Axeda End-of-Life: Three Reasons to Start Preparing Now

by Maciej Redel and Rodney Holmes

As the Axeda platform approaches it end of life, it can be difficult to choose the right time to begin a conversion to ThingWorx. Here's a look at a high-level historical timeline of the platform, its capabilities, and things to consider as you plan your conversion.[1]

[UPDATED December 2019 to reflect latest communication from PTC in regards to the ThingWorx & Axeda roadmap and IDM support specifically. Updated content is in italics.]

Summer of 99 (not 1999 just yet)

In the summer of '99 I was one year away from my final thesis in Computer Science at my Uni. I was also taking part in an apprentice program at a local, mid-size IT company that developed banking software.

Despite being in the network and infrastructure department, I watched the developers work long hours going through code and database scripts, franticly checking to see if the software could cope with two extra digits in the date fields.

Yes, that was the summer before Y2K.

Today, almost two decades later (and after over $300B spent globally tackling Y2K), it feels like it wasn't such a big thing in the end. On 1 January 2000, the newspapers dully noted that the world did not end, and everything worked (more or less) correctly.

In some isolated instances, non-critical systems were affected (to the right is a photo of an electronic sign at École centrale de Nantes displaying the year incorrectly as 1900 on 3 January 2000. Source: Wikipedia). However, in general the Y2K problem was successfully addressed, thanks to early acknowledgement of the issue (in 1985!), advanced planning, and an army of IT professionals verifying millions of lines of source code.

In many ways, the Axeda end-of-life is similar to the Y2K problem – it is a known issue (albeit the audience is significantly smaller), it's universally acknowledged by the user base, it was publicly announced a few years back, and it has a firm deadline of 31 December 2020. On the day after the last day of 2020, the Axeda platform will no longer be supported. There will potentially be an additional year for premium, paid support until end of 2021, but that is the last call.[2]

LiveWorx 2016: When Status-Quo Made Sense

Axeda was acquired by PTC in 2014. And while it's been clear for a while that PTC would sunset the platform, PTC has always recommended that Axeda customers convert to ThingWorx.

I remember sitting in an Axeda-only luncheon session during LiveWorx 2016, listening to Axeda customers expressing their concerns about a way forward. Moving from Axeda to ThingWorx back then was a challenging task. Even though ThingWorx offered a modern technology stack, a rapid development platform and super-flexible modeling capabilities, it would not support all required use cases from the Axeda audience at that time.

This was the time when maintaining the as-is status-quo made sense. The Axeda platform offered ample and unique capabilities, there was enough talent to support the product, and the end of life date felt like the distant future. The proposed to-be state seemed to lack capabilities, and the urgency was not there.

The Technology Today: When To-Be Becomes As-Is

One year in software development brings significant improvements when it comes to functional capabilities, performance, stability and scalability. Three years – even more so.

New versions of ThingWorx, including 8.4, support a variety of enterprise-ready database options and cloud deployment models – offering flexibility and scalability at the same time. There is a large collection of accompanying applications to address vertical problems including asset management, remote monitoring and control, and software and content distribution. There is an ever-growing community of ThingWorx certified developers and architects.

Even the features aimed squarely at Axeda users have matured dramatically. For example:

- eMessage Connector that enables existing Axeda Agents to talk to the ThingWorx platform instead of the Axeda mothership, which is critical for companies that have thousands of devices already deployed and operating in the field with Axeda edge software
- Software Content Management support that allows en-masse software and content updates on existing Axeda edge devices as well as ThingWorx based agents
- ThingWorx to Axeda agent remote access tunneling
- Migration tools that help move Axeda data models into ThingWorx (stay tuned for a separate post on this soon)
- ~~IDM Connector to support IDM Agents, so even older Questra agents can now talk to ThingWorx platform!~~[3] *Unfortunately, support for Questra agents in form of IDM Connector has been dropped by PTC and will not be available for General Release.*

We're now at the point where the to-be state of Axeda to ThingWorx conversions is here, and any significant remaining technical barriers have been addressed.

Three Important Reasons to Start Now

Axeda customers often ask us when to start a conversion. Should they worry about it now? Can they wait until mid-2020?

In my opinion, now is the time to kick off Axeda to ThingWorx conversions. Here's why.

Reduce Risks Related to Outdated Technology

Because of the end of life plans, Axeda receives less attention when it comes to technology development and updates. Change happens only when necessary (like when Chrome dropped NPAPI support and suddenly users could not invoke crucial UI functionality). Expect this trend to continue – which means staying on Axeda exposes you and your end users to the risk of out-of-date JBOSS, RDBMS, OS and web browser Java applets. Oh, and the Flash UI… it makes your internal users (and in some instances your end users) vulnerable to any security issues that are discovered in software components used across all enterprise systems. Fixes, if any, will take longer.

By moving now, Axeda users will reduce risks originating from out-of-date software components and infrastructure.

Get Access to Top Talent – Before it's Booked

As we get closer to the end of 2020, more conversion projects will start. That will lead to competition for the most competent resources in the market. It is worth noting that while ThingWorx competency is on a rise, the Axeda skillset is becoming scarcer and scarcer. And for successful conversions, this unique blend of Axeda and ThingWorx skillsets is required.

Moving now means access to the best talent available to make sure your conversion is smooth and efficient while building as much additional value as possible.

Take Advantage of New Capabilities – Right Now

Moving to ThingWorx brings many benefits to Axeda customers.

Some of the most exciting new capabilities include the ability to use the ThingWorx Composer to change model definition on-the-fly, update or build new mashups and user applications for variety of display sizes, and easily integrate with external systems (now even easier with ThingWorx Flow – a new component in the ThingWorx family). With these capabilities, companies can react quickly to market situation changes, test new ideas and prototype new functionality.

In today's business environment, companies need to rapidly innovate and adapt. And that is even easier with everything available in the ThingWorx Marketplace – pre-built solutions, applications, widgets and a strong community of developers.

Deploying ThingWorx will also address the backlog of technology and security updates to underlying IT components –a refreshed tech stack, and an up to date and patched OS, database, app/web server, etc. These are so important, as they address security and compliance concerns, which are especially critical for life science and healthcare companies.

And then there is a collection of features that never got realized on Axeda but now can be easily implemented with ThingWorx. There are a lot of these, but here are some that I feel are most important:

- SSO/SAML2 authentication, which integrates ThingWorx security with the existing enterprise infrastructure offering a superior seamless experience
- Real-time communication to/from the edge agent (commands, file browsing, properties…), which means no more waiting for the agent to ping the main platform if there is an urgent need to take control of the edge device

- Integration with field service systems for automatic ticket creation and scheduling of site visits should the device require a fix or maintenance, ensuring the right engineer is booked, with the right parts and knowledge
- Integration with PLM systems (for example via ThingWorx Navigate) to deliver on the promise of a fully integrated product lifecycle loop
- Integration with augmented reality viewers and mixed reality presentation layers, which helps field service technicians to perform onsite jobs, and streamlines factory operations and use cases related to trainings
- Integration with an analytics engine to unlock insights from the machine data

By moving now, you can take advantage of these important benefits sooner, leapfrogging the abilities of your competition.

Tips for Getting Started

Ready to start your own conversion timeline? Here are a few things to consider as you get started.

- Start by creating an inventory of currently implemented Axeda use cases that are crucial to your day-to-day operations, and identify any obsolete use cases
- Create a roadmap for your ThingWorx conversion that includes considerations for the platform, edge, operations, people & skills, and future use cases
- Build awareness of new ThingWorx-enabled capabilities across your organization, including R&D, operations and service
- Secure top talent required for conversion activities
- Avoid a lift-and-shift approach – use the conversion initiative to implement at least one new killer feature that will make an impact on your business
- Consider a POC or pilot to test certain device models or geographic areas

With a proactive approach and careful planning, companies can ensure a smooth conversion. And I promise, the world will not end.

Important Footnotes

1. I call the initiative to move from Axeda to ThingWorx a *conversion* and not a *migration*. These two systems, offer the same functionality in principle, but they differ in how the basic concepts of device/agent/monitoring are implemented. This means the traditional understanding of migration (as in data migration, system version migration) may not reflect the intricacies of the task at hand.
2. Please note these are the PTC announced dates, so the usual caveats apply – dates can change without prior notice and do not imply future commitment from PTC. For an official Axeda and ThingWorx roadmap, contact your PTC support team.
3. The Axeda platform offers built-in support for Questra IDM Agents. Questra was acquired by Axeda 10 years ago. *Due to recent announcements that IDM Connector is not going to be available, existing Questra users will have to migrate their edge connectivity to ThingWorx based solution or seek alternatives.*

About Kalypso

Kalypso's unique blend of seasoned Axeda and ThingWorx expertise is key for a successful conversion.

Axeda implementations and conversions are [Maciej Redel](#)'s passion (really!), and he loves helping clients realize value from smart connected products and smart connected operations thanks to IoT technology.

Today Maciej is looking forward to helping Axeda users realize more value from their products and operations by enabling myriad of new use cases once the conversion to ThingWorx is completed.

Give Maciej a shout – he can't wait to work with you.

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