

What is inside?

- **XELCODE Client Application.** Native (GUI) application compiled for particular mobile OS. Native code allows to interact with physical device's functionality. For example, it is possible to switch on/off the barcode scanner (laser) depending on particular screen on the process.
- **XELCODE Auto installer.** Native application for XELCODE Client download. In case of any modification in XELCODE Client tier, it is not necessary to manage with deployment process on the device level.
- **XELCODE Server.** Windows service responsible for communication between mobile devices and JD Edwards. There is no direct connection between mobile devices and JD Edwards servers. Wireless network in the warehouse should allow connections only to XELCODE server. All JD Edwards infrastructure can be hidden behind firewall.
- **XELCODE Logger.** Web application for browsing transaction logs. All operation performed on the GUN can be stored in log repository on XELCODE Server. CNC admin can decide which operations should be logged (for example – putaway transfers, only in case of error)
- **XELCODE JDE objects.** There are set of JDE objects delivered with XELCODE solution. All of them are customized, no standard objects modification is needed. There are three types of objects:
 - business functions (BSFN) for transaction processing
 - application and tables (APPL/TLBE) for solution management
 - backstage objects (DD, UDC)

Communication types

- **Two types of communication in general:**

Communication between mobile device and XELCODE server (across TCP protocol). Only two TCP ports are needed to be open in wireless network with communication to XELCODE server.

Communication between XELCODE server and JD Edwards infrastructure (see below)

- **Two types of communication with JD Edwards:**

Business functions or Web Services calls (communication between XELCODE and Enterprise/BSSV server)

Direct SQL statements (communication between XELCODE and DB server)

Business Data – R/W access

Control Tables – RO access

Integration with JDE – BSFN/BSSV

- **JDE Business Function calls** are used for:

Writing data into transactional tables

Performing JDE-based processing (like retrieving JDE-transaction attachment text stored in BLOB, get next number from custom next numbering functionality, etc.)

- For BSFN calls, communication is implemented inside XELTO connector based on JDENET protocol. This is realized directly between XELCODE server and JDE Enterprise server.
- Transactions are created using JDE MBF (for standard functionality). Each transaction supported by XELCODE is wrapped with light and easy to use custom BSFN.
- All errors from JDE call stack are displayed on XELCODE client application
- All transaction data is written online without any delays
- There are two communication channels/technologies in transaction management – BSSV and BSFN calls.

- Each **business functions/business service** is called in particular user's context, that's why all transactions are linked with real JDE user by audit fields. Just like in standard transaction entry.
- **Supported JDE versions:** Xe, E810, E811 (without BSSV), E900, E910, E920.