

CASE STUDY

▶ HOW A PRINTER OEM MONETISED SUPPLIES & SPARE PARTS FROM VAST ENTERPRISE INSTALL BASE



With a decade of experience in Device Management, M2M and IoT Solutions and Services, read how Thinxstream® used Thinxstream DeviceMaestro® Smart™, AWS®, Cassandra®, MuleSoft®, Talend™, Android™ and iOS® to build a device management solution for printers and scanners.

THE BUSINESS GOAL

Recurring Service and Supplies Revenue

In the low-end, price-competitive printer market, margins are thin. Remote services, self-help and supplies replenishment are avenues for profitable, recurring revenues.

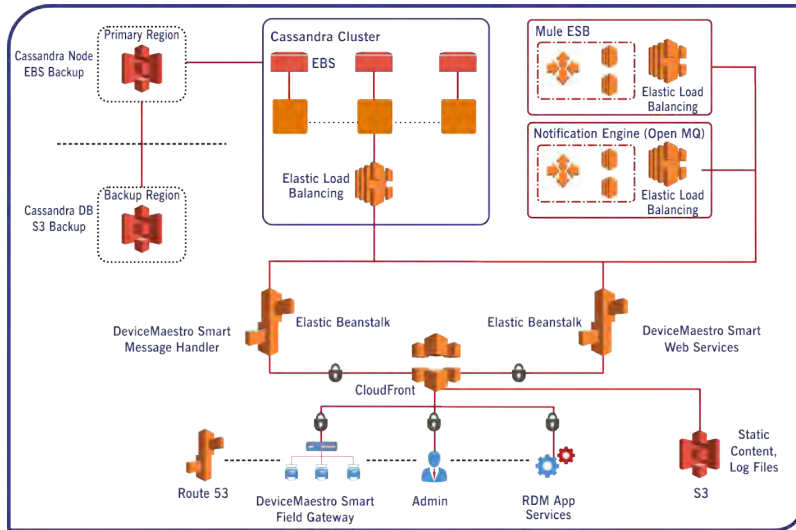
When there are thousands of small enterprise deployments, having a stable, scalable and accurate centralized managed device management system becomes key.

Developing and integrating low-end networked printers with an IoT solution ecosystem comprising cloud, mobile and field gateways help OEMs to keep an accurate account of the health of deployments and their supply-demand forecast.

TOP IOT CHALLENGES

- ▶ **SCALE TO MILLIONS OF PRINTERS**
- ▶ **SIMPLE SETUP FOR USERS**
- ▶ **EDGE COMPUTING ON SMALL FOOTPRINT HARDWARE FOR FIELD GATEWAY**
- ▶ **REAL-TIME STATUS MONITORING**
- ▶ **SECURE CLOUD CONNECTIVITY TO DOCUMENT HUBS FOR SCAN AND PRINT**
- ▶ **CONSISTENT PERFORMANCE AND USABILITY ACROSS DEVICE, WEB, AND MOBILE**
- ▶ **DEVICE CERTIFICATION FROM APPLE® AND MICROSOFT®**
- ▶ **TESTING FOR SCALE**

THE IOT SOLUTION



- > **IoT Platform:** Thinxstream DeviceMaestro® Smart™
- > **Cloud Services:** AWS®, AWS Auto Scaling, AWS CloudFormation®, AWS ELB, Amazon CloudFront®, Amazon CloudWatch®, Amazon EC2®, Amazon Elastic Beanstalk®, Amazon Elastic Block Store, Amazon Route 53®, Amazon S3®
- > **Cloud Data Services:** Cassandra®, MySQL™, PostGreSQL®
- > **UI:** Native Android, Apple® Objective-C®, HTML5, JavaScript™
- > **Programming:** Java®, Embedded C, TR069, OAuth
- > **Client OS:** Android™, iOS®
- > **Others:** Mule® Flow, Talend™ Jobs, JasperReports®, Cloud Storage - Dropbox™, OneDrive®, Google Drive™

KEY HIGHLIGHTS

- ▶ OUT OF THE BOX SETUP EXPERIENCE FOR USERS
- ▶ ACCESS TO PRINTERS FROM ANYWHERE VIA MOBILE PHONE
- ▶ INSTANT HEALTH ALERT
- ▶ ACCURATE TRACKING OF SUPPLIES
- ▶ PRINT FROM AND SCAN TO POPULAR CLOUD STORAGE PROVIDERS
- ▶ CUSTOMIZABLE DOCUMENT WORKFLOWS
- ▶ DRIVERLESS PRINTING AND SCANNING
- ▶ DEMAND FORECAST REPORTS FROM BACKEND
- ▶ DYNAMIC SCALE UP AND DOWN TO MEET DEMAND CYCLES
- ▶ OTA UPGRADE FOR FIELD GATEWAYS

“BY USING OUR DEVICEMAESTRO SMART IOT PLATFORM ON AWS®, WE CREATED A SCALABLE DEVICE MANAGEMENT SOLUTION FOR PRINTERS.”

RANGA RAJ
Director

More Information:

- > [Business Benefits of IoT Solutions](#)
- > [DeviceMaestro Smart IoT Platform](#)
- > [Thinxstream IoT Advantage](#)
- > [IoT Services for Enterprise Integration](#)
- > [IoT Solutions for Device Monitoring](#)
- > [Technology Enablers for IoT Solutions](#)
- > [IoT Solutions for Device Management](#)
- > [Scope of IoT Solutions and Services](#)

THE RESULTS

The Printer OEM leveraged our IoT services to develop an innovative cloud-based IoT solution, which unlocked new revenue channels for them by offering remote service and supplies replenishment. This IoT solution generated a lot of data that became the basis for reporting and analysis.

Value-added workflows such as mobile access to print/scan functionality, easy access to cloud-based document store, driverless printing and self-help for issues brought the printers closer to users.

By designing well-defined interfaces, loose coupling between modules, and workflows that can be customized, our IoT solution could be adapted to new technologies, processes and requirements.

Thinxtream Technologies is a global software company with a portfolio of innovative software platforms, products, components, solutions, patents, competences and services for Internet of Things (IoT) across several industry verticals and applications, successfully enabling leading customers, including Fortune 500 companies, meet their application, product and business goals.

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