EAGLE® XG Diameter Signaling Router

Feature Notice Release 4.1

910-6626-001 Revision C
September 2013

Tekelec

Diameter Signaling Router (DSR) - Copyright, Notice, Trademarks, and Patents

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Release Content

Introduction

Diameter Signaling Router (DSR) is a core Diameter signaling and routing solution for operators' LTE, IMS, and 3G networks. This Feature Notice includes feature descriptions, provides the hardware baseline for this release, and explains how to find customer documentation on the Customer Support Site.

Feature notices are distributed to customers with each new release of software.

This Feature Notice includes the following topics:

- *DSR Rack Mount Server Productization*
- *Charging proxy DA-MP scalability update (Limited Availability)*
- *Message Copy Support for CPA (Limited Availability)*
- *DSR 4.1 Performance and Configuration Updates*

Note: ▷Symantec Netbackup Compatibility: Backups of the various DSR platform and application-configuration files are performed automatically on the DSR and SDS, and can be retrieved and archived using Symantec NetBackup. DSR 4.x supports NetBackup releases 7.1 and 7.5.◁

DSR Rack Mount Server Productization

Virtualization, as provided by the Tekelec Eagle XG Platform, defines and executes virtual machines (VMs) to allow multiple functional components of DSR to be deployed on a single Rack Mount Server. HP DL380 Gen-8 RMS multi-core servers are used, which are profiled across multiple VMs.

For commercial deployments, the functional components of DSR that are supported are those that do not have database or SBR dependencies. The following DSR functional components are supported for commercial deployments:

- TVOE
- PM&C
- SOAM
- NOAM
- DA-MP
- IPFE
- DIH

For all commercial deployments, the DSR supports core Diameter Relay and the RBAR application.

The commercial deployments will always be on DL380 Gen 8 Rack Mount Servers running TVOE. The deployment options mirror the ones available when running DSR on c-Class hardware, including geo-redundant deployments.

Charging proxy DA-MP scalability update (Limited Availability)

This feature defines a DSR-based Charging Proxy Function (CPF) between the Charging Trigger Functions (CTFs) and the Charging Data Function (CDFs).

The CPF provides load distribution and failover support functionality between the CTFs (clients) and CDFs (servers). The CPF supports scalability, security, resilience and maintainability. The CPF also supports topology hiding. Topology hiding means the CPF will appear as a single large CDF to the CTFs, and vice-versa.

It also defines a flow for ACR messages, with the exception for when the Start message does not contain a Destination-Host, in which case the CPF will add a Destination-Host to the message before sending to the CDF. The CPF will distribute ACR-Start and ACR-Event messages over the Diameter connections to a pool of CDF connections. The CPF, absent of failures, should send all messages of a Diameter session to the same CDF for the duration of the session.

The CPF includes functionality to ensure all messages of a session are routed correctly via session-based routing.

Message Copy Support for CPA (Limited Availability)

This feature makes it possible for the DSR to forward a "copy" of a Diameter Request and Answer that was routed through the DSR to a Diameter Application Server (DAS). This intent to copy the message can be dictated by a Diameter Agent Application (DAA) such as the offline charging proxy.

DSR 4.1 Performance and Configuration Updates

The required Performance and Configuration functionality for the following features have been included in the DSR 4.1 baseline software:

- DIH on Rack Mount Server productization
- Charging proxy DA-MP scalability update
- Message copy support for CPA

Tekelec Resources and Services

Customer Care Center

The Tekelec Customer Care Center is your initial point of contact for all product support needs. A representative takes your call or email, creates a Customer Service Request (CSR) and directs your requests to the Tekelec Technical Assistance Center (TAC). Each CSR includes an individual tracking number. Together with TAC Engineers, the representative will help you resolve your request.

The Customer Care Center is available 24 hours a day, 7 days a week, 365 days a year, and is linked to TAC Engineers around the globe.

Tekelec TAC Engineers are available to provide solutions to your technical questions and issues 7 days a week, 24 hours a day. After a CSR is issued, the TAC Engineer determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, normal support procedures apply. A primary Technical Engineer is assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Tekelec Technical Assistance Centers are located around the globe in the following locations:

Tekelec - Global

Email (All Regions): support@tekelec.com

- **USA and Canada**

  Phone:

  1-888-FOR-TKLC or 1-888-367-8552 (toll-free, within continental USA and Canada)

  1-919-460-2150 (outside continental USA and Canada)

  TAC Regional Support Office Hours:

  8:00 a.m. through 5:00 p.m. (GMT minus 5 hours), Monday through Friday, excluding holidays

- **Caribbean and Latin America (CALA)**

  Phone:

  +1-919-460-2150

  TAC Regional Support Office Hours (except Brazil):

  10:00 a.m. through 7:00 p.m. (GMT minus 6 hours), Monday through Friday, excluding holidays

  - **Argentina**

    Phone:

    0-800-555-5246 (toll-free)

  - **Brazil**

Phone:

0-800-891-4341 (toll-free)

TAC Regional Support Office Hours:

8:00 a.m. through 5:48 p.m. (GMT minus 3 hours), Monday through Friday, excluding holidays

- **Chile**

  Phone:

  1230-020-555-5468

- **Colombia**

  Phone:

  01-800-912-0537

- **Dominican Republic**

  Phone:

  1-888-367-8552

- **Mexico**

  Phone:

  001-888-367-8552

- **Peru**

  Phone:

  0800-53-087

- **Puerto Rico**

  Phone:

  1-888-367-8552 (1-888-FOR-TKLC)

- **Venezuela**

  Phone:

  0800-176-6497

- **Europe, Middle East, and Africa**

  Regional Office Hours:

  8:30 a.m. through 5:00 p.m. (GMT), Monday through Friday, excluding holidays

  - **Signaling**

    Phone:

    +44 1784 467 804 (within UK)

  - **Software Solutions**

    Phone:

+33 3 89 33 54 00

- **Asia**
  - **India**

    Phone:

    +91-124-465-5098 or +1-919-460-2150

    TAC Regional Support Office Hours:

    10:00 a.m. through 7:00 p.m. (GMT plus 5 1/2 hours), Monday through Saturday, excluding holidays

  - **Singapore**

    Phone:

    +65 6796 2288

    TAC Regional Support Office Hours:

    9:00 a.m. through 6:00 p.m. (GMT plus 8 hours), Monday through Friday, excluding holidays

Emergency Response

In the event of a critical service situation, emergency response is offered by the Tekelec Customer Care Center 24 hours a day, 7 days a week. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with the Tekelec Customer Care Center.

DSR Documentation

Diameter Signaling Router (DSR) release 4.1 contains these documents:

- Getting Started Guide Help

- Feature Notice DSR 4.1 (this document)
- HP Roadmap to Hardware Documentation
- Operations, Administration, and Maintenance Guide
- Communication Agent User Guide
- Diameter User Guide
- Range Based Address Resolution User Guide
- Full Address Based Resolution User Guide
- Charging Proxy Application User Guide
- IP Front End User Guide
- Alarms, KPIs, and Measurements Reference Guide
- DSR Administration Guide
- Diameter Configuration, Maintenance, and DSR Applications Guide
- DSR 4.1 Release Notice

Customer Training

Tekelec offers a variety of technical training courses designed to provide the knowledge and experience required to properly provision, administer, operate, and maintain Tekelec products. To enroll in any of the courses or for schedule information, contact the Tekelec Training Center at (919) 460-3064 or E-mail `training@tekelec.com`.

A complete list and schedule of open enrollment can be found at `www.tekelec.com`.

Locate Product Documentation on the Customer Support Site

Access to Tekelec's Customer Support site is restricted to current Tekelec customers only. This section describes how to log into the Tekelec Customer Support site and locate a document. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the *Tekelec Customer Support* site.

   Note: If you have not registered for this new site, click the **Register Here** link. Have your customer number available. The response time for registration requests is 24 to 48 hours.

2. Click the **Product Support** tab.
3. Use the Search field to locate a document by its part number, release number, document name, or document type. The Search field accepts both full and partial entries.
4. Click a subject folder to browse through a list of related files.
5. To download a file to your location, right-click the file name and select **Save Target As**.