Additional License Authorizations
For HPE TAS software products

Products and suites covered

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>E-LTU OR E-MEDIA AVAILABLE</th>
<th>NON-PRODUCTION USE CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPE Telecom Application Server (TAS)</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

*Any product sold as E-LTU or E-Media shall be delivered electronically regardless of any contrary designation in a purchase order.

Definitions

Capitalized terms not otherwise defined in this ALA document are defined in the governing agreement.

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>means a resource which is configured and is being used to provide a function during normal operation, as opposed to a Standby resource which is configured but is not being used.</td>
</tr>
<tr>
<td>Busy Hour</td>
<td>means, the sliding sixty minute period during a day when the largest volume of subscriber traffic load is handled by telecommunication equipment. It is an uninterrupted period of sixty minutes for which the average intensity of traffic load is maximum. Busy Hour is used to model the telecom network for it's traffic handling capacity or various services. Note that, there may be times when the telecom network faces inordinately high traffic, for relatively short periods of time for which the network may or may not be dimensioned.</td>
</tr>
<tr>
<td>Busy Hour Attempts or BHA</td>
<td>means, the attempts made by users and subscribers of the telecom network service provider to use certain services provided by the service provider. The attempts may or may not result in successful rendering of the service. The services may be of different kinds, such as – voice or video telephony calls, short messages, USSD interactions to retrieve message and may be between two persons or perhaps even be between a person and an application such as for information retrieval or information submission. Telecom industry uses the terms BHCA i.e. Busy Hour Call Attempts to refer to BHA in context of calls with or without multimedia interactions, BHSM i.e. Busy Hour Short Message or BHMA i.e. Busy Hour Message Attempts in context of messages.</td>
</tr>
<tr>
<td>Call Control</td>
<td>means the ability to control the outcome of how a call is handled by telephony network, which may result in the call being rejected, call be routed as originally indicated by caller, or routed differently than as originally indicated by caller – but under control of some business logic hosted by the telecom network. Call-control extended and generalized to services other than voice calls, is also known as service control. Call-control is facilitated by application services running on network entities in telecom core network, called Service Control Points or Application Servers, that interact with the switching and service routing capabilities in core network to determine the outcome of a call or service request.</td>
</tr>
<tr>
<td><strong>Capacity LTU</strong></td>
<td>means LTU that brings entitlement to handle specific capacity of traffic on specific product or product features. Different product features may require different Capacity LTUs to be ordered.</td>
</tr>
<tr>
<td><strong>Cluster</strong></td>
<td>means a group of Servers or other resources that act like a single system and enable high availability and in some cases, load balancing and parallel processing. A Cluster is restricted to a single physical site.</td>
</tr>
<tr>
<td><strong>Cumulative license</strong></td>
<td>means that the Capacity licenses for same or related feature sets purchased over period of time are considered to be additive and result in higher resulting capacity being available to the customer.</td>
</tr>
<tr>
<td><strong>Device</strong></td>
<td>means an addressable entity, physical or virtual, including but not limited to router, switch, bridge, hub, server, PC, laptops, handheld device or printer that resides within the range defined for interrogation and asset tracking.</td>
</tr>
<tr>
<td><strong>Development and Test System, or Dev/Test</strong></td>
<td>means a non-production system which has the licensed software product installed, and is to be used solely for the purpose of a) developing Licensee add-on applications; b) migration testing, e.g. to test version upgrades; c) Pre-production staging, e.g., to test new applications before deployment; or d) support-related testing. This system is not authorized for any production or commercial usage.</td>
</tr>
<tr>
<td><strong>E-LTU and E-Media</strong></td>
<td>means products which are electronically delivered only, and as such any reference to FOB Destination or delivery methods that are stated on your purchase order other than electronic shall be null and void with respect to these E-LTU or E-Media products. E-LTU means electronic License To Use.</td>
</tr>
<tr>
<td><strong>Feature LTU</strong></td>
<td>means LTU that brings entitlement to use a specific feature or set of features of a given product, as long as the required capacity to run this feature is also present.</td>
</tr>
<tr>
<td><strong>Geo-redundant</strong></td>
<td>means providing geographic redundancy, over 2 or more physical sites, of the software to enable the implementation and configuration to permit site disaster recovery in case of site failure.</td>
</tr>
<tr>
<td><strong>IMS</strong></td>
<td>means IP Multimedia Subsystem is an architectural framework for delivering multimedia services over IP networks such as mobile Packet Switched networks or Fixed Broadband networks. IMS as a architecture and set of standards that define the functions, interfaces, protocol interactions between various functional entities in the network, are defined by 3GPP and ETSI standard bodies.</td>
</tr>
<tr>
<td><strong>Instance</strong></td>
<td>means each implementation of the software installed and available to execute on a Server.</td>
</tr>
<tr>
<td><strong>Intelligent Networks or IN</strong></td>
<td>means Intelligent Network, which is a technology developed for telecom core network to centralize service control logic and standardize interactions of the service control logic with the telecom switching equipment. Intelligent Network involves usage of protocols like IN-CS1 (Capability Set-1) defined by ITU-T and ETSI standard bodies for fixed-line networks, and protocols like CAMEL (phase-1,2,3,4) defined by ETSI and 3GPP standard bodies for mobile-networks.</td>
</tr>
<tr>
<td><strong>Internal Use</strong></td>
<td>means access and Use of the software for purposes of supporting your internal operations or functions.</td>
</tr>
<tr>
<td><strong>LTU</strong></td>
<td>means License To Use.</td>
</tr>
<tr>
<td><strong>Messaging</strong></td>
<td>means the ability to receive, send, route including the ability to reject or alter the destination of messages (such as Short Messages in GSM networks, or USSD message interactions, or SIP-based message service in IMS networks) in a telecom network. Messaging forms the backbone of various forms of person-to-person, person-to-application, application-to-person and even application-to-application interactions. Messaging can be transactional i.e. a single message and it's response s.a. a delivery indication, acknowledgement, delivery-failure notification, or session-based i.e. permitting participants to exchange messages back and forth in the context of the established session.</td>
</tr>
<tr>
<td><strong>Multimedia control</strong></td>
<td>means the ability to control the outcome of a multimedia interaction as handled by telephony network in context of a any service invocation in the telecom network. Multimedia interaction could be interactive voice response, interactive video response, or non-interactive voice or video interaction leading to only announcement, display or recording, submission of such content, to or by the telecom network subscriber. Multimedia interaction is rendered by an IN-Specialized Resource Function (IN-SRF) in IN networks, or by Multimedia Resource Function (MRF) in IMS networks. IN-SRF and MRF may act as slave devices operating under supervision of a master, i.e. application service logic running on an Application Server.</td>
</tr>
<tr>
<td><strong>Multi-site</strong></td>
<td>means deployment of the software authorized across multiple data-centres hosted at geographically distinct sites within the country where customer has operations, as per the sale made by HPE. Deploying the software across multiple data-centres allows for geographical redundancy, such that in the event of any natural or manmade calamity impacting operations at one of the sites, the operations can continue from the other site or sites. This contrasts with Single-site deployment where benefit of geographical redundancy is not available.</td>
</tr>
<tr>
<td><strong>NFV</strong></td>
<td>means Network Function Virtualization, a technology, architecture and framework defined by standardization &amp; industry bodies, that defines requirements, interfaces, interoperability, operations, management mechanisms for telecom network equipment (embodying network functions), while they run in a virtualized environment, instead of on bare-metal servers.</td>
</tr>
<tr>
<td><strong>Non-Production System</strong></td>
<td>means a system which has the licensed software product installed and is to be used for non-commercial or non-production usage as specifically agreed between the licensee and HPE. This system is not authorized for any production or commercial usage.</td>
</tr>
<tr>
<td><strong>Production System</strong></td>
<td>means a system which has the licensed software product installed and is to be used for collecting data, executing product logic, or sending/receiving messages for production or commercial usage.</td>
</tr>
</tbody>
</table>
Additional License Authorizations for HPE Telecom Application Server (TAS) software products

**Server** means any designated computer system in which an Instance or Instances of the software is installed. The computer system may be a physical machine or a virtual machine.

**Session** means a dialogue established between the software and a telecommunications network or web application, for a period of time. The session is set up at one point in time and then torn down later. While the session is established, one or more messages can be exchanged in either direction. The number and/or nature of these messages may be permitted or restricted based on licensing.

**SIP** means Session Initiation Protocol

**SNF** Means SIP Network Function, which provides the SIP frontend and loadbalancing capability to HPE TAS

**Standby** means a resource which is configured but is not being used to provide a function during normal operation, as opposed to an Active resource which is configured and is being used. An exception to that definition exists in context of HPE TAS multi-site geo-redundant deployment for SNF Load-balancer Standby licenses.

**Transaction** means the equivalent of 1 message request-response pair.

**Transaction Per Second (TPS)** means the number of Transactions in one second.

**Use** means to install, store, load, execute and display one copy of the software in accordance with the specifications.

Software specific license terms

Software products with software specific license terms are described below. Software products covered by this ALA document (as listed above) and not covered in this section do not have software specific license terms.

HPE Telecom Application Server

HPE Telecom Application Server (TAS) software is available for use under perpetual commercial electronic LTU and perpetual non-commercial electronic LTU.

- **HPE TAS, perpetual commercial electronic LTU.** HPE TAS commercial licensing is based on capacity measured in busy-hour-attempts (BHA) and on feature set, except for the SNF licenses. Depending on the feature set, the BHA may be call-oriented, messaging-interaction oriented, multimedia-session oriented or even transaction oriented. Site level redundancy is provided through an N+1 architecture, where there are N+1 Active entities capable of bearing traffic at any given time. Geographic redundancy, is possible through multi-site deployment. In geographically redundant configuration all sites may be traffic bearing but at any given point in time, the total traffic handled by all sites simultaneously may not exceed the purchased license capacity entitlements. HPE TAS commercial E-LTUs are perpetual, and can broadly be divided into two buckets, i.e. repurposable and non-repurposable.

  - **Repurposable commercial licenses.** This class of licenses permit the capacity licenses to be repurposed for usage in context various platform features, such that the capacity licenses is not locked down for a specific feature. Different features however require different quantity of such capacity licenses, per BHA. Following are the feature licenses and capacity licenses, of this type:

    - **Repurposable capacity licenses.** HPE TAS +1K TAS Platform Capacity Unit (TPCU) electronic LTUs entitle customers to use 1000 TPCU worth of repurposable capacity for any combination of base features and optional features of the repurposable type of licenses. Capacity license is mandatory for functioning of HPE TAS. These entitlements are cumulative and total capacity must not be exceeded except under the provisions described in the next topic titled seasonal, short, traffic peak capacity entitlements.

    - **Seasonal, short, traffic peak capacity entitlements.** HPE TAS capacity LTUs described above, include an in-built allowance for short duration, seasonal peak traffic (such as on New Year’s eve). Up to two hundred percent (200%) of additional capacity, over and above purchased license capacity during busiest hour of busiest day shall be admissible, for a maximum of any 10 busiest
days in a year, where the year is defined as 365 contiguous calendar days over which the entitlement is available and shall coincide with the tenure of the latest, current, active HPE TAS product support contract for the capacity LTUs in question. The entitlement is subject to sufficient headroom availability on physical or virtual servers.

- **Base feature licenses.** At least one of these licenses is required to have a functional system, since these licenses define the nature of platform features used in context of traffic handled by the system. In the case HPE TAS handles a variety of traffic, every bit of traffic handled by HPE TAS should be covered by the appropriate Base feature license, determined by the nature of traffic. One (1) quantity of these licenses, per customer, per country is required unless stated otherwise.

  - **HPE TAS Call Control Signaling** entitles usage of platform capability to handle call-management signaling using protocols like INAP, CAMEL, SIP or Diameter Gy/Ro used for service charging, while using Service Control API. One unit (1) BHA of feature tracked by this license requires three (3.0) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires three point nine (3.9) units of TPCU capacity license.

  - **HPE TAS Advanced Messaging Signaling** entitles usage of platform capability to handle advanced messaging such as Rich Communication Services (RCS) chat interactions using protocol like SIP (for RCS only) when using Messaging Framework API. One unit (1) BHA of feature tracked by this license requires two (2.0) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires two point six (2.6) units of TPCU capacity license.

  - **HPE TAS Basic Messaging Signaling** entitles usage of platform capability to handle basic messaging such as short-message-service (SMS) or USSD interactions using protocols like MAP and SIP (for messaging only) when using Messaging Framework API. One (1) unit BHA of feature tracked by this license requires one (1.0) unit of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires one point three (1.3) units of TPCU capacity license.

  - **HPE TAS Multi-Media Control Signaling** entitles usage of the HPE TAS connectors (REST APIs) that offer assistive functionality to Multimedia Interactive calls handled by HPE OCMP MRF, where call-control is done by script on HPE OCMP, and includes entitlement to utility functions like ACM and TMP. This excludes entitlement for calls where call-control application is running directly on HPE TAS (in which case HPE TAS Call Control Signaling E-LTU are required). One unit (1) BHA of feature tracked by this license requires two (2.0) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires two point six (2.6) units of TPCU capacity license.

  - **HPE TAS Transactional Signaling** entitles usage of platform capability to handle any transactional signaling traffic outside the context of handling call-management, basic or advanced messaging or multi-media control signaling traffic. For instance this E-LTU includes entitlement for SIP transactions s.a. SIP REGISTER, SUBSCRIBE/NOTIFY/PUBLISH (outside call related dialog) traffic. Note however, that SIP OPTIONS, INFO messages used outside call related dialog are not counted for purpose of (capacity) licensing. Similarly MAP or Diameter protocol message transactions that are outside the context of call or message handling are covered under this entitlement. One unit (1) BHA of feature tracked by this license requires point twenty-five (0.25) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires point three hundred twenty five (0.325) units of TPCU capacity license.
Additional License Authorizations for HPE Telecom Application Server (TAS) software products

- **HPE TAS Connector Group-1** entitles usage of only the Diameter Base Protocol connector (REST API), when call-control is done by script on HPE OCMP MRF, but when the full set of Multi-Media Control Signaling Base E-LTU entitlements are not required. One unit (1) BHA of feature tracked by this license requires one (1.0) unit of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires one point three (1.3) units of TPCU capacity license.

- **HPE TAS Connector Group-2** entitles usage of only the HPE TAS connectors (REST APIs) other than Diameter Base Protocol connector (REST API), when call-control is done by script on HPE OCMP MRF, but when the full set of Multi-Media Control Signaling Base E-LTU entitlements are not required. One unit (1) BHA of feature tracked by this license requires point five (0.5) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires point sixty five (0.65) units of TPCU capacity license.

- **Optional feature licenses.** These licenses add entitlement to use optional features of HPE TAS that bring additional value, over and above the features covered by the Base feature licenses. Zero or more of these licenses may be used simultaneously for some or all traffic handled by HPE TAS.

  - **HPE TAS Charging Enablement** entitles usage of the Charging-Client feature of HPE TAS that can be used to sending charging information over Diameter Ro/Rf or MBI protocol towards external Charging-System. One unit (1) BHA of feature tracked by this license requires two (2.0) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires two point six (2.6) units of TPCU capacity license.

  - **HPE TAS Feature Type A Enablement** entitles usage of the platform capability of optional Feature Type-A. Note that one (1) quantity of such E-LTU is required per feature of this type. One unit (1) BHA of feature tracked by this license requires three (3.0) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires three point nine (3.9) units of TPCU capacity license.

  - **HPE TAS Feature Type B Enablement** entitles usage of the platform capability of optional Feature Type-B. Note that one (1) quantity of such E-LTU is required per feature of this type. One unit (1) BHA of feature tracked by this license requires two (2.0) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires two point six (2.6) units of TPCU capacity license.

  - **HPE TAS Feature Type C Enablement** entitles usage of the platform capability of optional Feature Type-C. Note that one (1) quantity of such E-LTU is required per feature of this type. One unit (1) BHA of feature tracked by this license requires one (1.0) unit of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires one point three (1.3) units of TPCU capacity license.

  - **HPE TAS Feature Type D Enablement** entitles usage of the platform capability of optional Feature Type-D. Note that one (1) quantity of such E-LTU is required per feature of this type. One unit (1) BHA of feature tracked by this license requires point five (0.5) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires point sixty five (0.65) units of TPCU capacity license.

  - **HPE TAS Feature Type E Enablement** entitles usage of the platform capability of optional Feature Type-E. Note that one (1) quantity of such E-LTU is required per feature of this type. One unit (1) BHA of feature tracked by this license requires point twenty five (0.25) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires point three hundred twenty five (0.325) units of TPCU capacity license.
- **HPE TAS Feature Type F Enablement** entitles usage of the platform capability of optional Feature Type-F. Note that one (1) quantity of such E-LTU is required per feature of this type. One unit (1) BHA of feature tracked by this license requires point one (0.1) units of TPCU capacity license, if **HPE TAS Multi-Site Extension** license is not ordered, else requires point thirteen (0.13) units of TPCU capacity license.

- **HPE TAS Multi-Site Extension** entitles usage of capacity licenses across multiple-sites, limited to total of four (4) sites for geographic redundancy. Note that from capacity license standpoint, the collective traffic being handled by all sites covered by the Multi-Site entitlement cannot exceed the capacity licenses purchased. The exception is in case of seasonal, short, traffic peak capacity entitlement.

  o **Non-repurposable commercial licenses.** This class of licenses are directly linked to the features they bring entitlement for, and are not repurposable. Following are the licenses of this type:

    ▪ **TCAP Application capacity licenses** i.e. HPE TAS +1K TCAP Application Capacity Unit E-LTUs, entitle usage of protocol codecs required for TCAP based application protocols such as CAMEL, MAP and INAP. One (1) unit of TCAP Application Capacity Unit in case of single-site deployments, and one point three (1.3) units of TCAP Application Capacity Units in case of multi-site deployments is required, per Busy Hour Attempt of such traffic. These entitlements are cumulative and must not be exceeded except under the provisions described under the seasonal, short, traffic peak capacity entitlements.

    ▪ **Seasonal, short, traffic peak capacity entitlements.** HPE TAS TCAP Application capacity LTUs described above, include an in-built allowance for short duration, seasonal peak traffics (such as on New Year’s eve). Up to two hundred percent (200%) of additional capacity, over and above purchased license capacity during busiest hour of busiest day shall be admissible, for a maximum of any 10 busiest days in a year, where the year is defined as 365 contiguous calendar days over which the entitlement is available and shall coincide with the tenure of the latest, current, active HPE TAS product support contract for the capacity LTUs in question. The entitlement is subject to sufficient headroom availability on physical or virtual servers.

    ▪ **TCAP Front-end capacity licenses** entitle usage of SIGTRAN front-end and load-balancer for exchange of TCAP based application protocol messages.

      - **HPE TAS +10M TCAP Front-End Busy-Hour-Attempts for 1-site** entitles usage of SIGTRAN front-end and load-balancer for TCAP traffic handled by HPE TAS platform for an addition ten (10) million BHA of traffic, for one site.

      - **HPE TAS +10M TCAP Front-End Busy-Hour-Attempts for M-site** entitles usage of SIGTRAN front-end and load-balancer for TCAP traffic handled by HPE TAS platform for an addition ten (10) million BHA of traffic, for one addition site for geo-redundant deployments. This is required for every additional site.

    ▪ **SIP Network Function licenses** entitle usage of SNF as SIP frontend and load-balancer for exchange of SIP based application protocol messages.

      - **SNF Load Balancer** license are based on the SIP TPS expected to be handled by the SNF Load-balancer at peak traffic. For the purpose of SIP applications on HPE TAS, each call or session using SIP signaling in B2BUA or Proxy mode is considered to require one transaction only (the transaction that initiates an attempt to handle the SIP session in HPE TAS).

      - **SNF Load Balancer Standby** license are the standby equivalent for the SNF Load-balancer LTUs and are needed to enable SNF for one additional site for geo-redundant deployments. This is required for every additional site. It is to be noted that in case of HPE TAS multi-site geo-redundant deployments, the SNF Load-balance on the geo-
Additional License Authorizations for HPE Telecom Application Server (TAS) software products

- HPE TAS, perpetual non-commercial licenses are perpetual licenses for non-commercial use:
  
  o **HPE TAS 6 Nodes Base Non-Commercial** license entitles one to use HPE TAS on up to 6 nodes for non-production and non-commercial use, such as for development, test, system-integration, staging or other pre-production systems. This is required per customer and per country.
  
  o **HPE TAS +6 Nodes Extnsn Non-Commercial** license entitles one to use HPE TAS on additional 6 nodes for non-production and non-commercial use, such as for development, test, system-integration, staging or other pre-production systems. This is required per customer, per country.
  
  o **HPE TAS +10M TCAP FE BHA Non-Commercial** license entitles one to use SIGTRAN front-end and load-balancer for exchange of TCAP based application protocol messages with HPE TAS. This is required per customer, per country, per site, for every ten (10) million BHA of traffic.
Additional license terms

TERM

A. Software contains software and associated specifications licensed from third parties that are confidential to, and trade secrets of, such parties. You will not take any action other than to Use it as authorized under the agreement as part of the software products and will not disclose it to third parties.

B. You shall install and use the software as authorized in the applicable agreement only as a complete product and may not use portions of such software on a standalone basis separate from the complete software unless expressly authorized in the Supporting Material, specifications or an applicable agreement.

C. Unless stated otherwise, you are authorized to Use one Device at a time for your Internal Use.

D. Software may be utilized only on a computer system owned, controlled, or operated by or solely on behalf of you and may be further identified by HPE by the combination of a unique number and a specific system type. Such license will terminate in the event of a change in either the system number or system type, an unauthorized relocation, or if the computer system ceases to be within your possession or control. The computer system may be a physical machine or a virtual machine.

www.hpe.com/software/SWLicensing
Latest version of software licensing documents

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