



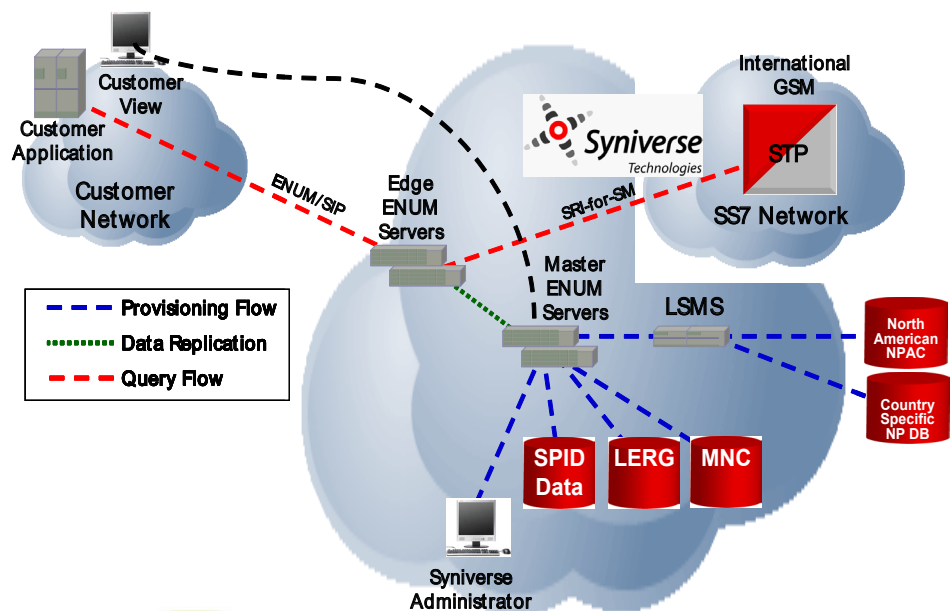
Operator ENUM Service

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The global Syniverse **Operator ENUM Service** is a secure, private implementation by Syniverse of the ENUM technology standard designed for mobile and fixed-line operators to facilitate portability-corrected addressing of IP services, such as MMS and SIP-based voice services. The service returns portability-corrected uniform resource identifiers (URIs) for routing calls or messages to the correct operator or carrier. This allows service providers the ability to translate E.164 phone numbers into IP addresses for routing packets over IP networks. The Operator ENUM Service also determines how to route IP-based services to a number portability-corrected destination utilizing the most efficient routing particular to an operator.

Operator ENUM Service enables operators' switches to query the most recent routing information for a subscriber's E.164 telephone number in a ported environment, allowing them to complete a call or message attempt to that subscriber. Queries are carried in-band, over the same transport facilities as the session payload. Origin-sensitive responses ensure the returned URIs reflect the interworking agreements specific to the requestor.

ENUM is an integral component of the IMS and MMS interworking guidelines utilized to provide telephone number resolution for routing IMS and MMS traffic types. And because Operator ENUM is a private, secure DNS database service, it is accessible only by operators who register URIs.





- Reduces costs by bringing signaling for IP-based services in band.
- Reduces complexity by transparently utilizing SS7 queries.
- Reduces capital investment by enabling you to utilize a high performance ENUM query engine.
- Simplifies ENUM implementation.
- Leverages existing transport networks for IMS and MMS services by bringing number resolution queries in band.

Example uses of the global Operator ENUM Service include:

- VoIP: A voice application can be set up to always search for a SIP address associated with a telephone number. If a SIP address exists, then a voice session can be set up to route the call via IP versus using the PSTN.
- MMS: An MMSC can determine how to route an MMS message by submitting an in-band query.
- SMS: An ENUM query can specify how an SMSC should route any specific message based on operator-specified criteria.

Benefits of Operator ENUM Service

- Reduces costs by bringing signaling for IP-based services (such as MMS and IMS) in-band, and by acquiring updated and customized routing information in a timely manner.
- Reduces complexity by transparently utilizing SS7 queries when necessary – all queries are ENUM and in-band.
- Reduces capital investment by enabling the operator to utilize a high performance ENUM query engine without the expense of buying and operating private ENUM servers.
- Minimizes operating costs by paying only for the number of queries required.

Features of Operator ENUM Service

- Simplifies ENUM implementation and operations by utilizing Syniverse's single service bureau source.
- Leverages existing transport networks for IMS and MMS services by bringing number resolution queries in-band.
- Offers complete North American market coverage from a single source, offering IP services access to number portability-corrected data from all Number Portability Administration Center (NPAC) regions.
- Offers global number resolution for GSM destinations.
- For international GSM destinations, the ENUM service transparently conducts SS7 queries to determine number ownership and returns the proper URI via ENUM, hiding the complexity of the SS7 queries from the IP-based service.
- Supports customized responses based on the interconnect relationship particular to the requesting operator, ensuring custom routing without the need to manipulate the response.



Syniverse Technologies

Serving more than 800 communications companies in over 160 countries, Syniverse Technologies (NYSE:SVR) offers market-leading solutions that simplify the complexities of roaming, messaging, network interoperability and business intelligence for mobile operators, MSOs, enterprise verticals and emerging mobile providers.

- Can be configured to support customized views on a per-operator, per-interworking agreement basis, allowing the operator to determine the most efficient transport route for delivering the IP session or message.
- Takes advantage of Syniverse's advanced network operations center to monitor Syniverse's network and database services to better ensure continued service reliability.
- Provides 24 hour, 7 days a week access to a staff of qualified, in-house technicians.

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