IoT Trends

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Overview / Background

- Tivix
 - Founded 2008
 - 50+ person product development firm
 - Offices in the US and Europe
- We're building a **IoT data management solution** for firms with up to 100,000 devices in production
 - Lot of current ideas are proof of concepts demonstrating "platform" capability
 - IoTFoundry is built for on-prem/private cloud
 - Offering a **complete solution** rather than a generic platform
- Unique offering of a solution backed by a consulting firm. Ensuring future sustainability of the solution along with up-time / support / enhancements.



Industrial IoT (Industry 4.0 in Europe)

Two use-cases

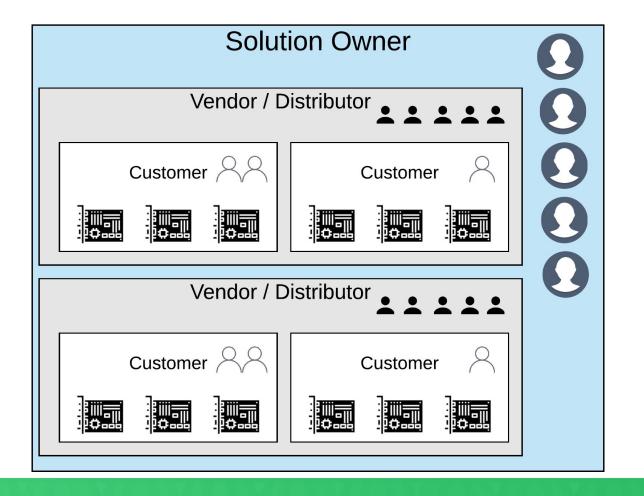
- **Improve current process** and become more efficient
 - Will build something bespoke
 - Leverage something off the shelf
- Wants to transform their business by offering a free or paid IoT empowered offering to their end users.
 - Think industrial hardware/heavy machinery manufacturers in the F&B industry
 - Any medium to large hardware/industrial robots used in manufacturing or service industry



Industrial IoT - Digital Transformation Requirements

- Strong focus on building a solution for tiered access / multiple user personas.
- Focus on Industrial IoT use-case leveraging vendors/distributors to manage large installations.
- Capability to run on-premise/private cloud while at the same time leveraging an existing out of the box solution that gets them started fast (no science experiments!)
 - Solution be fully customizable
 - Be built on open-source technology or open standards and hence no vendor lock-in







Implementation choice: Open-Source Technologies























Implementation choice: Cloud Platforms/Services

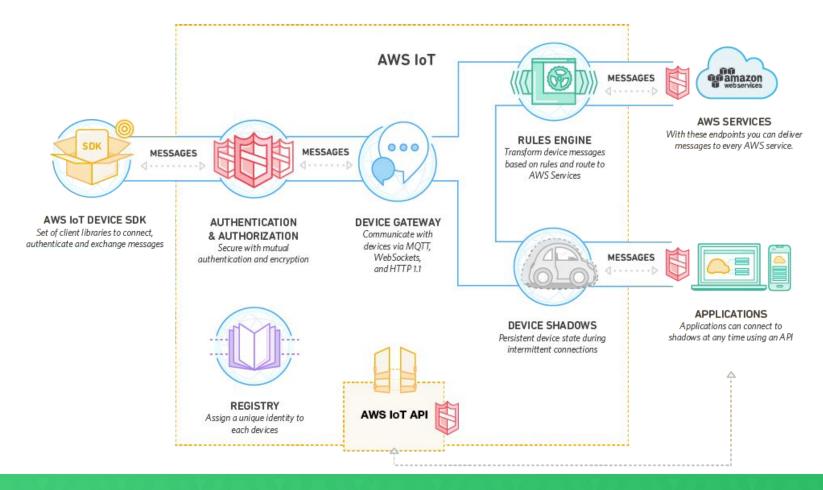




Microsoft Azure



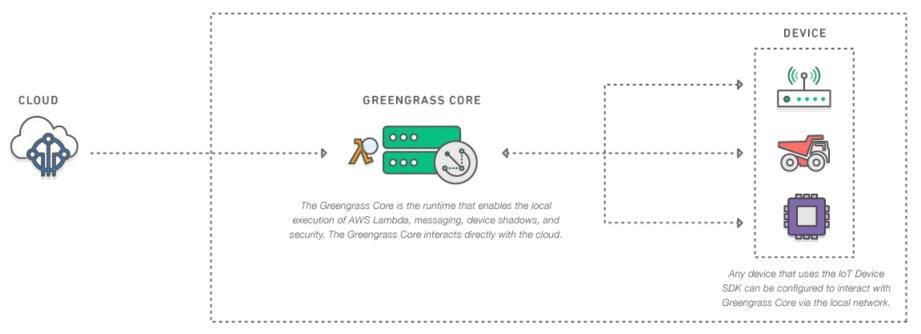






AWS Greengrass - Announced at AWS re:invent last week

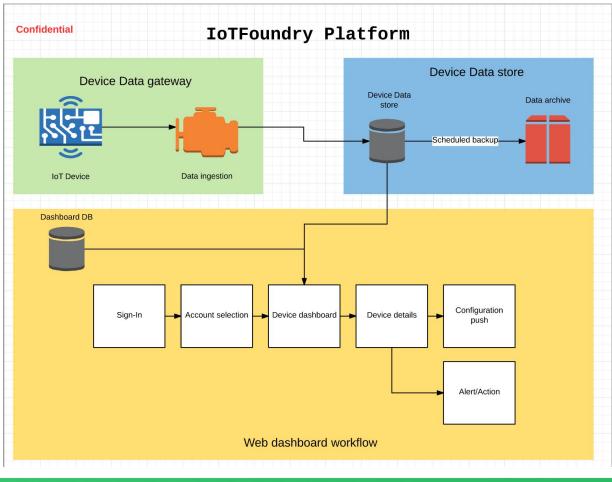
GREENGRASS GROUP



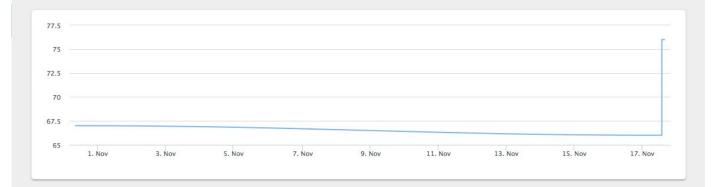
A defined group of Greengrass Cores and other devices that are configured to communicate with one another. A Greengrass Group may represent one floor of a building, one truck, or one home.











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| Device #2 | Lorem ipsum dolor sit amet, consectetur adipis | * |
| Device #3 | Lorem ipsum dolor sit amet, consectetur adipis | * |

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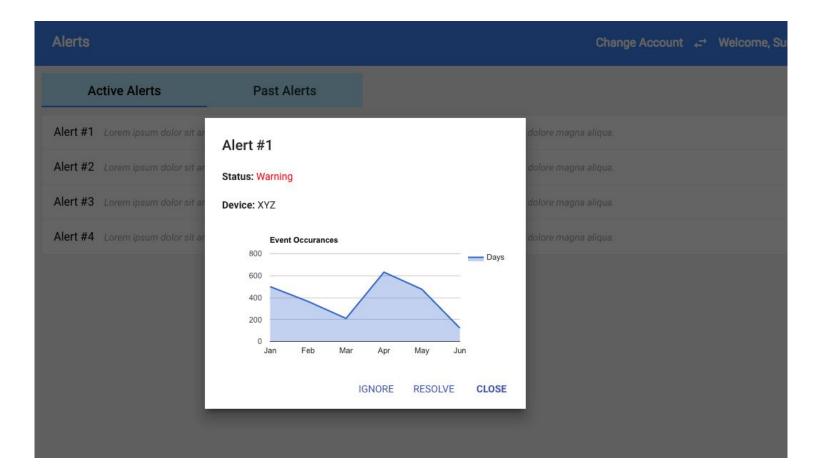




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Relevant recent M&A transactions

















Conclusion: Opportunities in IoT

- Device and Data Management
- Reporting and analytics
- Machine Learning for predictive maintenance and failover strategies/BCP.
- Consulting/Integration opportunities for Brownfield IoT deployments
- Industrial IoT / Industry 4.0
- End-to-end solution rather than a "platform"



Thanks!

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