

CRCP Primer

Making Sense of the New Cross Rate Center Porting
Functionality added to TN Management processes

What is CRCP?

- **CRCP, or Cross Rate Center Porting**, allows a Comcast business telephone services customer in one state, area code, or rate center to utilize a telephone number (TN) associated with another state, area code, or rate center **without paying long-distance rates.**

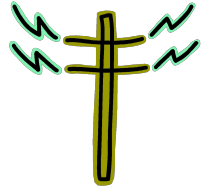
What is CRCP? (Cont'd.)

It is not a product but a functionality that:

- Expands a customer's TN options
- Affects all the Advanced Voice products
- Changes how TNs are processed in
 - Bundle Builder
 - Workbench
 - WebTop
 - Century

Why would business owners want CRCP TNs?

- Getting a CRCP TN saves the business owner money and helps him or her grow their business by:
- Allows the business owner to have a local presence in a “foreign” market outside of their local physical location/geographic area



- Allows business owners to expand their market reach without incurring the costs of setting up satellite physical locations with phone service
- Allows the business owner to offer his or her customers a local contact TN
 - Saving their customers money
 - Building goodwill among their customers

How does that work? First, a refresher*:

* (Or skip to slide 7)

- Telephone service in the United States is organized under the North American Number Plan (NANP) which divides the national calling area into
 - Area Codes (NPA) = geographical regions
 - Rate Centers = subdivisions of the NPA regions
- **Rate Centers:**
- At the local level, customers are billed through their **Rate Centers** and each TN is typically assigned to one Rate Center that governs their immediate physical vicinity.
- Roughly correspond to the Exchange Office – represented by the NXX portion of a TN (e.g. NPA-NXX-1234) – that routes the phone line to the home or business owner's physical location.
- Each TN landline is associated with one Rate Center.

A closer look at Rate Centers

- **Actual Rate Centers are poorly defined regions whose boundaries are constantly shifting** due to:
 - Deregulation/No single law governing one standard rate center definition for all 50 states
 - Proliferation of carriers
 - History (previous boundary lines)
 - Changes to regulatory law in various states
 - Ongoing market changes
- **For simplicity's sake, think of a Rate Center as**
 - a subdivision of the NPA geographical region
 - a billing office/center to which every TN within that Rate Center area is assigned

So here are
some basic
definitions:

- **Local Calls** - calls made from one TN to another in which both TNs are within the same Rate Center.
- **Long Distance Calls** - calls made from one TN to another TN that is located in a different (foreign) Rate Center.

CRCP TNs can be in-state or out-of-state

- **Customers physically located in Philadelphia can now use out-of-state TNs** from New Jersey, Delaware, Maryland, California, etc., or in-state TNs from Allentown or Pittsburgh, etc.
- **Callers see local Caller ID info** as if the business owner was located within the foreign rate center from which the CRCP TN call is made.
- **Outgoing calls** from CRCP TNs will be billed as if the customer were physically placing the calls from within the foreign TN Rate Center – i.e., a local call.
- **Incoming calls** to the customer will be billed (to the callers from their providers) as if the customer were receiving these calls in the home TN Rate Center – again, a local call.

But CRCP TNs
are prohibited
in 8 states...

- **CRCP TNs are limited to the contiguous United States** only (which excludes Alaska and Hawaii), and are prohibited in the following eight states:

- Colorado
- Iowa
- Maine
- Nebraska

- New Hampshire
- Oregon
- Vermont
- Wyoming

- **Note:** The prohibition is not related to the state in which the customer resides, but rather to the state from which the TN(s) is/are requested.

Regular CRCP TNs function the same for...

- Working TNs
- Billing TNs
- CNAM/Caller ID
- Voicemail
- Trunk Assignment
- Ring-to-number for Toll Free

Regular CRCP
TNs function
differently
regarding...

- Eg11 service – determined by the customer physical address
- DADL – enabled for future releases

Before the addition of CRCP functionality...

- ...a business customer who wanted to provide his service customers with a local phone number had to set up a **Remote Call Forwarding (RCF) TN**.
- For example, if a business owner in Philadelphia wanted to offer New Jersey customers a local NJ phone number in order to reach his/her business, the RCF TN would provide the business owner with a TN that had a 609 area code.
- However, the 609 area code RCF TN would be billed back to the business owner's rate center in Philadelphia which has a 215 area code.
- Their NJ customers **save** money making a **local call**.
- The PA business owner **loses** money by having to pay the **long-distance rate** associated with the cost of using an RCF TN.

CRCP cancels out long-distance rates!

- CRCP TNs remove the long distance cost by **setting the foreign rate center as the billing rate center.**
- This means the CRCP TN will be billed to the business owner as if it was a Local TN.
- This means the business owner can still
 - offer his customers a local TN
 - have a presence in a market/community outside of their physical/geographical location
 - NOT pay long distance rates.

Okay I've got the basics – what are the tricky parts?

- **Finding the Rate Center** - The advent of mobile phones and digital technology has made finding the correct rate center for a TN a trickier process.
- **Metropolitan Regions** - This is especially true when dealing with a metropolitan region like Philadelphia, New York, Los Angeles or Chicago.
- **Splits of and Additions to NPAs**
 - These big cities originally had just one area code each and each area code included multiple rate centers.
 - Today, with the addition of cell phones along with the landlines, these cities can have **Multiple NPAs because of**
 - **Overlay NPAs** – an additional NPA laid on top of the original NPA
 - **Split NPAs** – the original NPA split into 2 NPAs

For example...

- The original 215 Philadelphia Area Code was split into 215 and 610.
- Later the 484 and 267 area codes were overlaid on the 610 and 215 area codes, respectively.

610, split from 215 area code
484, overlaid on the 610 area code



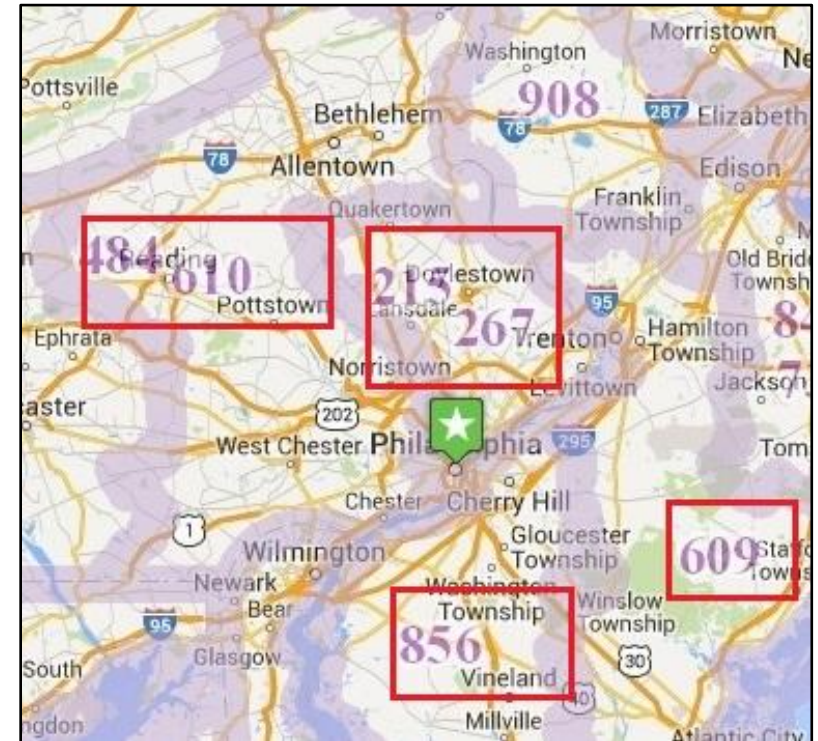
215, the original area code
267, overlaid on the 215 area code



For example...

- ...the Philadelphia metro region has 6 Area codes
- 215, the original area code
- 610, the **split** of 215
- 267, the **overlay** of 215
- 484, the overly of 610
- 609, the original NJ area code
- 856, the split of 609

* Screen shot from eMAP



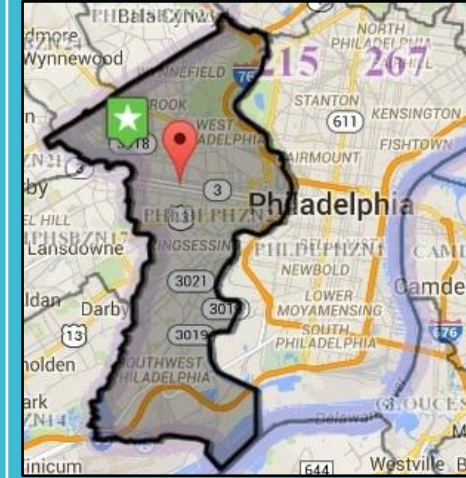
The City of Philadelphia proper has 4 rate centers

Note: eMAP lets you see how different rate centers relate to each other geographically.

Philadelphia Zone 1



Philadelphia Zone 2



Philadelphia Zone 3



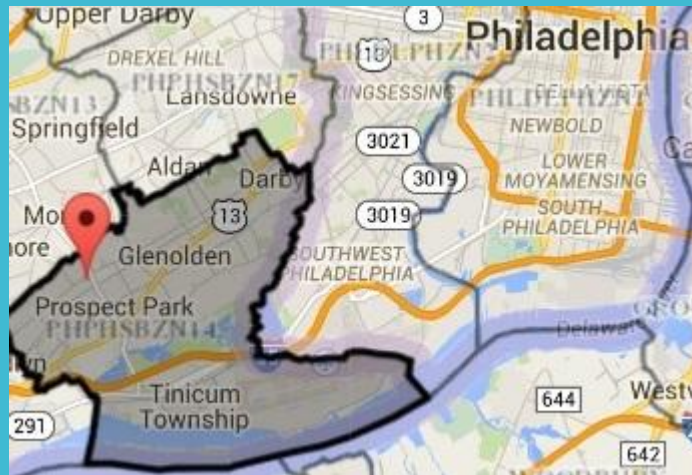
Philadelphia Zone 4



There are over 40 suburban rate centers

- The surrounding suburbs include over 40 suburban rate centers. See 2 examples below.

Phila Suburban Zone 14



Phila Suburban Zone 41



This can
create a
challenge
when...

- **Checking serviceability in eGIS/InSite**
- **Checking TN search criteria in eMAP**
- **Data constraints** - some rate centers in some NPA foot-prints may not validate correctly under every NPA in that foot-print
- Ex. 215 vs. 267
- Ex. the new 667 area code in Baltimore
- If Comcast has no numbers in the 267 or 667 inventories, requests for CRCP TNs under those NPAs may not validate in eGIS.

How do I handle that?

- **Problem:** If Comcast inventory does not have numbers under an overlay NPA, it won't validate.
- **Solution:** If it doesn't validate for a given NPA where there is an overlay, it's worth checking under another NPA.

How does this impact my own job?

- **More Comcast teams will be required to do a serviceability check** when entering or managing a new, in-flight or MACD order with CRCP TNs.
- **Affected teams include:**

- Sales Reps
- Sales Engineers
- Order Entry
- APS (for APS-supported markets)
- ASPM
- SDEs

- Business Support Specialists (BSS)
- Tier 1/Enterprise Customer Care (ECC)
- Tier 2/Enterprise Technical Support (ETS)
- Change of Service (COS)

Sales Reps & Engineers, etc.

- **Sell native TNs according to current native-TN pricing guidelines**, regardless of how many of those TNs might be CRCP or Local
- **Validate ported-in TNs** with tools that accommodate & validate CRCP TNs as well as Local TNs
- **Identify and specify** where customers request new TNs if customers request TNs that are not in same rate center as physical location (CRCP native TNs)
- **Express these requests in terms of telephony parameters** known as “TN Search Criteria” (ST, NPA, NXX, Rate Center)
- **Document these requests** using the telephony TN Search Criteria in their Sales tools

Order Entry and ASP

- **Recognize requests** for new native CRCP TNs
- **Validate the TN Search Criteria** for these requests & enter them into the order management systems
- See the **FAQ section** of How to Validate CRCP TNs using eGIS/InSite & eMAP

Order Management and ASPMs

- **Recognize that there are requests** for new native CRCP requests
- (Until later releases) **transcribe TN Search Criteria** from the sales tools into the order management systems
- **Resolve TN Search Criteria** to the Rate Center-ST values necessary for native TN requests from Inventory Services
- **Request native Local TNs** from Inventory Services in a similar manner as before CRCP implementation
- **Implement expanded capability** of order management systems to request CRCP TNs
- When TN request fail, or customer changes requests, **express new CRCP requests in terms of TN Search Criteria** (ST, NPA, NXX, Rate Center)
- When TN request fail or customer changes request, **document these CRCP requests** using the telephony TN Search Criteria in the order management systems
- **Configure services** on CRCP TNs just as they do on Local TNs
 - DL on CRCP TNs will not be enabled until future releases

Provisioners

CRCP TNs are provisioned on switches, CNAM, CNUM, DA, DL ... **no differently** than are Local TNs

Tier 1/ Enterprise Customer Care (ECC)

- **Add native TNs according to current native-TN pricing guidelines**, regardless of how many of those TNs might be CRCP or Local
- **Validate added ported-in TNs** with tools that accommodate & validate CRCP TNs as well as Local TNs
- **Identify and specify where customers request added new TNs** if customers request TNs that are not in same rate center as physical location (CRCP native TNs)
- **Express these requests in terms of telephony parameters** known as “TN Search Criteria” (ST, NPA, NXX, Rate Center)
- **Document these requests** using the telephony TN Search Criteria in their Care tools
- **Resolve TN search criteria** to the Rate Center-ST values necessary for native TN requests from Inventory Services

Change of Service (COS)

- **Recognize that there are requests** for new native CRCP TNs
- **Validate the TN Search Criteria** for these requests and enter them into the order management systems
- **Transcribe TN search criteria** from the Service Assurance tools into the order management systems
- **Resolve TN search criteria** to the Rate Center-ST values necessary for native TN requests from Inventory Services
- **Request native Local TNs** from Inventory Services in a similar manner as before CRCP implementation
- **Implement expanded capability** of order management systems to request CRCP TNs
- **Configure services** on CRCP TNs just as they do on Local TNs
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What tools help me manage CRCP?

- eGIS is checking TNs against TN Inventory (STARS makes the call to TN Inventory although STARS may be replaced in the future)
- **Resource Links:**
 - How to Validate CRCP TN Area Serviceability Using eMAP & eGIS/InSite
 - How to Complete the TN Management Task for CRCP TNs
 - How to Complete the Trunk Configuration Task With CRCP Functionality
 - CRCP Updates to Bundle Builder
- **For additional information on when to perform a serviceability check, see especially the FAQ section of How to Validate CRCP TN Area Serviceability Using eMAP & eGIS/InSite**

CRCP Review & FAQ

- **Q: What is CRCP?**
- **A:** “CRCP,” or Cross Rate Center Porting, describes a newly supported way of using the same TNs provisioned to customer accounts now. It applies only to the Advanced Voice products.

CRCP Review & FAQ (Cont'd.)

- **Q: What does CRCP mean?**
- **A:** It means that a Comcast business telephone services customer in
 - State A
 - NPA A
 - Rate Center A
- Can utilize a TN associated with
 - State B
 - NPA B
 - Rate Center B
- **without paying long-distance rates.**

CRCP Review & FAQ (Cont'd.)

- **Q: How do CRCP TNs work?**
- **A:** A customer physically located in Philadelphia (PA), for instance, can now use TNs from Maryland, the District of Columbia, California, Minnesota or closer in Allentown (PA), Camden (NJ), etc.
- **CRCP TNs will carry Caller ID** as if the customer location was in the rate center where the TNs themselves are associated (TN rate center).
- **Outgoing calls** from these TNs will be rated as if the customer were physically placing the calls from the TN Rate Center – i.e. as if it was a local call.
- **Incoming calls** to the customer will be billed (to the callers from their providers) as if the customer were receiving these calls in the TN Rate Center – again, a local call.
- **CRCP is an improvement over RCF** because it eliminates long-distance rates. In all but the 8 states that prohibit CRCP TNs, CRCP is expected to replace RCF TN use.

CRCP Review & FAQ (Cont'd.)

- **Q: Will there be additional functionality for CRCP TNs in the future?**
- **A: Yes. Once the “Move” process has been automated, CRCP will allow customers to move their physical locations to another rate center and keep their same TNs.**
- TNs that are not CRCP will be called “Local” TNs as in “Local to the physical customer location.”
- The original “physical location” for a satellite location or soft phone shall be considered the “physical location” regardless of whether the phone is used elsewhere.

The End

Questions

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