1  **NOTES**

The pre-requisites outlined below are mandatory and must be complied with in order for Lobster_data to be installed successfully within the intended time-frame.

When Lobster_data is purchased, two instances are licensed:
- production system
- test system

The two instances can be installed on various hardware and software platforms. We recommend that test and production modes are not run on one and the same instance. This is technically possible, if one system no longer has any memory (RAM), for example, then the other is also affected. The test system’s allocated resources may be reduced if no load and performance tests are carried out.

**Licensing:**

Each system requires a licence. Details about the types of licence available and their requirements can be found in the separate document *“Overview of licence check dongle”*.

2  **HARDWARE-REQUIREMENTS**

2.1  **Processor**

The choice of processor depends on the performance required from the system as a whole.

For large systems, a 64-bit multicore processor with a processor speed of more than 2GHz is recommended.

2.2  **Memory**

A minimum of 8 GB should be available for the whole system. Where higher performance is needed, considerably more memory may be required. Details can be clarified with the Lobster_data technical department.

Lobster_data is a Java application. In a 32-bit system, the Java virtual machine (JVM) can only address approx. 1.5 GB of memory. If more memory needs to be allocated to Lobster_data, it will require a 64-bit JVM. This requires a 64-bit operating system.

2.3  **Hard disk space**

For a small system, 50 GB disk space is sufficient for having Lobster_data and a database (e.g. MySQL) on the same system. The installation of Lobster_data itself (without a database) requires around 1 GB of space on the hard drive.

In addition to this, backups of the input data will also be stored on the hard drive during normal operation. The memory required for this will depend on the retention period, quantity and size of the files to be processed. The standard retention period for backups is 30 days.

Another factor to consider are the log files which are created while Lobster_data is in operation. The size of these files depends on the amount of data to be processed and the level of detail in the log entries.

For large production systems, the hard disk space without a database should be no less than 150 GB.

No other applications should be run on the server e.g. FTP server, mail server, web server or ERP.

3  **OPERATING SYSTEM**

The operating system used (MS Windows, Linux, UNIX) should be a server operating system.

When selecting the operating system, you should also consider the availability and support of potential additional hardware and software required for communication by OFTP via ISDN.

Should the Lobster_data HTTP, FTP or SMTP input agents be used, then the existing HTTP, FTP or SMTP services in the system may have to be deactivated or reconfigured. Alternatively, the respective services can be configured in Lobster_data so that they use different ports.
4 JAVA

A Java JDK (just the Runtime JRE is not enough!) of version 1.7 onwards must be installed on the system. For this JDK, we recommend the latest release of the Oracle (Sun) JDK 1.8. JDK by other developers or other versions of JDK are not supported.

Attention: Lobster_data needs unlimited strength cryptography (meaning keys of unlimited length) for the encryption, decryption and signing of data. Due to current export restrictions from the USA, if necessary, extensions must be installed for the Java version being used which allow unlimited strength cryptography.
For Java JDK 1.7/1.8, this is the “Java(TM) Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files”.
From version 1.8.0_160 of Java, strong encryption is activated as standard.

5 DATABASE

5.1 Database system

In order to operate correctly, Lobster_data needs its own catalogue (or schema) in a database system. We recommend that you create a separate user for this catalogue. In addition to the usual rights for so-called CRUD operations, this will also need the rights to create and modify tables and to create and modify indexes.

A database system will either be installed specifically for Lobster_data or a pre-existing database system will be used. Use of a pre-existing database system generally has the advantage that the backup/recovery mechanisms are already available and can be used. It also eliminates the administrative effort required in having a new database system.

Lobster_data works with all “common” transactional database systems (MySQL, MS SQL 2005, Oracle etc.). If possible, do not use MS SQL Express for your production system, as this has a natural limit of 10GB.

If there is no preference as to the database system to be used, we recommend MySQL Version 5.7x.

As a schema must be created in the database for Lobster_data, it is helpful if the relevant command line or GUI tools (e.g. mysqlclient or the MySQL Workbench for MySQL... Heidi SQL is also a very simple administrative tool) are available on the server for the administration of the database. These tools can be also be used for testing the database connections before the installation.

If the intention is to use an MSSQL database, please check whether it can work with the correct DB users. JDBC can only work with the correct DB users and definitely not using Windows authentication!

5.2 JDBC-drivers

A JDBC driver (Java Data Base Connectivity) is required in order to access the database. This can normally be purchased or downloaded from the producer of the database. It is important that the JDBC driver version is compatible with the database version, otherwise this can cause problems. If additional database systems are to be addressed, each one will require a compatible JDBC driver.

Note: When using an AS/400 database system, it should be noted that the standard JDBC driver from IBM does not support writing in packed or zoned database fields. In this case, it may be necessary to purchase a compatible JDBC driver from a third-party supplier.

6 CERTIFICATES

Certificates can be used for the communication via HTTPS, FTPS, AS2, SSH (SFTP, SCP). Lobster_data allows the production and use of self-issued certificates.

If the communication partner demands the use of trusted certificates, then these must be sourced from a certification body.
7 SAP CONNECTION SERVICE

In order to be able to use the SAP connection service, the SAP JCo (Java Connector) version 2.1.10 or 3.x is required and this must be compatible with your SAP version and the operating system of the computer on which Lobster_data is installed. We recommend that you download this driver from http://service.sap.com/connectors as soon as possible to ensure that you are using exactly the right driver for your SAP system.

8 AUTHORISATIONS AND PASSWORDS

All the user authorisations necessary for installing Lobster_data must be in place at operating system and database level. The necessary passwords must be known.