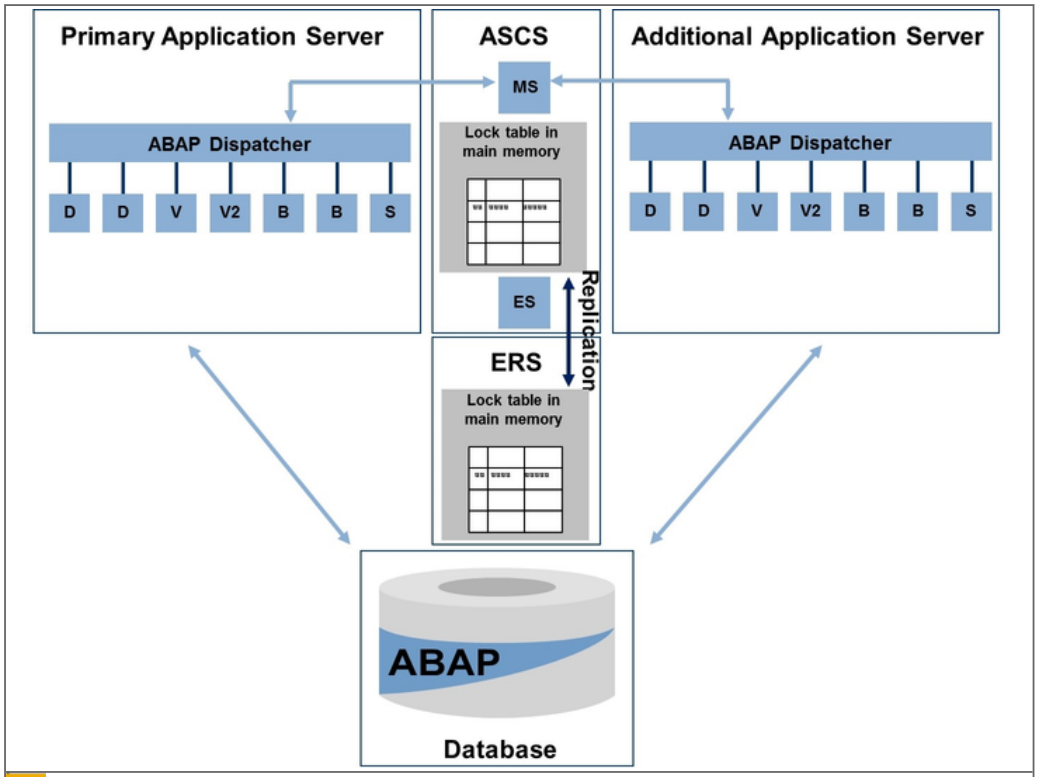

Figure 288: SAP system with ASCS and ERS

When using an ERS, each change of the lock table of the enqueue service is replicated to the ERS. The answer to the requesting enqueue client (the work process) is processed, as soon as the replication is successfully.

The multi threaded architecture of the stand-alone enqueue server allows parallel processing and synchronisation with the ERS. The throughput is higher than with a classical set up, using a dispatcher with enqueue work process.

Each work process is connected with the stand-alone enqueue server. The enqueue server is connected with the ERS.

The stand-alone enqueue server communicates vie port *sapdp<nn>* with its clients. *<nn>* is the instance number of the ASCS. Because application servers running on the same host communicate using this port, also, the ASCS needs its own instance number.

Communication Between Enqueue Server and ERS

The enqueue server opens port *enq/replicatorport* to wait for the connection of the ERS.

- If the stand-alone enqueue server fails, it is restarted by the HA software on the host of the ERS and copies the replication table in main memory from the ERS in order to rebuild its lock table. In other words: the enqueue server follows the ERS.
- If the ERS fails, it can be restarted on a different host. the ERS can copy the entire lock table from the stand-alone enqueue server. During normal run the ERS only receives the delta information from the stand-alone enqueue server.

Configuration of the ERS

Before using the ERS, it has to be installed and configured. The following road map shows the essential steps for installation, configuration and usage of the ERS: