## Dialogic ${ }^{\circledR}$ DSI Signaling Transfer Point based on Dialogic ${ }^{\circledR}$ DSI G5V Signaling Controller


#### Abstract

Dialogic ${ }^{\circledR}$ DSI Signaling Transfer Point (DSI STP) based on the Dialogic ${ }^{\circledR}$ DSI G5V Signaling Controller is a compact, cost-effective software only telecommunications signaling platform, providing core network connectivity for use in all-IP signaling environments. The DSI STP supports comprehensive Screening capabilities in addition to routing at the MTP and SCCP levels and Global Title Translation. The DSI STP features a browser-based graphical user interface (GUI) for all operations, administration, maintenance and provisioning functions. The GUI supports dynamic configuration, status and alarm monitoring, interactive control and a wide range of diagnostic capabilities. A multi-user environment - complete with password security, configurable user privileges and full audit trail - adheres to chosen security policy. The DSI STP supports multiple protocol variants allowing worldwide deployment in


 both fixed and mobile networks.

Dialogic ${ }^{\circledR}$ DSI G5V
Signaling Controller

## Features

Software-only appliance for deployment under VMware or KVM using a single OVF distribution.

## Benefits

Allows the user to provision the optimal amount of resource and to select hardware platform of choice

Worldwide protocol support (including ITU-T, ANSI, China, Japan)
for both telephony and transaction-based operation with SCCP Global Title Translation

Facilitates global deployments and the ability to configure protocol variants at runtime

Screening and routing based on OPC, DPC, SCCP Called \& Calling Address, SSN, MAP Operation Code and others

Supports built in browser and command line interface for OA\&M in addition to SNMP

Puts the operator in control of the way the network is used

Facilitates comprehensive, user-friendly remote management using standard tools without the need for an expensive Element Manager

Provides good visibility of utilization and traffic levels; facilitates fast resolution of network protocol issues

Built-in periodic traffic measurements, event logging and protocol tracing (including PCAP format), backed by documented internal interfaces between protocol layers

Ability to interwork between different network types including
National/International, ETSI/ANSI and support for Alias Point Codes

Resolves basic interworking needs without requiring external protocol conversion

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## Resiliency and Scalability

The DSI STP can be deployed as a stand-alone unit or in a dual active/active configuration for resilience and high availability. For larger deployments, instances can be stacked to provide a distributed STP with no single point of failure. A single STP instance requires just 4GB of memory, 50 GB of storage and can operate on a range of CPU cores from 2 to 24 with up to 8 virtual Ethernet ports.

## Multi-Purpose Signaling Transfer Point

In addition to operation as a Signaling Transfer Point, the DSI STP addresses a wide range of interworking needs. As an SCCP Router it provides the Signaling Point Relay (SPR) capability to pass messages between networks, allowing routing based on OPC, DPC, SSN, Global Title, any field in the SCCP Called or Calling Address or the MAP Operation Code. It provides Load Balancing, Global Title Translation and Network Topology Hiding. As an STP it provides routing of messages based on any field in the MTP Routing Label and supports policing to prevent unauthorized use of signaling relationships.

Figure 1 provides an example of how a Dialogic ${ }^{\circledR}$ DSI G5V Signaling Controller can be deployed as a Signaling Transfer Point in a typical network configuration.


Figure 1. Dialogic ${ }^{\circledR}$ DSI G5V Signaling Controller operating as an STP

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## Technical Specifications

| Host Requirements |  |
| :--- | :--- |
| Hypervisor requirements | x86 platform running VMware vSphere ESXi or KVM on CentOS or RHEL |
| CPU Clock Speed | 2.4 GHz or faster (recommended) |
| CPU Cores | Between 2 and 24 virtual CPU cores |
| Memory | Between 4 GB (recommended) and 12 GB RAM |
| Disk Space | 50 GB |
| Network Interfaces | Between one and eight 1Gigabit Ethernet (1GbE) interfaces |
| Capacity | DSI-G5V |
| Maximum number of SIGTRAN associations | 256 |
| SIGTRAN Protocols supported | M3UA, M2PA |
| Number of separate network contexts | 4 |
| Maximum MTP3/M2PA link sets per unit | 120 |
| Maximum number of SS7 routes | 4096 |
| Global Title Capacity | 30,000 |
| Throughput (MSU/sec) | 60,000 |
| Global Title Translation throughput (GTT/sec) | 60,000 |
| Service plans | See Dialogic® Pro ${ }^{\text {mi }}$ Services information at www.dialogic.com/products/services |

## For More Information

For more information about the product discussed in this datasheet, contact your local Dialogic representative. Worldwide contact information can be found online at www.dialogic.com/contact.

## www.dialogic.com

For a list of Dialogic locations and offices, please visit: https://www.dialogic.com/contact.aspx

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