

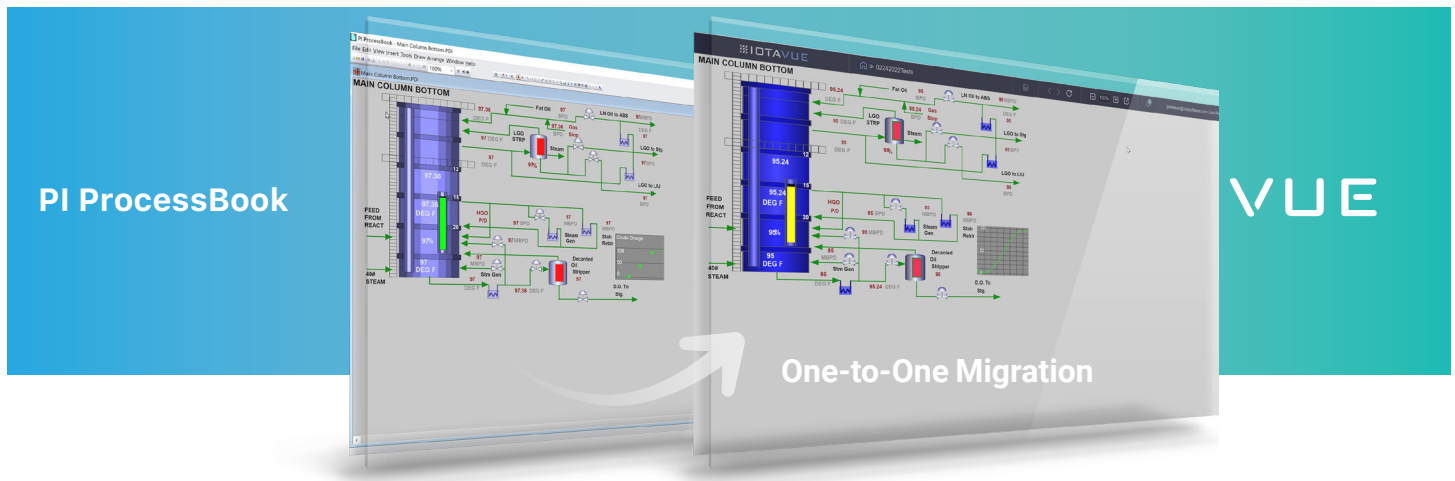
A new era of process visualization software starts now.

After more than 25 years, OSIsoft has announced that they are phasing out of PI Processbook, and will no longer continue to provide security updates beyond 2022. Technology, mobility, scalability and collaboration have developed beyond what PI ProcessBook can offer. With the end-of-support date identified, and OSIsoft focusing their development investment on PI Vision, clients are evaluating their options for migration.

Planning for end-of-life

We recognize that advanced planning is critical to your business. End-users with limited internal resources or those that developed VB scripts in ProcessBook and/or relied on the SQC add-in are likely to face migration challenges that will require migration support. ProcessBook will go through several phases during its decommissioning, OSIsoft published an end-of-support timeline as follows:

End-of-Sale	Security Updates	End-of-Support
12/31/2021	12/31/2022	12/31/2024



Why IOTA Vue?

Our platform is designed to meet the needs of all stakeholders, ensuring a smooth transition for everyone involved. Automatically migrate all ProcessBook content and PI Vision content. The migration will preserve:

- File system and ProcessBook (PIW) hierarchy
- Authorization/access control
- Referenced Display and Workbook (PIW) migration

We will identify items OSIsoft declares as un-migratable (SQC, Batch Group) and migrate those. No training is necessary, creating a seamless user transition from ProcessBook to IOTA Vue.

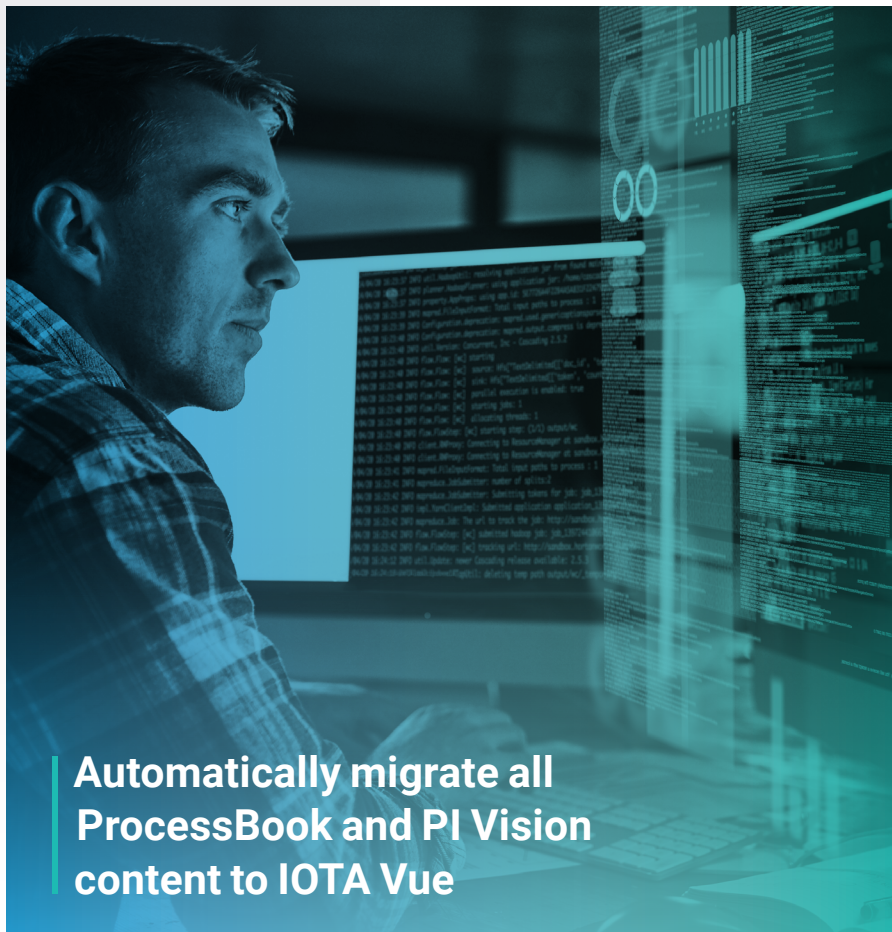
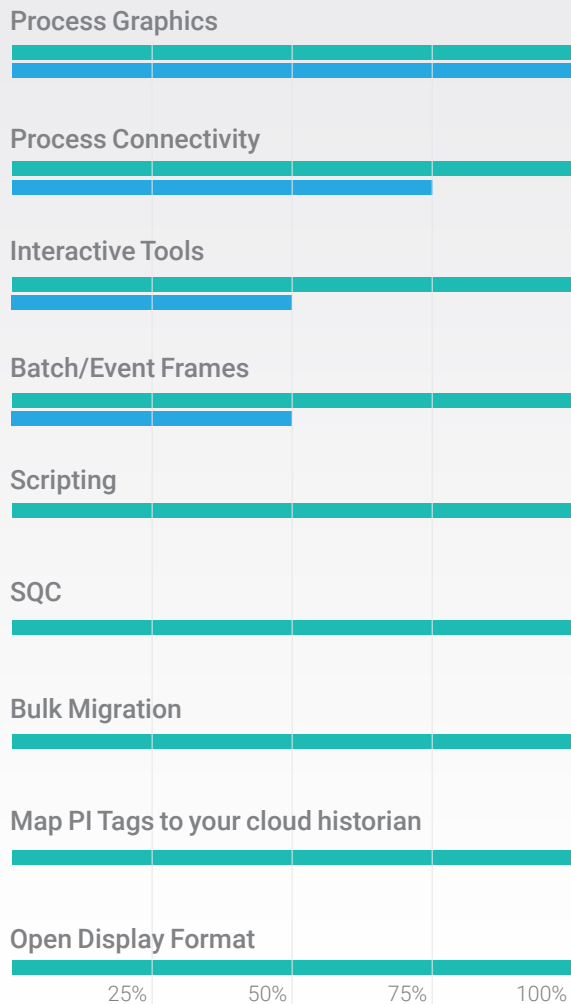
Migration advantages

IOTA Vue design aspires to enable 100% migration

- Automatic migration of all ProcessBook files, displays, and content
- Full migration and support of PI Batch View add-in
- Full migration and support of PI SQC add-in
- Support migration of referenced displays
- Support of PI-Batch Database and PI-Module Database via PI-SDK
- Support of PI-Asset Framework and PI-Event Frames via PI-AFSDK
- Two exceptions are handled with tools and services
 - VBA → IOTA Vue Java Script
 - Custom ActiveX controls → JavaScript equivalent controls

Snapshot comparison

IOTA VUE PI Vision



**Automatically migrate all
ProcessBook and PI Vision
content to IOTA Vue**

Your industrial IoT data is as important as the products you make.

IOTA Software is a leading provider of data visualization that connects people, assets, and manufacturing processes. Our scalable platform provides easy access to critical process data, insight for performance optimization and decision support. It serves as the central hub to drive daily and long-term business outcomes.

IOTAVUE

Features overview

IOTA Software reflects the knowledge and expertise of our team, who have spent years in this industry. We leverage industry systems and tools, and understand the business users' needs and requirements.



Browser-based
distributed, horizontally scalable
containerized backend



Seeq integration
Native integration with Seeq Cortex,
Workbench, and Organizer



Diverse data sources
Connect to PI/AF, GE, Seeq,
Wonderware, etc.



Build + Edit
Full display creation and editing
functionality as in ProcessBook



Supported data objects
Time-series, assets, time-frames



Component modeling
Native customer P&ID/PFD diagrams
(AutoCAD) and models integration



Zero-copy cloning
No data cloning via staging database



Workflow production
Business flow diagrams (mini MES) via
dynamic forms/dashboards and scripting rules



Automatic migration
Seamlessly migrate all ProcessBook
and PI Vision displays



Secure access
Integrates with the enterprise's authentication
provider, and existing authorization



Manual entry capability
Manually enter data for attribute/tag



Go global
Native geo-spatial data visualization
via interactive maps

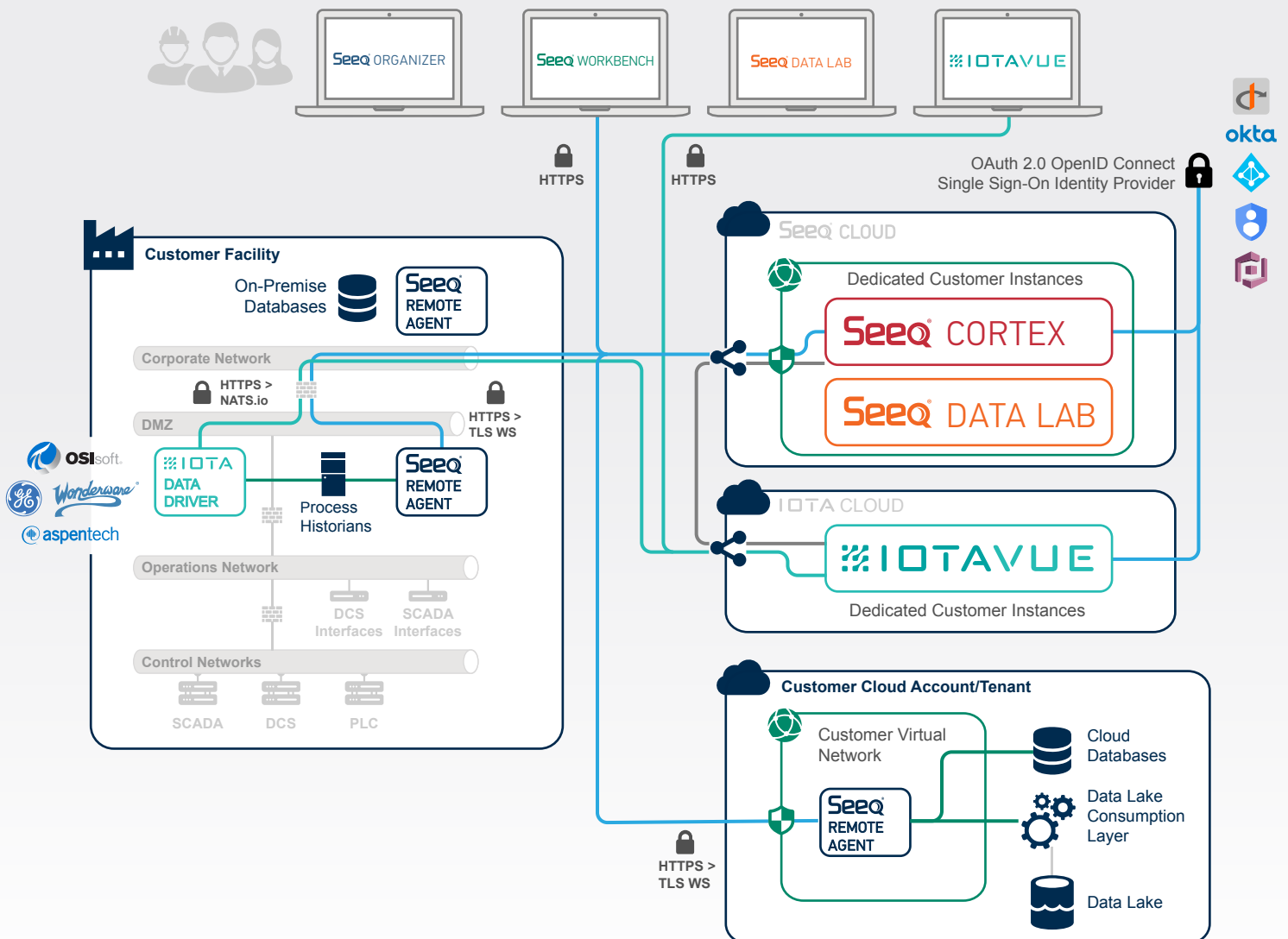
Feature	IOTA VUE	ProcessBook	PI Vision
Microservice Cloud Native	●		
Windows Application heavy software installed on workstations		●	
Browser Based	●		●
IIS hosted webservice on premise			●
Multiple data sources	●		
PI Data Archive	●	●	●
PI AF	●	●	●
GE Proficy	●		
Run and edit modes	●	●	●
Nested Group/Ungroup	●	●	1 Level
Display authorization and sharing	●	File System	●
Navigation buttons	●	●	Partial
Drawing (lines, ellipse, etc.)	●	●	●
Multi-state symbols	●	●	●
SVG Symbols	●	●	●
Time-series trends	●	●	●
XY Plot	●	●	●
SQC	●	●	
Gantt Chart (Batch, event frames)	●	●	
Tables (Batch, Assets)	●		●
UI Components (edit box, radio buttons, drop down)	●	Custom Active X	
Event driven (actions)	JavaScript	VBA	
Asset relative displays	●	●	●
Publish to Seeq	●		
Seeq as a data source	●		
Move Display context to Seeq for deeper analysis	●		
Navigation displays like maps and schematics	●		
Bind data to maps and schematics	●		
Playback	●		
Manual Entries (Comments, manual data)	●		
Ad Hoc Trends	●	●	●
Dynamic Forms/Advanced Tables w/ manual entry	●		
SVG Import	●		
Open graphics export and import format	●		
API/SDK	●		
All Communications over https	●		
SaaS	●		
On premise	●	●	●
SaaS based data sources	●		
Snowflake	●		
Aspen IP21	●		
Scaleout, redundancy, HA/Kubernetes, Dockers	●		
Identity Provider Authorization	●	Windows	Windows
Bar Charts	●		●
Gauge	●		●
Tree	●		
Pie Chart	●		
Scripting	JavaScript	VBA	
Advanced Search for all data sources	●		
Advanced editing (rotation, position, align)	●		
Advanced formatting (transparency, gradients, fonts, colors)	●		

3-way integration with Seeq Cortex, Workbench, and Organizer

IOTA Vue features a seamless and native integration with Seeq that will:

- Easily transition from IOTA Vue to Workbench
- Visualize Seeq derived data in IOTA Vue
- Publish to Organizer

Seeq + IOTA SaaS Architecture



Bridging the physical and digital with Extended Reality (XR)

Digitally Enabled Assets

Digital Twinning — also known as a digital replica — is a virtual copy of a real-world component in the manufacturing process. As an enhanced computer model, this digital representation uses inputs from a real-world component. The digital twin mirrors the real component's status, functionality, and/or interaction with other devices.

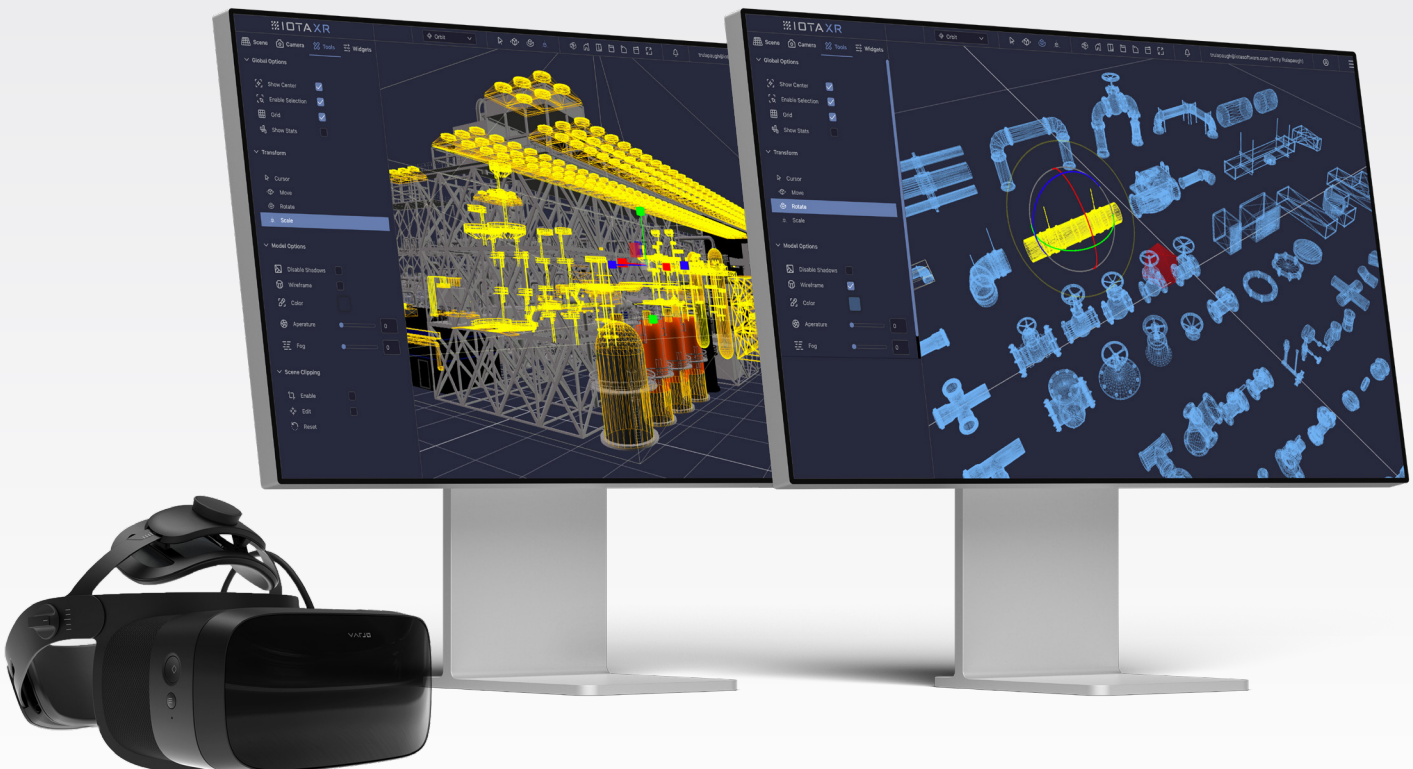
Why IOTA XR?

- Simulate, predict, and inform decisions based on real-world conditions
- Bring to life existing Process Flow diagrams and schematics created by standard authoring software such as Autodesk AutoCAD and Blender.
- Create custom visual components for IOTA VUE

IOTA XR

Build complex, real-world 3D environments and systems

How are you connecting with the future?
Extended reality is a term referring to all real-and-virtual combined environments and human-machine interactions generated by computer technology and wearables.



Develop an interactive blueprint

IOTA XR provides the ultimate visualization experience

- Bind live data to any diagram, whether they are flat (2-D) or volumetric (3-D) objects
- Native 2D/3D PFD/P&ID models and diagrams support
- No prior optimization is required. IOTA Vue XR performs it on the fly
- Assess and simulate systems to improve design and performance.

Move between XR & VUE

Import existing AutoCAD models

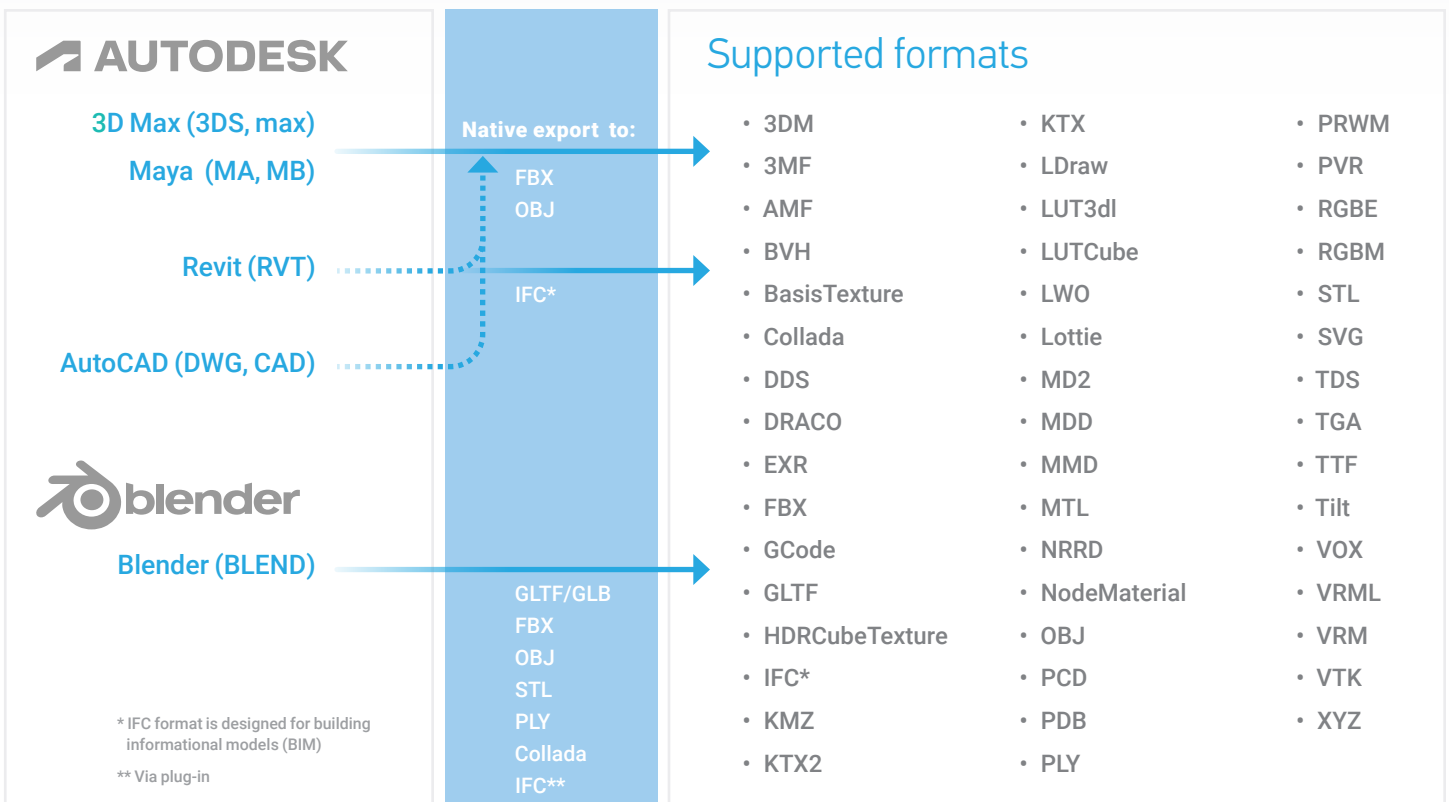
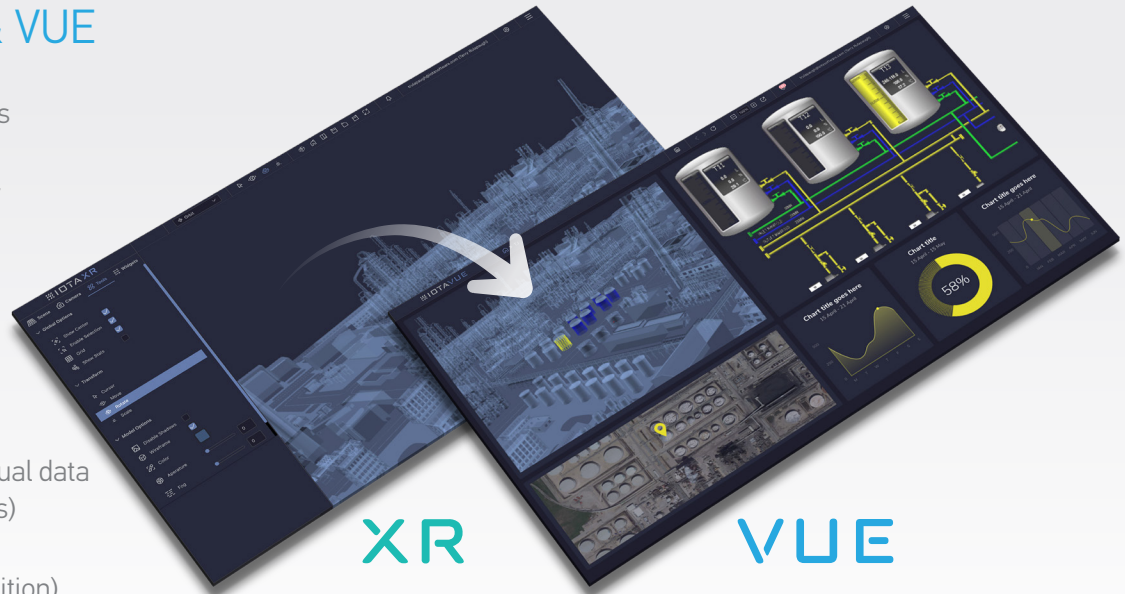
Publish to IOTA Vue's XR Library

Build complex scenes

Use XR objects as native IOTA Vue components

Bind XR object's variables to actual data (time-series, assets, timeframes)

Animate objects (color, size, position)





Manufacturing has begun a new reality as next-generation VR and AR become available

XR Features

Technology	Threejs
Dashboarding software	IOTA Vue
Data binding	Internal: objects as variables with external API access per model
Animation actions	Color, position, rotation on selected objects
Animation conditions	External via API
Max model size	200+ Mb (tested 200Mb)
Max objects per scene	Any (no frame drop)
Total polygon count per scene	10+ million (tested 10 million)
Model optimization	✓ (Auto)
Model decomposition	✓
Multiple models on scene	✓
Model Animation	✓
Embed Url (html) live data	✓
SVG graphics to IOTA component	✓
Generic objects support	Cube, Sphere, Cylinder, Custom sub-model selections
Multi-Select support	Decomposed model objects



VR/AR/XR Device + Browser Support*

Devices

- Varjo Aero
- ARCore-compatible devices
- Google Daydream
- HTC Vive
- Magic Leap One
- Microsoft HoloLens
- Oculus Rift
- Samsung Gear VR
- Windows Mixed Reality

Browsers

- Chrome (WebVR/WebXR)
- Microsoft Edge (WebXR)
- Firefox Reality (WebVR)
- Polyfill for older browsers (WebXR)

*as of early 2022



Value through visualization

Bridging the physical and digital with Extended Reality (XR)

IOTA XR is an innovative 3D platform that seamlessly links three organizations together: engineering, maintenance and operations.

Open and clarify the communication channels between these groups. With XR, operations have the ability to identify manufacturing issues that may be equipment related. They can easily bring maintenance in to pinpoint the problem and strategize a solution. In order to investigate a systemic or engineering issue, the engineer can quickly drop back into their CAD programs to inspect their models. XR's compatibility with a vast library of industry standard visual design software formats means you can work faster and more efficiently.



Build complex, real-world 3D environments and systems

How are you connecting with the future?
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