admin

Location : Location 1

Create Build Template ☒

LMP2-2026

Create Chassis ☒ \*the data will be imported directly to the Chassis

LMP2-CH010

☐ Do NOT create New Parts ☐ Update Existing Part Definitions ☐ Update Component Limits

OK Cancel

This window defines how and to where the data will be imported. By default, the parts and components will be imported into the specified location however when first setting up LifeCheck a common requirement is for the first import to define not just parts and components but also to define the Build Template from which the chassis will be later built, to create the first race car and also to place the imported components on to the chassis as this is a fundamental step in setting up LifeCheck.

The Import File is ideal for this as it can define not only part numbers and life codes but also, by use of the BoM Level column, the structure not just of individual assemblies but also the car as a whole.

In the previous screenshot we have elected to import the Excel file and from it create a Build template named **LMP2-2026**, a chassis named **LMP2-CH010** and place all components onto that chassis to match the structure defined by the Build Template (itself derived from the BoM Levels set in the import file).

If a part defined within the import file does not already exist within LifeCheck it will first be created. If the part does already exist, checking the **Update Part Definitions** check box will allow the definition of the part to be updated. This can be useful for updating default life values for the part or setting stock level alerts using low stock. Note that component instances of parts will not be updated.

In a similar way, components which do not already exist (which is the expected state) will be created as required.

## Updating Parts and Components

The Excel data import function may also be used to update **specific** attributes of both Parts and Components.

### Parts

For parts we can update Part type, Description, Stock levels, UILL Flag, Manufacturer and Supplier

### Components

Components are more limited as to what can be updated :- Life New Race/Test and Service New Race/Test are the only supported updateable fields at this time.

In the case of Components, it is possible to update limits for either ALL components (of the specified part number) or selected components. This is defined by whether or not the life code has been specified. If no life code is specified, all component instances of the part will be updated otherwise just that specified. Note that if multiple life codes need to be updated, this will need to be done on separate lines.

### Disclaimer:

Please note that while every effort has been made to ensure the accuracy of this document, Trenchant Technology, Ltd may not be held responsible for any errors or omissions or any data loss which may occur through the use of this document. It is highly recommended that a backup of the LifeCheck database is made prior to making any changes such as importing parts.