Hewlett Packard Enterprise

Additional License Authorizations

For HPE CMS OSS Fulfillment products

Products and suites covered

PRODUCTS	E-LTU OR E-MEDIA AVAILABLE *	NON-PRODUCTION USE CATEGORY **
HPE Trueview Inventory	Yes	
HPE Trueview Reconciliation	Yes	
HPE Service Activator	Yes	
HPE Service Activator Activation Function	Yes	
HPE Service Activator Extension Function	Yes	
HPE Service Activator Utility	Yes	
HPE Service Provisioner	Yes	
HPE Service Provisioner Technology Extension	Yes	
HPE NFV Director	Yes	
HPE NFV Director Adapter Function	Yes	

* Any product sold as E-LTU or E-Media shall be delivered electronically regardless of any contrary designation in a purchase order.
** Non-production use rights, if any, can be found at **www.hpe.com/go/SWlicensing**.

5200-0671

Definitions

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

TERM	DEFINITION
Cluster Node	*means a Server installed in a cluster*
Fulfillment Cluster/Dev/Test	*The Cluster/Dev/Test LTU is a cluster Server or test Server license for high-end platforms. The Cluster/Dev/Test LTU may only be used in one production system cluster or one test environment when a HPE Service Activator LTU has been purchased.*
Cold Standby System	*means a non-production standby system which is NOT up and running. If the production system breaks down, or needs to be taken out of service, You are required to switch on and start the Cold Standby System in order to take over for the Production System.*
Core	*means the sub-component of the CPU that actually performs the reading and executing of the instruction. Single-core processors can only process one instruction at a time. Multiple-core processor a processing system composed of two or more independent cores.*
Device or Dev	*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.*
E-LTU and E-Media	*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.*
Instance	*means each implementation of the application installed on a Server.*
Low end platform	*means platform for licensees with limited functionality such as no cluster support and only 32 bits Java runtime environment.*
Internal Use	*means access and Use of the software for purposes of supporting your internal operations or functions.*
LTU	*means License To Use*
Mobile Subscriber	*means an individual receiving a service for a given mobile device.*
NFV	*means Network Function Virtualization*
Operating System Instance or OS Inst or OSI	*means each implementation of the bootable program that can be installed onto a physical system or a partition, such as system Virtual Machines, virtual environments, virtual private servers, containers, guests and zones within the physical system. A physical system can contain multiple Operating System Instances. A container means a system partition based on software rather than hardware. Guests means a VM system running on a host system where the host runs its own complete OS Instance (as opposed to a hypervisor), like VMware Workstation. Zone means Oracle®/Sun Solaris specific nomenclature for a software partition which can run a virtual OS instance including but not limited to Sparse, native, and ipkg*

PAYG or "Pay as you grow"	*means a perpetual license scheme based on evolution of a specific usage criterion with pre-defined thresholds. As threshold is reached, the customer is required to purchase additional license as part of jointly agreed monitoring process involving HPE and customer. Detailed PAYG conditions need to be agreed in the commercial agreement.*
Capacity Based License model	*means a perpetual license scheme based on evolution of a specific usage criterion with pre-defined thresholds. As threshold is reached, the customer is required to purchase additional license as part of jointly agreed monitoring process involving HPE and customer. Once a capacity level has been reached, it is not possible for the customer to go back below this capacity. Detailed conditions need to be agreed in the commercial agreement.*
Production System	*means a system which has a HPE software product installed and is running some or all of the product's processes to be used for collecting data, executing product logic, or sending/receiving messages.*
RTU or Right To Use	*Right to Use is used when there is no license key required to enable the product use.*
Server	*means any designated computer system in which an Instance or Instances of the software is installed.*
Solution	*means a collection of software to address a specific business issue.*
Solution Pack	*means a collection of software within a business solution, to implement a sub function.*
Unlimited or Unltd	*means without restrictions in terms of number of systems, devices, or media depending on the context.*
Use	*means to install, store, load, execute and display one copy of the software.*
vCPE	*means virtual customer premises equipment*
Virtual Machine(s) or VM(s)	*means a computer that does not physically exist but is simulated by another computer.*

Software specific license terms

Software products with software specific license terms are described below.

HPE Trueview Inventory / HPE Trueview Reconciliation

HPE Trueview provides two main functions from the eTOM map: Inventory (HPE Trueview Inventory) and Discovery and Reconciliation (HPE Trueview Reconciliation).

HPE Trueview Inventory can be used separately or combined with HPE Trueview Reconciliation

HPE Trueview Reconciliation can be used to populate HPE Trueview Inventory or any other external Inventory System that is capable to fully receive/read/process the data from HPE Trueview Reconciliation.

HPE Trueview Inventory is sold as LTU per Server and requires one separate license per Production System Server and one per Server for Fulfillment Cluster/Dev/Test use.

The HPE Trueview Inventory license key is tied to the MAC address of the Server.

An HPE Trueview Inventory license is not restricted in its use by the number of users.

HPE Trueview Reconciliation is sold as LTU per Server and requires one separate license per Production System Server and one per Server for Fulfillment Cluster/Dev/Test use.

The HPE Trueview Reconciliation license key is tied to the MAC address of the Server.

HPE Trueview Reconciliation is licensed using PAYG model and is measured by the number of network elements (“NE”). A maximum configuration of 1,000 NE is associated with HPE Trueview Reconciliation license. In the event of growth of the solution (i.e. increase of number of NE), additional capacity needs to be purchased. The license is based on maximum number of NE reached at a time (and will not go down if the capacity decreases). Purchase of extra capacity needs to happen as soon as limit of current system is reached (and not as a result of verification by HP)

A HPE Trueview Reconciliation license is valid only for physical discovery.

To also discover logical information, service stitching needs to be implemented. It requires that HPE Trueview Reconciliation technology extension is purchased. It is licensed per technology deployed in the solution (one technology can be deployed several times with only one license within the same Production System Server)

For a HPE Trueview Reconciliation extension, additional adapters need to be purchased separately and can be deployed to complement discovery. It is licensed per adapter deployed in the solution (one adaptor can be deployed several times with only one license).

In the event that HPE Trueview Inventory and HPE Trueview Reconciliation are deployed on the same Server that is not used for a Production System (i.e. development system, test system), only one license for non-production system is required..

HPE Service Activator

The HPE Service Activator software is licensed using the Capacity Based license model, unless explicitly licensed using a different model in a separate commercial agreement.

HPE Service Activator is sold as LTU. The license key will be tied to Customer Name.

HPE Service Activator is licensed using the Capacity Based license model and is measured by the number of tokens. A minimum configuration of 15 tokens is defined. In the event of growth of the solution, additional capacity needs to be purchased.

The license is based on maximum number reached (and will not go down if the capacity decreases).

Purchase of extra capacity needs to happen as soon as limit of current system is reached (and not as a result of verification by HP)

Generic tokens have been introduced to keep the product structure simple for a given solution. The mapping between token and a specific capacity is defined in a separate mapping table (See Table 1)Specific capacity is either a number of transactions or a number of users.

The purchase of HPE Service Activator token licenses entitles licensee to Use the HPE Unified OSS Console software by any number of Users only in connection with to the HPE Service Activator solution it was sold with (refer to Table 1). This right to use does not include the HPE Unified OSS Console View Designer software which must be ordered separately. The Use of HPE Unified OSS Console software for different capabilities, products and/or solutions is not permitted under the HPE Service Activator token licenses.

A transaction is defined as a Service Request (Create, Update, Delete, and Query) received by HPE Service Activator from the Order Management system or any northbound system requesting services. A Service Request which consists of a bulk request for transactions is counted as the sum of all sub-requests in the request.

A user is defined as a specific individual or entity authorized by you to access the software regardless of whether he/she is actively using the software.

A Number Potability transaction is defined as a port in, port out and port over operation.

HPE Service Activator license can be used for production or non-production system (development, test, pre-production) irrespective of the number and type of Servers deployed, including high-availability.

HPE may decide in its sole discretion to include certain HPE CMS software components in activation solution

HPE Service Activator license may be used for a single legal entity only and a specified purpose.

Table 1: HPE Service Activator Token License Capacity Mapping Table

APPLICATION DOMAIN	SOFTWARE COMPONENTS	MAPPING	COMMENT
Business Solution for VPN (Corporate Products)	HPE SA Core / HPE SAVPN / HPNA-adapter + HPNNMi-adapter	Transaction per Unit of time: **1 TPD (*) = 8 tokens**	Applicable for L2 and L3 corporate VPNs (**)
Business Solution for VPN (Retail products)	HPE SA Core/ HPE SAVPN	Transaction per Unit of time: **5 TPD (*) = 1 token**	Applicable for L2 and L3 retail VPNs
Business Solution for Mobile (MSA)	HPE SA Core / SOSA / MSA	Transaction per Unit of time: **1 TPS(*) = 2 token**	Applicable for Mobile only (2/3 G, LTE , 4G)
		Transaction per Subscriber **10,000 subscribers = 1 token**	
Customer (CFS) Activation	HPE SA Core	Transaction per Unit of time: **1 TPS (*) = 1 token**	None
Test and diagnosis – customer care automation	HPE SA T&D console + HPE SA T&D platform	**1 T&D process = 5 tokens** **1 T&D action = 1 token** **1 T&D interface = 5 tokens**	T&D Process = description of a business process for a given scope T&D action = particular test or command executed toward an external system T&D interface = specific integration with an external system or application
Number Portability base platform	HPE SA Core	**100 TPD (*) = 1 token**	Important : License only entitles the customer to use the Service Activator platform to run a NP solution. It does NOT cover the NP solution itself.

(*) : TPS means Transactions per second, TPD means Transaction per day

HPE Service Activator Activation Function

A target is a network element, element manager or service platform which is needed to be configured to provide services (HLR, AuC, EIR, etc.).

An HPE SA adaptor is the component which knows how to interact with a specific target (login and logout, activation commands, error codes, etc). Only one HPE SA adaptor is built for each target type. An adaptor may evolve with additional functions over time.

An HPE SA Activation Function is associated with only one capability offered by the target (resource service). Each adaptor will support one or more activation functions (e.g. activation of voice, activation of data, and activation of L2/L3 connectivity) implemented in the HPE SA adaptor.

The HPE SA Activation Function is sold as RTU and requires an HPE Service Activator Core installation, which must be ordered separately

The HPE SA Activation Function license is valid for the use of one activation function

The HPE SA Activation Function license can be used for production or non-production systems (development, test, pre-production) irrespective of the number and type of Servers deployed.

The HPE SA Activation Function license may be used for a single legal entity only.

HPE Service Activator Extension Function

A library of productized features to complement core HPE SA solution is available centrally

Each feature– based on its complexity – is assigned a weight (See Table 2)

The HPE Service Activator Extension Function is sold as RTU and requires an HPE Service Activator Core installation, which must be ordered separately

The HPE SA Extension Function license is valid for the use of a feature of weight 1.

Several HPE SA Extension Function licenses can be combined to use a feature of weight greater than one.

The HPE SA Extension Function license can be used for production or non-production system (development, test, pre-production) irrespective of the number and type of Servers deployed.

The HPE SA Extension Function license may be used for a single legal entity only

Table 2: Extension function mapping

FUNCTION NAME	DESCRIPTION	WEIGHT
HPE Network Automation Integration	Provides full configuration lifecycle support	2
NNMi Integration	Provides dataload and Services State sharing capability	3
Web Service Connectivity	Web Service Integration Framework	4
Solution Container	Presentation layer on top of HPE SA core allowing to build customer specific GUI using best practices from HPE SA R&D	4
Service Order Smart Adapter (SOSA)	Lightweight implementation of Service Order management, it provides catalog based decomposition of Service Orders into simple activation tasks	6

HPE Service Activator Utility Solution

HPE Service Activator Utility solution is licensed using the Capacity Based license model and is measured by the number of subscriber meters (MU – Meter Units) used within the utility company network. A minimum configuration of 30,000 (30K) Meter Units is defined. In the event of growth of the solution, additional capacity needs to be purchased.

The HPE Service Activator Utility solution is comprised of a Utility base LTU and several RTUs depending on the number of subscriber meters (MU – Meter Units) used within the utility company network.

The Utility base must always be purchased. HPE Service Activator Utility Solution Base is sold as LTU. The license key will be tied to Customer Name and cannot be reused for any other project.

When the capacity of the allowed MU for the utility based is exceeded, additional utility tiers must be purchased. The summed number of allowed MU for all the utility tiers must exceed the actual number of MU in the network.

HPE Service Activator Utility Tier A RTU: Requires a Utility Base LTU. One Utility Tier A RTU is required for every 10,000 (10K) MUs, where the number of MUs exceeds 30,000 (30K) MUs. The maximum number of MUs supported in this tier is 500,000 (500K) MUs.

HPE Service Activator Utility Tier B RTU: Requires a Utility Base LTU and 47 Utility Tier A RTUs. One Utility Tier B RTU is required for every 100,000 (100K) MUs, where the number of MUs exceeds 500,000 (500K) MUs. The maximum number of MUs supported in this tier is 2,000,000 (2M) MUs.

HPE Service Activator Utility Tier C RTU: Requires a Utility Base LTU, 47 Utility Tier A RTUs, and15 Utility Tier B RTUs. A Utility Tier C RTU is required for every 100,000 (100K) MUs, where the number of MUs exceeds 2,000,000 (2M). The maximum number of MUs supported in this tier is 5,000,000 (5M) MUs.

HPE Service Activator Utility Tier D RTU: Requires a Utility Base LTU, 47 Utility Tier A RTUs, 15 Utility Tier B RTUs, and 30 Utility Tier C RTUs. A Utility Tier D RTU is required for every 100,000 (100K) MUs, where the number of MUs exceeds 5,000,000 (5M). The maximum number of MUs supported in this tier is 10,000,000 (10M) MUs.

HPE Service Activator Utility Tier E RTU: The HPE Service Activator Utility Tier E is required on top of the Utility Base LTU, 47 Utility Tier A RTUs, 15 Utility Tier B RTUs, 30 Utility Tier C RTUs, and 50 Utility Tier D. A Utility Tier E RTU is required for every 1,000,000 (1M) MUs, where the number of MUs exceeds 10,000,000 (10M)

HPE Service Provisioner

HPE Service Provisioner enables Communications Service Providers to automate provisioning of multi-vendor, multi-technology products and services. It provides functionality for service order decomposition, streamlines the execution of the order provisioning flow, and facilitates service order lifecycle management. It includes the following key functions:

- Service catalog – it implements dynamic products and services specification (Product only includes technical definition of Customer Facing Services (CFS) with all their characteristics). It also includes rules to translate product instances into underlying services instances with mapping of characteristics
- Dynamic service order management – It covers design and assign process, service decomposition (both catalog driven and through manual interactions), mapping of product and service characteristics throughout hierarchical structure, and order orchestration.
- Service inventory – It maintains all instances of service request, offering full text search, reporting, versioning and history of data

The HPE Service Provisioner software is licensed using the PAYG model, unless explicitly licensed using a different model in a separate commercial agreement.

HPE Service Provisioner is sold as LTU. The license key will be tied to Customer Name.

HPE Service Provisioner is licensed using the PAYG model and is measured by the number of tokens. A minimum configuration of 10 tokens is defined. In the event of growth of the solution, additional capacity needs to be purchased.

The license is based on maximum number reached (and will not go down if the capacity decreases).

Purchase of extra capacity needs to happen as soon as limit of current system is reached (and not as a result of verification by HPE)

Generic tokens have been introduced to keep the product structure simple for a given solution. The mapping between token and capacity is defined in a separate mapping table (See Table 3) Specific capacity is either a number of transactions or a number of users.

The purchase of HPE Service Provisioner token licenses entitles licensee to Use the HPE Unified OSS Console software by any number of Users only in connection with to the HPE Service Provisioner solution it was sold with (refer to Table 3). The Use of HPE Unified OSS Console software for different capabilities, products and/or solutions is not permitted under the HPE Service Provisioner token licenses.

A transaction is defined as a Service Request (Create, Update, Delete, and Query) received by HPE Service Provisioner from the CRM system or any northbound system requesting services. A Service Request which consists of a bulk request for transactions is counted as the sum of all sub-requests in the request.

A user is defined as a specific individual or entity authorized by you to access the software regardless of whether he/she is actively using the software

HPE Service Provisioner license can be used for production or non-production system (development, test, pre-production) irrespective of the number and type of Servers deployed, including high-availability.

HPE may decide in its sole discretion to include certain HPE CMS software components in solution

HPE Service Provisioner license may be used for a single legal entity only and a specified purpose

Table 3: HPE Service Provisioner Token License Capacity Mapping Table

APPLICATION DOMAIN	MAPPING	COMMENT
Mobile – Entry	Transaction per Subscriber: 100,000 subs=1 token	Total number of subscriber below 5 Million
Mobile – Mid / Large	Transaction per Subscriber: 1,000,000 subs=1 token	Total number of subscriber is above 5 million Prerequisite - license for 5 million subs using entry based mapping is purchased first
VPN Retail - Entry	Transaction per Subscriber: 10,000 subs=1 token	Total number of subscriber below 500,000
VPN Retail – Mid/Large	Transaction per Subscriber: 100,000 subs=1 token	Total number of subscriber is above 500,000 Prerequisite - license for 500,000 subs using entry based mapping is purchased first
VPN Commercial - Entry	Transaction per VPN sites: 1,000 sites=1 token	Total number of sites below 5,000
VPN Commercial – Mid/Large	Transaction per VPN sites : 10,000 sites=1 token	Total number of sites is above 5,000 Prerequisite - license for 5,000 sites using entry based mapping is purchased first

HPE Service Provisioner Technology extension

HPE Service Provisioner components need to be configured for each given network technology.

To get technology specific configuration of both the service catalog, and the service orchestration an HPE Service Provisioner technology extension might be purchased. HPE Service Provisioner technology extension is sold as RTU, and is licensed per technology deployed in the solution (one technology can be deployed several times with only one license within the same Production System Server)

As many HPE Service Provisioner technology extension licenses are required as different technology implemented in the solution.

HPE NFV Director

HPE Service Provisioner components need to be configured for each given network technology.

The HPE NFV Director software is licensed using the PAYG model, unless explicitly licensed using a different model in a separate commercial agreement.

HPE NFV Director is sold as LTU. The license key will be tied to Customer Name.

HPE NFV Director is licensed using a combination of a mandatory Base platform license and a PAYG model measured by the number of tokens. No minimum configuration is defined. In the event of growth of the solution, additional capacity needs to be purchased.

The HPE NFV Base platform license can be used for production or non-production system (development, test, pre-production) irrespective of the number and type of Servers deployed.

The HPE NFV Director Base platform license includes the following common base adapter functions that do not need to be purchased separately: Helion, Openstack and Cloud OS adapters (for configuration and monitoring), generic SNMP adapter (for monitoring), generic CLI, http, LDAP adapters (for configuration)

The purchase of HPE NFV Director Base platform license(s) entitles licensee to Use the HPE Unified OSS Console software on its HPE NFV Director platform by any number of Users only in connection with the capabilities exposed by the HPE NFV Director platform. The Use of HPE Unified OSS Console software for different capabilities, products and/or solutions is not permitted under the HPE NFV Direct Base platform license(s).

The PAYG license is based on maximum number reached (and will not go down if the capacity decreases).

Purchase of extra capacity needs to happen as soon as limit of current system is reached (and not as a result of verification by HP)

The PAYG license applies only to production environment.

Generic tokens have been introduced to keep the product structure simple. The mapping between token and capacity is defined in a separate mapping table (See Table 4)

HPE may decide in its sole discretion to include certain HPE CMS software components in the NFV Director solution

HPE NFV Director License may be used for a single legal entity only and a specified purpose.

Table 4: Capacity Mapping Table

COMPONENT	TOKEN USAGE	COMMENT
VM	0.2 token (1 token for 5 VMs)	A VM component is a VM on which a Virtual Network Function instance has been deployed by NFV Director and registered in its instance production database
vCPE VM	0.05 token (1 token for 20 VMs)	A vCPE VM component is a VM on which a Virtual Network Function instance part of a vCPE has been deployed by NFV Director and registered in its instance production database
Physical server or physical device	0.01 token (1 token for 100 servers/devices)	A Physical server or physical device instance stored in NFV Director instance production database

HPE NFV Director Adapter Function

HPE Service Provisioner components need to be configured for each given network technology.

A target is a VNF manager, Virtual Infrastructure manager (VIM), network element, element manager or application which is needed to be configured, monitored or automated for orchestration with NFV Director.

A HPE NFV Director adaptor is the component which knows how to interact with a specific target. Only one HPE NFV Director adaptor is built for each target type. An adaptor may evolve with additional functions over time.

A HPE NFV Director Adapter Function is associated with only one orchestration capability associated with the target. The capabilities currently supported are configuration, monitoring and automation.

The HPE NFV Director Adapter Function is sold as RTU and requires an HPE NFV Director Base platform installation, which must be ordered separately

The HPE NFV Director Base platform license includes the following common base adapter functions that do not need to be purchased separately: Helion, Openstack and Cloud OS adapters (for configuration and monitoring), generic SNMP adapter (for monitoring), generic CLI, http, LDAP adapters (for configuration)

The HPE NFV Director Adapter Function license is valid for the use of one orchestration capability per target.

The HPE NFV Director Adapter Function license can be used for production or non-production systems (development, test, pre-production) irrespective of the number and type of Servers deployed.

The HPE NFV Director Adapter Function license may be used for a single legal entity only

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.

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

5200-0671, April 2016; replaces 5900-0684 (July 2015)

Hewlett Packard Enterprise