IoT based Big Data System for
Chungho-Nais With MySQL

ChunghoNais optimizes product management and Increases Customer Satisfaction Using TeraStream Powered by MySQL

CHUNGHO NAIS CASE STUDY

CHUNGHO 청호나이스

Customer : ChungHo Nais
Location : Korea

Industry : Home Appliances
Employees : 1,482
Annual Revenue : 358.4 Billion KRW

The Solution

Chungho Nais Corp. is a leading environmentally friendly home appliance company from Korea that manufactures, sells, and rents water and air cleaning appliances—including water and air purifiers, bidets, dehumidifiers, and water softeners—to customers across the globe. Since 1983 their mission has been to develop unique future-minded technology in order to create a wellness-focused society free from waste and pollution.
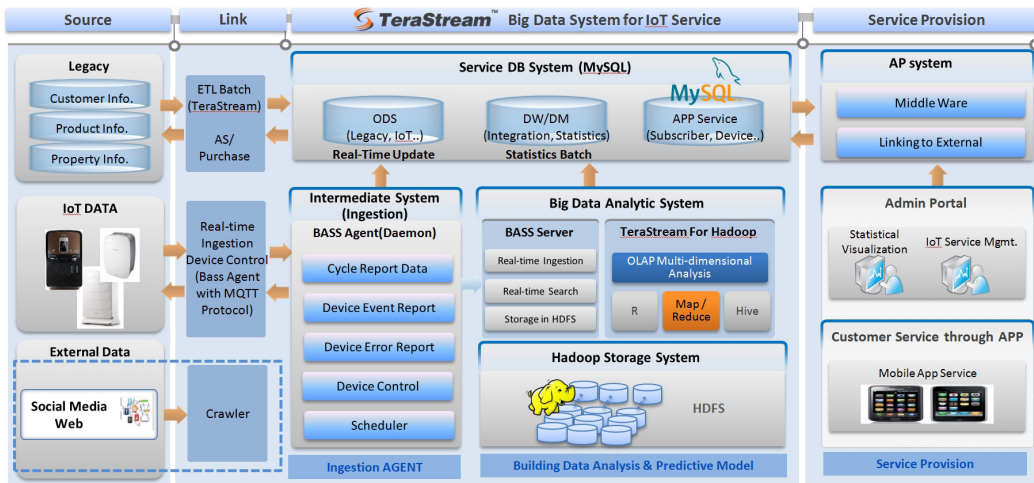
To increase sales and support corporate strategy, Chungho Nais' growth committee members wanted to gain new business insights and develop new products to meet growing customer needs, such as a water purifier with a coffee and icemaker. In order to accomplish this, engineers at Chungho Nais knew that they needed a powerful solution system capable of securely storing and analysing large sets of data. After reviewing a number of solutions it was determined that MySQL was best suited to meet both their current as well as long term technology needs.
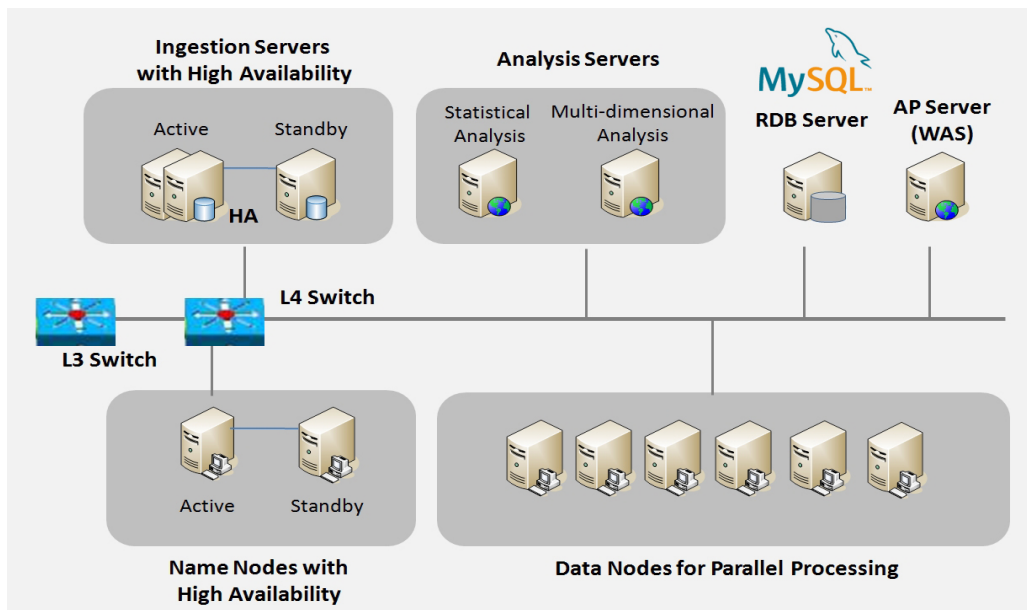
The Challenge

- Develop a secure yet robust back-end system capable of collecting and analysing large volumes of data from millions of censors embedded in Chungho Nais' products.

- Enable customers to see the condition of their Chungho Nais products using real-time data displayed through an app on their mobile devices.

- Increase business agility by analysing trends gathered from anonymous user data to meet customer needs and constantly improve their product offering.

- Reduce the costs associated with big data needs without sacrificing performance or stability.

The Solution

- Increased data processing speed by over 3x by implementing an IoT or Internet-of-Things platform driven by an underlying MySQL architecture enabling Chungho Nais' to collect large volumes of metadata in real time using Datastream's TeraStream BASS technology.

- Reduced overall IT spend by 50% by simplifying their technology stack and standardizing on MySQL.

- Ensured safeguarding of customer data by retaining all of the collected metadata on a highly secure MySQL database.

- Increased responsiveness to customer needs and grew Chungho Nais' business by creating and utilizing predictive purchasing models generated from data stored within the high-performance MySQL database.
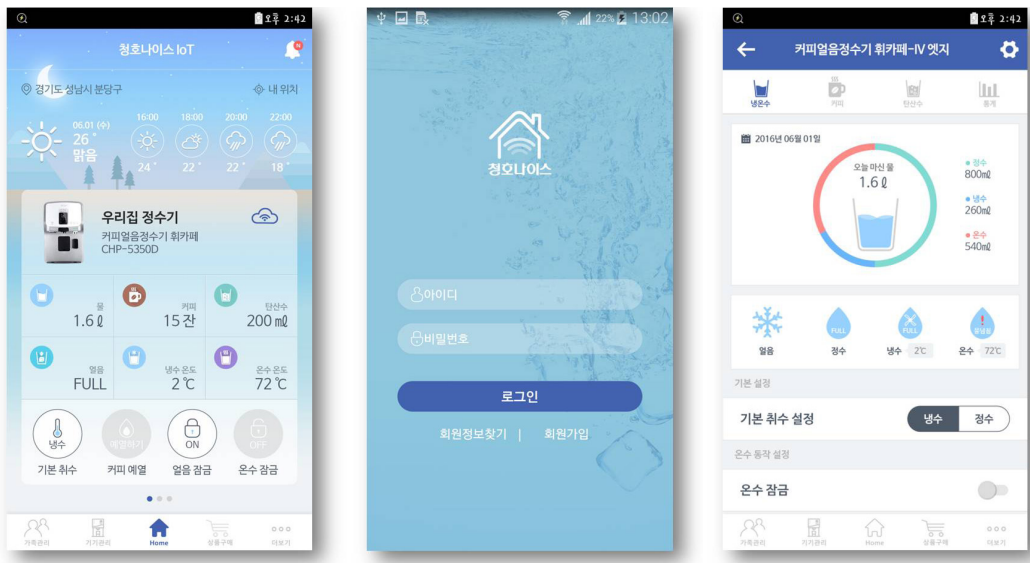

[System Architecture]

[Hardware System]   ※MySQL Standard Edition embedded

[Application Screenshot]

Why Datastream with MySQL ?

When creating their new home IoT platform to monitor each water purifier in real time, Chungho Nais knew that they needed a database which could handle large amounts of data. Additionally, whatever system they chose would need to be capable of real-time online inquiries within a Hadoop Big Data environment. In order to ensure this happened on a highly reliable yet cost effective solution, Chungho Nais chose to deploy on MySQL Standard Edition.

The Key Benefits

Chungho Nais was able to quickly realize the benefits associated with the MySQL + Terastream hybrid solution by receiving real-time operational analyses generated from the following data stream:

- Number of Devices : Monthly 3,000 EA
- Data Ingestion Cycle : Every 10 Mins
- Data Ingestion Size : 2KB
- Number of View & Control : Daily 10 Times
- Data Volume of View & Control : 2KB per time

The data, gathered from this new IoT platform, has allowed Chunho Nais to study real-time customer trends which in turn influences the future direction of the technology being developed by the company. Current end-users also greatly benefit from the collection of this data due to the constantly improving efficiency of their connected devices as well as significant increases in customer service responsiveness.

Learn More

To learn more about the future of green technology in the home and the latest products from Chungho Nais, please visit their website at: http://www.chungho-global.com/