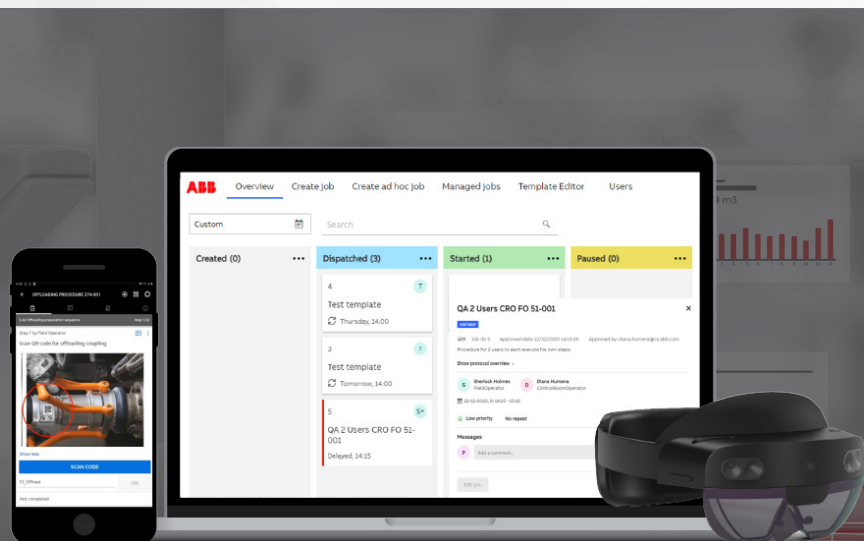


ABB Ability™ Connected Workforce apps for Digital Workflows



Make a step change in improving frontline workforce competency and onboarding speed. Ensure safer working environments and continuity of operations. Capture tribal knowledge.

Digitalize the field operator experience when executing manual procedures, rounds, work instructions and checklists using state of the art mobile and augmented reality technologies to improve efficiencies and reduce human error.

Put the power of Industry 4.0 in the hands of your field workers



Mobile App, Web client, HoloLens App

Execute digital workflows and collaborate using smartphones, tablets, HoloLens

- Replace paper-based SOPs, SMPs
- Add media files, take pictures, record videos
- Work on-line or off-line
- Collaboration between field & control room
- Hands-free, augmented data with HoloLens



Work Procedure Editor

Define workflows and supporting information

- Build complex conditional logic and parallel tasks with “no-code” drag-and-drop tools
- Include rich instruction adding images, videos
- Choose from the library of pre-defined step types
- Connect to DCS to read data not available in the field or enter field measurements not in the DCS



Integrated Task Manager

Assign, schedule, and track jobs from predefined procedures

- Schedule now, later, recurring, event-based
- Assign task to defined users, user groups
- Leverage Kanban view to monitor job status, avoid delays and reduce bottlenecks
- Digitize & transmit manually collected data to the relevant system (e.g. APM data collection)

Why ABB ?

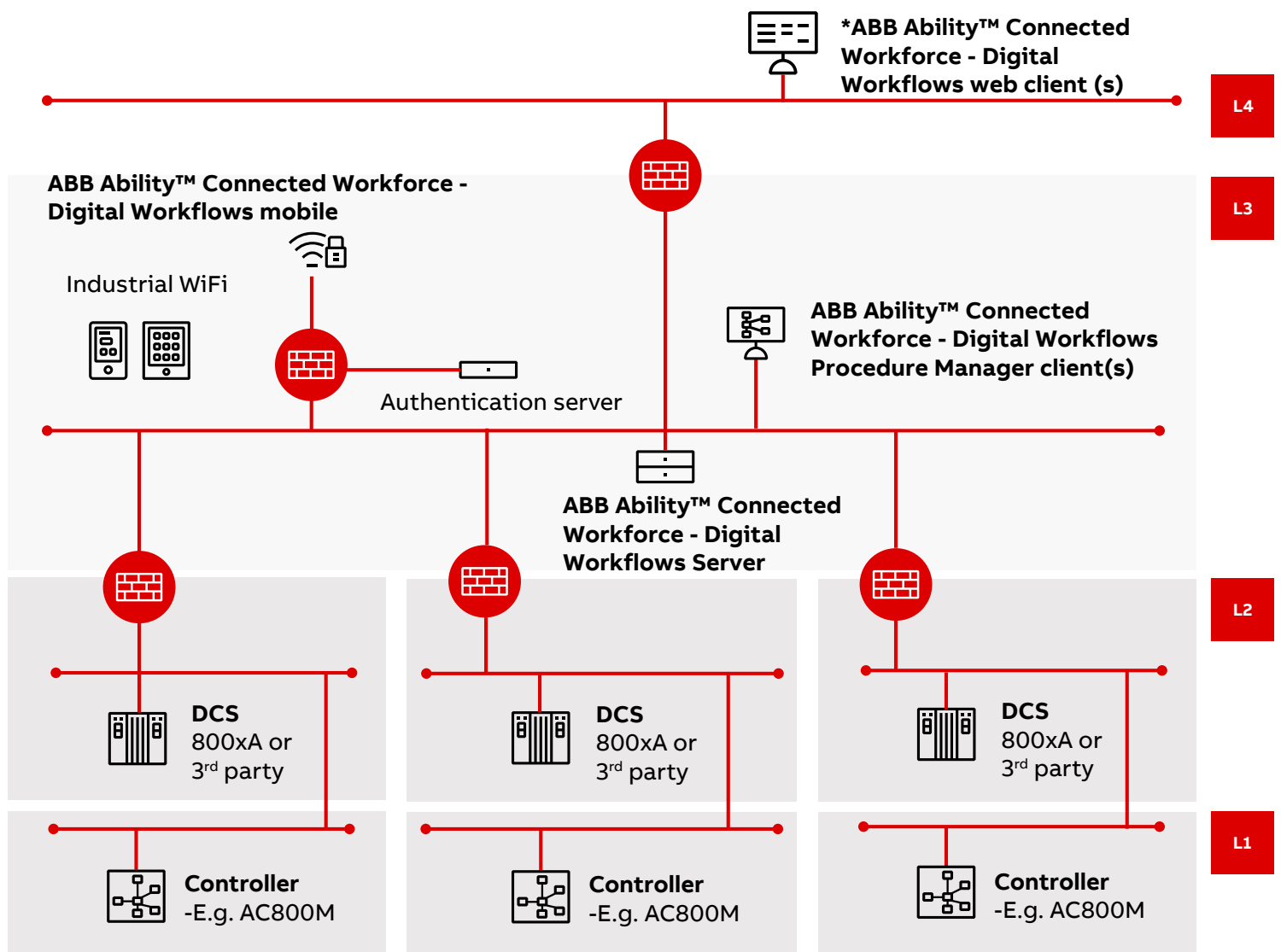
- **Integrations, embedded cyber security:** Seamless integration with DCS, MES, ERP and LIMS as well as new technologies (AR, voice I/O, wearables)
- **Audit trail:** Digitally guiding operators and recording each execution history to ensure procedure is followed
- **Continuous improvement:** enables operators to log comments to procedure templates during execution for future runs of the procedure
- **Collaboration:** Links steps to the appropriate role to enable seamless operations in multi-operator procedures

Convert paper-based procedures into digital workflows using “no-code” tools. Simplify frontline worker experience with mobile and HoloLens apps integrated with the existing systems.

Digital Workflow apps description	Lite edition	Standard edition	Premium edition
Price (PER NAMED USER, monthly subscription, invoiced yearly)	USD/month	USD/month	Get your quote
Mobile app			
- Support for Android, iOS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Step by step guidance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Supporting information (files, videos, pics, web links)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Digitalize manual data collection incl. validation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Photo and video capture and redlining	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Provide comments to job, step and/or procedure definition	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Voice commands and synthesize	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Bar code scanning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Online	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Offline	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Integrated Task Manager			
- Schedule job (manual, recurring & automatic)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Monitor job overview and progress (Kanban, Grid, Gant)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Job performance view	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Create checklists with predefined step types	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Execute jobs with step by step guidance in web client	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Procedure Manager			
- Selfservice drag and drop graphical procedure editor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Conditional workflows	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Pre-defined step types	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Import / Export	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- Approval and Versioning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Number of procedure definitions	20	unlimited	unlimited
Integration enabled			
- OPC, DCS		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- MS Teams		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
- ERP, CMMS, MES 3rd party systems			<input checked="" type="checkbox"/>
Hololens app			
- Handsfree step by step guidance			<input checked="" type="checkbox"/>
- Augmented reality enabled (OPC real time information)			<input checked="" type="checkbox"/>

Software and Hardware Requirements

Description	Lite edition	Standard edition	Premium edition
Hardware	CPU: minimum 4 cores, 2 GHz RAM: minimum 16 GB, recommended >64 GB 200 GB ultra-fast disk 1 Gbps network	CPU: 1,8 GHz or faster RAM 6 GB HDD: 300 Mb Display: 1024x768 (Windows devices), 375px as minimum width (mobile devices) Network: 100 Mbit	CPU: 1,5 GHz or faster RAM 4 GB HDD: 100 Mb Display: 1024x768 (Windows devices) Network: 100 Mbit
Software	800xA system versions 5 or 6 Windows Server 2016 (64-bit) SQL Server 2017 is recommended (SQL Server Express 2016, SQL Server 2016 also supported) SQL Server Management Studio Microsoft Excel 2016 (if export and import functionality) Microsoft Visual C++ 2012 redistributable (x86 version) OPC Core Components (3.0.106 or later) Redistributable Package (x86 version)	Microsoft Windows server 2016 (64-bit) and above Microsoft SQL server 2013 (64-bit) Express edition and above .NET Core 5 Web server (e.g. IIS) AD server available	Microsoft Window server 2016 (64-bit) and above Trigger service: .NET Framework 4.72



*Web client can be located on L3 or L4

Robust, secure, and integrated architecture

Mobile app operating system supported

- Android devices (version 8 or later)
- iOS devices (version 13.1 or later)

Tested in Intrinsically Safe devices:

- iSafe IS910.1, P&F Ecom Tab-Ex® 02 DZ1, P&F Ecom Tab-Ex® 02 D2

Communication Protocol for integration

- OPC DA, XML, Web services, ODBC, OLE DB, SAP Business Application Programming Interface

Integrations

- System 800xA DCS
- SAP
- ERP LN
- IBM Maximo

You own your data. We ensure defense in depth cyber security, reliability, data, privacy, and intellectual property protection.

ABB is your trusted partner when securing your internet facing solutions, with a comprehensive defense in depth approach that begins in the supply chain through the implementation and production. By implementing a secure architecture with proper separation of functions, zoning, and electronic security perimeters you can reduce the overall system's surface area of vulnerability by limiting unnecessary exposure and access.

Find out more: new.abb.com/industrial-software/connected-workforce

