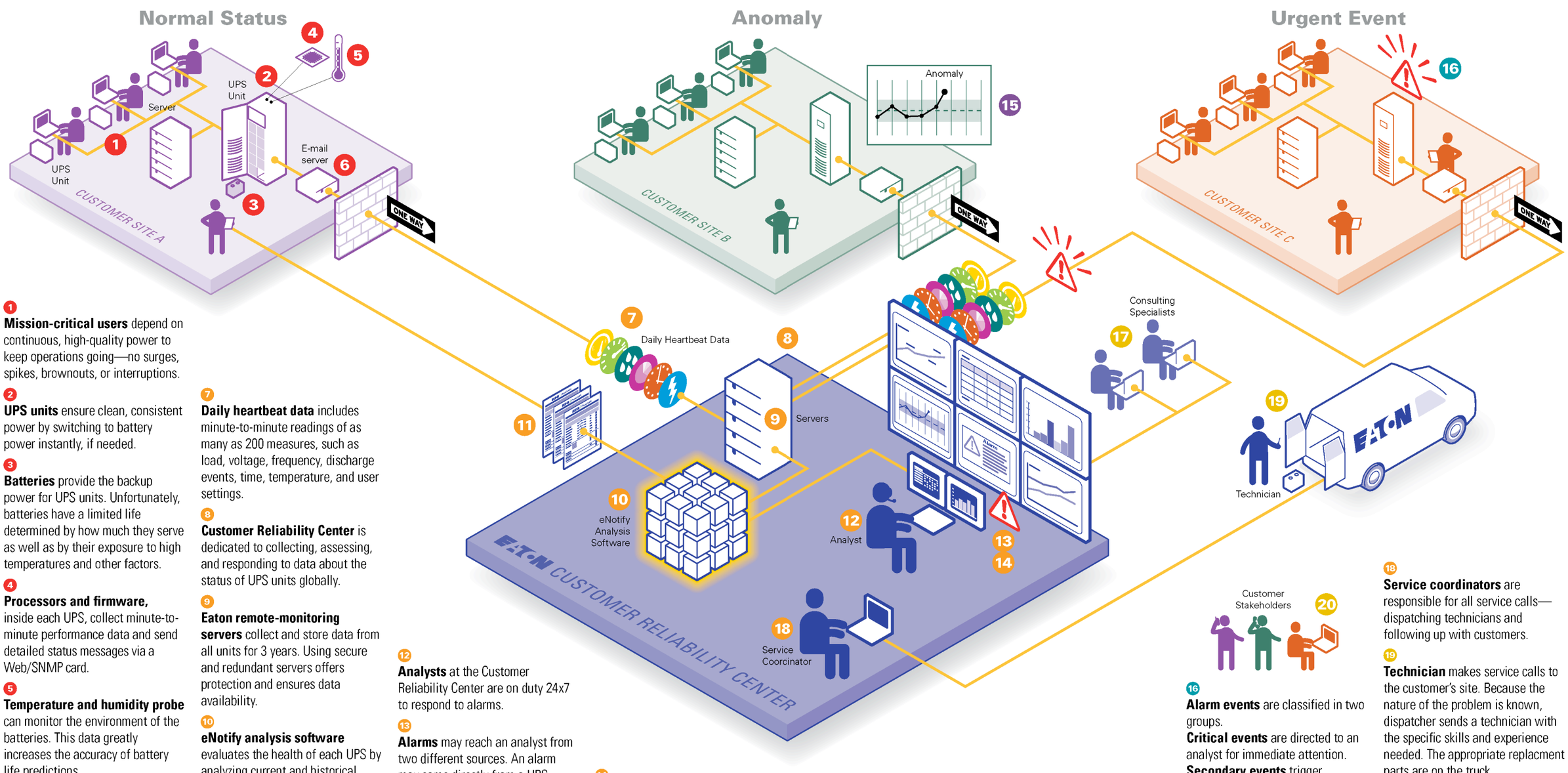
Two-Minute Guide to eNotify™



1 **Mission-critical users** depend on continuous, high-quality power to keep operations going—no surges, spikes, brownouts, or interruptions.

2 **UPS units** ensure clean, consistent power by switching to battery power instantly, if needed.

3 **Batteries** provide the backup power for UPS units. Unfortunately, batteries have a limited life determined by how much they serve as well as by their exposure to high temperatures and other factors.

4 **Processors and firmware,** inside each UPS, collect minute-to-minute performance data and send detailed status messages via a Web/SNMP card.

5 **Temperature and humidity probe** can monitor the environment of the batteries. This data greatly increases the accuracy of battery life predictions.

6 **E-mail server** allows the UPS to send daily updates using the Internet via a firewall—safe, one-way (outbound only) communication.

7 **Daily heartbeat data** includes minute-to-minute readings of as many as 200 measures, such as load, voltage, frequency, discharge events, time, temperature, and user settings.

8 **Customer Reliability Center** is dedicated to collecting, assessing, and responding to data about the status of UPS units globally.

9 **Eaton remote-monitoring servers** collect and store data from all units for 3 years. Using secure and redundant servers offers protection and ensures data availability.

10 **eNotify analysis software** evaluates the health of each UPS by analyzing current and historical data and enables accurate predictions of UPS status.

11 **Monthly reports** summarize UPS status with relative health index score card and other displays.

12 **Analysts** at the Customer Reliability Center are on duty 24x7 to respond to alarms.

13 **Alarms** may reach an analyst from two different sources. An alarm may come directly from a UPS identifying one or more conditions from a pre-programmed list of nearly 50 events. Or an alarm can be generated by the analysis software when it detects an anomaly.

14 **Responses include:**
- Determine that no immediate action is required (false alarm, etc.)
- Guide the on-site customer to resolve the problem (re-set switch, etc.)
- Dispatch technician (replace battery, etc.)

15 **Anomalies** are detected whenever data is outside a defined range or when history reveals a trend that predicts future problems.

16 **Alarm events** are classified in two groups.
Critical events are directed to an analyst for immediate attention.
Secondary events trigger instant e-mail updates to customer stakeholders.

17 **Consultants** with deep expertise on specific units are on call to advise on unusual problems.

18 **Service coordinators** are responsible for all service calls—dispatching technicians and following up with customers.

19 **Technician** makes service calls to the customer's site. Because the nature of the problem is known, dispatcher sends a technician with the specific skills and experience needed. The appropriate replacment parts are on the truck.

20 **Customer stakeholders** are notified of critical problems instantly via the communication channels that they prefer—e-mail, voice mail, instant messaging, etc.