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CLOUD BASED BIOMETRIC SUPPLY GASE GAGE - IMPROVEMENTS BASED ON GEOLOCATION INPUT

HP INC

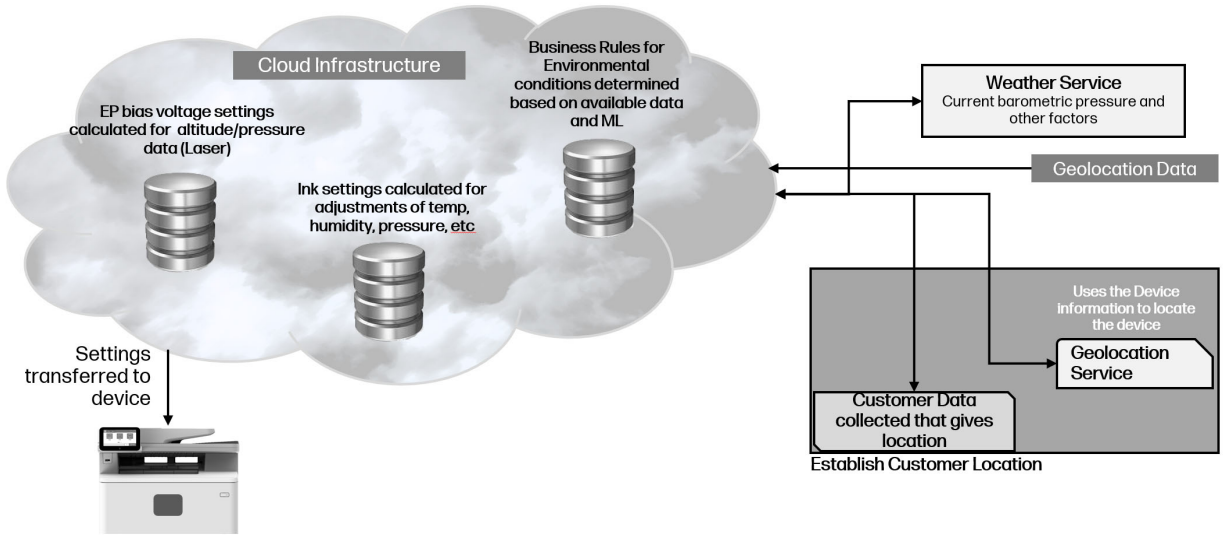
Cloud based biometric supply gas gage – improvements based on geolocation input

As more info migrates to a cloud centric customer experience, customer value and experience can be improved by being connected to the cloud. The cloud can be used to improve the connected customer experience by using data in the cloud to fine tune the device/Supply Gas Gage and/or EP system, improving tracking of the toner/ink used/remaining in the installed supplies and improve print quality. Both Ink and toner consumption are influenced by many environmental factors such as temperature, humidity, altitude, etc.

This disclosure addresses specific ink level adjustments based on data that can be assumed or known based on various inputs from the customer and apply altitude corrections to the Supply/Device gas gage to improve resolution accuracy.

The performance of laser EP systems are also affected by altitude. PQ defects such as background toner can occur at high altitudes. EP bias voltages and the corresponding movement of toner are affected by the dielectric constant of the air, which changes with altitude. Bias voltages adjustments can be adjusted to account for dielectric changes due to atmosphere (when they are known).

Using cloud and geolocation to determine printer altitude/meteorological data can be used to update the gas gage to account for barometric differences. In some cases, the cloud could be used to compensate print settings to maintain a standard print performance over a range of printing altitudes.



Components

1. Cloud Infrastructure
2. Reference data (geolocation, weather, technical)
3. A device that can receive and process cloud Gas Gage correction data
4. Business rules

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