How the ETM® System Presents Non-North American Numbering Plan (NANP) Calling Sequences

Each Span in the ETM® System uses a Dialing Plan to recognize, normalize, and classify calling sequences for ETM Policy processing, display, reporting, and service-type classification (such as long-distance, local, or international). Dialing Plans are customized for the specific Appliance locale to ensure that the calling sequences the Span receives are correctly processed for Policy processing and number recognition. This required Dialing Plan configuration for essential ETM System functions is performed during every ETM Appliance installation.

For countries that use the North American Numbering Plan (NANP), the basic configuration to ensure proper policy processing also results in display and reporting in the format customary to the locale—for example, 1(210)402-9669.

Numbering plans for customer facilities located outside of NANP, however, can differ greatly and are more complex. For these sites and for international calls dialed from NANP countries, the default Dialing Plan configuration included with a standard installation does not result in display and reporting in the manner customary to the locale. Rather, the phone number is presented as follows—country code, a set of empty brackets, and then the remaining digits as one sequence. For example, a phone number in France might appear in the ETM System as 33()144419900. Although visually different, this format is the minimum required to enable calling sequences to be properly matched for ETM Voice Firewall and IPS Policy processing and enforcement.

Limitations of this format are that it looks unusual in displays and reports, prevents reporting and policy creation based on area/region/city code and partial numbers, and precludes many types of call classification. For customers who are not concerned with the cosmetic display issue and are not using ETM System features related to wildcards and classification, no further customization is needed.

For those who are concerned with these issues, SecureLogix offers services to perform more complex customization of the Dialing Plan to modify this formatting into the desired presentation for most calling sequences (except in certain cases such as when no NPA is used for certain types of calls). This customization is outside the scope of a standard ETM System installation, however. Contact your SecureLogix Sales Representative for information regarding available Dialing Plan customization services.

More Information

Each ETM Span uses two types of Dialing Plans to process calls against ETM System Policy Rules, accurately classify calls for call accounting, and format phone numbers for display and reporting: a Local Dialing Plan and a World Dialing Plan. Both files are read into Span memory and processed simultaneously. For management, local and global configuration settings are separated into these two files.

Local Dialing Plan

The Local Dialing Plan is specific to the Local Exchange numbering plan for the Appliance locale. It is used to:

- Classify phone numbers according to service type (for example, local, long-distance, toll-free).

- Recognize emergency numbers as they are dialed at the beginning of a calling sequence.

- Recognize special partial numbers, such as service codes, that should not be normalized but recognized when seen at the beginning of a calling sequence.

- Recognize dialing access codes and prefixes, such as direct-distance dialing, long-distance, or line access codes.

- Recognize suffix digits, such as a # denoting the end of a calling sequence.

- Recognize and normalize direct-inward dialing (DID) extensions used at the Span site.

- Provide labels used to identify Service Types used in Intrusion Prevention System IPS Policies and for call accounting reports.

World Dialing Plan

The World Dialing Plan is specific to the country in which the Appliance is located. It is used to:

- Recognize and confirm the country code component of a calling sequence.

- Recognize and confirm the NPA (region/area/city codes) component of the calling sequence.

- Specify the default length of the various components of a phone number and other default values.

See the *ETM® System Technical Reference* for details about customizing the Dialing Plan. Be aware that improperly configured Dialing Plans can impair policy processing and phone number recognition.

Last Update: 7/10/2014