X

JMobile

The X Platform Software



X

...Our Word Counts



JMobile

Highlights

High User Interface Experience

Create IIoT ecosystems with reduced risk

From Shop Floor to Cloud / Big Data

Deterministic Communication via TSN*

Real Interoperability

Great HTML5 interface with JM4web

Efficient scripting with JavaScript

Excluding variants, more than 50 communication protocols readily available for all platforms with gateway function

Browser widget

Integrated PLC runtime as an option for compact control solutions. Include full support of networked I/O

Software and documentation available in 4 languages: EN, DE, FR, ZH

Multi platform runtime: Linux ,Windows, Windows CE. HTML5

Exor began developing the JMobile software in 2006 in close cooperation with a group of major clients: Exor has invested over 300 of man-years in development. This trusting collaboration with the market has continued throughout the subsequent years and as a consequence has led to a unique software package, responding in a secure and stable manner to real needs.

The three principles that have guided and will continue to guide this development are:

- Remain open to the major fieldbus / protocols of communication
- Use open and universally recognized market technological standards such as HTML5, SVG, XML
- Maintain ease of use and extremely secure all integrations of market leading 3rd party software

These three principles working together leads Exor and our customers to the best of all situations where the secure, solid JMobile backbone of highly critical software is able to contain and implement in use the software that is needed.

JMobile with a fully integrated CODESYS PLC has grown to permit communication to all I/O, Sensors, Motion devices via the major protocols of PROFINET, EtherCAT, POWERLINK, EtherNet/IP, Modbus amongst others. Transmitted using OPC UA standard and soon pub/sub* via various communication networks including TSN* JMobile covers the Connectivity, Device management, Process management and Data Visualization components of any platform.

*Road map for 2017

JMobile -The software inside the X Platform **PROTOCOL** PLC ROLES **PROGRAMMING** Microsoft docker **J**Mobile* USER INTEROPERABILITY **EXPERIENCE USER REMOTE INTERFACE** CONTROL



New Features

Multi touch and Gesturing

Supports OPC UA Server and Client

Enhanced realism for graphic images

Advanced support for custom widgets

Canvas widget: fully customized graphic objects

Table widget: extreme table design and layout improving quick and accurate data acceptance

Supports OPC UA Alarms, Historical Alarms and Trends

Alarm management widgets: easier handling of options in Active alarms

Communication via BACnet, DNP3 Outstation

Protocols for Automation Direct, Emerson, Schneider, Delta

FTP Client with the new actions FTPGet FTPPut

Fastboot under 15 secs depending upon project complexity

JMobile

JMobile also covers inside of a smart scada or as a simple IoT gateway, sending all data to higher Enterprise levels and external interfaces via the highly robust and secure OPC UA pub/sub or where deemed suitable a MQTT* broker. JMobile client-server architecture is based on current HTML5 web technologies with the QT engine and Scalable Vector Graphics. This provides users with advanced control and remote supervision from any browser, any device (smartphone, tablet, or computer).

This seamless communication which is already envied as a real technical achievement does not convey the completeness of JMobile. What began as a close contact with customers has remained so deeply engrained into the development process that the beautiful user experience is a defining attribute.

Through a rich set of symbols, widgets and advanced functions (e-mail, RSS, PDF Reporting, Scheduler, HTML5 Browser, Gesturing), incredible graphic images, Canvas, the main design element in HTML5 in association with Javascript, table design and layout for even the most extreme of data visualization needs, BACnet, CANopen and Network I/O stacks available for integrated PLC via CODESYS v3, PING for easier network diagnostics, DNP3 Outstation for all smartgrid applications, all the way down to Indexed Tags and a full FTP client......it is all intuitively easy to use.



Key Features

Pure Web Technology

Created and Developed since 2010

Based on HTML5/JS

Ready for responsive design

100% HTML5 web HMI Interface

Realtime Data Update (up to 10x per second)

Multitouch Support

Ready for iOS and Android

Ready for most common Browsers for PC and Smart Devices

Scalable SVG Vector Graphic

Ease of Use. No HTML competence required

Full JMobile library of over 2000 Widgets

Available as Component for 3rd party platforms

Trends Support

Recipes

Multilanguage

Javascript

JMobile 4 Web

JM4web is the seamless connection between Industrial control applications and ubiquitous mobile devices such as smart phones and tablets. Developed some six years ago and subsequently continuously updated, it now provides the most comprehensive Pure Web Technology available, designed and maintained by Exor, a company with 45 years experience in control applications.

With HTML5 and Javascript technology embedded in JMobile, all that is needed to remotely monitor and control applications is a web browser with HTML5 support: Firefox, Chrome, Safari and Microsoft EDGE

No "apps" needed when operating from mobile devices, hence reducing the risk of compatibility across various operating systems.

With JM4web you can have instant Web access to JMobile applications via the integrated Web server included in all JMobile runtime systems.

JM4web allows for creating the exact responsive user experience for the target mobile device. The Web server will detect the resolution of the connected client device and serve the appropriate pages.

JM4web is the ideal complement to the powerful remote connectivity and visualization tools already available in JMobile.



JMcloud

Key Features

All in One Solution

Easily Connects to applications

Secure VPN Tunnel

Efficient server-based Connection with Devices

Based on openVPN and OpenSSL for Security and Transparency

Option for Web Access from Mobile Devices

Full Remote Control of PLC, HMI and other devices

Plug and Play solution

Direct Web Access

OPC UA, MQTT* support

JMcloud is a Secure Open VPN and SSL based solution that allows to remotely manage Industrial installation in an easy and yet extremely safe manner, avoiding expensive interventions on site.

Simply by entering the credentials of the JMcloud portal, you have direct access to the system and you will be able to perform maintenance and upgrade, using the JMobile platform.

After activating the secure VPN communication to the panel you can reach all the devices connected to the network, such as PLCs, inverters and I/O and you can manage and configure them via proprietary software.

JMobile client and JM4Web, integral parts of the X platform, allow you to view the user interface through both desktop and mobile devices (smartphones and tablets), providing a full monitoring and preventive maintenance service.





JMcloud

JMcloud components:

- 1) JMcloud Connect is an application used to connect to the cloud service and view and connect to all devices enabled and belonging to that domain. This allows direct monitoring and remote control of all devices. The configuration and maintenance of devices are supported.
- 2) JMcloud Servers are the heart of the whole infrastructure. It stores all the configuration data, the access policies, and keeps track of the connections to the endpoints (HMI and PLC).
- 3) JMcloud Service is used by HMI for Cloud connection
 - a) For Series eTOP500/600, it comes as the HMI Cloud Enabler that uses the single Ethernet port for PLC and for Cloud connection. If however network separation is required there is the PLCM07 Hardware which uses two separate Ethernet ports, LAN for HMI/PLC and WAN for Cloud connection.
 - b) For the eSMART family (except eSMART107), it comes as a system service and uses the single Ethernet port for PLC and Cloud connection. If however network separation is required a router such as the eXware will be needed.
 - c) For the eX700 series, eXware and eSMART107, it comes as a system service and the possibility of network separation are already in built.
- 4) PLCM09 is a wireless modem plug in available for the eX700 and eXware. With 4 LED indicators on module and network status, a microSIM slot and powered via the plug in connection the PLMC09 adds the ability to communicate with all machines and systems worldwide.







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