

# Generate and Optimize Complex Geographic Routing!

## 8MS Add-on Product: CPRGen (CPR Generator)

Managing complex geographic Toll Free routing using the SMS/800™ interface is difficult and time consuming. When complex geographic routing is needed (for example to generate least cost routing CPRs) it becomes impractical and often impossible to create routing updates manually. The result:

- patchwork call routing and long delays in implementing or updating least cost routes
- loss of focus on the core business and cost reduction opportunities
- wasted time investigating and implementing “homegrown” IT solutions (screen-scraping, spreadsheets, databases, etc.)

**CPRgen is a powerful 8MS add-on product that automatically generates and optimizes complex geographic Toll Free routing from simple user-supplied input.** You specify how you want your calls routed - CPRgen automatically generates complex records that:

- Select a carrier based on one or more of the following: originating 6-digits (NPA/NXX), NPA, LATA, state, or 10-digit number.
- Direct traffic to POTS numbers based on any of the above.
- Block calls based on any of the above.
- Define a default carrier for calls not matching any origination criteria.
- Create and name complex routing segments (which we refer to as “Trees”) with any of the above, and then attach them to the branches of other Trees to create the final complex routing.

After CPRGen creates the update, the normal 8MS GUI is then used to send the generated complex record(s) to SMS/800™. **Most CPRGen routing updates complete in minutes (not hours!)** When CPR updates are required, simply update the input file - CPRGen automates and optimizes the plan and label creation, simplifying your response to NPA-NXX additions or NPA Splits.

CPRGen has been engineered to meet the needs of the most demanding customers in the Toll Free industry. Capabilities featured in CPRGen include:

- *Proven performance* - Our current customers update over 100,000 CPR's annually using CPRGen.
- *Proven experience in maximizing geographic routing* - Customers generating plans often have a large number (over 50,000) of NPANXX's they want to route. A CPR with a single six-digit node can be built but is likely to be rejected by SMS/800™ because of the large number of nodes and paths. In most cases, CPRGen can restructure the plan as an AREA node followed by NXX nodes making the plan smaller and acceptable to SMS.
- *Ignore Invalid NPA-NXX's* - if requested, input containing NPAs and/or NXXs will be ignored if they contain an NPA or NXX not found in the SMS/800™ list of valid values.
- *Maximize the “Other” Branch* - if requested, all geographic routing nodes in the CPR will be examined to see if the routing logic on any branch exactly matches the routing logic on the OTHER branch. If so, the branch is removed. This can significantly reduce the size of complex CPRs.
- *Throughput controls* - SMS/800™ has a rule that no single customer may use more than 5% of the CPU per hour for processing the customer's routing data on the SMS/800™ system. CPRGen allows you to specify an update rate that meets your business needs and adheres to the SMS/800™ policy.

