PERFORMANCE TECHNOLOGIES

Unity in Systems Design

SEGway™

SS7 Protocol Conversion

Overview

Despite being a standard, there are more than 100 versions of SS7 variants in use throughout the world. Performance Technologies offers protocol conversion capabilities between most major flavors of SS7 including ANSI, ITU-T, ETSI, Japan (NTT and TTC) and China in application layers such as:

- TUP
- ISUP
- SCCP

Our expertise involves integrating protocol conversion with STP functionality, or providing in-line conversion where the solution is transparent (no point codes) to the interconnecting networks. Some examples of SS7 protocol converters include:

- China TUP to China ISUP
- ANSI ISUP to ITU ISUP
- Japan ISUP to ANSI ISUP
- China SCCP to ITU SCCP

Performance Technologies prides itself on being able to meet any SS7 protocol conversion need. This is a function of our infield expertise, object-oriented software architecture and extensive libraries of protocols developed from many years of experience doing SS7 conversions. Generally new variants can be accommodated within four to six weeks, although higher levels of the stack may offer unique challenges that may require more extensive development.

Why Protocol Conversion

Signaling interoperability between the various international flavors of SS7 continues to be a significant challenge to developers. Much of this relates to the fact that there were several somewhat different versions of SS7 standards and many different variations of flavors.

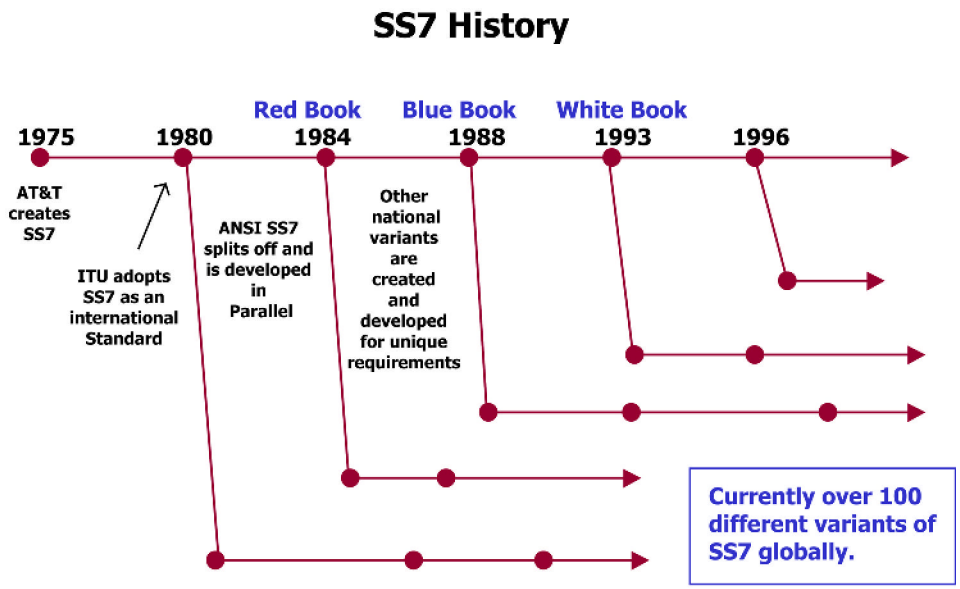
Increasingly, telephony users are placing calls over IP as well as public-switched networks. While the IP Network use data packets, the Public Switched Telephone Network (PSTN) uses the SS7 signaling protocol to set up and tear down phone calls, or provide service features such as Local Number Portability (LNP), 800 service, Calling Name Display and others.

Performance Technologies' SEGway Signaling Gateway plays a critical role in supporting the seamless interworking between these two networks, and when this data is traveling though different geographical locales, protocol conversion may be required.

Highlights

- **Solutions Available Between Most Major Flavors of SS7 - ANSI, ITU-T, ETSI, Japan NTT and TTC, and China**
- **There Are More than 100 Versions of SS7 Variants Throughout the World**
- **Infield Expertise, Object-Oriented Software Architecture and Ten Years Experience Doing SS7 Conversions**
- **Customers Include Some of the Largest Carriers and OEMs Worldwide**

The SEGway Signaling Gateway can include protocol conversion for most major flavors of SS7 and is recognized as a world leader in this area. Performance Technologies has developed protocol solutions for some of the largest carriers and OEMs worldwide, who rely on us to provide workable solutions in short timeframes.



The History of SS7

The SS7 (Signaling System 7) standard defines the procedures and protocol by which network elements in the PSTN exchange information over a digital signaling network to perform call setup, routing and control.

Throughout the years, different variants, or flavors of SS7, have been developed. In fact, today there are over 100 different variants of SS7 worldwide. Of course, differences in protocols is certainly not specific to SS7 networks, there are multiple IP-side protocols being developed as well, including SCTP, M3UA, SUA, MGCP, H.248, MEGACO, SIP and H.323.

Because of these different SS7 flavors, signaling networks in one geographic area may not be able to interwork with a signaling network in another. Protocol conversion between these two flavors is necessary for intelligent routing to occur. In VoIP applications, this would ideally occur in the same signaling gateway that allows SS7 to communicate to IP. The SEGway Signaling Gateway does exactly this. Contact **sales@pt.com** to discuss your protocol conversion requirements.

Ordering Information

To discuss specific requirements and/or pricing, contact sales@pt.com.

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