SAP HANA Enterprise Cloud

Advanced Edition Production - Roles & Responsibilities

SIX CATEGORIES: For avoidance of doubt, all of the tasks and services itemized in this Roles & Responsibilities document are provided as a catalog of services. However, the relevance and necessity of each individual task or service will be unique to each customer's HEC Computing Environment. Customers are responsible to review and analyze these tasks and make the selection of such tasks/services in collaboration with the assigned SAP HEC Cloud Architect Advisor ("CAA"), or with their SAP Engagement Lead ("EL").

HEC Standard Services	All tasks/services that are included as part of the standard HEC Services, covered by the HEC Service Fee and performed by SAP2, as applicable to customer.
HEC Optional Services	HEC Optional Services: these tasks/services are not covered in the standard HEC Services, and are not and cannot be covered by the Cloud Application Services1 ("CAS"). These tasks/services • may be elected by customer, • are subject to additional service fees, • must be specifically contracted for and itemized in the customer's contract (original HEC contract or via a change request), and • can only be performed by SAP2.
Cloud Application Services[1] ("CAS"). Can be performed by customer.	Cloud Application Services1 ("CAS"). Can be performed by customer: Include tasks/services that a customer can perform, but the customer may elect to have SAP2 to deliver.
Cloud Application Services[1] ("CAS"). Cannot be performed by customer.	Cloud Application Services1 ("CAS"). Cannot be performed by customer: Include tasks/services that a customer can not perform, but the customer may elect to have performed. These tasks/services can only be performed by SAP2.
HEC Additional Service	HEC Additional Service: Include tasks/services which are not covered by HEC Standard, HEC Optional and/or Cloud Application Services. These tasks/services • may be elected by customer, • are subject to additional service fees and • can only be performed by SAP[2].
HEC Excluded Tasks	HEC Excluded Tasks are those tasks/services that can only be performed by the customer and are excluded from HEC Standard Services, HEC Optional Services, HEC Additional Services and/or Cloud Application Services.

[1] **Cloud Application Services ("CAS")** is a category of supplementary services identified as Cloud Application Services ("CAS") in this document. CAS is subject to additional service fees as agreed in a customer's HEC contract. CAS excludes all services involving the extension, reduction, or change of the customer's existing HEC landscape, e.g. provisioning additional infrastructure resources. SAP may provide CAS services in either proactive or reactive mode. For SAP to provide services in a reactive mode, the customer is required to submit CAS service requests to SAP via the ticketing/service request system made available to customer for such purpose.

[2] The term **"SAP"** when used herein refers to SAP as defined in the customer Order Form, and means either SAP or the relevant SAP third party provider or subcontractor.

Not all tasks or services listed in the HEC R&R are relevant to all customer environments. **Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).** Certain tasks or services may not be available from SAP or certain SAP third party providers, and may not be available in certain regions. The availability of a specific service may also depend on characteristics of the specific customer situation (e. g. system size, solution scope etc.) and must be individually checked and confirmed with the SAP HEC Cloud Architect Advisor ("CAA"), or with their SAP Engagement Lead ("EL").

All tasks and work efforts not purchased by customer or not provided SAP as part of the HEC standard service but applicable to customer and its HEC Computing Environment are the responsibility of customer.

The PDF version of this **SAP HANA Enterprise Cloud, Advanced Edition – Roles & Responsibilities** document made available by SAP at http://www.sap.com/corporate-en/about/our-company/policies/cloud/hec-roles-and-responsibilities.html is the Documentation of record. Customer acknowledges that a non-pdf version of this Roles & Responsibilities document may be made available for task analysis, task planning and overall customer task management purposes, but such version shall not be considered Documentation.

D	meaning	
=	task is identical between Production and Project	
<>	task is different between Production and Project; this may be that it is relevant only for one of the two HEC Services or that it is defined in a different way for each type of HEC Service	

SAP HANA Enterprise Cloud

Technical Operations

SAP HEC advanced edition Roles and Responsibilities for Production (BYOL and Subscription models)-ENGLISH-master_v1.xlsx

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
			=	All task descriptions exclusively refer to the execution of the respective task and are exclusive of potentially required hardware or infrastructure capacities (e.g. compute, storage, network connectivity etc.). Any extension to such entities is required to be processed via a contractual change request (CR) and is subject to additional HEC service fees. Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).	
1		**A - Service Management**	=	For accounts delivered by a HEC premium partner, certain tasks in chapter "A - Service Management" are a joint effort between SAP and that HEC Premium Partner	
2		**Account Management**	=		
3	SM_1.1.01	Conduct Delivery & Operations Kick-Off -Review HEC Support Manual -Schedule Landscape Review and Scope Alignment -Detailed Engagement & Operations Review	=	HEC Standard Services	
4	SM_1.1.02	Capacity Management Review: Quarterly review of systems within landscape, monitoring, and reporting of resource usage (e.g. storage capacity, memory and CPU) to prevent operational issues. Review need for service changes and extensions based on technical resource consumption trends.	=	HEC Standard Services	
5	SM_1.1.03	Capacity Management Planning: Develop quarterly capacity plan based on technical capacity management review.	=	HEC Standard Services	
6	SM_1.1.04	System outage notification and escalation management	=	HEC Standard Services	Handling of critical service situations aiming to bring the service back to targeted quality and standards.
7	SM_1.1.05	Service Performance Review & Report – Monthly - Provide review and suggestions if a high volume of HEC support requests occurs - Service availability and KPIs	=	HEC Standard Services	
8		**Service Request Management - Technical Support**	=		
9	SM_1.2.01	Use defined tracking system to enter and update technical requests	=	HEC Excluded Tasks	Change Requests (CR) or Change Orders subject to process defined in Agreement.
10	SM_1.2.09	Service Request Management - Receive and acknowledge requests in SAP defined request tracking system - Assess criticality/priority of request, effort and approvals required - Coordinate request approval - Notify requester of approval or rejection - Coordinate request scheduling - Notification of request completion	=	HEC Standard Services	Handling of Service Requests which require commercial change requests (CR) or need to be planned and coordinated only during customer business hours.
11	SM_1.2.11_AE	Create service plan for reoccurring and proactive CAS tasks / Create and maintain service plan for reoccurring and proactive HEC services	=	HEC Standard Services	
12	SM_1.2.12_AE	Create and maintain release plan for HEC landscape	=	HEC Standard Services	
13		**HEC Services to support industry regulations**	=	This section does not define a fixed-scope service package but represents an open list of possible services that can be offered to support specific compliance needs; a detailed service scope must be specified in the HEC contract; examples for industry standards that may be addressed with these services are GxP or HIPAA	
14		**Qualifications Services**	=		

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15	SM_1.6.02	Qualification deliverables (project and lifecycle documentation)	<>	HEC Optional Services	
16	SM_1.6.03	Personnel qualification and training as mandatory requirement for administrator access to regulated industries systems	<>	HEC Optional Services	
17	SM_1.6.04	Onboarding / system setup with additional Installation Qualification	<>	HEC Optional Services	
18		**Process Services**	=		
19	SM_1.6.06	Documents and records management for regulated industries	<>	HEC Optional Services	
20	SM_1.6.07	Change & Configuration Management for regulated industries	<>	HEC Optional Services	
21	SM_1.6.08	Problem Management for regulated industries	<>	HEC Optional Services	
22	SM_1.6.09	Audits and Periodic Review	<>	HEC Optional Services	
23	SM_1.6.10	System Decommissioning for regulated industries	<>	HEC Optional Services	
24		**B - Infrastructure**	=	**Section B - Infrastructure describes the infrastructure services provided for components used as part of HEC managed systems; services around "Server Provisioning" (aka IaaS) are described in detail in the respective section. Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).**	
25		**Data Center Management**	=		
26	INFRA_1.1.01	Data Center Management	=	HEC Standard Services	HEC is operated either in DC facilities owned by the respective HEC service provider, in rented co-location facilities, public cloud, or on hyperscaler infrastructure platforms.
27		**Network Management**	=		
28	INFRA_1.2.01	Manage remote connection between the hosted system landscape and SAPs support infrastructure	=	HEC Standard Services	Service initiated after formal transition to HEC service provider.
29	INFRA_1.2.03	Separation of systems in HEC customer landscape into more than one network segment	<>	HEC Additional Service	May not be available with Hyperscale deployment.
30	INFRA_1.2.04	Modification to existing customer connectivity (VPN, MPLS, Cloud Peering etc.)	=	HEC Standard Services	One (1) ticket per each feature change is required (after initial connectivity is established).
31	INFRA_1.2.05	Add additional VPN or MPLS or Cloud Peering	=	HEC Optional Services	Requires new VPN questionnaire to be completed.
32	INFRA_1.2.06	IP address migration - Change IP addressing of existing network segment to new IP addressing	=	HEC Additional Service	Used for cases where the original IP range of a network segment (including delivered systems) needs to be changed.
33	INFRA_1.2.07	Enable DNS integration of an on-premise customer domains into customer DNS servers in HEC to resolve on-premise host names	=	HEC Standard Services	Supported through DNS forwarding on the DNS server. This task does not add /etc/hosts file entries on individual HEC servers.
34	INFRA_1.2.08	Migrate SAP domain (hec.sap.biz) to customer domain or customer domain migration	=	HEC Additional Service	Used in case customer wants to change from HEC internal domain to customer domain or want to migrate existing domain to new domain due to organizational change.
35		**Hardware Operations**	=	**Applies to equipment managed by HEC service provider**	
36	INFRA_1.4.03	Plan and conduct HEC infrastructure maintenance	=	HEC Standard Services	
37	INFRA_1.4.05	Monitor critical operations parameters of HEC computing environment	=	HEC Standard Services	
38	INFRA_1.4.06	Monitor disk capacity	=	HEC Standard Services	Subject to additional fees for additional capacity.
39	INFRA_1.4.07	Monitor server capacity	=	HEC Standard Services	Subject to additional fees for additional capacity.
40	INFRA_1.4.08	Monitor network utilization	=	HEC Standard Services	
41	INFRA_1.4.09	Infrastructure/hardware/system requests; Process commercial change requests as required for hardware upgrades, additions etc.	=	HEC Standard Services	Subject to reasonable lead time, customer to provide request via tracking system with sufficient detail; additional fees apply; service provided only during office hours (referring only to the commercial part, technical implementation timing will be scheduled based on contractual specifications).

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
42	INFRA_1.4.11	Scale compute capacity (memory & CPU)	=	HEC Optional Services	
43		**Storage Management**	=		
44	INFRA_1.5.01	Manage data files, file systems and disks per HEC standards and practices	=	HEC Standard Services	
45	INFRA_1.5.02	Scale storage capacity	=	HEC Optional Services	
46	INFRA_1.5.03	Enable SnapLock/WORM/Immutability capability for archiving use cases	<>	HEC Optional Services	Available only for certain storage types on request; activated per volume. Not available on Hyperscaler.
47		**Operating System**	=		
48	INFRA_1.6.01	Create and maintain OS users and groups	=	HEC Standard Services	HEC service provider access only, no privileged access to operating system by customer.
49	INFRA_1.6.04	Inform customer regarding security incidents	=	HEC Standard Services	
50	INFRA_1.6.05	Configure OS parameters	=	HEC Standard Services	
51	INFRA_1.6.06	Troubleshoot operating system problems, monitor system log and file systems	=	HEC Standard Services	
52	INFRA_1.6.07	Work with vendor to resolve operating system issues	=	HEC Standard Services	
53	INFRA_1.6.08	Monitoring of swap and page areas	=	HEC Standard Services	
54	INFRA_1.6.09	Monitoring of memory load	=	HEC Standard Services	
55	INFRA_1.6.12	Software Lifecycle Management of operating system	=	HEC Standard Services	
56		**System Startup/Shutdown**	=		
57	INFRA_1.7.01	Perform scheduled startup/shutdown of computing environment	=	HEC Standard Services	
58	INFRA_1.7.03	Restart computing environment after failure	=	HEC Standard Services	
59		**Backup/Restore**	=		
60	INFRA_1.8.01	Perform standard file system and database backups	=	HEC Standard Services	Per HEC standards, or according to specific terms of the HEC Agreement.
61	INFRA_1.8.10	Perform exceptional ad-hoc backup upon request	=	HEC Additional Service	Lead time for backup to be aligned in advance.
62	INFRA_1.8.09	Provide non-standard backup services (e.g. extended retention period for long-term backups)	<>	HEC Optional Services	Offered options are described in separate service descriptions and are subject to change; not every theoretically possible combination of backup frequency and retention period is offered.
63	INFRA_1.8.11	Monitor backup processes	=	HEC Standard Services	
64	INFRA_1.8.07	Test backup/restore procedures periodically	=	HEC Standard Services	Verify procedures used in HEC and operational readiness; testing is not performed for each individual system but for representative scenarios
65	INFRA_1.8.03	Perform data restore and recovery (file system, database) as required after system failures	=	HEC Standard Services	Extra charges apply for restores if caused by customer error.
66	INFRA_1.8.02	Perform data restore and recovery (file system, database) on customer request (other reasons than as a response to system failures)	=	HEC Standard Services	
67	INFRA_1.8.06	Validate logical integrity and consistency of restored information	=	HEC Excluded Tasks	
68		**Infrastructure integration**	=		
69	INFRA_1.9.02	Integration of customer Active Directory	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
70	INFRA_1.9.04	Provide access to systems/resources within customer infrastructure	=	HEC Excluded Tasks	If required to fulfil agreed contractual obligations.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
71		**File transfer capabilities: CIFS shares**	=		
72	INFRA_1.10.01	Provide CIFS (aka Samba) share on LINUX	=	HEC Standard Services	Within contractually agreed infrastructure capacity
73	INFRA_1.10.03	User and access management	=	HEC Standard Services	Once/initially when share is created.
74	INFRA_1.10.04	Creation and maintenance of folder structure on shares	=	HEC Standard Services	
75	INFRA_1.10.05	Ensure up-to-date anti-virus protection on end user equipment connecting to the provided shares	=	HEC Excluded Tasks	
76	INFRA_1.10.06	Implement virus protection on server	=	HEC Standard Services	
77	INFRA_1.10.07	Backup of data uploaded to shares to ensure data integrity	=	HEC Excluded Tasks	Customer must ensure that data which get uploaded to the CIFS shares are kept properly secured at customer end; the shares themselves are only backed up via standard file system backups not allowing point-in-time recovery.
78		**Managed SFTP Server**	=	**To be installed on existing application server in HEC landscape**	
79	INFRA_1.11.01	Configuration of sftp daemon	=	HEC Standard Services	Only available on Linux.
80	INFRA_1.11.02_AE	Create and maintain sftp user accounts and groups	=	HEC Standard Services	Up to 10 users.
81	INFRA_1.11.03	Manage file systems	=	HEC Standard Services	Within contractually agreed infrastructure capacity
82	INFRA_1.11.04	Provide user list	=	HEC Excluded Tasks	
83	INFRA_1.11.05	Creation and deletion of files	=	HEC Excluded Tasks	
84		**Management of Wide Area Network**	=		
85	INFRA_1.12.01	Provide network infrastructure at customer data center/site	=	HEC Excluded Tasks	
86	INFRA_1.12.02	Provide network switching and ports at SAP/Partner data center to customer to connect telco equipment.	=	HEC Standard Services	Per SAP Guidelines, customer must ensure compatible network infrastructure at own site. Note: does not include infrastructure such as rackspace for MPLS or other devices.
87	INFRA_1.12.03	Determine appropriate size and purchase network connection between customer and HEC sites; manage telecommunication provider/ISP	=	HEC Excluded Tasks	
88	INFRA_1.12.04	SAP Cloud Peering: Establish a virtual connection to an SAP datacenter via a customer's interconnection provider to access multiple clouds through one connection.	<>	HEC Optional Services	Can only be used if SAP is connected to same interconnection provider. Monthly subscription fee via Change request based on bandwidth. Not available in all regions or for all interconnection partners. Connection of customer on-premise networks to interconnection hub is performed by the customer with their selected interconnect provider.
89		**C1 - Database Management SAP HANA**	=		
90		**SAP HANA (general database operations)**	=	**The HEC services, specified by this version of the HEC Roles and Responsibilities, include as a baseline the features and**	
91	HANA_1.1.31	Provide recommendations on database release management	=	HEC Standard Services	HEC will provide guidance on recommended database releases based on operational experience in HEC and information given by SAP Product Development.
92	HANA_1.1.01	Plan and perform file system extensions for e.g. backup activities	=	HEC Standard Services	Additional infrastructure consumption requires a CR.
93	HANA_1.1.02	Monitor database resource consumption to detect issues in technical operations	=	HEC Standard Services	Task output feeds into capacity management; recommendations for optimization may also be provided via SAP Enterprise Support services.
94	HANA_1.1.03	Monitor table growth to proactively prevent operational issues and ensure that the service stays within the contractual sizing boundaries	=	HEC Standard Services	Recommendations for limitation of data growth could may also be provided via SAP Enterprise Support services.
95	HANA_1.1.25	Design table partitioning strategy/architecture	=	HEC Excluded Tasks	Customer may engage SAP Consulting for designing table partitioning strategy and architecture.
96	HANA_1.1.04	Partition tables (technical execution)	=	HEC Standard Services	If required as a consequence of extensive table growth; one (1) execution per year included; any further requests will be charged separately.

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
97	HANA_1.1.35	Partition tables (additional)	=	HEC Additional Service	If required as a consequence of extensive table growth; one (1) execution per year included; any further requests will be charged as an additional service.
98	HANA_1.1.36	Database table redistribution based on the table placement rules (Technical Execution)	=	HEC Standard Services	For requirements involving application dependency (e.g. Moving tables and table partitions manually from one host to another).
99	HANA_1.1.05	Perform rowstore / column store migration: technical execution only	=	HEC Standard Services	Per customer request. Executing party to be mutually agreed between HEC and customer; migration of larger SAP tables to be done by HEC; customer should perform task on own tables if desired; additional downtime required per customer approval.
100	HANA_1.1.37	Database Defragmentation (Data Volume Reclamation)	=	HEC Standard Services	
101	HANA_1.1.38	Database Row Store Fragmentation	=	HEC Standard Services	
102	HANA_1.1.06	Monitor database for technical issues; analyze and resolve technical database failures	=	HEC Standard Services	
103	HANA_1.1.07	Clean-up HANA log and trace files (traces, statistic files etc.) to free up capacity and keep HANA system clean and healthy	=	HEC Standard Services	
104	HANA_1.1.08	Maintain technical configuration parameters for SAP HANA and SAP HANA XS based on SAP and HEC standards and recommendations	=	HEC Standard Services	
105	HANA_1.1.09	Start/stop database	=	HEC Standard Services	
106	HANA_1.1.10	Add/remove SAP HANA node to adjust SAP HANA capacity	=	HEC Optional Services	For HANA scale-out configurations only
107	HANA_1.1.28	Creation of additional schema for existing SAP HANA datamart	=	HEC Standard Services	
108	HANA_1.1.29	Change of SAP HANA database ID and instance number	=	HEC Standard Services	
109	HANA_1.1.26	Change SAP HANA database architecture (single node to multi node or vice versa)	=	HEC Optional Services	
110	HANA_1.1.11	Management of standby databases (HANA System Replication) for high availability	<>	HEC Standard Services	Performed only for productive systems; only if dedicated standby databases are explicitly included as part of the solution in the contract. Not in scope for multi-node setups. Failover tests are not performed on a regular basis per system.
111	HANA_1.1.34	Test standby databases (HANA System Replication) for high availability at customer request	<>	HEC Additional Service	
112	HANA_1.1.12	Update SAP HANA database software and update of DB client	=	HEC Standard Services	Additional downtime for maintenance required; this task does not include the usage of advanced update approaches such as ZDO/Downtime Minimization etc. The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements.
113	HANA_1.1.33	SAP HANA version upgrade and update of DB Client	=	HEC Standard Services	HANA systems to HANA MDC system with latest support pack levels, and with replication mode set to CLR. The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements.
114	HANA_1.1.27	Implement updates to the managed SAP HANA database using advanced tools and methods which are part of the HEC Maintenance Downtime Minimization Service to minimize required downtime	=	HEC Additional Service	Available from SAP HANA SPS 12 onwards.
115	HANA_1.1.22	SAP HANA Transports Management Setup	=	HEC Standard Services	
116	HANA_1.1.14	Implement / maintain additional SAP tools (e.g. SAP HANA Analytics Foundation Browser)	=	HEC Standard Services	Depending on customer requirements; only for tools in the HANA context delivered by SAP, 3rd party tools not covered.
117	HANA_1.1.15	Identify, analyze and optimize expensive SQL-statements to improve application performance	=	Cloud Application Services ("CAS"). Can be performed by customer.	

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
118	HANA_1.1.16	System troubleshooting, e.g. blocked transactions, to overcome issues and bring SAP HANA back to normal state of operations	=	HEC Standard Services	
119	HANA_1.1.17	Create/modify users for HANA modelling in the SAP HANA Studio	=	Cloud Application Services ("CAS"). Can be performed by customer.	
120	HANA_1.1.18	User, roles, and permissions management for non-technical users	=	Cloud Application Services ("CAS"). Can be performed by customer.	Customer has ownership and responsibility for SAP HANA role CUST_USER_ROLE_ADMIN.
121	HANA_1.1.19	User, roles and permissions management for technical and administration users	=	HEC Standard Services	Technical users: e.g. users delivered and used by SAP HANA. This service is only for internal Users created by HEC e.g. SAPSID / SAPABAP1 / SAPHANADB.
122	HANA_1.1.20	Perform database backups (regular full backups and log backups)	=	HEC Standard Services	Per HEC backup policy.
123	HANA_1.1.21	Restore and recover SAP HANA after technical issues	=	HEC Standard Services	Restores on customer request provided at additional costs.
124	HANA_1.1.30	dbcc (database consistency check)	=	HEC Standard Services	
125	HANA_1.1.32	Export/Import of database schema	=	HEC Excluded Tasks	
126	HANA_1.1.24	Implement SAP HANA database encryption on SAP HANA database already installed in HEC	<>	HEC Standard Services	Downtime required for re-installation of database; potential additional storage consumption is subject to a change request (CR).
127	HANA_1.1.23	Setup and operate encrypted HANA database	<>	HEC Optional Services	
128	HANA_1.1.39	Implement SAP HANA log encryption on SAP HANA database already installed in HEC	=	HEC Standard Services	
129	HANA_1.1.40	Configure Secure Communication on SAP HANA System Replication (HSR)	=	HEC Standard Services	Available by default in HANA 2.0. Explicitly required only for HANA 1.0 where EarlyWatch Alert recommends to secure System Replication communication or a Tenant needs to be moved to another system.
130		SAP HANA XS	=		
131	HANA_1.2.01	Maintain technical configuration parameters for SAP HANA XS based on SAP and HEC standards and recommendations	=	HEC Standard Services	
132	HANA_1.2.02	Maintain Application Runtime Configurations	=	HEC Standard Services	
133	HANA_1.2.03	Manage Trust Relationships	=	HEC Standard Services	
134	HANA_1.2.04	Maintain SAML Providers	=	HEC Standard Services	
135	HANA_1.2.05	Maintain SMTP Server Configurations	=	HEC Standard Services	
136	HANA_1.2.06	Maintain HTTP Access to SAP HANA	=	HEC Standard Services	
137	HANA_1.2.08	Maintain User Self Service Tools	=	HEC Standard Services	
138	HANA_1.2.09	Schedule XS Jobs	=	Cloud Application Services ("CAS"). Can be performed by customer.	
139	HANA_1.2.11	Maintain HTTP Traces for SAP HANA XS Applications	=	HEC Standard Services	
140		SAP HANA XSA	=	SAP HANA XSA is a separate technical component and not part of a standard installation of an SAP HANA database; SAP HANA XSA needs to be explicitly included/scoped in the initial contract or subsequent Change Request (CR).	
141	HANA_1.9.01	Installation along with HANA Server	=	HEC Standard Services	
142	HANA_1.9.02	Install XSA Components as an add-on for already installed HANA Server	=	HEC Standard Services	
143	HANA_1.9.04	Setup/Configuration of XSA for HANA Development at customer side	=	HEC Excluded Tasks	

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144	HANA_1.9.05	Configuration of XS-CLI Tool for HANA Development	=	HEC Excluded Tasks	
145	HANA_1.9.06	User management for HANA Development	=	HEC Excluded Tasks	
146	HANA_1.9.07	Monitoring of XSA services and its applications	=	HEC Optional Services	Super set will be included in monitoring if selected
147	HANA_1.9.08	Setup Logical database (Register Tenant Database)	=	HEC Optional Services	
148	HANA_1.9.09	Set up initial admin users for XSA	=	HEC Optional Services	
149	HANA_1.9.10	Backup and restore of XSA specific files	=	HEC Optional Services	Requires Disaster Recovery service package.
150	HANA_1.9.11	Web Dispatcher configuration for the applications installed by HEC and built by customers	=	HEC Optional Services	
151	HANA_1.9.13	Support customer built applications	=	HEC Excluded Tasks	
152	HANA_1.9.14	Availability monitoring of customer built applications	=	HEC Excluded Tasks	
153	HANA_1.9.15	Backup of custom applications if using file system storage	=	HEC Standard Services	
154	HANA_1.9.16	Restore of customer built applications using file system storage provided the backup has been enabled prior	=	HEC Standard Services	
155	HANA_1.9.17	Post-restore task checking and connection of custom applications	=	HEC Excluded Tasks	
156		**SAP HANA: Smart Data Integration (Formerly Enterprise Information Management - EIM)**	**=**	**Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0**	
157		**Setup - Technical Set Up Only - Does Not Include Application Set Up**	**=**		
158	TO_HANA_SDI_1.1.01	Enable Data Provisioning Server	=	HEC Optional Services	The Data Provisioning Server is a native SAP HANA process. It is built as an index server variant, runs in the SAP HANA cluster, and is managed and monitored just like other SAP HANA services. The Data Provisioning Server is installed with, but must be enabled in, the SAP HANA Server
159	TO_HANA_SDI_1.1.02	Install, configure, and register Data Provisioning Agent	=	HEC Optional Services	One (1) agent is included. Additional Data Provisioning Agents can be charged separately.
160	TO_HANA_SDI_1.1.03	Install, configure, and register additional Data Provisioning Agents	=	HEC Standard Services	
161	TO_HANA_SDI_1.1.04	Setup Smart Data Quality (SDQ)	=	HEC Optional Services	Deploy SDQ, download Address and Data Cleansing package from the SAP Service Market Place and configuration from SAP HANA Server. SFTP access will be setup for the customer so that the customer may upload the address directories on their own.
162	TO_HANA_SDI_1.1.05	Setup Agile Data Preparation (ADP)	=	HEC Standard Services	ADP requires SDQ, ESS and HRF be deployed and setup with related users and authorizations
163	TO_HANA_SDI_1.1.06	Administration of Agile Data Preparation (ADP)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Setting Export Options, worksheet expiration, password features, warehouse workspace, and size and policy for queues.
164	TO_HANA_SDI_1.1.07	Set up replications, federation and transformations	=	Cloud Application Services ("CAS"). Can be performed by customer.	
165	TO_HANA_SDI_1.1.08	FlowGraph jobs backup	=	HEC Excluded Tasks	
166	TO_HANA_SDI_1.1.09	Replication task backup	=	HEC Excluded Tasks	
167	TO_HANA_SDI_1.1.10	DP Agent - High Availability setup	=	HEC Optional Services	DP Agent can be setup in High Availability setup by provisioning shadow instances on additional nodes; included only if explicitly mentioned in the contract.
168	TO_HANA_SDI_1.1.11	Deploy standard adapters with SAP HANA	=	Cloud Application Services ("CAS"). Can be performed by customer.	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters
169	TO_HANA_SDI_1.1.12	Deploy custom adapters with SAP HANA	=	HEC Optional Services	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters.
170	TO_HANA_SDI_1.1.13	Monitor Data Provisioning tasks and remote subscriptions	=	Cloud Application Services ("CAS"). Can be performed by customer.	
171	TO_HANA_SDI_1.1.14	Process remote subscription exceptions	=	Cloud Application Services ("CAS"). Can be performed by customer.	

SAP HANA Enterprise Cloud

Technical Operations

SAP HEC advanced edition Roles and Responsibilities for Production (BYOL and Subscription models)-ENGLISH-master_v1.xlsx

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
172		**SAP HANA: Dynamic Tiering (DT)**	=	**Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0**	
173		**Operational Setup**	=		
174	TO_HANA_DT_1.1.01	HANA-DT operational setup: Install and technically configure HANA DT, add DT Host, Import DT delivery units, maintain technical authorizations	=	HEC Optional Services	
175		**Optional Services**	=		
176	TO_HANA_DT_1.2.01	Manage extended storage DB spaces (add extended storage to each ES host)	=	HEC Standard Services	Increased storage consumption is subject to a Change Request (CR) and additional cost.
177	TO_HANA_DT_1.2.02	Manage extended storage tables: Create, move or drop ES Tables on each ES storage	=	HEC Standard Services	
178		**SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)**	=	**Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0**	
179		**Operational Setup**	=		
180	TO_HANA_SA_1.0.01	Install Streaming Analytics option package	=	HEC Optional Services	SAO package is installed on the SAP HANA DB node/MDC Tenant.
181	TO_HANA_SA_1.0.02	Add Streaming Analytics option host	=	HEC Optional Services	A maximum of Two (2) SAO host can be provided. Additional SAO hosts can be charged separately.
182	TO_HANA_SA_1.0.03	Add additional Streaming Analytics option host	=	HEC Standard Services	A maximum of Two (2) SAO host can be provided. Additional SAO hosts can be charged separately.
183	TO_HANA_SA_1.0.04	Configure data source on Streaming Analytics option host	=	Cloud Application Services ("CAS"). Can be performed by customer.	Configure odbc.ini for SAP HANA connection from each of the SAO hosts.
184	TO_HANA_SA_1.0.05	Setup streaming authorization	=	HEC Optional Services	Activate smart data streaming roles, privileges and object access for monitoring and operations.
185	TO_HANA_SA_1.0.06	Activate SAP HANA Cockpit	=	HEC Optional Services	Execute tasks for SAP HANA Cockpit activation for SAO operations and monitoring.
186	TO_HANA_SA_1.0.07	Configure Streaming Cluster - High Availability setup	=	HEC Optional Services	Configure for high availability by adding multiple nodes. Additional Infrastructure required.
187	TO_HANA_SA_1.0.08	Provision of Disaster Recovery (Streaming Analytics option nodes)	=	HEC Optional Services	Provisioning of identical number of nodes at a secondary site to mirror primary site using HEC Provisioning Tool
188	TO_HANA_SA_1.0.09	Streaming Lite setup	=	HEC Excluded Tasks	Streaming Lite is optional and not required as part of a standard SAO installation. The Streaming Lite package is downloadable as a separate component only. Streaming Lite is designed to deploy streaming projects on remote gateway devices
189	TO_HANA_SA_1.0.10	Create and deploy Streaming Analytics option streaming projects	=	Cloud Application Services ("CAS"). Can be performed by customer.	Using SAP HANA Studio, create and deploy project for data streaming to SAP HANA and other external sources.
190	TO_HANA_SA_1.0.11	Monitor Streaming Analytics option objects and projects	=	Cloud Application Services ("CAS"). Can be performed by customer.	Monitoring SAO objects and projects using SAP HANA/ESP Cockpits
191		**SAP HANA: Multiple Database Containers (MDC)**	=	**Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0**	
192		**Operational Setup**	=		
193	TO_HANA_MDC_1.1.01	Install HANA MDC (HANA server, Client, AFL, Runtime Libraries and Studio)	=	HEC Standard Services	MDC is default in SAP HANA 2.0.
194	TO_HANA_MDC_1.1.06	Creation of technical users	=	HEC Standard Services	MDC is default in SAP HANA 2.0. Customer responsible for user management using CUST_USER_ROLE_ADMIN
195	TO_HANA_MDC_1.1.02	Convert an SAP HANA System to support Multitenant Database Containers	<>	not offered	Only performed as part of an SAP HANA2.0 upgrade
196	TO_HANA_MDC_1.1.07	Creation of additional tenants for datamart scenarios on existing infrastructure	=	HEC Optional Services	For use on existing infrastructure. A change request (CR) is required for backup retention requirements and the setup of new continuous monitoring.
197	TO_HANA_MDC_1.1.08	Creation of additional tenants for datamart scenarios on new infrastructure	=	HEC Optional Services	Additional infrastructure consumption requires a change request (CR).

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Technical Operations

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
198	TO_HANA_MDC_1.1.04	Install additional services for tenant DB containers	=	HEC Standard Services	Additional services such as dp server, index server, XS engine. By default one of each comes automatically upon creation of a tenant; installation of additional services required for certain use cases is covered under this line item.
199	TO_HANA_MDC_1.1.05	Scale out of tenant database	=	HEC Standard Services	SAP BW systems only.
200	TO_HANA_MDC_1.2.17_AE	Tenant Copy/Move Preparation, Checks, Certificates, Pre-Steps, Move/Copy via replication, post processing steps	=	HEC Standard Services	Move will drop the source database after the task is complete. Copy will keep the source after the task is complete.
201	TO_HANA_MDC_1.2.01	Network: Reserve additional ports to one instance to adjust tenant overhead per instance	=	HEC Standard Services	
202	TO_HANA_MDC_1.2.02	Cross-Database authorization in MDC databases to facilitate cross-DB queries	=	Cloud Application Services ("CAS"). Can be performed by customer.	
203	TO_HANA_MDC_1.2.03	Auditing: Creating and enabling audit policies for systemdb and each tenant db	=	HEC Standard Services	
204	TO_HANA_MDC_1.2.04	Data storage: DB-specific encryption keys	=	HEC Standard Services	SSFS Master Key Change.
205	TO_HANA_MDC_1.2.08	Data storage: DB-specific encryption keys (SSFS Master Key) Change	=	HEC Standard Services	
206	TO_HANA_MDC_1.2.06	Backup of individual tenants	=	HEC Additional Service	As per HEC standard, backups are performed for the entire database. However, a tenant-individual backup - as a file based dump - is possible on individual request.
207	TO_HANA_MDC_1.2.07	Restore of individual tenant	=	HEC Additional Service	
208	TO_HANA_MDC_1.2.10	Authorization: Management of system privileges and tenant DB privileges	=	HEC Standard Services	
209		**Active-Active Read Enabled Setup**	**=**	**Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0**	
210	TO_HANA_AAR_1.1.01	Install primary and secondary SAP HANA system	=	HEC Optional Services	Import delivery units, setup users and roles.
211	TO_HANA_AAR_1.1.03	Establish log replay between both SAP HANA instances	=	HEC Optional Services	Import delivery units, setup users and roles.
212	TO_HANA_AAR_1.1.04	Establish monitoring for secondary system	=	HEC Optional Services	
213		**Remote Data Sync (RDS)**	**=**	**Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0**	
214		**Setup and Configuration**	**=**		
215	TO_HANA_RDS_1.1.01	Install Remote Data Sync component on SAP HANA	=	HEC Optional Services	RDS package is installed on the SAP HANA DB node. It can be installed at the same time as the SAP HANA install or can be installed independently.
216	TO_HANA_RDS_1.1.02	Add Remote Data Sync Host	=	HEC Optional Services	
217	TO_HANA_RDS_1.1.03	Activate RDS roles, privileges and object access for monitoring and operations	=	HEC Optional Services	
218	TO_HANA_RDS_1.1.04	Import of RDS delivery units	=	HEC Optional Services	This task is required only in MDC setups.
219	TO_HANA_RDS_1.1.05	Setup and configure RDS nodes for each tenant DB including service initialization, cockpit access, delivery units and verification	=	HEC Optional Services	This task is required only in MDC setups.
220	TO_HANA_RDS_1.1.06	RDS cockpit - Setup and Configuration	=	HEC Optional Services	Execute tasks for HANA Cockpit activation for RDS operations and monitoring.
221		**High Availability Setup**	**=**		
222	TO_HANA_RDS_1.2.01	Setup of additional hosts for high availability	=	HEC Optional Services	Add and setup RDS for additional nodes, including configuration of single or multi-tenant databases and group setup. For Multi-tenant setup, only a single stand-by node serves all tenant DB(s). For RDS load balancer setup, check R&R Section "LoadBalancer".
223	TO_HANA_RDS_1.2.02	High availability configuration	=	HEC Optional Services	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
224	TO_HANA_RDS_1.2.03	Setup and configure LoadBalancer for High Availability support	=	HEC Optional Services	
225		Other Services	=		
226	TO_HANA_RDS_1.3.01	Setup and configure synchronization scripts	=	HEC Excluded Tasks	Configure synchronization script for upload and download of data between remote and consolidate databases.
227	TO_HANA_RDS_1.3.02	Monitor synchronization requests, process and status	=	HEC Excluded Tasks	Monitoring sync status, request and availability using RDS cockpits.
228		Capture and Replay	=	Extended feature beyond SAP HANA 1.0 SPS08 baseline; not included in standard HEC service for SAP HANA 1.0	
229	TO_HANA_CR_1.1.01	Prepare capture in source system	=	HEC Optional Services	Import Delivery units, setup users and roles.
230	TO_HANA_CR_1.1.02	Start capture	=	Cloud Application Services ("CAS"). Can be performed by customer.	Customer must ensure sufficient capacity to store capture of workload; capacity extension requires change request (CR).
231	TO_HANA_CR_1.1.03	Setup replay in target system	=	HEC Optional Services	Import Delivery units, setup users and roles.
232	TO_HANA_CR_1.1.04	Configure replayer service	=	HEC Optional Services	Configure replayer service.
233	TO_HANA_CR_1.1.05	Preprocess and replay in target system	=	Cloud Application Services ("CAS"). Can be performed by customer.	
234		SAP HANA: Accelerator for SAP ASE (AFA)	=		
235		Operational Setup	=		
236	TO_AFA_1.1.01	Installing Accelerator for SAP ASE Package	=	HEC Standard Services	HANA - AFA package is installed on the SAP HANA DB node.
237	TO_AFA_1.1.02	Adding Accelerator for ASE Host	=	HEC Standard Services	Adding Accelerator for ASE host. For multi-tenant setups, AFA nodes are added exclusively to each tenant DB.
238	TO_AFA_1.1.03	Install and configure SAP Replication Server	=	HEC Standard Services	SAP Replication server is required when data is replicated from existing SAP ASE OLTP source server to SAP HANA target server. Depending on SAP ASE OLTP server installed location i.e. on on-premise or HEC landscape, replication server can be installed as managed server.
239	TO_AFA_1.1.04	Authorization - Setup	=	HEC Standard Services	Activate accelerator for ASE roles, privileges and object access for monitoring and operations. Provision HEC specific user and roles.
240	TO_AFA_1.1.05	Enable Pushdown Optimization	=	HEC Standard Services	AFA pushdown optimization is enabled on AFA nodes
241	TO_AFA_1.1.06	Import Delivery Units	=	HEC Standard Services	Import of AFA Delivery units in HANA multi-container scenarios. This task is required only in MDC setup.
242	TO_AFA_1.1.07	Multitenant Setup	=	HEC Standard Services	Configure and setup AFA nodes for each tenant DB including, service initialization, cockpit access, delivery units and verification.
243	TO_AFA_1.1.08	Configure HTTP Access for Multi Database Containers (MDC)	=	HEC Standard Services	Configure HTTP Access for Multitenant Database Containers for HANA Cockpit Access and monitoring. Note: This task is not required if HTTP Access is already configured for existing MDC setup.
244	TO_AFA_1.1.09	High availability setup and configuration	=	HEC Optional Services	High Availability setup and configuration involving single or multi-tenant DB setups including ETS group setup; only if standby nodes are part of the contractual landscape design.
245		Other Services	=		
246	TO_AFA_1.2.01	Pushdown Analysis Tool Setup	=	Cloud Application Services ("CAS"). Can be performed by customer.	Simulation tool to evaluate pushdown optimization. This is carried out prior to AFA Deployment.
247	TO_AFA_1.2.02	Data Replication for Accelerated Reporting	=	HEC Excluded Tasks	Setup ASE OLTP data replication to HANA DB. Identify and setup DB objects to be replicated.
248	TO_AFA_1.2.03	Monitor Accelerator for ASE Pushdown Statements	=	HEC Excluded Tasks	Monitoring Accelerator for ASE objects including pushdown statements using HANA Cockpits.
249		SAP HANA Cockpit 2.0	=		
250		Installation and Configuration	=		
251	TO_HANA_CP_1.1.01	Install cockpit on new SAP HANA database	=	HEC Optional Services	Import delivery units, setup users and roles.

SAP HANA Enterprise Cloud

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
252	TO_HANA_CP_1.1.02	Install cockpit on new SAP HANA database on new tenant	=	HEC Optional Services	Import delivery units, setup users and roles.
253	TO_HANA_CP_1.1.03	Setup/Configure for SAP HANA system on customer side	=	HEC Excluded Tasks	Customer can perform this task with user provided by HEC.
254	TO_HANA_CP_1.1.04	Monitoring	=	HEC Optional Services	
255	TO_HANA_CP_1.1.05	User management	=	HEC Excluded Tasks	Customer must maintain users.
256		C2 - Database Management	=	Excluding SAP HANA and Sybase IQ which are described in the respective sections	
257		Database operations	=		
258	DB_1.1.17	Provide recommendations on database release management	=	HEC Standard Services	HEC will provide guidance on recommended database releases based on operational experience in HEC and information given by SAP Product Development.
259	DB_1.1.19	Monitor database resource consumption (memory, CPU, storage) to detect issues in technical operations	=	HEC Standard Services	Task output feeds into capacity management; recommendations for optimization may also be provided via SAP Enterprise Support services.
260	DB_1.1.02	Perform database extensions to increase database capacity	=	HEC Standard Services	Increased consumption will be charged according to contractual Agreement.
261	DB_1.1.03	Monitor table extension parameters to avoid issues	=	HEC Standard Services	
262	DB_1.1.20	Monitor database for technical issues; analyze and resolve technical database failures	=	HEC Standard Services	
263	DB_1.1.24	System troubleshooting, e.g. blocked transactions to overcome issues and bring database back to normal state of operations	=	HEC Standard Services	
264	DB_1.1.05	Schedule periodic statistical database collectors to generate statistical performance data	=	HEC Standard Services	
265	DB_1.1.06	Perform reorganization to remove database fragmentation	=	HEC Standard Services	
266	DB_1.1.07	Maintain/change database parameters	=	HEC Standard Services	Based on vendor recommendations and HEC standards.
267	DB_1.1.21	Start/stop database	=	HEC Standard Services	
268	DB_1.1.10	Create and check optimizer statistics to maintain database performance	=	HEC Standard Services	
269	DB_1.1.11	Perform upgrades of database software	=	HEC Standard Services	
270	DB_1.1.12	Apply database patches	=	HEC Standard Services	
271	DB_1.1.13	Perform database backups (regular database and log backups)	=	HEC Standard Services	Per HEC backup policy.
272	DB_1.1.14	Restore and recover database after technical issues	=	HEC Standard Services	For technical issues. Restores on customer request provided at additional costs.
273	DB_1.1.22	Perform dbcc (database consistency check)	=	HEC Standard Services	
274	DB_1.1.23	Export/Import of database schema	=	HEC Standard Services	
275	DB_1.1.18	Implement SAP ASE database encryption on SAP ASE database already installed in HEC.	=	HEC Standard Services	No downtime required.
276	DB_1.1.16	Assist customer in optimizing SQL statements (indexes, selects etc.) for application improvements	=	Cloud Application Services ("CAS"). Can be performed by customer.	
277	DB_1.1.25	Create indexes for application tables	=	HEC Standard Services	
278	DB_1.126	Shrink database	=	HEC Excluded Tasks	
279		D - Core Technical Operations	=		
280		System Installation	=		

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
281	BASIC_1.8.01	Installation of HEC solution landscape as specified in the HEC contract, based on SAP and HEC standards and HEC best-practices	=	HEC Standard Services	If an entirely new customer system is set up as a homogenous copy (no change of database platform) of a customer system already residing in HEC, the respective effort and costs are covered by the general setup and there will be no additional charge for a "system copy". Source systems not residing inside HEC is not addressed by this comment and is covered by the separately contracted HEC onboarding and migration service.
282	BASIC_1.8.25	System Rebuild	=	HEC Additional Service	Customer may request a system rebuild on existing infrastructure only. This service is for effort only and does not include any required infrastructure change. This service is not applicable if new or changed infrastructure is required as new or changed infrastructure requires a Change Request.
283	BASIC_1.8.02	Technical configuration (installation post-processing) of installed systems (e.g. scheduling of standard batch jobs, backup etc.)	=	HEC Standard Services	Scope is determined by this Roles & Responsibilities document.
284	BASIC_1.8.15	Basic Technical Configuration of SAP BW and SAP BW/4HANA Systems	=	HEC Optional Services	For ABAP Greenfield setups only
285	BASIC_1.8.23	Implement a preconfigured system from SAP Model Company solution in an HEC skeleton system	=	HEC Standard Services	Optional part for installation of systems of customer's HEC solution landscape. Customer needs to have an applicable SAP Professional Services contract for the relevant SAP Model Company (MC).
286	BASIC_1.5.01	Application customizing and configuration, application maintenance, application support and application troubleshooting	=	HEC Excluded Tasks	HEC delivers systems which are technically configured on technical platform (e. g. SAP NetWeaver) level and ready to be operated. Any solution (e.g. SAP BW, SAP CRM, SAP EP) or customer specific configuration task is not included and must be performed by the customer.
287	BASIC_1.8.03	Integration of installed systems into SAP HEC operations environment	=	HEC Standard Services	
288	BASIC_1.8.04	Enablement of HEC system monitoring	=	HEC Standard Services	
289	BASIC_1.8.22	Data transfer to HEC during HEC onboarding	=	HEC Optional Services	One-time service fee. Approach depends on chosen onboarding scenario and individual requirements, either using network connection or physical and encrypted media; shipment of physical media done at customers risk.
290	BASIC_1.8.20	Provide special support to customer during HEC onboarding	=	HEC Additional Service	Depending on scope and approach of HEC onboarding project customers may require technical assistance, e.g. whenever OS access is required; this type of onboarding support can be provided under this line item.
291	BASIC_1.8.05	Integration of system with other systems and applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	Create RFC and/or JAVA connections to satellite systems.
292	BASIC_1.8.07	Setup monitoring with Customer Solution Manager located in HEC: Installation of additional Diagnostics Agent on customer systems	=	HEC Standard Services	Connecting an SAP Solution Manager system owned by the customer operated in HEC (not the central SAP Solution Manager system owned by HEC)
293	BASIC_1.8.18	Setup monitoring with Customer Solution Manager located in HEC: Configuration of monitoring within the customers SAP Solution Manager system	=	Cloud Application Services ("CAS"). Can be performed by customer.	Service charge is calculated per server; monitoring setup is done using only SAP Solution manager standard templates, no customer specific settings and adjustments included.
294	BASIC_1.8.26	Configure Solution Manager: Focused Insight standard dashboard	=	Cloud Application Services ("CAS"). Can be performed by customer.	No customer specific settings and adjustments included.
295	BASIC_1.8.14	Implementation SAP Best Practices and similar packages	=	HEC Standard Services	The implementation of "Best Practices for SAP S/4HANA" includes the activation of release-dependent business functions in client 000 and the provisioning of a desired copy profile. Customer is responsible for defining/selecting Best Practice business content and country versions. All customizing that may be required after activation of the Best Practices content in order to meet requirements that differ from Best Practice scenarios is not part of this service.
296	BASIC_1.8.24	Implement a preconfigured system from SAP Cloud Appliance Library (CAL) solution in an HEC skeleton system	=	HEC Standard Services	Optional part for installation of systems of customer's HEC solution landscape.
297	BASIC_1.8.19	Configuration of SAP online help (local installation)	=	HEC Standard Services	Once (1) per system; subject to contractual change request (CR) to cover increased infrastructure consumption and additional administrative efforts.

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
298	BASIC_1.8.21	Install ODBC Drivers to connect to external databases	=	HEC Standard Services	On SLT/HANA SDS/BOBJ; customer needs to provide required software including appropriate usage rights for an installation in HEC; customer needs to provide specification for required connection (e. g. SSL/TLS).
299	BASIC_1.8.12	Increase system capacity by adding additional components (nodes, application servers etc.) or moving existing system to larger infrastructure (e.g. larger database server)	=	HEC Optional Services	Contractual change request (CR) required to reflect higher infrastructure consumption, subject to additional service fees.
300	BASIC_1.8.10	Data handover from HEC to customer - one time	=	HEC Standard Services	Efforts for a one-time data handover (creation of export and transfer to media) as part of a contract or system termination are included in the HEC service. Planning, coordination, media and logistics of shipment as well as all associated costs are customer responsibility. Any other occurrence of data handover is an additional service.
301	BASIC_1.8.13	Data handover from HEC to customer - additional requests	=	HEC Additional Service	Efforts for additional data handover (creation of export and transfer to media). Planning, coordination, media and logistics of shipment as well as all associated costs are customer responsibility.

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
302		**Incident Management**	=		
303	BASIC_1.16.01	Operate Call Center receiving incidents 24x7x365	=	HEC Standard Services	24x7 support only in English language, local languages where available during business hours and explicitly agreed with the customer.
304	BASIC_1.16.02	Incident processing - Qualification and prioritization of the incidents - Initiate incident resolution - Track incident resolution progress - Incident escalation as defined by escalation process - Determine incident resolution or workaround - Implement solution or workaround - Verify incident resolution - Inform customer about incident resolution	=	HEC Standard Services	
305	BASIC_1.16.03	Sign-off/Approve solution and confirm incident resolution	=	HEC Excluded Tasks	
306		**Event detection and notification ("monitoring")**	=		
307	BASIC_1.8.17	Monitoring and event detection of SAP system availability and critical system states	=	HEC Standard Services	Monitoring requirements are defined based on HEC Roles & Responsibilities and SLAs; activated monitoring metrics and used thresholds are subject to constant change and tuning.
308	BASIC_1.7.07	Monitor critical business transactions	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
309		**General Operations**	=		
310	BASIC_1.8.08	Start/Stop HEC managed systems	=	HEC Standard Services	
311	BASIC_1.1.15	Troubleshooting of technical issues in HEC managed systems	=	HEC Standard Services	For technical issues only; application related problems must be resolved by the customer.
312	BASIC_1.1.14	Assist customers with tasks in their area of responsibility, if OS access is required	=	HEC Standard Services	In cases where the execution of tasks requires activities to be performed within the OS level and for which the customer is responsible according to this document. Customers will not get OS access to managed servers within HEC. The HEC Service provider will support the customer, e.g. by taking over the tasks or by providing other methods to execute tasks. This line item only applies to infrequent/occasional assistance; projects requiring regular, longer and more general OS access for implementation, development and support cannot be supported via this line item. A Service charge is calculated per server.
313	BASIC_1.1.16	Regular analysis and maintenance of SAP system profile parameters	=	HEC Standard Services	HEC is responsible for executing this task as it can have impact on system performance and availability. HEC will provide recommendations for technical system parameters; HEC will also adjust parameters by customer request except for certain standardized settings required to maintain system stability or security.
314		**SAP Security Management**	=		
315	BASIC_1.2.22	Define and implement security concept for application	=	HEC Excluded Tasks	
316	BASIC_1.2.23	Define and implement infrastructure security concept	=	HEC Standard Services	Special rules apply for HEC Server Provisioning; please refer to the respective section for details.
317	BASIC_1.2.19	Customer specific Security Audit Log analysis	=	Cloud Application Services ("CAS"). Can be performed by customer.	
318	BASIC_1.2.20	Analyze the SAP system and identify relevant SAP security notes	=	Cloud Application Services ("CAS"). Can be performed by customer.	
319	BASIC_1.2.17	Definition, maintenance, review and audit of roles, profiles, authorizations etc.	=	Cloud Application Services ("CAS"). Can be performed by customer.	

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
320	BASIC_1.2.18	Administration of customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, master data and passwords)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
321	BASIC_1.2.15	Maintain user profiles, roles, authorizations, master data and passwords in client 000	=	HEC Standard Services	
322	BASIC_1.2.16	Provide access to client 000 for customer	=	HEC Standard Services	Restricted, predefined profile only; limited set of users provided; service provided on request only.
323	BASIC_1.2.25	Design / Architecture of Single Sign On (SSO) for systems in HEC landscape	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
324	BASIC_1.2.24	Implementation of Single Sign On (SSO) for systems in HEC landscape	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
325	BASIC_1.2.21	Provide audit log information to customers	=	HEC Standard Services	By request only to support incident investigations, but not on a regular basis e.g. to monitor administrative activities. Format, content and procedure used will be determined by SAP and by general security and data protection policies.
326		**Homogeneous system copy (aka System refresh)**	=	A homogenous system copy is defined either as 1) a new system which is built as copy from an existing system in a landscape within the same data center or hyperscaler platform or 2) a "data refresh" overwriting the database of an already existing system in the landscape within the same data center or hyperscaler platform. Copies for non-NetWeaver systems need to be evaluated on a case by case basis and is not possible in all cases.	
327	BASIC_1.3.11	Pre-processing tasks, i.e. export tables with 'old' configuration	=	Cloud Application Services ("CAS"). Can be performed by customer.	
328	BASIC_1.3.10	Homogeneous system copy (Planning, preparations, checks, database backup, database restore, technical post processing tasks, test of technical system functionality)	=	HEC Standard Services	Standard fixed service valid for system sizes <=500GB (actual database size) and single node system architecture. System copy for systems >500GB or multi-node architecture are performed on time & material basis.
329	BASIC_1.3.07	Post processing tasks e.g. Embedded Search, BDLS	=	Cloud Application Services ("CAS"). Can be performed by customer.	
330		**Heterogeneous system copy (aka System migration)**	=	A heterogeneous system copy is defined as a new system which is built as copy from an existing system in the landscape within the same data center or hyperscaler platform. Copies for non-NetWeaver systems need to be evaluated on a case by case basis and is not possible in all cases.	
331	BASIC_1.14.01	Heterogeneous system copy	=	HEC Standard Services	Scope, approach and price subject to individual planning depending on circumstances and requirements; change request (CR) required for infrastructure changes.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
332		**Release Management**	=		
333	BASIC_1.5.13	Installation of new entities in the system after initial customer handover during HEC Onboarding (applies to e.g. add-ons and other sorts of additional solution packages, languages, content packages etc.)	=	HEC Standard Services	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.
334	BASIC_1.5.13A	Installation of new software entities in the system after initial customer handover during HEC Onboarding (applies to e.g. add-ons and other sorts of additional solution packages)	=	HEC Standard Services	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.
335	BASIC_1.5.13B	Installation of new content in the system after initial customer handover during HEC Onboarding (applies to e.g. languages, content packages etc.)	=	HEC Standard Services	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.
336	BASIC_1.5.03	Implement SAP Notes and other types of manual corrections (corrections not provided as software correction package) in managed system (notes and corrections required to fix application related issues)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Delineation between "application" and "technical" is defined by this HEC Roles & Responsibilities document; fixing issues that fall into the responsibility of HEC per the R&R are considered "technical" and notes would be applied as defined in the respective task. The topic area of the respective note can only serve as a rough indicator, since only a subset of BC-* topic areas are covered by the HEC standard service. The two areas, where the HEC service mostly applies are BC-CST and BC-DB
337	BASIC_1.5.04	Implement SAP Notes and other types of manual corrections (corrections not provided as software correction package) in managed system (notes required to fix issues related to technical SAP components)	=	HEC Standard Services	Dependent on criticality of repair and only if no appropriate Support Package is available; delineation between "application" and "technical" is defined by the HEC Roles & Responsibilities document; fixing issues that fall into the responsibility of HEC per the R&R are considered "technical" and notes would be applied as defined in the respective task. The topic area of the respective note can only serve as a rough indicator, since only a subset of BC-* topic areas are covered by the HEC standard service. The two areas, where the HEC service mostly applies are BC-CST and BC-DB. Any post installation tasks required as per the SAP note in question which is not technical in nature (e.g. application related settings/manual code creation in customer namespace or manual activities required in SAP namespace) need to be performed by the customer.
338	BASIC_1.5.06	Implementation of patches for system software running on OS level, e.g. SAP kernel	=	HEC Standard Services	May require additional system downtime.
339	BASIC_1.5.21	Implementation of kernel patches using rolling kernel update mechanism	=	HEC Additional Service	To keep any adverse effects on business operations to a minimum when importing a new kernel version, instances are restarted one after the other. This means that during the Rolling Kernel Switch (RKS) procedure at least one application server instance is always available for business operations.
340	BASIC_1.5.09	Implement updates to the managed SAP solution using standard tools and methods	=	HEC Standard Services	The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements. The terminology for such events differs within the SAP portfolio, however frequently used terms in this context are "patch", "Support Package" and the like; this line item also includes the implementation of S/4HANA Feature Pack Stacks (FPS) but does not include the upgrade of S/4HANA to the next major release; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; this line item does not include the usage of more sophisticated update approaches like nZDT/ZDO/Downtime Minimization etc.; Requires standard scheduled downtime to implement. Any post installation tasks required which is not technical in nature (e.g. application related settings/manual code creation in customer namespace or manual activities required in SAP namespace) need to be performed by the customer.

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
341	BASIC_1.5.11	Implement updates to the managed SAP solution using advanced tools and methods which are part of the HEC Maintenance Downtime Minimization Service to minimize required downtime	=	HEC Additional Service	The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements. The terminology for such events differs within the SAP portfolio, however frequently used terms in this context are "patch", "Support Package" and the like; this line item also includes the implementation of S/4HANA Feature Pack Stacks (FPS), but does not include the upgrade of S/4HANA to the next major release; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; Note: any implementation of updates may require additional system downtime or pre-requisites for system resources to include but not limited to additional memory, CPU, and a QA or Pre-production system to perform testing and validation. System resources not available in the existing customer landscape need to be provided via a change request (CR) and may result in additional service fees. Requires minimal scheduled downtime to implement. Any post installation tasks required which is not technical in nature (e.g. application related settings/manual code creation in customer namespace or manual activities required in SAP namespace) need to be performed by the customer.
342	BASIC_1.5.10	Ongoing maintenance of system languages, e.g. performing language fill-up	=	HEC Standard Services	
343	BASIC_1.1.01	Version upgrade of SAP Software: Upgrade planning and coordination	=	Cloud Application Services ("CAS"). Can be performed by customer.	The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements; besides upgrades this also includes the implementation of SAP Enhancement Packages; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace.
344	BASIC_1.5.07	Version upgrade of SAP Software: Execute technical upgrade tasks	=	HEC Standard Services	The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements; besides upgrades this also includes the implementation of SAP Enhancement Packages; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; 3rd Party software excluded.
345	BASIC_1.5.22	Version upgrade/update of SAP Software: Pre- and Post BASIS Tasks	=	Cloud Application Services ("CAS"). Can be performed by customer.	Examples for this service include, run simplification check; unlock objects; remove inactive objects; implement upgrade related notes; run modification adjustment for technical issues. The term "version upgrade" denotes the change to a new major release of the hosted SAP software, typically including functional enhancements; besides upgrades this also includes the implementation of SAP Enhancement Packages; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace.
346	BASIC_1.5.08	Execute application related technical tasks as part of Release and Change Management (e.g. application testing, adjustments, content/functional activation)	=	Cloud Application Services ("CAS"). Can be performed by customer.	

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
347	BASIC_1.5.20	Conversion of SAP ERP and SAP BW systems to SAP S/4HANA and SAP BW4/HANA	<>	HEC Additional Service	"Conversion" process denotes the switch or movement from an older hosted SAP ERP software version to an SAP S/4 release, and typically involves SAP Readiness Check, Simplification Items Catalog, Business function (de)activation with tools like SUM/DMO, Custom code optimization, functional/integration testing etc. This task is limited to services which cannot be performed by the customer e.g. SUM tool, activities in client 000 etc. Overall responsibility for SAP S/4HANA conversion which includes (but not limited to) SAP Readiness check, simplification items, Maintenance planner, Application tasks, custom code adjustment, functional/integration testing etc. for conversion process is the responsibility of the customer. This line item does not include the usage of more sophisticated update approaches like nZDT/ZDO/Downtime Minimization etc. Standard scheduled downtime is required to implement. Any post installation tasks required which is not technical in nature (e.g. application related settings/manual code creation in customer namespace or manual activities required in SAP namespace, SPAU/SPDD, simplification items etc.) need to be performed by the customer. Depending on complexity of conversion involvement of SAP Consulting might be required.
348		**Proactive services**	=		
349	BASIC_1.7.02	Prepare SAP service sessions session by maintaining RTCCTOOL	<>	HEC Standard Services	Performed only for productive systems; activities which have to be performed within the customer's SAP Solution Manager are the customer's responsibility.
350	BASIC_1.7.03	Analysis of SAP Service Session reports (incl. EarlyWatch Alert) for systems operated in SAP HEC for findings and recommendations regarding aspects within the service scope of SAP HEC (technical operations)	<>	HEC Standard Services	Performed only for productive systems.
351	BASIC_1.7.09	Analysis of SAP Service Session reports (incl. EarlyWatch Alert) for systems operated in SAP HEC. Provide recommendations for changes related to SAP application (outside technical operations scope of HEC standard service)	<>	Cloud Application Services ("CAS"). Can be performed by customer.	Performed only for productive systems.
352		**System performance management**	=		
353	BASIC_1.12.01	Initial assessment of system performance issues	<>	HEC Standard Services	HEC performs an initial assessment of identified or reported system performance issues to identify potential root causes. The primary scope of this assessment is to quickly check performance relevant technical building blocks of the HEC service. This may include infrastructure, database and technical SAP stack for root causes and based on the result, determine whether the root cause is likely to be technical or application related.
354	BASIC_1.12.03	Troubleshoot SAP system performance issues (technical root causes within HEC service scope)	<>	HEC Standard Services	Based on the result of the initial assessment; troubleshooting by HEC is only performed in situations caused by technical issues within the service scope of HEC and where the system performance lies outside usual and expectable behavior (e.g. as it has shown in the past in comparable load situations within HEC).
355	BASIC_1.12.02	Performance and Benchmark Service	<>	HEC Optional Services	This is an optional service package that includes the definition of performance metrics and measurements against those to identify deviations in system behavior; a detailed service description is available.
356	BASIC_1.7.06	Analyze and troubleshoot performance issues (root causes outside HEC service scope and application related root causes)	=	Cloud Application Services ("CAS"). Can be performed by customer.	In some situations HEC might be able to support the customer using an HEC Application Management as a CAS service.
357	BASIC_1.12.04	Execute performance tuning	=	HEC Additional Service	Improve the performance of a system; tuning activities can result in service requests related to other line items in this document, e.g. parameter changes, which are partly covered by the HEC standard service. Performed only for productive systems.

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
358	BASIC_1.7.08	Review and optimize customer code to improve system performance and stability	=	HEC Excluded Tasks	
359		**Certificate Handling**	=		
360	BASIC_1.11.01	Generate Certificate Signing Request (CSR)	=	HEC Standard Services	Except LoadBalancers, Web Dispatchers, Data Services, SAP Cloud Platform Integration - Data Services Agent, BO and other systems; for these systems HEC will generate the CSR and hand it over to the customer for further processing.
361	BASIC_1.11.09	Generate Certificate Signing Request (CSR) for LoadBalancers, Web Dispatchers, Data Services and BO systems	=	HEC Standard Services	
362	BASIC_1.11.02	Send request to Certificate Authority	=	HEC Excluded Tasks	
363	BASIC_1.11.08	Creating SSL server / client identity with key pair	=	HEC Standard Services	
364	BASIC_1.11.04	System (OS Level) configuration to enable SSL/TLS	=	HEC Standard Services	
365	BASIC_1.11.05	System (Application Level) configuration to enable SSL/TLS	=	HEC Standard Services	
366	BASIC_1.11.07	Implement signed certificate for LoadBalancers, Web Dispatchers, Data Services, SAP Cloud Platform Integration - Data Services Agent and BO systems	=	HEC Standard Services	
367	BASIC_1.11.10	Implement other signed certificate to managed system	=	HEC Standard Services	Other than LoadBalancers, Web Dispatchers, Data Services, SAP Cloud Platform Integration - Data Services Agent, BO, and other systems.
368	BASIC_1.11.06	Monitor validity period of certificates	=	Cloud Application Services ("CAS"). Can be performed by customer.	Customer to provide URL for certificate check (e.g. FLP). Manual monitoring; effort based per execution.

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
369		**Disaster Recovery**	**=**		
370	BASIC_1.9.01	Implement disaster recovery setup according to architecture blueprint and contractual specifications. Test HEC internal data center and technical system infrastructure	<>	HEC Optional Services	Performed only for productive systems; only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form. HEC internal testing requires additional downtime.
371	BASIC_1.9.02	Develop and use disaster recovery procedures for database and file system replication only.	<>	HEC Optional Services	Performed only for productive systems; only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form.
372	BASIC_1.9.03	Ongoing management of disaster recovery architecture: monitoring of data replication to secondary site including troubleshooting	<>	HEC Optional Services	Performed only for productive systems; only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form.
373	BASIC_1.9.04	Ongoing management of disaster recovery architecture: maintenance and change management for systems at secondary site to ensure system consistency including troubleshooting	<>	HEC Optional Services	Performed only for productive systems; only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form.
374	BASIC_1.9.05	Develop and maintain disaster recovery procedures for those areas and aspects of the service which are in customer responsibility	<>	HEC Excluded Tasks	Included customer infrastructure, connectivity to HEC, interfaces (including RFC connections, connection details in other integrated systems), organizational measures and processes etc.
375	BASIC_1.9.06	Execute failover during disaster recovery test (DB, application and cnames)	<>	HEC Optional Services	Note: DB inserts/updates/deletes done during testing will be lost. Performed only for productive system; on request; maximum one (1) per calendar year (any further test will be charged as billable service); only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form; customer is responsible for creation and execution of functional tests and customer must support in certain technical aspects, e.g. regarding interfaces, connectivity etc.
376	BASIC_1.9.10	Execute failover during disaster recovery test (DB, application and cnames) - additional test	<>	HEC Additional Service	Additional test. Note: DB inserts/updates/deletes done during testing will be lost. Performed only for productive system; on request; maximum one (1) per calendar year (any further test will be charged as billable service); only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form; customer is responsible for creation and execution of functional tests and customer must support in certain technical aspects, e.g. regarding interfaces, connectivity etc.
377	BASIC_1.9.09	Execute online disaster recovery tests (data center and technical system infrastructure only); primary systems remain accessible	<>	HEC Additional Service	Performed only for productive system; on request; only possible to be delivered if disaster recovery solution is part of the contract/SOW/Order Form; customer must support in certain technical aspects, e.g. regarding interfaces, connectivity etc.
378	BASIC_1.9.07	Execute productive failover in case of an officially declared disaster by HEC provider - all HA/DR architecture scenarios.	<>	HEC Optional Services	True disaster declaration for all HA/DR architecture scenarios. "Disaster" shall describe a catastrophic event causing widespread damage/destruction, typically not restricted to one individual system or landscape but larger parts of the overall infrastructure; therefore disaster recovery is no measure to overcome outages of isolated systems due to hardware or software incidents; performed only for productive systems; only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form.
379	BASIC_1.9.11	Mixed HA/DR: Execute productive failover for a specific SID and invert replication vector	<>	HEC Optional Services	Full productive failover. For Mixed HA/DR architecture scenarios in SAP datacenters. Maximum of one (1) customer requested failover per calendar year is included. Failovers which are the result of SAP-declared disasters do not count against maximum. Additional customer requested failovers will be charged via EMS. Only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
380	BASIC_1.9.12	Mixed HA/DR: Execute productive failover for a specific SID and invert replication vector - additional customer requests	<>	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	For testing purposes. Full productive failover. For Mixed HA/DR architecture scenarios in SAP datacenters. Maximum of one (1) customer requested failover per calendar year is included. Failovers which are the result of SAP-declared disasters do not count against maximum. Additional customer requested failovers will be charged via EMS. Only included in HEC service if disaster recovery solution is part of the contract/SOW/Order Form.
381		Operations Extension	=	These services provide possible extensions to areas of Incident, Change and Event Management beyond the standard scope of HEC services	
382	BASIC_1.15.01	Incident Management: Troubleshooting of technical/non-functional incidents not included in HEC Standard Services as per R&R Definition	=	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.
383	BASIC_1.15.02	Change Management: Changes of technical system configuration not included in HEC Standard Services as per R&R Definition	=	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.
384	BASIC_1.15.03	Event management: Monitor technical/non-functional event types not included in HEC Standard Service as per R&R Definition	=	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.
385	BASIC_1.15.04	Service Request Fulfillment: Perform Service Request Fulfillment for technical/non-functional task not included in HEC Standard Service as per R&R Definition	=	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.
386		E - NetWeaver Operations (ABAP and JAVA)	=	Depending on technical conditions some tasks listed in this section are applicable to only one of the two platforms (NW ABAP or NW JAVA)	
387		General NetWeaver Operations	=		
388	TO_NWABAP_1.1.04	Analyze SAP system log and fix technical failures included in scope of services	=	HEC Standard Services	May require customer assistance
389	TO_NWABAP_1.1.06	Monitor update processes within SAP software to avoid system operations issues	=	HEC Standard Services	HEC informs customer of update process problems; RCA methods provided by SAP Enterprise Support may be used to find application related root causes for updates.
390	TO_NWABAP_1.1.07	Analyze update terminations, determine business impact and appropriate action	=	Cloud Application Services ("CAS"). Can be performed by customer.	With regards to application issues and impact.
391	TO_NWABAP_1.1.08	Clean up terminated updates	=	Cloud Application Services ("CAS"). Can be performed by customer.	
392	TO_NWABAP_1.1.10	Analyze lock entries, determine business impact and appropriate action	=	Cloud Application Services ("CAS"). Can be performed by customer.	
393	TO_NWABAP_1.1.11	Check/clear lock entries	=	Cloud Application Services ("CAS"). Can be performed by customer.	
394	TO_NWABAP_1.1.12	Check for ABAP dumps to detect serious system issues	<>	HEC Standard Services	HEC informs customer in the event of serious application related issues that need to be resolved by the customer. Dumps relevant to HEC's responsibility will be resolved by HEC.
395	TO_NWABAP_1.1.22	Regular ABAP dump check and classification	=	Cloud Application Services ("CAS"). Can be performed by customer.	Including application related dumps.
396	TO_NWABAP_1.1.23	Analyze SAP application log and provide recommendations on fixing failures	=	Cloud Application Services ("CAS"). Can be performed by customer.	
397	TO_NWABAP_1.1.24	Reorganize qRFC/tRFC queues	=	Cloud Application Services ("CAS"). Can be performed by customer.	
398	TO_NWABAP_1.1.25	Regularly check fastest growing tables in the SAP system and provide recommendations for archiving or reorganization	=	Cloud Application Services ("CAS"). Can be performed by customer.	
399	TO_NWABAP_1.1.13	Administer SAP Logon Groups	=	HEC Standard Services	The customer may perform this activity; if HEC is requested to perform the task, the design/definition must be provided by customer.

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
400	TO_NWABAP_1.1.26	Creation/Update/Change of the System-PSE (Personal Security Environment)	=	HEC Standard Services	Customers may decide to perform this task themselves for convenience.
401	TO_NWABAP_1.1.16	Implement/update tools to ensure readiness for SAP support services	=	HEC Standard Services	
402	TO_NWABAP_1.1.20	Definition of archiving strategy	=	HEC Excluded Tasks	
403	TO_NWABAP_1.1.21	Execution and monitoring of archiving process	=	Cloud Application Services ("CAS"). Can be performed by customer.	Increased infrastructure consumption is subject to a CR and additional service fees. Manual monitoring; effort based per execution. This task is only for execution of the archiving programs. The archiving setup, retention configuration, investigate / troubleshooting of the unarchivable documents/objects is customer's responsibility.
404	TO_NWABAP_1.1.17	Management of Web Service Runtime (WSRT)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Activation of WSRT in client 000 is done by HEC on request and free of charge
405	TO_NWABAP_1.1.18	Configure technical RFC connections (TA SM59) to central systems managed by SAP used for system operations	=	HEC Standard Services	Technical RFC connection = generic RFC connection required for all HEC based systems the same way, e.g. for HEC monitoring configuration.
406	TO_NWABAP_1.1.19	Configure RFC connections (TA SM59) to technical systems managed by the customer and any application-related RFC connection	=	Cloud Application Services ("CAS"). Can be performed by customer.	
407	TO_J2EE_1.1.01	Troubleshooting of SAP J2EE in case of technical issues	=	HEC Standard Services	For technical issues only; application related problems must be resolved by the customer.
408	TO_J2EE_1.1.02	SAP J2EE: adjust/configure Java applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	
409		SAP Client Operations	=		
410	TO_NWABAP_1.2.01	Copy client within one SAP System (including analysis and resolution of technical issues)	=	HEC Standard Services	500GB upper limit, above that threshold, only system copies are performed because of technical restrictions.
411	TO_NWABAP_1.2.06	Delete client within one SAP System (including analysis and resolution of technical issues)	=	HEC Standard Services	
412	TO_NWABAP_1.2.02	Perform client export/import or remote client copy between SAP systems (including analysis and resolution of technical issues)	=	HEC Standard Services	500GB upper limit, above that threshold, only system copies are performed because of technical restrictions.
413	TO_NWABAP_1.2.07	Pre-processing tasks, i.e. suspend jobs, lock users, export tables with 'old' configuration	=	Cloud Application Services ("CAS"). Can be performed by customer.	
414	TO_NWABAP_1.2.08	Post processing tasks, i.e. Enterprise Search, Fiori Launchpad, unlock user, release jobs)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
415	TO_NWABAP_1.2.05	Investigate and resolve application related issues (e.g. with certain database tables and fields)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
416		Interface Administration	=		
417	TO_NWABAP_1.3.24	Creation, execution, monitoring and troubleshooting of batch input sessions	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
418	TO_NWABAP_1.3.25	Configuration of interface related functions (e.g. IDOCs, interface scripts and jobs, qRFC/tRFC/bgRFC, ALE scenarios etc.)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
419	TO_NWABAP_1.3.26	Monitoring of interfaces and interface related functions	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
420	TO_NWABAP_1.6.03	Establish trust relationships between SAP NW ABAP systems	=	Cloud Application Services ("CAS"). Can be performed by customer.	
421		Job Scheduling	=		
422	TO_NWABAP_1.4.09	Schedule (via SM36 --> standard jobs), check and monitor standard SAP system batch jobs to facilitate best-practice housekeeping of SAP system	=	HEC Standard Services	Per SAP guidelines as defined in SAP Note 16083; additional SAP standard jobs to be reviewed and agreed with customer.
423	TO_NWABAP_1.4.14	Define production job schedule and dependencies based on business requirements	=	Cloud Application Services ("CAS"). Can be performed by customer.	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
424	TO_NWABAP_1.4.15	Administration of application batch jobs: - Job monitoring - Troubleshooting according to troubleshooting handbook	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
425		**Transport Management**	=		
426	TO_NWABAP_1.5.10	Create and maintain transport domain in client 000 and transport directory	=	HEC Standard Services	Migrating the transport method from HTC to HTA is not included in this task.
427	TO_NWABAP_1.5.15_AE	Initial setup of SAP transport management system (TMS) and configure transport routes	=	HEC Standard Services	
428	TO_NWABAP_1.5.11	Maintain SAP transport management system and configure transport routes and any further configuration (automatic import, scheduled import etc.)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
429	TO_NWABAP_1.5.12	Initial configuration of Transport-based correction instructions (TCI) in client 000	=	HEC Standard Services	
430	TO_NWABAP_1.5.13	Implement SAP Note Transport-based correction instructions (TCI)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
431	TO_NWABAP_1.5.01	Setup of CTS+	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	OS access required.
432	TO_NWABAP_1.5.02	Transfer and release of transport orders	=	Cloud Application Services ("CAS"). Can be performed by customer.	Before importing critical transports the customer should inform HEC and perform the transport as a scheduled activity.
433	TO_NWABAP_1.5.03	Execute transports to move objects between SAP systems	=	Cloud Application Services ("CAS"). Can be performed by customer.	
434	TO_NWABAP_1.5.04	Troubleshooting SAP Transport Management System	=	HEC Standard Services	Only for technical transport problems, not related to problems due to the content of the transports, e.g. locked objects.
435	TO_NWABAP_1.5.08	Adjustment of repository objects as part of software changes	=	Cloud Application Services ("CAS"). Can be performed by customer.	Execution of adjustments in SPDD/SPAU for SAP objects. Customer objects in SPDD/SPAU require customers decision during execution.
436	TO_NWABAP_1.5.14	Setup and configuration of CHaRM	=	Cloud Application Services ("CAS"). Can be performed by customer.	
437	TO_NWABAP_1.5.09	Testing and acceptance of object changes	=	HEC Excluded Tasks	
438		**Output Management**	=		
439	TO_NWABAP_1.7.01	Create, change and delete printers within SAP solution	=	Cloud Application Services ("CAS"). Can be performed by customer.	HEC would only support printer types contained in SAP published guidelines.
440	TO_NWABAP_1.7.02	Analyze faulty output requests (transaction SP01)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
441	TO_NWABAP_1.7.03	Reorganize SAP spool system to keep system clean	=	HEC Standard Services	Via SAP standard batch job.
442	TO_NWABAP_1.7.04	Design and implementation of print forms	=	HEC Excluded Tasks	
443	TO_NWABAP_1.7.05	Lock/unlock SAP printers	=	Cloud Application Services ("CAS"). Can be performed by customer.	
444	TO_NWABAP_1.7.06	Check spooler table consistency to prevent printing issues	=	HEC Standard Services	Via SAP standard batch job.
445	TO_NWABAP_1.7.07	Configuration of virtual spool (load balancing between spool processes)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
446	TO_NWABAP_1.7.08	Troubleshooting technical spool- and print-problems (within the SAP system)	=	HEC Standard Services	Problems caused outside the SAP system/solution scope must be solved by the customer.
447	TO_NWABAP_1.7.09	Local printing and support	<>	not offered	Local printing requires printer drivers to be installed on HEC servers which is not offered in HEC due to availability of drivers in SUSE repositories, security restrictions, and possible performance degradation.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
448		**F - Server Provisioning (aka IaaS)**	=	**Service to provide server platform, e.g. to install and run non-SAP applications (IaaS); this section does not apply to server infrastructure used to run the managed SAP system landscape. Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).**	
449		**Security Planning**	=		
450	TO_SPROV_1.4.01	Provide application communication requirements	=	HEC Excluded Tasks	
451	TO_SPROV_1.4.02	Determine communication and security requirements	=	HEC Excluded Tasks	
452	TO_SPROV_1.4.03	Create and maintain security policies	=	HEC Excluded Tasks	
453	TO_SPROV_1.4.04	Determine security strategy and implementation plans	=	HEC Excluded Tasks	
454	TO_SPROV_1.4.05	Monitor and assess security strategies	=	HEC Excluded Tasks	
455		**Hardware Operations**	=		
456	TO_SPROV_1.5.03	Plan and conduct HEC infrastructure maintenance	=	HEC Standard Services	
457		**Server Management**	=		
458	TO_SPROV_1.6.11	Sizing of server infrastructure	=	HEC Excluded Tasks	Virtual machines provided as specified in the SOW/Order Form; customer must ensure that sizing is accurate and provided VMs fulfil the requirements of the intended use case.
459	TO_SPROV_1.6.01	Provide server infrastructure	=	HEC Standard Services	
460	TO_SPROV_1.6.02	Provide licenses for OS	=	HEC Standard Services	Licenses will be provided and charged by HEC.
461	TO_SPROV_1.6.03	Basic operating system installation	=	HEC Standard Services	Supported OS: SUSE LINUX and MS Windows Server (most up-to-date HEC versions).
462	TO_SPROV_1.6.04	Installation of OS patches and security updates	=	HEC Excluded Tasks	Server will be shipped with the latest available security patch level, after hand over customer is responsible for updates.
463	TO_SPROV_1.6.05	Installation of antivirus software and patterns updates	=	HEC Excluded Tasks	Customer is responsible for Antivirus installation and virus pattern updates on a daily basis.
464	TO_SPROV_1.6.06	Antivirus software licenses	=	HEC Excluded Tasks	
465	TO_SPROV_1.6.07	Perform scheduled startup/shutdown of hardware	=	HEC Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).
466	TO_SPROV_1.6.08	Restart the hardware after failure	=	HEC Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).
467	TO_SPROV_1.6.09	Monitoring of hardware on hypervisor level	=	HEC Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).
468	TO_SPROV_1.6.10	Monitoring of operating system of provided OS instances	=	HEC Excluded Tasks	
469		**Storage Management**	=		
470	TO_SPROV_1.7.01	Initial setup and ongoing management of storage	=	HEC Standard Services	Storage capacity will be provided as contracted based on customer specifications; technical limitations for storage volume that can be provided under this service apply (details specified in the respective service description).
471	TO_SPROV_1.7.02	Manage data files/file systems	=	HEC Excluded Tasks	
472	TO_SPROV_1.7.03	Request storage area size/ size extensions for the backup storage area. Select and execute backup according to application/ customer needs and store backup data into the designated backup storage area. Ensure housekeeping of the backup storage area.	=	HEC Excluded Tasks	
473	TO_SPROV_1.7.04	Provide an NFS or SMB share as backup storage area to allow storage of customer defined backups. Backup storage area sizing is done based on customer input as contracted.	=	HEC Standard Services	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
474	TO_SPROV_1.7.06	Mount of file system from managed server to an IaaS server	=	HEC Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler). Applicability to a given customer landscape needs to be checked with the respective HEC Account Manager; customers must not execute tasks using this mount that put a risk to performance or stability of the managed HEC infrastructure (e. g. network services, large volume data syncs etc.).
475	TO_SPROV_1.7.05	Scale storage capacity	=	HEC Optional Services	
476		**Application Management**	=		
477	TO_SPROV_1.8.01	Define application requirements	=	HEC Excluded Tasks	
478	TO_SPROV_1.8.02	Provide customer specific software licenses	=	HEC Excluded Tasks	Customer must make sure that they hold valid licenses to run the installed software in an environment such as SAP HEC
479	TO_SPROV_1.8.03	Application installation	=	HEC Excluded Tasks	
480	TO_SPROV_1.8.04	Application operations	=	HEC Excluded Tasks	
481	TO_SPROV_1.8.05	Installation of patches and security updates	=	HEC Excluded Tasks	Customer is responsible for software lifecycle management
482	TO_SPROV_1.8.06	Application monitoring	=	HEC Excluded Tasks	
483		**IaaS VM Snapshot (offline image backup)**	=		
484	TO_SPROV_1.10.01	Service Setup	=	HEC Optional Services	
485	TO_SPROV_1.10.02	Request additional storage for copy of block device	=	HEC Excluded Tasks	This Volume (additional storage) needs to be provisioned to accommodate the block device backup temporarily before moving it to the standard backup solution.
486	TO_SPROV_1.10.04	Snapshot of IaaS	=	HEC Optional Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler). Performed on customer request only; shutdown, rsync block device and copy to the standard backup solution. Maximum of two (2) snapshots per month. Minimum duration of three (3) months required for snapshot service and storage (if required). Any storage required can be extended through the contract duration.
487	TO_SPROV_1.10.05	Restart server and inform customer	=	HEC Optional Services	After successful restart of VM, inform customer and update the ticket.
488	TO_SPROV_1.10.06	Start required applications on server	=	HEC Excluded Tasks	Customer needs to make sure that applications are started after the snapshot operation.
489		**Disaster Recovery**	=		
490	TO_SPROV_1.9.01	Provide VM and related storage in the secondary data center	<>	HEC Optional Services	Only for those IaaS servers explicitly specified in the contract as relevant for DR.
491	TO_SPROV_1.9.02	Setup application on the dedicated VM in the secondary data center. Configure file system replication between primary and the secondary data center across the customer WAN network. Monitor the replication status and perform necessary operation activities.	<>	HEC Excluded Tasks	
492		**G - Cloud Application Services**	**=**		
493		**Cloud Application Services - Reactive Services**	=	**Only available for managed systems. Service delivery requires initial scoping for relevant application area before tasks can be**	
494	CAS_1.1.01	Incident Management: Troubleshooting of functional incidents in SAP applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	
495	CAS_1.1.02	Problem Management: root cause analysis and resolution of problems in SAP applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	
496	CAS_1.1.03	Service Request Fulfillment: Perform Service Request Fulfillment for functional tasks in SAP applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	
497	CAS_1.1.04	Event Management: Monitor functional event types in SAP applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	
498	CAS_1.1.05	Change Management: Changes of functional configuration in SAP applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	
499		**Cloud Application Services - Proactive Services**	=		
500	CAS_1.2.01	Continuous Operations	=	Cloud Application Services ("CAS"). Can be performed by customer.	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
501	CAS_1.2.02	Extended Application Security Operations	=	Cloud Application Services ("CAS"). Can be performed by customer.	
502	CAS_1.2.03	Managed Operations Control Center	=	Cloud Application Services ("CAS"). Can be performed by customer.	
503	CAS_1.2.04	Test Management and Execution	=	Cloud Application Services ("CAS"). Can be performed by customer.	
504	CAS_1.2.05	Deployment Management	=	Cloud Application Services ("CAS"). Can be performed by customer.	
505	CAS_1.2.06	Operations Improvement	=	Cloud Application Services ("CAS"). Can be performed by customer.	
506	CAS_1.2.07	Business Improvement	=	Cloud Application Services ("CAS"). Can be performed by customer.	
507	CAS_1.2.08	Data Integration & Lifecycle Management	=	Cloud Application Services ("CAS"). Can be performed by customer.	
508		**X1 - 3rd Party Software**	**=**		
509		**3rd Party Software (e.g. partner add-ons, libraries, client software; not applicable to solutions explicitly shown as managed service in other sections of this document and the HEC contract for the customer)**	**=**	**Customer must ensure proper licensing of the respective 3rd party software allowing its usage in HEC; 3rd party software in the context of HEC is defined as any software solution for which the intellectual property is not owned by SAP; the technical and operational compatibility of every 3rd Party Solution with HEC has to be individually checked by the customer; HEC will not take responsibility for negative effects on the underlying system and infrastructure platform managed by HEC which are caused by any such 3rd Party Solution**	
510		**Managed 3rd Party ABAP add-ons**	**=**	**For selected 3rd party NW ABAP add-ons which are listed on the SAP license price list HEC offers a lightweight managed service, which only includes installation of the add-on and subsequent updates; the list of supported solutions is subject to change; supported add-on needs to be explicitly specified in the HEC contract**	
511	TO_PA_1.1.01	Installation	=	HEC Standard Services	
512	TO_PA_1.1.02	Configuration	=	HEC Excluded Tasks	
513	TO_PA_1.1.03	Application monitoring	=	HEC Excluded Tasks	
514	TO_PA_1.1.04	Apply updates	=	HEC Standard Services	
515	TO_PA_1.1.05	Application troubleshooting including engagement with the partners support organization	=	HEC Excluded Tasks	
516	TO_PA_1.1.06	Uninstallation of ABAP Add-ons	=	HEC Standard Services	
517		**Unmanaged 3rd Party ABAP add-ons**	**=**		
518	TO_PA_1.2.01	Installation	=	HEC Excluded Tasks	
519	TO_PA_1.2.02	Configuration	=	HEC Excluded Tasks	
520	TO_PA_1.2.03	Application monitoring	=	HEC Excluded Tasks	
521	TO_PA_1.2.04	Apply updates	=	HEC Excluded Tasks	
522	TO_PA_1.2.05	Application troubleshooting including engagement with the partners support organization	=	HEC Excluded Tasks	
523		**Other unmanaged 3rd Party Software**	**=**	**Any type of 3rd party software which is requested to be installed in total or in parts on the managed HEC infrastructure is subject to prior evaluation by HEC. Details of this process and conditions are documented in the respective HEC 3rd party software policies.**	
524	TO_PA_1.3.01	3rd party software evaluation	=	HEC Standard Services	This task can take several weeks to be completed. Results of previously completed evaluations will be reused and lead to lower process runtimes.
525		**X2 - Business Connector**	**=**		
526		**Operations**	**=**		
527	TO_BC_1.1.04	Reorganization of Message Store	=	Cloud Application Services ("CAS"). Can be performed by customer.	
528		**X3 - SAP CO-PA Accelerator**	**=**		
529		**Operations**	**=**		
530	TO_CO-PA_1.1.01	Determine initial data load procedure	=	HEC Excluded Tasks	
531	TO_CO-PA_1.1.02	Perform initial data load procedure	=	HEC Excluded Tasks	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
532	TO_CO-PA_1.1.03	CO-PA customizing	=	HEC Excluded Tasks	
533	TO_CO-PA_1.1.04	Setup DB connection to HANA	=	HEC Excluded Tasks	
534	TO_CO-PA_1.1.05	Setup CO-PA Jobs for data replication	=	HEC Excluded Tasks	
535	TO_CO-PA_1.1.06	Monitor CO-PA Jobs for data replication	=	HEC Excluded Tasks	

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
536		**X4 - SAP Data Services (DS)**	=		
537		**Operations**	=		
538	TO_DS_1.1.22	Authorization - Users and Rights Management	=	Cloud Application Services ("CAS"). Can be performed by customer.	
539	TO_DS_1.1.06	Create/Modify Data Services jobs	=	Cloud Application Services ("CAS"). Can be performed by customer.	
540	TO_DS_1.1.07	Schedule Data Services jobs	=	Cloud Application Services ("CAS"). Can be performed by customer.	
541	TO_DS_1.1.08	Configure database connections	=	Cloud Application Services ("CAS"). Can be performed by customer.	
542	TO_DS_1.1.09	Monitor jobs	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
543	TO_DS_1.1.10	Repository backup DS & BOE	=	HEC Standard Services	
544	TO_DS_1.1.11	Delete batch job history	=	Cloud Application Services ("CAS"). Can be performed by customer.	
545	TO_DS_1.1.12	Verify that job and access servers are running	=	HEC Standard Services	
546	TO_DS_1.1.13	Remove obsolete repository contents	=	HEC Standard Services	
547	TO_DS_1.1.14	Troubleshooting issues with DS Jobs	=	Cloud Application Services ("CAS"). Can be performed by customer.	
548	TO_DS_1.1.23	Create/Manage additional repositories	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	System comes with default repositories, if more repositories are requested, these will be delivered via additional service charge.
549	TO_DS_1.1.26	Backup: On-Demand - BI Database and File Repo Sync	=	HEC Additional Service	
550	TO_DS_1.1.27	Restore: On-Demand - BI Database and File Repo Sync	=	HEC Additional Service	
551	TO_DS_1.1.28	Authentication setup and Single Sign On (SSO) configuration	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
552	TO_DS_1.1.29	Installation and Configuration of Data Services Adapters	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
553	TO_DS_1.1.30	Add and configure additional Job Servers/ Job Groups for load balancing	=	HEC Optional Services	Depending on sizing, additional infrastructure may be required.
554	TO_DS_1.1.31	Configure Runtime Resources	=	HEC Standard Services	
555	TO_DS_1.1.32	Configure SMTP Email	=	HEC Standard Services	
556	TO_DS_1.1.33	Starting and Stopping Services	=	HEC Standard Services	
557	TO_DS_1.1.34	Enhanced Change and Transport System (CTS+) Integration Setup	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
558	TO_DS_1.1.35	Configure transports via Data Services (DS) Object Promotion Management	=	Cloud Application Services ("CAS"). Can be performed by customer.	
559	TO_DS_1.1.36	Backup Data Services Repository using Import/Export Tool	=	Cloud Application Services ("CAS"). Can be performed by customer.	
560		**X5 - SCIC Operations**	=		
561		**Operations**	=		
562	TO_SCIC_1.1.03	Setup initial SCIC of source system	=	Cloud Application Services ("CAS"). Can be performed by customer.	e.g. setup of secondary database connection / RFC.
563	TO_SCIC_1.1.04	Setup LiveCache replication jobs in source system	=	Cloud Application Services ("CAS"). Can be performed by customer.	
564	TO_SCIC_1.1.06	Monitor LiveCache replication jobs in customer system	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
565	TO_SCIC_1.1.09	Manage end users with HANA Studio	=	Cloud Application Services ("CAS"). Can be performed by customer.	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
566		**X6 - SAP BusinessObjects Business Intelligence (BI)**	=		
567		**Operations**	=		
568	TO_BI_1.1.06	Backup (Full content backup / BIAR backup)	=	HEC Standard Services	
569	TO_BI_1.1.07	Scan / Repair and compact all repository errors	=	HEC Standard Services	
570	TO_BI_1.1.11	Clean-up empty directories created for Repository Diagnostic Tool	=	HEC Standard Services	
571	TO_BI_1.1.26	Cache Clean-up and Maintenance - Tomcat, Web Intelligence, Log Files	=	HEC Standard Services	
572	TO_BI_1.1.17	Program Object Actions: Import and Execution	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
573	TO_BI_1.1.18	Promote/deploy BI objects between environments	=	Cloud Application Services ("CAS"). Can be performed by customer.	
574	TO_BI_1.1.19	Create, rename, remove connections and Universes	=	HEC Excluded Tasks	
575	TO_BI_1.1.21	Provide user access and maintain authorizations	=	Cloud Application Services ("CAS"). Can be performed by customer.	
576	TO_BI_1.1.47	SAML configuration	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
577	TO_BI_1.1.27	Deploy templates and system configurations for hardware changes	=	HEC Standard Services	
578	TO_BI_1.1.29	Auditing/Monitoring Driver Setup and configuration for Audit reporting	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
579	TO_BI_1.1.30	Perform ERP Integration Setup and Configuration	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
580	TO_BI_1.1.33	Backup: On-Demand - BI Database and File Repo Sync	=	HEC Additional Service	
581	TO_BI_1.1.34	Restore: On-Demand - BI Database and File Repo Sync	=	HEC Additional Service	
582	TO_BI_1.1.35	Authentication setup and Single Sign On SSO configuration	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
583	TO_BI_1.1.36	Configure Cryptography Settings	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
584	TO_BI_1.1.37	Configure Web Application - Reverse Proxy Settings	=	HEC Standard Services	
585	TO_BI_1.1.38	Add and configure additional BI servers for load balancing	=	HEC Optional Services	Additional infrastructure may be required.
586	TO_BI_1.1.39	Manage Server Process and Server Groups	=	Cloud Application Services ("CAS"). Can be performed by customer.	
587	TO_BI_1.1.40	Setup/Support technical tasks for BI Report Version Management	=	HEC Standard Services	Customer responsible for maintaining report versions.
588	TO_BI_1.1.41	Enhanced Change and Transport System (CTS+) Integration Setup	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
589		**X7 - SAP PI**	=		
590		**SAP PI Implementation**	=		
591	TO_PI_1.1.01	Installation of adapters and software components provided by SAP	=	HEC Standard Services	Included only for items explicitly specified in the HEC contract/Order Form. This is valid also for additional offerings from SAP such as: ADAPTERS for SAP NW PI 1.1, SAP NW Process Integration, business-to-business add-on 1.0, SAP NW Process Integration Secure Connectivity Add-on 1.0. This does not include efforts for content handling like the import of TPZ files into the ESR.
592	TO_PI_1.1.02	Installation of adapters provided by external partners	=	HEC Standard Services	Must provide adapter software and licenses. This does not include efforts for content handling like the import of TPZ files into the ESR.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
593	TO_PI_1.1.03	Configuration of the required system connections to partner systems	=	Cloud Application Services ("CAS"). Can be performed by customer.	Time & material basis for changes in network setup (routers, firewalls access lists). Customer must provide network connections to target systems.
594	TO_PI_1.1.04	Creation of SSL views and PSEs	=	HEC Excluded Tasks	
595		SAP PI Operations	=		
596	TO_PI_2.1.02	Monitor application-specific PI functions, e.g. messaging, queues etc.	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
597	TO_PI_2.1.03	Monitor the message processing in PI (success & performance)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
598	TO_PI_2.1.04	Monitor communication channels, queues, backlogs of PI (AEX)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
599	TO_PI_2.1.05	Monitor BPM processes (success & performance)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
600	TO_PI_2.1.06	Configure adapters	=	HEC Excluded Tasks	
601	TO_PI_2.1.07	Deal with incorrect messages	=	HEC Excluded Tasks	
602	TO_PI_2.1.08	Configure message archiving	=	Cloud Application Services ("CAS"). Can be performed by customer.	
603	TO_PI_2.1.27	Execute and monitor message archiving	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
604	TO_PI_2.1.11	Role/authorization maintenance (except SAP & initial customer administrator role)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
605	TO_PI_2.1.16	Maintain users (except for the SAP and initial customer administrator role)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
606	TO_PI_2.1.17	Setup of PI / BPM / AEX housekeeping	=	Cloud Application Services ("CAS"). Can be performed by customer.	
607	TO_PI_2.1.28	Monitor housekeeping activities of PI / BPM / AEX	=	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.
608	TO_PI_2.1.19	Adjust PO/PI /AEX parameterization and configuration	=	Cloud Application Services ("CAS"). Can be performed by customer.	The configuration doesn't cover the realization of integration scenarios (content development).
609	TO_PI_2.1.21	Maintain the system landscape directory (SLD)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Related to PI scenarios.
610	TO_PI_2.1.22	Apply SAP basic application content update to the Enterprise Service Repository (ESR)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
611	TO_PI_2.1.23	Handle errors and analyze root cause for incorrect message processing in PI (AEX)	=	HEC Excluded Tasks	
612	TO_PI_2.1.24	Check PI / PO / AEX readiness after changes (upgrades, patches, notes)	=	HEC Excluded Tasks	
613	TO_PI_2.1.25	Configure the required system connections to partner systems	=	Cloud Application Services ("CAS"). Can be performed by customer.	
614	TO_PI_2.1.26	Transport management of PI objects	=	Cloud Application Services ("CAS"). Can be performed by customer.	

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
615		**X8 - Enterprise Portal**	=		
616		Operations	=		
617	TO_EP_1.1.01	Monitoring of application services for Portal, Unifiers, Unification Server, PCD, and CM	=	HEC Standard Services	HEC monitors application services only; customer responsible to monitor portal content.
618	TO_EP_1.1.03	Maintain LDAP (Novell, ADS, iPlanet and others)	=	HEC Excluded Tasks	
619	TO_EP_1.1.04	Analyze Portal System logs and revise failures occurred	=	HEC Standard Services	HEC has to inform customer of required assistance.
620	TO_EP_1.1.05	System landscape maintenance, connection of external systems – e.g. SAP	=	Cloud Application Services ("CAS"). Can be performed by customer.	Port connection required.
621	TO_EP_1.1.07	User mapping	=	Cloud Application Services ("CAS"). Can be performed by customer.	
622	TO_EP_1.1.08	Role/Channel/iPanel allocation	=	Cloud Application Services ("CAS"). Can be performed by customer.	
623	TO_EP_1.1.09	Content administration	=	HEC Excluded Tasks	
624	TO_EP_1.1.10	Set-up and maintain Portal user master data	=	Cloud Application Services ("CAS"). Can be performed by customer.	
625	TO_EP_1.1.11	Lock and delete portal user master data	=	Cloud Application Services ("CAS"). Can be performed by customer.	
626	TO_EP_1.1.12	Release locked portal users	=	Cloud Application Services ("CAS"). Can be performed by customer.	
627	TO_EP_1.1.13	Define and change Customer specific portal authorization profiles	=	Cloud Application Services ("CAS"). Can be performed by customer.	
628	TO_EP_1.1.14	Administer Content Repository	=	HEC Excluded Tasks	
629	TO_EP_1.1.20	Customize, upgrade POE including all components	=	HEC Excluded Tasks	Set J2EE passwords, configure Java port, add service packs.
630	TO_EP_1.1.22	Upgrade of pages, roles, static html content	=	HEC Excluded Tasks	
631	TO_EP_1.1.23	Maintenance of Java services	=	HEC Standard Services	Customer responsible to develop new Java services, and to customize existing java services.
632		**X9 - Sybase IQ (used as data persistency for NLS or 3rd party archiving solutions)**	=		
633		Database Installation/Configuration	=		
634	TO_SIQ_1.1.01	Checking/preparing system requirements (BW Release, SAP Notes, Source/target setup)	=	HEC Excluded Tasks	
635	TO_SIQ_1.1.03	Initial configuration / parameter settings	=	HEC Standard Services	
636	TO_SIQ_1.1.06	Initialize connection between BW/NLS and Sybase IQ	=	HEC Standard Services	HEC will perform required setup. Customer must configure the NLS connection from the BW side.
637		Database Operations	=		
638	TO_SIQ_1.2.02	Database capacity management	=	HEC Standard Services	
639	TO_SIQ_1.2.03	Reorg/Statistic update	=	HEC Standard Services	
640	TO_SIQ_1.2.04	dbcc (database consistency check)	=	HEC Standard Services	
641	TO_SIQ_1.2.05	Troubleshooting of technical database issues	=	HEC Standard Services	
642	TO_SIQ_1.2.06	Setup backup	=	HEC Standard Services	
643	TO_SIQ_1.2.07	Restore backup	=	HEC Standard Services	
644	TO_SIQ_1.2.08	Monitor database connection	=	HEC Standard Services	Customer must check connection from BW side.
645		Application	=		
646	TO_SIQ_1.4.01	Create/schedule/restore data archiving requests	=	Cloud Application Services ("CAS"). Can be performed by customer.	
647	TO_SIQ_1.4.02	Query handling	=	Cloud Application Services ("CAS"). Can be performed by customer.	
648	TO_SIQ_1.4.03	Installing partner add-ons in backend systems	=	Cloud Application Services ("CAS"). Can be performed by customer.	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
649	TO_SIQ_1.5.01	Server provisioning for the archiving solution server	=	HEC Optional Services	If partner solution requires extra server; refer to Server Provisioning section in this document for details.
650	TO_SIQ_1.4.04	Installation of archiving partner software	=	Cloud Application Services ("CAS"). Can be performed by customer.	Customer must make sure, that they hold valid licenses to run the installed software in an environment such as the SAP HEC.
651	TO_SIQ_1.4.05	Configuration of archiving partner software	=	Cloud Application Services ("CAS"). Can be performed by customer.	
652	TO_SIQ_1.4.06	Managed services for archiving partner software (issue handling)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
653		SAP Information Lifecycle Management (ILM) for Sybase IQ	=		
654	TO_SIQ_1.6.01	Check and prepare system requirements (Sizing, SAP Notes)	=	HEC Excluded Tasks	
655	TO_SIQ_1.6.02	Activate of ILM Store in NetWeaver	=	HEC Standard Services	
656	TO_SIQ_1.6.03	Set parameters in SAP IQ for ILM Store	=	HEC Standard Services	
657	TO_SIQ_1.6.05	Setup ILM Store Authorizations	=	Cloud Application Services ("CAS"). Can be performed by customer.	
658	TO_SIQ_1.6.06	Integrate ILM Store to Archiving Process	=	Cloud Application Services ("CAS"). Can be performed by customer.	
659	TO_SIQ_1.6.07	Configure of ArchiveLink connection to ILM Store	=	Cloud Application Services ("CAS"). Can be performed by customer.	
660	TO_SIQ_1.6.08	Configure of Storage Connections	=	Cloud Application Services ("CAS"). Can be performed by customer.	
661	TO_SIQ_1.6.09	Check ICM Parameters	=	HEC Standard Services	
662	TO_SIQ_1.6.10	Setup Clients and Origins in the ILM Store	=	Cloud Application Services ("CAS"). Can be performed by customer.	
663	TO_SIQ_1.6.11	Integration to OpenText Storage	=	Cloud Application Services ("CAS"). Can be performed by customer.	
664	TO_SIQ_1.6.12	Integration to other ILM Certified Storage	=	Cloud Application Services ("CAS"). Can be performed by customer.	
665	TO_SIQ_1.6.13	Data destruction and data compliance	=	Cloud Application Services ("CAS"). Can be performed by customer.	
666	TO_SIQ_1.6.14	License generation and deployment for Live Systems	=	HEC Standard Services	
667		X11 - SAP Cloud Connector	=		
668		Installation and Configuration	=		
669	TO_SCC_1.1.02	Configuration - Enable outbound connection via LoadBalancer to connect with SAP Cloud Platform (SCP)	=	HEC Standard Services	
670	TO_SCC_1.1.03	Configuration - Establish connection to customer's cloud account	=	HEC Standard Services	
671	TO_SCC_1.1.04	Configuration - On-premise resources (OData services) customer wants to use in SAP Cloud Platform (SCP)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
672	TO_SCC_1.1.05	Monitoring - SCC service monitoring (Linux / Windows Services)	=	Cloud Application Services ("CAS"). Can be performed by customer.	Can be done in Administrator UI or by executing a manual status check command or via HCP Administrator Cockpit. Manual monitoring; effort based per execution.
673	TO_SCC_1.1.06	Define and provide two user groups (Cloud Portal Admin, Cloud Portal User)	=	HEC Standard Services	
674	TO_SCC_1.1.07	Tunnel Availability monitoring	=	HEC Standard Services	For version 2.12 and higher only. HEC can monitor tunnel availability for informational purposes only but is not covered under the Service Level Agreement.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
675		X12 - SAP Cloud Platform Integration - Data Services Agent (CPI-DS) (Formerly HCI-DS)	=		
676		Installation and Configuration	=		
677	TO_CPIDS_1.1.01	Installation of SAP CPI - Data Service agent	=	HEC Standard Services	
678	TO_CPIDS_1.1.02	Configuration - Enable outbound connection via LoadBalancer to connect with CPI	=	HEC Standard Services	
679	TO_CPIDS_1.1.03	Configuration - Establish connection to customer's cloud account	=	HEC Standard Services	Need access to CPI portal or HEC will request the configuration file from customer. Configuration performed at OS level. HEC will verify that agent status is green in CPI portal.
680	TO_CPIDS_1.1.04	Configuration - Business backend preparation steps for CPI consumption	=	Cloud Application Services ("CAS"). Can be performed by customer.	
681		Monitoring Setup	=		
682	TO_CPIDS_1.2.01	Monitoring setup for process level availability - Nagios	=	HEC Standard Services	
683		Data Handling and Data Services	=		
684	TO_CPIDS_1.3.01	Migrating or replicating data between data stores	=	Cloud Application Services ("CAS"). Can be performed by customer.	
685		X13 - SAP Fiori	=		
686		Installation and Configuration	=		
687	TO_FIORI_1.1.01	Installation of application specific packages in respective SAP Systems	=	HEC Standard Services	Initial setup in HEC.
688	TO_FIORI_1.1.03	Configuration - Web Dispatcher Fiori App redirects	=	HEC Standard Services	SSL is a prerequisite for this task. Scope during Initial Provisioning includes all systems defined in the initial contract. If more systems are added a Change Request (CR) is required and extra charges may apply.
689	TO_FIORI_1.1.05	Configuration - HANA XS Engine Web Dispatcher	=	Cloud Application Services ("CAS"). Can be performed by customer.	SSL is a prerequisite for this task. Scope during Initial Provisioning includes all systems defined in the initial contract. If more systems are added a Change Request (CR) is required and extra charges may apply.
690	TO_FIORI_1.1.09	Initial enablement of Fiori launchpad including all required connectivity setup	=	HEC Standard Services	Limited to one example Fiori app per S/4HANA system according to requested application type; SAP Standard procedure includes Fiori launchpad enablement for one client per S/4HANA system.
691	TO_FIORI_1.1.06	Re-enable Fiori launchpad including all required connectivity setup	=	Cloud Application Services ("CAS"). Can be performed by customer.	Limited to one (1) example Fiori app per S/4HANA system according to requested application type; SAP Standard procedure includes Fiori launchpad enablement for one client per S/4HANA system. Fiori Launchpad will be made available over LoadBalancer, if exist and configured.
692	TO_FIORI_1.1.07	Configuration - Fiori applications	=	HEC Excluded Tasks	In some situations HEC might be able to support the customer using a HEC Application Management service, however due to the large variety of possible scenarios this item has been generally excluded from the HEC service; customers should seek assistance via SAP Consulting.
693	TO_FIORI_1.1.08	Establish trusted connections from Web Dispatcher to Gateway, backend system (e.g. S/4 HANA) and HANA XS engine of backend system	=	Cloud Application Services ("CAS"). Can be performed by customer.	Access to customer client required.
694		X15 - Web Dispatcher	=		
695		Web Dispatcher Operations	=		
696	TO_WD_1.1.01	Register/Remove Systems in Web Dispatcher and their options regarding SSL	=	HEC Standard Services	Scope during initial provisioning includes all systems defined in the initial contract. If more systems are added a Change Request (CR) is required and extra charges may apply.
697	TO_WD_1.1.02	General memory management definition	=	HEC Standard Services	
698	TO_WD_1.1.03	General security parameter definition	=	HEC Standard Services	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
699	TO_WD_1.1.04	General Configuration for Support SSL in Parameter File or PSE Maintenance Tool in Admintool (Handling HTTPS Requests)	=	HEC Standard Services	
700	TO_WD_1.1.05	Communication with the message server / application server using SSL	=	HEC Standard Services	
701	TO_WD_1.1.06	Modification of HTTP requests	=	HEC Standard Services	
702	TO_WD_1.1.07	Setting up error handling	=	HEC Standard Services	
703	TO_WD_1.1.08	Maintaining the authentication File	=	HEC Standard Services	
704	TO_WD_1.1.09	Changes in client 000 of the backend systems related to Web Dispatcher (HTTPURLLOC)	=	HEC Standard Services	
705	TO_WD_1.1.10	Log and trace strategy	=	HEC Standard Services	
706	TO_WD_1.1.11	Encryption policy (protocols, ciphersuites, key length)	=	HEC Standard Services	
707	TO_WD_1.1.12	Connection counts	=	HEC Standard Services	
708	TO_WD_1.1.13	Metadata Exchange Using SSL	=	HEC Standard Services	
709	TO_WD_1.1.14	Definition of port ranges	=	HEC Standard Services	
710	TO_WD_1.1.15	LoadBalancer configuration for Web Dispatcher	=	HEC Standard Services	Configuration details (routing rules, redirection information, backend system details etc.) must be provided by customer. HEC will be update the Load Balancer and Web Dispatcher accordingly.
711	TO_WD_1.1.16	DNS Changes for Web Dispatcher Service	=	HEC Excluded Tasks	There are no options to have personalized DNS
712		**X16 - LoadBalancer**	**=**		
713		**LoadBalancer operation**	**=**		
714	TO_LRP_1.1.01	Setup LoadBalancer instance	=	HEC Standard Services	
715	TO_LRP_1.1.02	Register/Remove Systems in LoadBalancer	=	HEC Standard Services	
716	TO_LRP_1.1.03	Configure load distribution to application servers	=	HEC Standard Services	
717	TO_LRP_1.1.04	Provide external IP for Internet facing scenarios	=	HEC Standard Services	
718	TO_LRP_1.1.05	Configure SSL offloading (Encryption)	=	HEC Standard Services	
719	TO_LRP_1.1.07	Perform DNS handling for customer own Domain	=	HEC Excluded Tasks	
720	TO_LRP_1.1.08	Provide X.509 certificate for customer domain to enable SSL	=	HEC Excluded Tasks	
721	TO_LRP_1.1.09	Provide X.509 certificate for SAP own URL like *.hec.ondemand.com domain	=	HEC Standard Services	
722	TO_LRP_1.1.10	Install customer X.509 certificate	=	HEC Standard Services	
723	TO_LRP_1.1.11	Configure Web Application Firewall	=	HEC Standard Services	
724	TO_LRP_1.1.12	Configure persistence handling	=	HEC Standard Services	
725	TO_LRP_1.1.14	Configure health checks	=	HEC Standard Services	
726	TO_LRP_1.1.15	Configure URL/IP based black and white list filtering	=	HEC Standard Services	
727	TO_LRP_1.1.16	Configure sorry page function	=	HEC Standard Services	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
728	TO_LRP_1.1.17	Configure outgoing connections to Internet	=	HEC Standard Services	
729	TO_LRP_1.1.18	Enable access from HEC to internet/public domain	=	HEC Optional Services	Supported using outbound LoadBalancer. Used to integrate HEC with other clouds or customer public services etc.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
730		**X17 - OpenText Solutions**	=		
731		**Data archiving and document access: ERP + archive + storage**	=		
732		**ERP part**	=		
733	TO_OT_1.1.01	Setup connection to archive server	=	HEC Standard Services	
734	TO_OT_1.1.02	Customizing of archiving solution	=	Cloud Application Services ("CAS"). Can be performed by customer.	
735		**Archive server part (content repository)**	=		
736	TO_OT_1.2.01	Archive server DB installation	=	HEC Standard Services	
737	TO_OT_1.2.02	Archive server installation	=	HEC Standard Services	
738	TO_OT_1.2.03	Configuration of the archive storage	=	HEC Standard Services	
739	TO_OT_1.2.04	Attaching storage to the Archive server	=	HEC Standard Services	
740	TO_OT_1.2.05	Configuration of the archive server	=	HEC Standard Services	
741		**Migration of existing archives to HEC**	=		
742	TO_OT_1.6.01	Data migration of archived data of OpenText archive system	=	Cloud Application Services ("CAS"). Can be performed by customer.	Consulting project required.
743	TO_OT_1.6.02	Data migration of archived data of Non-OpenText archive system	=	Cloud Application Services ("CAS"). Can be performed by customer.	Consulting project required.
744		**Admin Tasks Archive Server**	=		
745	TO_OT_1.7.01	Standard backup (storage handling)	=	HEC Standard Services	
746	TO_OT_1.7.02	Standard monitoring	=	HEC Standard Services	
747	TO_OT_1.7.03	Administrative tasks (create new archives)	=	HEC Standard Services	On customer request.
748		**Archiving: application management**	=		
749	TO_OT_1.8.01	Authorization concept	=	Cloud Application Services ("CAS"). Can be performed by customer.	
750	TO_OT_1.8.02	Archiving concept	=	Cloud Application Services ("CAS"). Can be performed by customer.	
751	TO_OT_1.8.03	Archiving of data	=	Cloud Application Services ("CAS"). Can be performed by customer.	
752	TO_OT_1.8.04	Deletion of data	=	Cloud Application Services ("CAS"). Can be performed by customer.	
753		**Scanning and Pipeline**	=		
754	TO_OT_1.3.01	Installation on premise (scan client)	=	HEC Excluded Tasks	
755	TO_OT_1.3.02	Scan Configuration	=	Cloud Application Services ("CAS"). Can be performed by customer.	
756	TO_OT_1.3.03	Pipeline installation on premise	=	HEC Excluded Tasks	
757	TO_OT_1.3.04	Pipeline configuration on premise	=	HEC Excluded Tasks	
758		**VIM: SAP Component Installation in SAP ERP**	=	**In case VIM is part of solution scope in HEC**	
759	TO_OT_1.4.01	Add-On installation for VIM	=	HEC Standard Services	
760	TO_OT_1.4.02	SAP Business Workflow Engine enabling (Basic configuration)	=	HEC Standard Services	
761	TO_OT_1.4.03	Business Configuration	=	HEC Excluded Tasks	RDS available.
762	TO_OT_1.4.04	ArchiveLink customizing	=	HEC Standard Services	
763		**VIM: Invoice Capture Center (ICC)**	=	**In case VIM is part of solution scope in HEC**	
764	TO_OT_1.5.01	Installation VIM server	=	HEC Standard Services	
765	TO_OT_1.5.02	Basic configuration and connectivity	=	HEC Standard Services	
766	TO_OT_1.5.03	Basic business configuration	=	HEC Excluded Tasks	RDS available.
767	TO_OT_1.5.04	Customer specific enhancements	=	HEC Excluded Tasks	
768		**StreamServe**	=	**In case StreamServe is part of solution scope in HEC**	
769	TO_OT_1.9.01	Installation of StreamServe	=	HEC Standard Services	To be done on OS-level.
770	TO_OT_1.9.02	Setup connection to StreamServe server	=	HEC Standard Services	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
771	TO_OT_1.9.03	StreamServe base configuration	=	HEC Standard Services	Customer to provide FQDN of OpenText Server.
772	TO_OT_1.9.04	Configure output management	=	Cloud Application Services ("CAS"). Can be performed by customer.	Real output management; logical output management; output device; RFC destination
773	TO_OT_1.9.05	Application specific configuration	=	HEC Excluded Tasks	e.g. Adjust print forms, BAPI functions, etc.
774		**Cloud Editions**	=		
775		**SAP S/4HANA Common Tasks**	=		
776	TO_OT_1.10.1	Install OpenText Cloud Edition Add-On	=	HEC Standard Services	ADA, VIM, and xECM Add-On covered
777	TO_OT_1.10.2	Activate/Maintain ICF nodes required for Apps to be enabled/updated	=	HEC Standard Services	
778	TO_OT_1.10.3	Activate/Maintain OData Services required for Apps to be enabled/updated	=	HEC Standard Services	
779		**Vendor Invoice Management for SAP Solutions (VIM)**	=		
780	TO_OT_1.11.1	Establish/Maintain secure connection to OpenText Core Capture for SAP Solutions (IES Cloud)/OT2	=	HEC Standard Services	Create and maintain connections from S/4HANA SM59. Client ID and secret password from Admin Center need to be provided to HEC
781		**Extended ECM for SAP Solutions (xECM)**	=		
782	TO_OT_1.12.1	Establish/Maintain secure connection to OpenText Cloud (OTK)	=	HEC Standard Services	Create and maintain connections from S/4HANA SM59, STRUST and in xECM's IMG hierarchy "Create HTTP Connections"
783		**Archiving and Document Access for SAP Solutions (ADA)**	=		
784		**OpenText Core Archive Connector**	=		
785		**Operations**	=		
786	TO_OT_1.13.1	Install OpenText Core Archive Connector and Document Pipelines	=	HEC Standard Services	Application installation only
787	TO_OT_1.13.2	Establish/Maintain secure connection to OpenText Core Archive for SAP Solutions (ADA Cloud)/OT2	=	HEC Standard Services	Initial configuration and customer tenant registration
788	TO_OT_1.13.3	Add/Maintain SAP S/4HANA systems connection	=	HEC Standard Services	
789	TO_OT_1.13.4	Administration of Collections and Data Sources	=	Cloud Application Services ("CAS"). Can be performed by customer.	
790	TO_OT_1.13.5	Configure scan host and profile	=	Cloud Application Services ("CAS"). Can be performed by customer.	
791	TO_OT_1.13.6	Configure/Maintain file archive job	=	Cloud Application Services ("CAS"). Can be performed by customer.	
792	TO_OT_1.13.7	Maintain Core Archive Connector setting	=	HEC Standard Services	Activity includes replacing/generating certificate and private key
793	TO_OT_1.13.8	User Administration	=	Cloud Application Services ("CAS"). Can be performed by customer.	
794		**Software Lifecycle Management**	=		
795	TO_OT_1.14.1	Implement customer specific updates to the managed OT Core Archive Connector solution (software packages not commonly available via the SAP Service Marketplace)	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
796		**X18 - SAP Information Steward**	=		
797		**Operations**	=		
798	TO_IS_1.1.02	Adding additional IS job servers for load balancing on existing infrastructure.	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Adding additional server on existing infrastructure. A Change Request (CR) is required If additional infrastructure needs to be deployed.
799	TO_IS_1.1.13	Adding additional IS job servers for load balancing on new infrastructure	=	HEC Optional Services	Adding additional server on new infrastructure. A Change Request (CR) is required.
800	TO_IS_1.1.03	User and access management	=	Cloud Application Services ("CAS"). Can be performed by customer.	

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
801	TO_IS_1.1.04	Create and manage IS application jobs	=	Cloud Application Services ("CAS"). Can be performed by customer.	
802	TO_IS_1.1.05	Executing Information Steward utilities	=	Cloud Application Services ("CAS"). Can be performed by customer.	
803	TO_IS_1.1.06	Data Insight, Metadata, Cleansing Package and Match Review administration	=	Cloud Application Services ("CAS"). Can be performed by customer.	
804	TO_IS_1.1.08	IS repository and file system backup	=	HEC Standard Services	
805	TO_IS_1.1.09	IS job server and services monitoring	=	HEC Standard Services	
806	TO_IS_1.1.10	IS repository management	=	Cloud Application Services ("CAS"). Can be performed by customer.	
807	TO_IS_1.1.11	Troubleshooting issues with IS jobs and utilities (Data Insight, Rule Tasks, Metadata Management, Data Cleansing)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
808	TO_IS_1.1.12	Execute performance tuning for Data Insight, Data Cleansing, Metadata Management, Metapedia and Match Review	=	Cloud Application Services ("CAS"). Can be performed by customer.	
809		**X19 - SAP Policy Management**	**=**	**This section represents an extension of the HEC standard service as described in the HEC Roles & Responsibilities. It applies only to customers using SAP Policy Management in HEC in combination with the full managed service including the components pm.msg and TomatosX.**	
810		**TomatosX for Policy Management**	**=**		
811	TO_PM_1.1.01	Installation of the solution	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
812	TO_PM_1.1.02	Technical configuration (installation post-processing) of installed systems.	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
813	TO_PM_1.1.03	Configuration or Integration of TomatosX system with other SAP systems. (TA SM59)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
814	TO_PM_1.1.05	Application configuration (post-installation configuration) of installed systems	=	HEC Excluded Tasks	
815	TO_PM_1.1.06	Application troubleshooting	=	HEC Excluded Tasks	
816		**MSG.PM designer & CAIMAN for Policy Management**	**=**		
817	TO_PM_2.1.01	Installation of the solution	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	MSG.PM designer and CAIMAN can only be installed on the windows platform.
818	TO_PM_2.1.02	Technical configuration (installation post-processing) of installed systems.	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
819	TO_PM_2.1.08	Technical integration of system with other systems and applications	=	Cloud Application Services ("CAS"). Can be performed by customer.	
820	TO_PM_2.1.05	Application configuration (post-installation configuration) of installed systems	=	HEC Excluded Tasks	
821	TO_PM_2.1.06	Application troubleshooting	=	HEC Excluded Tasks	
822	TO_PM_2.1.07	Installation of additional client tools	=	HEC Excluded Tasks	
823		**Security Management**	**=**		
824	TO_PM_3.1.1	Administration of customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, master data and passwords)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
825		**X20 - Celonis CPM**	**=**		
826		**Celonis CPM**	**=**		
827	TO_CEL_1.1.02	Creation Java KeyStore	=	HEC Standard Services	
828	TO_CEL_1.1.03	Configuring authorized SQL queries	=	HEC Excluded Tasks	HEC will update the respective file on OS Level.
829	TO_CEL_1.1.04	Configure audit parameters and password rules	=	HEC Standard Services	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
830	TO_CEL_1.1.05	Request logging trace for user	=	HEC Standard Services	
831	TO_CEL_1.1.06	Transport Export/Import	=	HEC Excluded Tasks	
832	TO_CEL_1.1.07	General Administration of users, groups and authorizations	=	HEC Excluded Tasks	
833	TO_CEL_1.1.08	Change system settings on application side	=	HEC Excluded Tasks	
834	TO_CEL_1.1.09	Backup/Restore H2 Database	=	HEC Standard Services	
835		**X21 - SAP Identity Management IDM**	**=**		
836	TO_IDM_1.0.01	Assist customer with IDM related tasks that require access to operating system	=	HEC Standard Services	
837	TO_IDM_1.0.02	Install IDM dispatchers as part of their initial HEC installation	=	HEC Standard Services	
838	TO_IDM_1.0.03	Connect IDM UI to IDM system	=	HEC Standard Services	SSL configuration is not covered by this task.
839		**X22 - SAP Financial Consolidation (FC)**	**=**		
840		**Administration of Data Sources**	**=**		
841	TO_FC_1.1.01	Starting/Stopping/Setting Administrator Password and activity views for Datasources	=	HEC Standard Services	
842	TO_FC_1.1.02	Adding Webservices	=	Cloud Application Services ("CAS"). Can be performed by customer.	
843	TO_FC_1.1.03	Adding FC Application Server/Webserver on existing infrastructure	=	Cloud Application Services ("CAS"). Can be performed by customer.	
844	TO_FC_1.1.15	Adding FC Application Server/Webserver on new infrastructure	=	HEC Optional Services	
845	TO_FC_1.1.04	Migrating and filtering data source	=	HEC Excluded Tasks	
846	TO_FC_1.1.05	Installing software configuration	=	HEC Excluded Tasks	
847	TO_FC_1.1.06	Sending/Broadcasting messages to End-users	=	HEC Excluded Tasks	
848	TO_FC_1.1.07	Defining log configuration for application servers	=	HEC Excluded Tasks	
849	TO_FC_1.1.08	Defining commands available for machines and instances	=	HEC Excluded Tasks	
850	TO_FC_1.1.09	Activation/Deactivation Machine in the FC Admin console	=	Cloud Application Services ("CAS"). Can be performed by customer.	
851	TO_FC_1.1.10	Starting/Stopping Instances in the FC Admin console	=	Cloud Application Services ("CAS"). Can be performed by customer.	
852	TO_FC_1.1.11	Creating scheduled tasks for starting and stopping servers	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
853	TO_FC_1.1.12	Create/Delete Data Source(s)	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Requires actions at OS Level.
854	TO_FC_1.1.13	Create FC transport folder	=	HEC Standard Services	
855	TO_FC_1.1.14	Restart FC platform periodically	=	HEC Standard Services	
856		**Monitoring**	**=**		
857	TO_FC_1.2.04	Monitoring one FC application URL per SID	=	HEC Standard Services	Limited to one URL per SID. Customer needs to provide URL to be monitored.
858	TO_FC_1.2.03	Monitoring of further FC application URLs	=	Cloud Application Services ("CAS"). Can be performed by customer.	Customer needs to provide URL to be monitored.
859		**Administration of HANA Databases**	**=**		
860	TO_FC_1.3.01	Prerequisites for creating SAP HANA Modeling Views with Cube Designer	=	HEC Excluded Tasks	Customer require access to HANA Studio and require HANA Customer Administration authorization.
861	TO_FC_1.3.02	Deleting rights created during Cube Deployments	=	HEC Excluded Tasks	Customer require access to HANA Studio and require HANA Customer Administration authorization.

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
862		**Configuring SAP Financial Consolidation Web Site**	=		
863	TO_FC_1.4.01	Reconnecting Automatically	=	HEC Standard Services	
864	TO_FC_1.4.02	Activating the SAP Financial Consolidation Web Technical Log	=	HEC Standard Services	
865	TO_FC_1.4.03	Supporting long-term HTTP sessions with firewalls	=	HEC Standard Services	
866	TO_FC_1.4.04	Publishing documents via a URL	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
867	TO_FC_1.4.05	Configuring HTTPS	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
868	TO_FC_1.4.06	Customizing the SAP Financial Consolidation Web Site Home page	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
869		**Configuring SAP Financial Consolidation Web HTML5 Site**	=		
870	TO_FC_1.5.01	Configuring/Customizing SAP Financial Consolidation Web HTML5 site advanced settings	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
871		**Archiving Tool**	=		
872	TO_FC_1.6.01	Installing and accessing the Archiving Tool	=	HEC Standard Services	
873	TO_FC_1.6.02	Execute archiving process	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Just possible using AMS/SAP Consulting because require access to OS Level.
874		**Installing and Configuring the SAP NetWeaver BW Server to deploy Infocubes with SAP Financial Consolidation Cube Designer**	=		
875	TO_FC_1.8.01	Installing the FPM Basis component on the SAP NetWeaver BW server	=	HEC Standard Services	
876	TO_FC_1.8.02	Creating BW NetWeaver Roles to deploy Infocubes with Cube Designer	=	HEC Excluded Tasks	
877	TO_FC_1.8.03	Installing SAP EPM Solutions Connection Manager on the BOE platform	=	HEC Standard Services	
878	TO_FC_1.8.04	Configuring the Central Management Console for SAP Cube Designer	=	HEC Excluded Tasks	
879	TO_FC_1.8.05	Configuring the Central Management Server for a distributed installation	=	HEC Excluded Tasks	
880	TO_FC_1.8.06	Configuring reverse proxy	=	HEC Standard Services	
881	TO_FC_1.8.07	Creating an EPM Connection for SAP Financial Consolidation with NetWeaver BW Cubes or SAP PCM or SAP SSM or SAP HANA	=	HEC Excluded Tasks	
882		**Financial Information Management**	=		
883	TO_FC_1.9.01	Configuring the number of lines in a Flat File Preview	=	HEC Standard Services	
884	TO_FC_1.9.02	Configuring Time-out Parameters	=	HEC Standard Services	
885		**X23 - SAP Mobile Platform (SMP)**	=		
886		Implementation	=		
887	TO_MP_1.1.01	Installation of SMP Application Node(s) - Greenfield	=	HEC Standard Services	
888	TO_MP_1.1.02	Installation of Additional SMP Application Node(s) - Brownfield	=	HEC Optional Services	
889	TO_MP_1.1.03	Connection to backend System	=	HEC Standard Services	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
890	TO_MP_1.1.04	Securing Application Platform	=	HEC Excluded Tasks	
891	TO_MP_1.1.05	Updating DB connection settings including DB connection passwords	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
892		Operations	=		
893	TO_MP_1.2.01	SMP Mobile/Agentry/Application Administration -Deploying Application -deleting Applications -Managing and Monitoring Application -Provisioning Application	=	HEC Excluded Tasks	
894	TO_MP_1.2.02	Starting / Stopping SMP Application Server	=	HEC Standard Services	
895	TO_MP_1.2.03	SMP Server availability and monitoring	=	HEC Standard Services	
896	TO_MP_1.2.04	Monitoring heap memory	=	HEC Excluded Tasks	
897		**X25 - BPA by Redwood**	**=**		
898		Operations	=		
899	TO_BP_1.1.01	Technical installation	=	HEC Standard Services	
900	TO_BP_1.1.03	License deployment	=	Cloud Application Services ("CAS"). Can be performed by customer.	
901	TO_BP_1.1.05	Connect the central SAP BPA server system to remote systems within HEC	=	Cloud Application Services ("CAS"). Can be performed by customer.	
902	TO_BP_1.1.07	Monitoring of central BPA system	=	HEC Standard Services	
903	TO_BP_1.1.08	Job monitoring	=	Cloud Application Services ("CAS"). Can be performed by customer.	
904	TO_BP_1.1.09	User and role management	=	Cloud Application Services ("CAS"). Can be performed by customer.	
905	TO_BP_1.1.12	Initial job scheduling Setup	=	Cloud Application Services ("CAS"). Can be performed by customer.	
906	TO_BP_1.1.13	Modification of scheduling setup	=	Cloud Application Services ("CAS"). Can be performed by customer.	
907	TO_BP_1.1.14	Re-Scheduling of jobs to remote system	=	Cloud Application Services ("CAS"). Can be performed by customer.	
908	TO_BP_1.1.15	Defining monitoring framework for jobs triggered via SAP BPA	=	Cloud Application Services ("CAS"). Can be performed by customer.	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
909		**X28 - GK Software**	**=**		
910		**Setup and configuration**	**=**		
911	TO_GK_1.1.01	Setup and manage GK Software directories	=	HEC Standard Services	
912	TO_GK_1.1.02	Create directory for master data file upload (if not already available)	=	HEC Standard Services	
913	TO_GK_1.1.03	Assist in copying various files related to GK software configuration to file system directories	=	HEC Standard Services	
914	TO_GK_1.1.04	Setup of dynamic takeovers in the structures	=	HEC Excluded Tasks	
915	TO_GK_1.1.05	Setup of structure level overwrites	=	HEC Excluded Tasks	
916	TO_GK_1.1.06	Setup NetWeaver Config tool directory structure	=	HEC Standard Services	
917	TO_GK_1.1.07	Change language after installation	=	HEC Standard Services	
918	TO_GK_1.1.08	Setup system level overwrite (system types)	=	HEC Excluded Tasks	
919	TO_GK_1.1.09	Configure customer specific organizational structure	=	HEC Excluded Tasks	
920	TO_GK_1.1.10	Configure basic Store Manager node	=	HEC Standard Services	
921	TO_GK_1.1.11	Install store templates	=	HEC Excluded Tasks	HEC to provide share to copy files on to the OS level.
922	TO_GK_1.1.12	Import of store templates into Store Manager	=	HEC Excluded Tasks	
923	TO_GK_1.1.13	Assign template to the main Store Manager structure	=	HEC Excluded Tasks	
924	TO_GK_1.1.14	Import config into Hybrid Infoserver	=	HEC Excluded Tasks	
925	TO_GK_1.1.15	Configure HANA JDBC datasource connection pooling	=	HEC Standard Services	
926	TO_GK_1.1.16	Deploy EPA files into SAP NetWeaver Portal	=	HEC Standard Services	
927	TO_GK_1.1.17	Create customer store structure	=	HEC Excluded Tasks	
928	TO_GK_1.1.18	Configure GK Store Manager	=	HEC Excluded Tasks	
929	TO_GK_1.1.19	Import Global Configuration for Store Manager (data container)	=	HEC Excluded Tasks	
930	TO_GK_1.1.20	Configure GK Software Store Manager for stores or country level overrides	=	HEC Excluded Tasks	Example: configuration of the POS Server it points to or LPS.
931	TO_GK_1.1.21	Import master data	=	HEC Excluded Tasks	
932	TO_GK_1.1.22	Configure GK ECON for Data import (defining the xml file for IDoc imports)	=	HEC Excluded Tasks	
933	TO_GK_1.1.23	Create and customize Reference Store (countries, district, stores)	=	HEC Excluded Tasks	
934	TO_GK_1.1.24	Create SAP NetWeaver datasource	=	Cloud Application Services ("CAS"). Can be performed by customer.	
935	TO_GK_1.1.25	Configure and assign data containers (Taxes, work groups, reasons of transactions etc.)	=	HEC Excluded Tasks	
936	TO_GK_1.1.26	Configure SDC data containers (assign variants etc.)	=	HEC Excluded Tasks	
937	TO_GK_1.1.27	Import templates and activation manually (e.g. EC config template, heartbeat monitor)	=	HEC Excluded Tasks	
938	TO_GK_1.1.28	Configure reference customer organizational structure (during installation)	=	HEC Standard Services	Only the basic structure as per the setup procedures. The detailed functional structures is Customer / Project team responsibility.
939		**Operations**	**=**		

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940	TO_GK_1.2.01	Assist customers with tasks in their area of responsibility, if OS access is required	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	In cases where the execution of tasks requires activities to be performed within the OS level and for which the customer is responsible according to this document. Customers and GK implementation partners will not get OS access to managed servers within HEC. The HEC Service provider will support the customer, e.g. by taking over the tasks or by providing other methods to execute tasks. This line item only applies to infrequent/occasional assistance; projects requiring regular, longer and more general OS access for implementation, development and support cannot be supported via this line item. Extra service charge is calculated per server.
941	TO_GK_1.2.02	Configure Application level JDBC Datasources	=	Cloud Application Services ("CAS"). Can be performed by customer.	Each central application on SAP NetWeaver must be linked to a database by a datasource entry. This entry has to be set via NetWeaver Administrator one time per application and must be available before the first launch of the related application.
942	TO_GK_1.2.03	Modification of HTTP requests	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
943	TO_GK_1.2.04	Change application server parameters after handover	=	Cloud Application Services ("CAS"). Can be performed by customer.	Modifying standard settings to changing customer requirements.
944	TO_GK_1.2.05	Manage communication with the message server / application server using SSL	=	HEC Standard Services	
945	TO_GK_1.2.06	Definition of port ranges	=	HEC Standard Services	
946	TO_GK_1.2.07	GK Host Configuration via Portal Administration	=	HEC Standard Services	
947	TO_GK_1.2.08	Update by CDPL tool (Central Deployment update for Store components)	=	HEC Excluded Tasks	
948	TO_GK_1.2.09	Rebuild client	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	OS access required to run the scripts.
949	TO_GK_1.2.10	GK Software user management	=	HEC Excluded Tasks	
950	TO_GK_1.2.11	Map GK software users to SAP NetWeaver user management	=	HEC Excluded Tasks	
951	TO_GK_1.2.12	Backup and Restore - standard HANA & NW	=	HEC Standard Services	
952	TO_GK_1.2.13	Backup and Restore - sync after DB restore	=	HEC Excluded Tasks	
953	TO_GK_1.2.14	Synchronization of master data after database recovery	=	HEC Excluded Tasks	
954	TO_GK_1.2.15	Clean up obsolete content data and templates	=	HEC Excluded Tasks	
955	TO_GK_1.2.16	Define and implement log and trace strategy	=	HEC Standard Services	
956	TO_GK_1.2.17	Monitor basic technical functions using HEC monitoring environment	=	HEC Standard Services	
957	TO_GK_1.2.18	Monitor GK application using Enterprise Cockpit	=	HEC Excluded Tasks	
958	TO_GK_1.2.19	GK Business Process Monitoring	=	HEC Excluded Tasks	
959	TO_GK_1.2.20	Monitoring solution performance (node level performance using GK Performance Monitor)	=	HEC Excluded Tasks	HEC to support copying the files into working directories.
960	TO_GK_1.2.21	Analyze database using GK_PMON, GK_STATS	=	HEC Excluded Tasks	
961		**Software Lifecycle Management for GK**	**=**		
962	TO_GK_1.3.01	Implement updates to the managed GK solution (software packages commonly available via the SAP Service Marketplace)	=	HEC Standard Services	
963	TO_GK_1.3.02	Implement customer specific updates to the managed GK solution (software packages not commonly available via the SAP Service Marketplace)	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
964	TO_GK_1.3.03	Upgrade of managed GK solution to the next higher major software version	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
965		**X29 - SAP TREX**	**=**		
966		**TREX operations**	**=**		

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967	TO_TREX_1.1.14	Post-Installation Configuration and Connection TREX with an Application (Java or ABAP)	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	This includes activities Post-Installation Configuration and Connection between TREX and an Application (Java or ABAP) as is described in Official Product documentation (help.sap.com)
968	TO_TREX_1.1.15	Administer TREX indices	=	HEC Excluded Tasks	
969	TO_TREX_1.1.16	Administer Taxonomies	=	HEC Excluded Tasks	
970		**X30 - SAP Predictive Analytics (SPA)**	=		
971		**SAP Predictive Analytics - Setup and Configuration**	=		
972	TO_SPA_1.1.01	Install Predictive (Automated) Server	=	HEC Standard Services	
973	TO_SPA_1.1.03	Install Predictive Factory	=	HEC Standard Services	
974	TO_SPA_1.1.04	Install SAP HANA Automated Predictive Library	=	HEC Standard Services	
975	TO_SPA_1.1.05	Predictive Analytics Client Install and Connectivity	=	HEC Standard Services	
976	TO_SPA_1.1.06	Predictive Analytics - Data Source Setups for Automated Server	=	HEC Standard Services	Install and setup ODBC drivers for HANA as data source. Additional data sources setup will incur extra service charge.
977	TO_SPA_1.1.14	Predictive Analytics - Data Source Setups for Automated Server (additional)	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Install and setup ODBC drivers for HANA as data source. Additional data sources setup will incur extra service charge.
978	TO_SPA_1.1.07	Automated Analytics/Predictive Factory - Authentication setup and configuration	=	HEC Standard Services	
979	TO_SPA_1.1.08	Automated Analytics/Predictive Factory - Authorization Setup	=	HEC Standard Services	
980	TO_SPA_1.1.09	Automated Analytics/Predictive Factor - SSL/TLS Secure Communication	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
981	TO_SPA_1.1.10	Automated Analytics/Predictive Factory - Single Sign On (SSO) with Windows Active Directory	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
982	TO_SPA_1.1.11	Setting Up Modeling Servers in Predictive Factory	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
983	TO_SPA_1.1.12	Executing external commands/program from Predictive Factory	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
984	TO_SPA_1.1.13	Implement additional hosts setup for High Availability	=	HEC Optional Services	
985		**Other Services**	=		
986	TO_SPA_1.2.01	Predictive Analytics Integrator Setup	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
987	TO_SPA_1.2.02	Setup and configure Predictive Analytics Models	=	Cloud Application Services ("CAS"). Can be performed by customer.	
988		**X31 - SAP Solution Manager**	=		
989		**TREX operations**	=		
990	TO_SOLM_1.1.01	Setup and configuration of ITSM	=	Cloud Application Services ("CAS"). Can be performed by customer.	
991		**X33 - SAP Test Data Migration Server (TDMS)**	=		
992		**Installation and Configuration**	=		
993	TO_TDMS_1.1.01	Setup of Control System (TDMS server) and setup of receiver system (target server)	=	HEC Standard Services	
994	TO_TDMS_1.1.02	Patching of the sender systems (source system)	=	HEC Standard Services	
995	TO_TDMS_1.1.03	TDMS initial configuration, client creation, setup RFC connections, setup authorizations, Shell Creation	=	HEC Standard Services	
996	TO_TDMS_1.1.04	Setting scrambling data, customizing, using BPL modeler	=	HEC Excluded Tasks	
997		**X34 - SAP PowerDesigner**	=		

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
998		**Operational Setup**	=		
999	TO_PWR_1.1.01	Install components (Portal, Repo, Proxy)	=	HEC Standard Services	Install and setup SAP PowerDesigner repository including any support package and patch updates. SAP ASE database will be setup as repository server. Install and configure Apache Tomcat Server on portal server for remote web access. Install and setup SAP PowerDesigner admin server as staging server for initial deployment. Export/import of SAP PowerDesigner Web application files to portal server.
1000	TO_PWR_1.1.02	Install Proxy	=	HEC Standard Services	Install and setup SAP PowerDesigner proxy server - will be installed on same server as SAP PowerDesigner admin server. This is an optional component.
1001	TO_PWR_1.1.03	Setup and configuration	=	HEC Standard Services	Install and setup ODBC drivers for SAP HANA as data source. Additional data sources setup will incur extra service charge. Setup and configure authentication for portal and repository servers. Authorization setup - provision HEC specific user and roles for SAP PowerDesigner portal and repository Access.
1002	TO_PWR_1.1.04	Portal Server - SSL/TLS Setup	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Setup secure communication through SSL/TLS configuration.
1003	TO_PWR_1.1.05	Portal Server - Single Sign On (SSO) with Windows Active Directory	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
1004		**X35 - bowbridge Anti-Virus for SAP Solutions**	=		
1005		**Installation and Configuration**	=		
1006	TO_BB_AV_1.1.01	Verify files signature or comparing checksum	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Check that bowbridge software is original and unmodified.
1007	TO_BB_AV_1.1.02	Install bowbridge software	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1008	TO_BB_AV_1.1.03	Configure application layer	=	HEC Excluded Tasks	
1009	TO_BB_AV_1.1.04	Update bowbridge software	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Customer must inform HEC and provide software update.
1010		**X36 - SAP Billing and Revenue Innovation Management**	=		
1011		**SAP Convergent Charging**	=		
1012		**Installation and Configuration**	=		
1013	TO_BRIM_CC_1.1.01	Install SAP Convergent Charging database	=	HEC Standard Services	
1014	TO_BRIM_CC_1.1.02	Install SAP Convergent Charging core server	=	HEC Standard Services	
1015	TO_BRIM_CC_1.1.03	Post Installation steps	=	HEC Standard Services	
1016		**Installation and Configuration**	=		
1017	TO_BRIM_CC_1.2.01	Start/stop system	=	HEC Standard Services	
1018	TO_BRIM_CC_1.2.02	Apply Updates	=	HEC Standard Services	
1019	TO_BRIM_CC_1.2.03	Upgrade	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1020	TO_BRIM_CC_1.2.04	Monitoring	=	HEC Standard Services	
1021		**SAP Convergent Mediation by DigitalRoute**	=		
1022		**Installation and Configuration**	=		
1023	TO_BRIM_CM_1.1.01	Install SAP Convergent Mediation Database	=	HEC Standard Services	
1024	TO_BRIM_CM_1.1.02	Install SAP Convergent Mediation Control Zone & Execution Zone setup	=	HEC Standard Services	
1025	TO_BRIM_CM_1.1.03	Post Installation steps	=	HEC Standard Services	
1026		**Operation**	=		
1027	TO_BRIM_CM_1.2.01	Disaster Recovery procedures and testing for reprocessing of events	=	HEC Excluded Tasks	
1028	TO_BRIM_CM_1.2.02	Deletion of collected files after checkpoint batch	=	HEC Excluded Tasks	

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1029	TO_BRIM_CM_1.2.03	Push Data Records from customer sFTP server to HEC sFTP server	=	HEC Excluded Tasks	
1030		**X37 - SAP Manufacturing Integration and Intelligence**	**=**		
1031		Implementation & Configuration	=		
1032	TO_MII_1.1.01	Setup Plant Connectivity (PCo) for SAP Overall Equipment Effectiveness (OEE) Functionality	=	HEC Excluded Tasks	
1033	TO_MII_1.1.02	Setup ALE user	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1034	TO_MII_1.1.03	Establish ALE connection to customer's ERP system	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1035	TO_MII_1.1.04	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: SAP NetWeaver	=	HEC Excluded Tasks	
1036	TO_MII_1.1.05	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: Integration Interfaces	=	HEC Excluded Tasks	
1037	TO_MII_1.1.06	Configure SAP Overall Equipment Effectiveness Management	=	HEC Excluded Tasks	
1038	TO_MII_1.1.07	Create XMII Users and perform Roles Assignments	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1039		**X38 - SAP Manufacturing Execution**	**=**		
1040		Operational Setup	=		
1041	TO_ME_1.1.01	Execute CTC Template for SAP NetWeaver Engine Configuration	=	HEC Standard Services	
1042	TO_ME_1.1.02	Execute CTC Template for SAP Database Setup	=	HEC Standard Services	
1043	TO_ME_1.1.03	Execute CTC Template for SAP ME Configuration	=	HEC Excluded Tasks	
1044	TO_ME_1.1.04	Execute SAP ME Scripts	=	HEC Excluded Tasks	
1045	TO_ME_1.1.05	Perform SAP ME and ERP Integration	=	HEC Excluded Tasks	
1046	TO_ME_1.1.06	Install Adobe Document Services	=	HEC Optional Services	
1047		**X39 - R Integration**	**=**		
1048		Operational Setup	=		
1049	TO_RINT_1.1.02	Install R Integration Components	=	HEC Standard Services	R, R Server, and dependent packages are installed independently from the SAP HANA database.
1050	TO_RINT_1.1.03	Perform technical post-installation tasks	=	HEC Standard Services	Setup SAP HANA configuration for index and XS Engine parameters for R Integration. Setup R Server authentication and authorization. Provision HEC specific user and roles for R Integration. Configure and setup R Integration nodes for each tenant database including, service initialization, cockpit access, delivery units, and verification.
1051	TO_RINT_1.1.04	R Integration - Additional hosts setup for High Availability (HA)	=	HEC Optional Services	Add and setup R Integration additional nodes. High Availability setup and configuration involves single or multi-tenant database setup including R Integration group setup. For R Integration LoadBalancer setup, check R&R Section "LoadBalancer".
1052		**X40 - SAP SQL Anywhere - Mobilink**	**=**		
1053		Implementation & Configuration	=		
1054	TO_SQLA_ML_1.1.01	Install and activate SQLAnywhere Mobilink Services	=	HEC Standard Services	Install and setup of SQLA Mobilink Server including any support package and patch updates. Import of Mobilink system object to consolidated database. Note: Prior to Mobilink install, an SAP HANA database should already be provisioned as a consolidated database.
1055	TO_SQLA_ML_1.1.02	Perform technical post-installation tasks	=	HEC Standard Services	Activate Mobilink roles, privileges and object access for monitoring and operations. Provision HEC specific user and roles. Configure and setup Mobilink nodes for each SAP HANA tenant database including, service initialization, delivery units and verification.

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1056	TO_SQLA_ML_1.1.03	Mobilink - Single Sign On (SSO) Setup	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
1057	TO_SQLA_ML_1.1.04	Mobilink - Additional Host Setup for High Availability (HA)	=	HEC Optional Services	Add and configuring additional hosts for high availability setup. For multi-tenant setup, Mobilink nodes are added exclusively to each tenant database. For Mobilink LoadBalancer setup, check R&R Section "LoadBalancer".
1058	TO_SQLA_ML_1.1.05	Setup and configure synchronization scripts	=	HEC Excluded Tasks	Configure synchronization script for upload and download of data between remote and consolidated databases.
1059		**X41 - SAP Analytics Cloud**	**=**		
1060		**SAP Analytics Cloud Tenant**	=		
1061	TO_SAC_1.1.01	Establish connection between SAP Analytics Cloud and HEC managed system	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1062	TO_SAC_1.1.02	Setup Single Sign On (SSO) communication with Principle Propagation from SAP Analytics Cloud to SAP S/4HANA	=	HEC Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for HEC.
1063	TO_SAC_1.1.03	Creation or change of user/roles or SAP as Identity Provider	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1064		**SAP Analytics Cloud Agent**	=		
1065	TO_SAC_1.2.01	Install SAP Analytics Cloud Agent	=	HEC Standard Services	
1066	TO_SAC_1.2.02	Configure SAP Analytics agent, Cloud Connector, Java Connector	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1067	TO_SAC_1.2.03	Configure SAP Analytics agent connection with other systems like SAP S/4HANA, ERP	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1068	TO_SAC_1.2.04	Configure SAP Analytics Cloud with SAP Analytics agent	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1069		**SAP S/4HANA Tasks for SAP Analytics Cloud**	=		
1070	TO_SAC_1.3.01	Configure STRUST for SSL settings	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1071	TO_SAC_1.3.02	Activate Embedded BW content (BEx queries etc.)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1072	TO_SAC_1.3.03	Enable INA for Analytics Cloud	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1073	TO_SAC_1.3.04	Enable CORS Analytics Cloud and edit white Listing	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1074		**X42 - SAP Cloud Platform**	**=**		
1075		**Global Account & Subaccount(s)**	=		
1076	TO_SCP_1.1.01	Create or change of subaccounts related to HEC landscape (DEV, QAS, PRD etc.)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1077	TO_SCP_1.1.02	Create or change of entitlements in the Global Account	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1078	TO_SCP_1.1.03	Activate Cloud Platform service(s)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1079	TO_SCP_1.1.04	Create or change of user/roles	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1080	TO_SCP_1.1.05	Create or change of connectivity destinations	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1081	TO_SCP_1.1.06	Manage of certificates (issue, import, export)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1082	TO_SCP_1.1.07	Create or change Custom Application Domains Settings	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1083		**Identity Provider**	=		

SAP HANA Enterprise Cloud

Technical Operations

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#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
1084	TO_SCP_1.2.01	Configure Local Provider Settings	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1085	TO_SCP_1.2.02	Configure Trust Relationships and Federation Settings for external Identity Providers (e.g. Microsoft, Okta)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1086	TO_SCP_1.2.03	Configure Trust Relationships and Federation Settings for SAP Identity Authentication Tenant	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1087	TO_SCP_1.2.04	Configure Principle Propagation SAP Cloud Platform, SAP Cloud Connector and SAP S/4HANA	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1088	TO_SCP_1.2.05	Activate CERTRULE for the purpose of client based certificates	=	Cloud Application Services ("CAS"). Can be performed by customer.	If an existing SAP S/4HANA system is to be used for the integration.
1089	TO_SCP_1.2.06	User Migration to Cloud Platform Identity Authentication Tenant	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1090		**SAP S/4HANA Tasks for SAP Cloud Platform**	**=**		
1091	TO_SCP_1.3.01	Configure STRUST for SSL settings	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1092	TO_SCP_1.3.02	Activate ICF nodes required for sample Apps to be enabled	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1093	TO_SCP_1.3.03	Activate OData Services required for sample Apps to be enabled	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1094	TO_SCP_1.3.04	Enterprise Search Enablement (ESH)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1095	TO_SCP_1.3.05	Create authorization role in backend system for OData processing	=	Cloud Application Services ("CAS"). Can be performed by customer.	For relevant sample Apps.
1096	TO_SCP_1.3.06	Activate Embedded BW content for Analytical Fiori Apps	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1097	TO_SCP_1.3.07	Enable INA for Analytical SAP Fiori Apps	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1098	TO_SAC_1.3.08	Establish backend connectivity to SAP Cloud Platform Forms by Adobe	=	Cloud Application Services ("CAS"). Can be performed by customer.	Enables generation of print and interactive forms using Adobe Document Services (ADS); includes mandatory baseline configuration.
1099		**Portal**	**=**		
1100	TO_SCP_1.4.01	Create or change SAP Fiori Launchpad sites (Site Directory & Site Settings)	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1101	TO_SCP_1.4.02	Create or change roles	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1102	TO_SCP_1.4.03	Create or change groups including role assignment	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1103	TO_SCP_1.4.04	Create or change catalogs including role assignment	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1104	TO_SCP_1.4.05	Enable SAP Fiori sample apps and perform required connectivity setup	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1105		**X43 - SAP Forms by Adobe (Adobe Document Services/ADS)**	**=**	**SAP Cloud Connector and SAP Cloud Platform are prerequisites.**	
1106		**Installation and Configuration**	**=**		
1107	TO_ADS_1.1.01	Testing	=	Cloud Application Services ("CAS"). Can be performed by customer.	FP_PDF_TEST_00; FP_CHECK_DESTINATION_SERVICE; FP_TEST_03; FP_TEST_IA_01; FP_CHECK_HTTP_DATA_TRANSFER
1108	TO_ADS_1.1.02	Data Migration from on premise ADS to ADS on SCP	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1109	TO_ADS_1.1.03	Configure Fonts and Print Information using XDC and XCI Files	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1110	TO_ADS_1.1.04	Configure document security	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	

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1111	TO_ADS_1.1.05	Configure job profiles	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1112		**X44 - SAP Enterprise Threat Detection (ETD)**	=		
1113		**Installing SAP Enterprise Threat Detection**	=		
1114	TO_ETD_1.1.01	Create specific SAP HANA Tenant for SAP Enterprise Threat Detection (ETD)	=	HEC Standard Services	
1115	TO_ETD_1.1.02	Install SAP HANA Streaming Analytics Option (Formerly Smart Data Streaming/SDS)	=	HEC Standard Services	For cluster setup see SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1116	TO_ETD_1.1.03	Install of Kafka	=	HEC Excluded Tasks	Customer must provide Kafka cluster
1117		**Creation of User and Assigning Authorizations**	=		
1118	TO_ETD_1.2.01	Create of ETD service users in SAP HANA independent of source systems	=	HEC Standard Services	Users to be created: ETD_DATA_COMMITTER, ETD_DART_COMMITTER;SDS_ADMIN;ETD_BATCH
1119	TO_ETD_1.2.02	Create dependent source system user: SDS_RT_<SID>	=	HEC Excluded Tasks	
1120		**Post Installation**	=		
1121	TO_ETD_1.3.01	Finish installation	=	HEC Excluded Tasks	
1122	TO_ETD_1.3.02	Provision initial ETDADmin Administrator	=	HEC Standard Services	
1123	TO_ETD_1.3.03	Define of namespaces	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1124		**Installing SAP Enterprise Threat Detection on Streaming Analytics Option (Formerly Smart Data Streaming/SDS)**	=		
1125	TO_ETD_1.4.01	Import SAP HANA Streaming Analytics Option ETD Project	=	HEC Excluded Tasks	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1126	TO_ETD_1.4.02	Create data services for SAP HANA	=	Cloud Application Services ("CAS"). Can be performed by customer.	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1127	TO_ETD_1.4.03	Configure and deploy projects to the Cluster Workspace	=	Cloud Application Services ("CAS"). Can be performed by customer.	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1128	TO_ETD_1.4.04	Start Streaming Web Service	=	Cloud Application Services ("CAS"). Can be performed by customer.	See SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)
1129		**On Demand Tasks**	=		
1130	TO_ETD_1.5.01	Install ETD Adapters	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1131	TO_ETD_1.5.02	Install warm storage adapter	=	Cloud Application Services ("CAS"). Can be performed by customer.	
1132	TO_ETD_1.5.03	Adjust performance settings for aggregates	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1133	TO_ETD_1.5.04	Enable configuration checks	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1134	TO_ETD_1.5.05	Enable custom configuration checks	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1135	TO_ETD_1.5.06	Install ETD log collector	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1136	TO_ETD_1.5.07	Encrypt communications between log provider and the streaming web service	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1137	TO_ETD_1.5.08	Encrypt communications between non-SAP log provider	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1138	TO_ETD_1.5.09	Encrypt communications between log providers and the web service provider	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	

#	Identifier	Task	D	HEC for Production Advanced Edition	Remarks HEC for Production Advanced Edition
1139	TO_ETD_1.5.10	Monitor performance of the log learning adapter	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1140	TO_ETD_1.5.11	Archive and import of log data	=	Cloud Application Services ("CAS"). Can be performed by customer.	Compilation of project should be executed by SAP If customer performs this task for themselves.
1141	TO_ETD_1.5.12	Configure provisioning logs from SAP NetWeaver ABAP based system	=	HEC Excluded Tasks	
1142	TO_ETD_1.5.13	Configure provisioning logs from SAP HANA-based system	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Requires modification of audit log parameters and possible mount of filesystems. Not possible to configure with filesystems outside HEC.
1143	TO_ETD_1.5.14	Configure provisioning logs from SAP NetWeaver JAVA-based system	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	Requires handling of <SID>adm password
1144	TO_ETD_1.5.15	Configure provisioning logs from other systems including OS	=	Cloud Application Services ("CAS"). **Cannot** be performed by customer.	
1145		Other Tasks	=		
1146	TO_ETD_1.6.01	Configure knowledge base	=	HEC Excluded Tasks	
1147	TO_ETD_1.6.02	Enter context information	=	HEC Excluded Tasks	
1148	TO_ETD_1.6.03	Define locations	=	HEC Excluded Tasks	
1149	TO_ETD_1.6.04	Publishing Alerts	=	HEC Excluded Tasks	
1150		**X45 - Zscaler ZPA Connector**	**=**		
1151		**Implementation & Configuration**	**=**		
1152	TO_ZPA_1.1.01	Install ZPA Connector and required OS packages	=	HEC Standard Services	
1153	TO_ZPA_1.1.02	Configure ZPA Connector	=	HEC Standard Services	
1154	TO_ZPA_1.1.03	Whitelist ZPA Connector IP addresses in LoadBalancer	=	HEC Standard Services	
1155	TO_ZPA_1.1.04	Configure connector in ZPA Admin Console	=	HEC Excluded Tasks	
1156	TO_ZPA_1.1.05	Provision ZPA Connector provisioning keys	=	HEC Excluded Tasks	
1157	TO_ZPA_1.1.06	Install client software	=	HEC Excluded Tasks	
1158	TO_ZPA_1.1.07	Client and end-user support	=	HEC Excluded Tasks	
1159	TO_ZPA_1.1.08	Sizing of required number of connectors	=	HEC Excluded Tasks	
1160	TO_ZPA_1.1.09	Integration with customer's IDP (SAML)	=	HEC Excluded Tasks	
1161	TO_ZPA_1.1.10	Install provisioning keys	=	HEC Standard Services	
1162		**X46 - SAP Omnichannel Banking (OCB)**	**=**		
1163		**Implementation & Configuration**	**=**		
1164	TO_OCB_1.1.01	Install Tomcat	=	HEC Optional Services	
1165	TO_OCB_1.1.02	Install OCB software Retail Banking or Business Banking (Digital)	=	HEC Standard Services	
1166	TO_OCB_1.1.03	Deploy Business Central and Platform and customized .war files	=	HEC Excluded Tasks	HEC performs it for customer for SAP product .war files and Customer provided customized war files
1167	TO_OCB_1.1.04	Develop .war files	=	HEC Excluded Tasks	