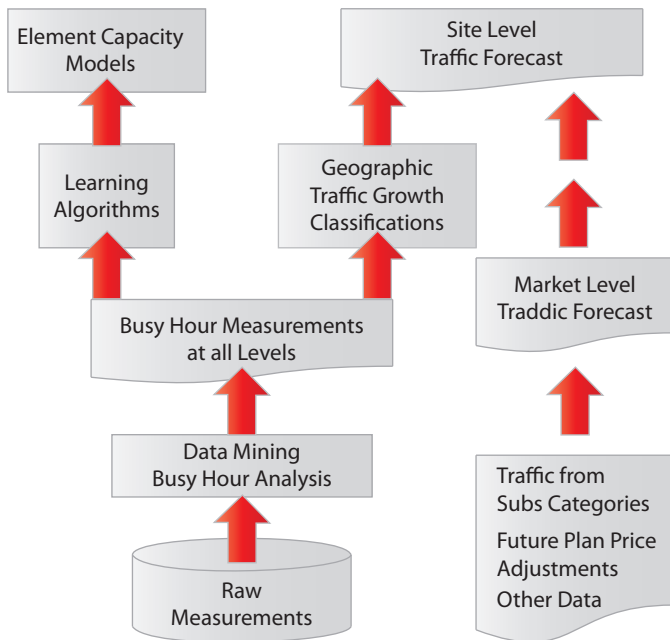


Traffic Forecasting

Due to the proliferation of smartphones and all-you-can-eat data plans, mobile data traffic is experiencing exponential growth. To help harness this explosive growth, accurate network traffic forecasting and capacity planning are both a must have necessity and a significant challenge. Without fast and accurate network traffic forecasts wireless operators risk either network under-building, degrading service quality and the user experience, or network overbuilding, increasing OPEX and CAPEX spending. Using patented technology and computer automation, Cerion has developed a software application that helps wireless operators to best forecast their wireless broadband network traffic and dynamically plan their network capacity. With Cerion software, operators can right-build their network, and when the forecasts change overnight...right-build it again, quickly and accurately.

Data Mining

Ensuring reliable traffic forecasting in high growth mobile networks requires traffic pattern and user behavior analysis. These patterns and behaviors are highly sporadic in nature and vary geographically and by time of day. Cerion's innovative technology applies sophisticated data mining techniques to historic network traffic and mobility measurements. The data mining results are used to create sophisticated network traffic forecasts as well as generate highly accurate Element capacity models.



Traffic Forecasting

Our traffic forecasting technique uses machine learning techniques to automatically classify site clusters based upon historical data including voice traffic growth, data growth, and seasonality. This site clustering is then used to map market-level forecasts down to the individual site-level. The resulting network forecast retains the embedded imprint of key network characteristics while allowing the user to perform “what-if” analysis for different perspective forecast changes

Capacity Modeling

As wireless technology evolves, transaction capacity, such as CPU and SS7 loading, has become the limiting capacity constraint on most types of network elements (e.g., RNCs, SGSNs and Call servers).

Accurately modeling this element transaction capacity is the key to dimensioning network equipment as traffic grows. However, unlike hard capacity constraints (e.g., E1/T1 ports), transaction capacity may be driven by a complex set of underlying busy hour transaction events. Cerion's software application applies learning algorithms to create a detailed transaction capacity profile based upon historic behaviors. By linking this custom profile with our traffic forecasting capabilities, our customers can see the timing of equipment exhaustion points and make better and more timely decisions.

Know the future of your network. Today.

cerion
mobile broadband solutions