

## Neustar® Networking Solutions Ensure Seamless Interconnection

Boost Efficiency and Profits

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### SOLUTIONS TO ENSURE YOU

- Reduce Operating Costs
- Flexible Solutions that Scale
- Leverage Unequaled Networking Expertise

Businesses are currently striving to do more with less, while keeping an eye on performance. Neustar manages the increased complexity in the telecommunications industry through its set of unique databases and system infrastructure in geographically dispersed data centers. This ensures the seamless connection of our carrier customers' numerous networks, while also enhancing the capabilities and performance of their infrastructure.

Neustar also facilitates order management and work flow processing among carriers, and allows operators to manage and optimize the addressing and routing of Internet Protocol, or IP, communications. Neustar helps you to seamlessly connect:

### Neustar's NumberManager™

Neustar manages the NPAC database, which enables consumers in the United States and Canada to keep their numbers when switching carriers. Service providers use the NPAC to centrally process changes to essential network elements that are used to route telephone calls. The NPAC supports emerging technologies and is the only number portability system that supports multiple communications technologies in a single repository. Neustar also implements the administration of the allocation of pooled blocks of unassigned telephone numbers.

### Multimedia Interconnect Service (MMIS)

MMIS enables service providers to implement and manage policies for the intelligent and efficient routing of IP traffic between networks. Providers can easily direct traffic at the address level so they can control route, costs, and capabilities. MMIS provides a flexible platform that creates new revenue opportunities for Voice, Video, and IP multimedia applications, reduces operating costs, and simplifies network interconnection.

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### COMMUNICATIONS SERVICE PROVIDERS DEPEND ON NEUSTAR FOR

- Improved reliability
- Enriched data and analytics
- High value solutions

### Pathfinder

PathFinder is a GSMA Number Translation Service operated by Neustar. This service facilitates IP inter-operability by translating telephone numbers to IP-based addresses. Interoperability is particularly important in facilitating the uptake of emerging services such as Multimedia Messaging Service (MMS), IP-Multimedia Service (IMS), and Packet Voice. Based on Carrier Electronic Numbering (ENUM), PathFinder is available to mobile operators, fixed network operators, and related service providers. As next generation IP-based services proliferate, operators can utilize PathFinder to position new services behind the telephone number already used by subscribers.

### ITRS

Neustar operates the iTRS ENUM Database under contract to the FCC , created following a recent FCC Order. The iTRS database maps 10 digit U.S. telephone numbers to IP addresses or Instant Message screen names using the industry standard ENUM protocol. Video Relay Service and IP Relay users who are deaf or hard of hearing are assigned these 10 digit telephone numbers by their chosen default provider. These telephone numbers, which automatically create relay calls when they are called by hearing users, are real, local geographic telephone numbers. Relay calls which are direct dialed by hearing callers to deaf or hard of hearing persons use the default relay provider to provide interpreting services. Similarly, a call by a deaf or hard of hearing user to a hearing person may be direct dialed on the deaf/HoH user's IP device and will be placed automatically as a relay call using the default provider.

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### Learn More

For more information **Call +1.877.831.3984**  
Visit **[www.neustar.biz/carrier-services](http://www.neustar.biz/carrier-services)**  
Email **[solutionsteam@neustar.biz](mailto:solutionsteam@neustar.biz)**

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### About Neustar

**Neustar, Inc., (NYSE: NSR)** is a trusted, neutral provider of real-time information and analysis to the Internet, telecommunications, entertainment, advertising and marketing industries throughout the world. Neustar applies its advanced, secure technologies in routing, addressing and authentication to its customers' data to help them identify new revenue opportunities and network efficiencies, and institute cybersecurity and fraud protection measures. More information is available at **[www.neustar.biz](http://www.neustar.biz)**.