



**SAP Enterprise  
Cloud Services** 

RISE with SAP S/4HANA Cloud, private edition and SAP ERP, PCE

**PUBLIC**

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**FIVE 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 Computing Environment. Customers are responsible to review and analyze these tasks and make the selection of such tasks/services in collaboration with an SAP Cloud Architect Advisor ("CAA"), with a SAP Client Delivery Manager ("CDM"), or with the Private Cloud customer center team.

<b>Standard Services</b>	All tasks/services that are included as part of the standard Services, covered by the Service Fee and performed by SAP <sup>2</sup> , as applicable to customer.
<b>Optional Services</b>	Optional Services: these tasks/services are not covered in the standard Services, and are not and cannot be covered by the Cloud Application Services <sup>1</sup> ("CAS"). These tasks/services <ul style="list-style-type: none"> <li>• may be elected by customer,</li> <li>• are subject to additional service fees,</li> <li>• must be specifically contracted for and itemized in the customer's contract (original contract or via a change request), and</li> <li>• can only be performed by SAP<sup>2</sup>.</li> </ul>
<b>Additional Service</b>	Additional Service: Include one-off tasks/services which are not covered by Standard, Optional and/or Cloud Application Services. These tasks/services <ul style="list-style-type: none"> <li>• may be elected by customer,</li> <li>• are subject to additional service fees and</li> <li>• can only be performed by SAP<sup>2</sup>.</li> </ul>
<b>Cloud Application Services<sup>1</sup> ("CAS"). Can be performed by customer.</b>	Cloud Application Services <sup>1</sup> ("CAS"). Can be performed by customer: Include tasks/services that a customer can perform, but the customer may elect to have SAP <sup>2</sup> to deliver.
<b>Excluded Tasks</b>	Excluded Tasks are those tasks/services that can only be performed by the customer and are excluded from Standard Services, Optional Services, Additional Services and/or Cloud Application Services.

<sup>1</sup> **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 contract. CAS excludes all services involving the extension, reduction, or change of the customer's existing 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.

<sup>2</sup> 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 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 an SAP Cloud Architect Advisor ("CAA"), an SAP Client Delivery Manager ("CDM"), or with the Private Cloud customer center team.

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

The PDF version of this **Roles & Responsibilities** document made available by SAP at <https://www.sap.com/about/agreements/policies/hec-services.html> at 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.

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
			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 service fees. Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler). Tasks are applicable only to systems managed by the service provider unless otherwise explicitly noted.			
1		<b>A - Service Management</b>	For accounts delivered by a Premium Partner, certain tasks in chapter "A - Service Management" are a joint effort between SAP and that Premium Partner.			
2		<b>Account Management</b>				
3	SM_1.1.01	Conduct Delivery and Operations Kick-Off -Review Support Manual -Landscape Review and Scope Alignment -Detailed Engagement and Operations Review	Standard Services		not applicable	n/a
4	SM_1.1.02	Capacity Management Review: Periodic 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.	Standard Services		not applicable	n/a
5	SM_1.1.03	Capacity Management Planning: Develop periodic capacity plan based on technical capacity management review	Standard Services		not applicable	n/a
6	SM_1.1.04	System outage notification and escalation management	Standard Services	Handling of critical service situations aiming to bring the service back to targeted quality and standards. Provide Root Cause Analysis (RCA) for production environment(s) only.	not applicable	n/a
7	SM_1.1.05	Service Performance Review and Report – Periodic - Provide review and suggestions if a high volume of support requests occurs - Service availability and KPIs	Standard Services		not applicable	n/a
8		<b>Service Request Management - Technical Support</b>				
9	SM_1.2.01	Use defined tracking system to enter and update technical requests	Excluded Tasks	Change Requests (CR) or Change Orders subject to process defined in Agreement.	not applicable	n/a
10	SM_1.2.09	Service Request Management - Receive and acknowledge requests in 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	Standard Services	Handling of Service Requests which require commercial change requests (CR) or need to be planned and coordinated only during customer business hours.	not applicable	n/a
11	SM_1.2.11_AE	Create service plan for reoccurring and proactive CAS tasks / Create and maintain service plan for reoccurring and proactive services	Standard Services	If applicable.	not applicable	n/a
12	SM_1.2.12_AE	Create and maintain release plan for managed landscape	Standard Services	Including check for SAP software updates (SAP Release Version, SAP Support Packages, SAP kernel updates, DB version) for contracted landscape.	not applicable	n/a
13		<b>Services to support industry regulations</b>	<b>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 contract; examples for industry standards that may be addressed with these services are GxP or HIPAA.</b>			
14		<b>Qualifications Services</b>				
15	SM_1.6.02	Qualification deliverables (project and lifecycle documentation)	Optional Services		not applicable	n/a
16	SM_1.6.03	Personnel qualification and training as mandatory requirement for administrator access to regulated industries systems	Optional Services		not applicable	n/a
17	SM_1.6.04	Onboarding / system set-up with additional Installation Qualification	Optional Services		not applicable	n/a
18		<b>Process Services</b>				
19	SM_1.6.06	Documents and records management for regulated industries	Optional Services		not applicable	n/a
20	SM_1.6.07	Change and configuration management for regulated industries	Optional Services		not applicable	n/a
21	SM_1.6.08	Problem management for regulated industries	Optional Services		not applicable	n/a
22	SM_1.6.09	Audits and periodic review	Optional Services		not applicable	n/a
23	SM_1.6.10	System decommission for regulated industries	Optional Services		not applicable	n/a

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24		<b>B - Managed Infrastructure</b>		<b>Section B - Managed Infrastructure describes the infrastructure services provided for components used as part of 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).</b>		
25		<b>Data Center Management</b>				
26	INFRA_1.1.01	Manage Data Center	Standard Services	This service is operated either in DC facilities owned by the respective service provider, in rented co-location facilities, public cloud, or on hyperscaler infrastructure platforms.	not applicable	n/a
27		<b>Network Management</b>				
28	INFRA_1.2.01	Manage remote connection between the managed system landscape and service provider's support infrastructure	Standard Services	Service initiated after formal transition to service provider.	not applicable	n/a
29	INFRA_1.2.03	Separation of systems in customer landscape into more than one network segment	Additional Service	Note: This task is not available when using a Hyperscaler deployment model as this requires a decommission and rebuild all systems. Customers using a Hyperscaler deployment model are strongly advised to provide final IP address ranges before initial system build.	not applicable	n/a
30	INFRA_1.2.04	Modify existing customer connectivity (VPN, MPLS, Cloud Peering etc.)	Standard Services	One (1) ticket per each feature change is required (after initial connectivity is established).	not applicable	n/a
31	INFRA_1.2.05	Add additional VPN or MPLS or Cloud Peering	not offered		not applicable	n/a
32	INFRA_1.2.06	IP address migration - Change IP addressing of existing network segment to new IP addressing	Additional Service	Used for cases where the original IP range of a network segment (including delivered systems) needs to be changed. Note: This task is not available when using a Hyperscaler deployment model as this requires a decommission and rebuild all systems. Customers using a Hyperscaler deployment model are strongly advised to provide final IP address ranges before initial system build.	not applicable	n/a
33	INFRA_1.2.07	Enable DNS integration of on-premise customer domains into customer DNS servers to resolve on-premise host names	Standard Services	Supported through DNS forwarding on the DNS server. This task does not add /etc/hosts file entries on individual servers.	not applicable	n/a
34	INFRA_1.2.08	Migrate SAP domain (*.sap.biz) to customer domain or customer domain migration	Additional Service	Used in case customer wants to change from internal domain to customer domain or want to migrate existing domain to new domain due to organizational change.	not applicable	n/a
35		<b>Hardware Operations</b>	<b>Applies to equipment managed by service provider.</b>			
36	INFRA_1.4.03	Plan and conduct managed service infrastructure maintenance	Standard Services		not applicable	n/a
37	INFRA_1.4.05	Monitor critical operations parameters of computing environment	Standard Services		not applicable	n/a
38	INFRA_1.4.06	Monitor disk capacity	Standard Services	Subject to additional fees for additional capacity.	not applicable	n/a
39	INFRA_1.4.07	Monitor server capacity	Standard Services	Subject to additional fees for additional capacity.	not applicable	n/a
40	INFRA_1.4.08	Monitor network utilization	Standard Services		not applicable	n/a
41	INFRA_1.4.09	Infrastructure/hardware/system requests; Process commercial change requests as required for hardware upgrades, additions etc.	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).	not applicable	n/a
42	INFRA_1.4.11	Scale compute capacity (memory and CPU)	Optional Services		not applicable	n/a
43		<b>Storage Management</b>				
44	INFRA_1.5.01	Manage data files, file systems and disks per standards and practices	Standard Services		not applicable	n/a
45	INFRA_1.5.02	Scale storage capacity	Optional Services		not applicable	n/a
46	INFRA_1.5.03	Enable SnapLock/WORM/Immutability capability for archiving use cases	not offered		not applicable	n/a
47	INFRA_1.5.04_AE	Review and analyze the impact of data volume/load on data environment performance	Cloud Application Services ("CAS"). Can be performed by customer.		Data Volume Optimization	D6
48	INFRA_1.5.05_AE	Determine if existing hardware can meet growth	Cloud Application Services ("CAS"). Can be performed by customer.		Data Volume Optimization	D6
49	INFRA_1.5.06_AE	Develop alternative plans (e.g. archiving, consolidation, hardware upgrades)	Cloud Application Services ("CAS"). Can be performed by customer.		Data Volume Optimization	D6
50		<b>Operating System</b>				
51	INFRA_1.6.01	Create and maintain OS users and groups	Standard Services	Service provider access only, no privileged access to operating system by customer.	not applicable	n/a
52	INFRA_1.6.04	Inform customer regarding security incidents	Standard Services		not applicable	n/a
53	INFRA_1.6.05	Configure OS parameters	Standard Services		not applicable	n/a
54	INFRA_1.6.06	Troubleshoot operating system problems, monitor system log and file systems	Standard Services		not applicable	n/a
55	INFRA_1.6.07	Work with OS vendor to resolve operating system issues	Standard Services		not applicable	n/a
56	INFRA_1.6.08	Monitoring of swap and page areas	Standard Services		not applicable	n/a
57	INFRA_1.6.09	Monitoring of memory load	Standard Services		not applicable	n/a
58	INFRA_1.6.12	Software Lifecycle Management of operating system	Standard Services		not applicable	n/a
59		<b>System Startup/Shutdown</b>				
60	INFRA_1.7.01	Perform scheduled startup/shutdown of computing environment	Standard Services		not applicable	n/a
61	INFRA_1.7.03	Restart computing environment after failure	Standard Services		not applicable	n/a
62		<b>Backup/Restore</b>				
63		<b>General</b>				
64	INFRA_1.8.01	Perform standard file system and database backups	Standard Services	Per standards, or according to specific terms of the Agreement.	not applicable	n/a
65	INFRA_1.8.10	Perform exceptional ad-hoc backup upon request	Additional Service	Lead time for backup to be aligned in advance.	not applicable	n/a
66	INFRA_1.8.09	Provide non-standard backup services (e.g. extended retention period for long-term backups)	Additional Service		not applicable	n/a
67	INFRA_1.8.11	Monitor backup processes	Standard Services		not applicable	n/a
68	INFRA_1.8.07	Test backup/restore procedures periodically	Standard Services	Verify procedures used in and operational readiness; testing is not performed for each individual system but for representative scenarios.	not applicable	n/a
69	INFRA_1.8.03	Perform data restore and recovery (file system, database) as required after system failures	Standard Services		not applicable	n/a
70	INFRA_1.8.02	Perform data restore and recovery (file system, database) on customer request (other reasons than as a response to system failures)	Standard Services		not applicable	n/a
71	INFRA_1.8.06	Validate logical integrity and consistency of restored information	Excluded Tasks		not applicable	n/a
72		<b>NFS DB Volume Consistent Snapshot and Restore</b>				
73	INFRA_1.13.01	Perform standard NFS DB volume snapshot	Standard Services	SAP HANA and ASE only. Per standards, or according to specific terms of the Agreement.	not applicable	n/a
74	INFRA_1.13.02	Perform ad-hoc NFS DB volume consistent snapshot	Additional Service	Lead time for backup to be aligned in advance.	not applicable	n/a

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75	INFRA_1.13.03	Perform exceptional ad-hoc NFS DB volume consistent snapshot	Additional Service	Example: extend retention period for a snapshot or transfer to secondary system for longer retention. 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.	not applicable	n/a
76	INFRA_1.13.04	Perform DB nfs volume snapshot restore and recovery (file system, database) - as required after system failures	Standard Services	Extra charges apply for restores if caused by customer error.	not applicable	n/a
77	INFRA_1.13.05	Perform DB nfs volume restore and recovery (file system, database) on customer request - reasons other than as a response to system failures	Additional Service		not applicable	n/a
78	INFRA_1.13.06	Perform standard flat filesystem NFS volume snapshot (non-DB volumes)	Standard Services	Per standards, or according to specific terms of the Agreement.	not applicable	n/a
79	INFRA_1.13.07	Restore standard flat filesystem NFS volume snapshot (non-DB volumes)	Additional Service		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
<b>80</b>		<b>Infrastructure integration</b>				
81	INFRA_1.9.02	Integrate customer Active Directory, Google IdP and other identity management solutions	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
82	INFRA_1.9.04	Provide access to systems/resources within customer infrastructure	Excluded Tasks	If required to fulfil agreed contractual obligations.	not applicable	n/a
<b>83</b>		<b>File transfer capabilities: CIFS shares</b>				
84	INFRA_1.10.01	Mount remote customer SMB shares locally on managed landscape Linux clients (aka CIFS)	Standard Services	Within contractually agreed infrastructure capacity.	not applicable	n/a
85	INFRA_1.10.01 A	Provide Samba Server Share on managed landscape LINUX server for remote SMB clients	Standard Services	Within contractually agreed infrastructure capacity.	not applicable	n/a
86	INFRA_1.10.03	User and access management	Standard Services	Once/initially when share is created.	not applicable	n/a
87	INFRA_1.10.04	Create and maintain folder structure on shares	Standard Services		not applicable	n/a
88	INFRA_1.10.05	Ensure up-to-date anti-virus protection on end user equipment connecting to the provided shares	Excluded Tasks		not applicable	n/a
89	INFRA_1.10.06	Implement virus protection on server	Standard Services		not applicable	n/a
90	INFRA_1.10.07	Backup of data uploaded to shares to ensure data integrity	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.	not applicable	n/a
<b>91</b>		<b>Managed SFTP Server</b>	<b>To be installed on existing application server in managed system</b>			
92	INFRA_1.11.01	Configure sftp daemon	Standard Services	Only available on Linux.	not applicable	n/a
93	INFRA_1.11.02 AE	Create and maintain sftp user accounts and groups	Standard Services	Up to 10 users.	not applicable	n/a
94	INFRA_1.11.03	Manage file systems	Standard Services	Within contractually agreed infrastructure capacity.	not applicable	n/a
95	INFRA_1.11.04	Provide user list	Excluded Tasks		not applicable	n/a
96	INFRA_1.11.05	Create and delete files	Excluded Tasks		not applicable	n/a
<b>97</b>		<b>Management of Wide Area Network</b>				
98	INFRA_1.12.01	Provide network infrastructure at customer data center/site	Excluded Tasks		not applicable	n/a
99	INFRA_1.12.02	Provide network switching and ports at SAP/Partner data center to customer to connect telco equipment	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.	not applicable	n/a
100	INFRA_1.12.03	Determine appropriate size and purchase network connection between customer and managed system sites; manage telecommunication provider/ISP	Excluded Tasks		not applicable	n/a
101	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	not offered		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
102		<b>C1 - Database Management SAP HANA</b>				
103		<b>SAP HANA (general database operations)</b>		<b>The standard service scope specified by this version of the Roles and Responsibilities includes certain baseline features and functionalities which are part of the SAP HANA database. SAP HANA provides additional or optional features and functionalities for which related services and support are not included in the standard service scope, and may be available on an additional cost basis. Additional and optional services to support these and future SAP HANA features and the availability of those services will be evaluated and determined by SAP on a case-by-case basis, including the assessment of associated efforts and costs. The respective standard and additional services are shown in separate sections of this document.</b>		
104	HANA_1.1.31	Provide recommendations on database release management	Standard Services	Service provider will provide guidance on recommended database releases based on operational experience and information given by SAP Product Development.	not applicable	n/a
105	HANA_1.1.01	Plan and perform file system extensions for e.g. backup activities	Standard Services	Additional infrastructure consumption requires a CR.	not applicable	n/a
106	HANA_1.1.02	Monitor database resource consumption to detect issues in technical operations	Standard Services	Task output feeds into capacity management; recommendations for optimization may also be provided via SAP Enterprise Support services.	not applicable	n/a
107	HANA_1.1.03	Monitor table growth to proactively prevent operational issues and ensure that the service stays within the contractual sizing boundaries	Standard Services	Storage capacity is specified in the service description. Recommendations for limitation of data growth could may also be provided via SAP Enterprise Support services.	not applicable	n/a
108	HANA_1.1.25	Design table partitioning strategy/architecture	Excluded Tasks	Customer may engage SAP Consulting for designing table partitioning strategy and architecture.	not applicable	n/a
109	HANA_1.1.04	Partition tables (technical execution)	Standard Services	If required as a consequence of extensive table growth; One (1) execution per year included; any further requests will be charged separately.	not applicable	n/a
110	HANA_1.1.35	Partition tables (technical execution) - additional requests	Additional Service	Efforts for additional table partition requests.	not applicable	n/a
111	HANA_1.1.36	Database table redistribution based on the table placement rules (Technical Execution)	Standard Services	For requirements involving application dependency (e.g. Moving tables and table partitions manually from one host to another).	not applicable	n/a
112	HANA_1.1.05	Perform rowstore / column store migration: technical execution only	Standard Services	Per customer request. Executing party to be mutually agreed between the service provider and customer; migration of larger SAP tables to be done by service provider; customer should perform task on own tables if desired; additional downtime required per customer approval.	not applicable	n/a
113	HANA_1.1.37	Database Defragmentation (Data Volume Reclamation)	Standard Services		not applicable	n/a
114	HANA_1.1.38	Database Row Store Fragmentation	Standard Services		not applicable	n/a
115	HANA_1.1.06	Monitor database for technical issues; analyze and resolve technical database failures	Standard Services		not applicable	n/a
116	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	Standard Services		not applicable	n/a
117	HANA_1.1.08	Maintain technical configuration parameters for SAP HANA and SAP HANA XS based on and standards and recommendations	Standard Services		not applicable	n/a
118	HANA_1.1.09	Start/stop database	Standard Services		not applicable	n/a
119	HANA_1.1.10	Add/remove SAP HANA node to adjust SAP HANA capacity	Optional Services	For HANA scale-out configurations only.	not applicable	n/a
120	HANA_1.1.28	Create additional schema for existing SAP HANA datamart	Standard Services		not applicable	n/a
121	HANA_1.1.29	Change of SAP HANA database ID and instance number	Standard Services		not applicable	n/a
122	HANA_1.1.26	Change SAP HANA database architecture (single node to multi node or vice versa)	not offered		not applicable	n/a
123	HANA_1.1.11	Manage standby databases (HANA System Replication) for high availability	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 set-ups. Failover tests are not performed on a regular basis per system.	not applicable	n/a
124	HANA_1.1.11A	Manage standby databases (ASE System Replication) for high availability	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 set-ups. Failover tests are not performed on a regular basis per system.	not applicable	n/a
125	HANA_1.1.11B	Manage standby application instance for high availability	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 set-ups. Failover tests are not performed on a regular basis per system.	not applicable	n/a
126	HANA_1.1.34	Test standby databases (HANA System Replication) for high availability at customer request	Additional Service		not applicable	n/a
127	HANA_1.1.34A	Test standby databases (ASE System Replication) for high availability at customer request	Additional Service		not applicable	n/a
128	HANA_1.1.34B	Test standby Application instance for high availability at customer request	Additional Service		not applicable	n/a
129	HANA_1.1.12	Update SAP HANA database software and update of DB client	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.	not applicable	n/a
130	HANA_1.1.33	SAP HANA version upgrade and update of DB Client	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.	not applicable	n/a
131	HANA_1.1.27	Implement updates to the managed SAP HANA database using advanced tools and methods which are part of the Maintenance Downtime Minimization Service to minimize required downtime	Additional Service	Available from SAP HANA SPS 12 onwards.	not applicable	n/a
132	HANA_1.1.22	SAP HANA Transports Management Set-up	Standard Services		not applicable	n/a
133	HANA_1.1.14	Implement / maintain additional SAP tools (e.g. SAP HANA Analytics Foundation Browser)	Standard Services	Depending on customer requirements; only for tools in the HANA context delivered by SAP, 3rd party tools not covered.	not applicable	n/a
134	HANA_1.1.15	Identify, analyze and optimize expensive SQL-statements to improve application performance	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Data Environment Health Checks or Performance Optimization	A1, D1, P2
135	HANA_1.1.16	System troubleshooting, e.g. blocked transactions, to overcome issues and bring SAP HANA back to normal state of operations	Standard Services		not applicable	n/a
136	HANA_1.1.17	Create/modify users for HANA modelling in the SAP HANA Studio	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Data Environment Health Checks	A1, D1
137	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	Application Operations or Secure Users & Authorizations	A1, S2



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138	HANA_1.1.19	User, roles and permissions management for technical and administration users	Standard Services	Technical users: e.g. users delivered and used by SAP HANA. This service is only for internal Users created by service provider e.g. SAPSID / SAPABAP1 / SAPHANADB.	not applicable	n/a
139	HANA_1.1.20	Perform database backups (regular full backups and log backups)	Standard Services	Per backup policy.	not applicable	n/a
140	HANA_1.1.21	Restore and recover SAP HANA after technical issues	Standard Services	Restores on customer request provided at additional costs.	not applicable	n/a
141	HANA_1.1.30	Perform database consistency check (DBCC)	Standard Services		not applicable	n/a
142	HANA_1.1.32	Export/Import of database schema	Excluded Tasks		not applicable	n/a
143	HANA_1.1.23	Set-up and operate encrypted HANA database	Optional Services		not applicable	n/a
144	HANA_1.1.24	Implement SAP HANA database encryption on SAP HANA database already installed	Standard Services	Downtime required for re-installation of database; potential additional storage consumption is subject to a change request (CR).	not applicable	n/a
145	HANA_1.1.39	Implement SAP HANA log encryption on SAP HANA database already installed	Standard Services		not applicable	n/a
146	HANA_1.1.40	Configure Secure Communication on SAP HANA System Replication (HSR)	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.	not applicable	n/a
147	HANA_1.1.41	Activate SAP HANA Fast Restart Option	Standard Services		not applicable	n/a
148	HANA_1.1.42	Deactivate SAP HANA Fast Restart Option	Standard Services		not applicable	n/a
149		<b>SAP HANA XS</b>				
150	HANA_1.2.01	Maintain technical configuration parameters for SAP HANA XS based on SAP standards and recommendations	Standard Services		not applicable	n/a
151	HANA_1.2.02	Maintain Application Runtime Configurations	Standard Services		not applicable	n/a
152	HANA_1.2.03	Manage Trust Relationships	Standard Services		not applicable	n/a
153	HANA_1.2.04	Maintain SAML Providers	Standard Services		not applicable	n/a
154	HANA_1.2.05	Maintain SMTP Server Configurations	Standard Services		not applicable	n/a
155	HANA_1.2.06	Maintain HTTP Access to SAP HANA	Standard Services		not applicable	n/a
156	HANA_1.2.08	Maintain User Self Service Tools	Standard Services		not applicable	n/a
157	HANA_1.2.09	Schedule XS Jobs	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
158	HANA_1.2.11	Maintain HTTP Traces for SAP HANA XS Applications	Standard Services		not applicable	n/a
159		<b>SAP HANA XSA</b>	<b>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).</b>			
160	HANA_1.9.01	Install along with HANA Server	Optional Services		not applicable	n/a
161	HANA_1.9.02	Install XSA Components as an add-on for already installed HANA Server	Optional Services		not applicable	n/a
162	HANA_1.9.04	Set-up/Configure XSA for HANA Development at customer side	Excluded Tasks		not applicable	n/a
163	HANA_1.9.05	Configure XS-CLI Tool for HANA Development	Excluded Tasks		not applicable	n/a
164	HANA_1.9.06	User management for HANA Development	Excluded Tasks		not applicable	n/a
165	HANA_1.9.07	Monitoring of XSA services and its applications	Additional Service	Super set will be included in monitoring if selected.	not applicable	n/a
166	HANA_1.9.08	Set-up Logical database (Register Tenant Database)	Additional Service		not applicable	n/a
167	HANA_1.9.09	Set-up initial admin users for XSA	Additional Service		not applicable	n/a
168	HANA_1.9.10	Backup and restore of XSA specific files	not offered		not applicable	n/a
169	HANA_1.9.11	Web Dispatcher configuration for the applications installed by service provider and built by customers	Additional Service		not applicable	n/a
170	HANA_1.9.13	Support customer built applications	Excluded Tasks		not applicable	n/a
171	HANA_1.9.14	Availability monitoring of customer built applications	Excluded Tasks		not applicable	n/a
172	HANA_1.9.15	Backup of custom applications if using file system storage	Standard Services		not applicable	n/a
173	HANA_1.9.16	Restore of customer built applications using file system storage provided the backup has been enabled prior	Standard Services		not applicable	n/a
174	HANA_1.9.17	Post-restore task checking and connection of custom applications	Excluded Tasks		not applicable	n/a
175	HANA_1.9.18	HANA XS (XS classic) to XSA model conversion	Additional Service		not applicable	n/a
176		<b>SAP HANA: Smart Data Integration (Formerly Enterprise Information Management - EIM)</b>	<b>Extended feature beyond the standard service scope.</b>			
177		<b>Set-up - Technical Set-up Only - Does Not include Application Set-up</b>				
178	TO_HANA_SDI_1.1.01	Enable Data Provisioning Server	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.	not applicable	n/a
179	TO_HANA_SDI_1.1.02	Install, configure, and register Data Provisioning Agents	Optional Services		not applicable	n/a
180	TO_HANA_SDI_1.1.04	Set-up Smart Data Quality (SDQ)	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 set-up so that the customer may upload the address directories on their own.	not applicable	n/a
181	TO_HANA_SDI_1.1.05	Set-up Agile Data Preparation (ADP)	Standard Services	ADP requires SDQ, ESS and HRF be deployed and set-up with related users and authorizations.	not applicable	n/a
182	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.	Application Operations or Data Integration	A1, D2
183	TO_HANA_SDI_1.1.07	Set-up replications, federation and transformations	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Data Integration	A1, D2
184	TO_HANA_SDI_1.1.08	FlowGraph jobs backup	Excluded Tasks		not applicable	n/a
185	TO_HANA_SDI_1.1.09	Replication task backup	Excluded Tasks		not applicable	n/a
186	TO_HANA_SDI_1.1.10	DP Agent - High Availability set-up	Optional Services	DP Agent can be set-up in High Availability set-up by provisioning shadow instances on additional nodes; included only if explicitly mentioned in the contract.	not applicable	n/a
187	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.	Application Operations or Data Integration	A1, D2

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
188	TO_HANA_SDI 1.1.12	Deploy custom adapters with SAP HANA	Optional Services	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters.	not applicable	n/a
189	TO_HANA_SDI 1.1.13	Monitor Data Provisioning tasks and remote subscriptions	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Data Integration	A1, D2
190	TO_HANA_SDI 1.1.14	Process remote subscription exceptions	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Data Integration	A1, D2
191		<b>SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)</b>	<b>Extended feature beyond the standard service scope.</b>			
192		<b>Operational Set-up</b>				
193	TO_HANA_SA 1.0.01	Install Streaming Analytics option package	Optional Services	SAO package is installed on the SAP HANA DB node/MDC Tenant.	not applicable	n/a
194	TO_HANA_SA 1.0.02	Add Streaming Analytics option hosts	Optional Services		not applicable	n/a
195	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.	Application Operations or Data Integration	A1, D2
196	TO_HANA_SA 1.0.05	Set-up streaming authorization	Optional Services	Activate smart data streaming roles, privileges and object access for monitoring and operations.	not applicable	n/a
197	TO_HANA_SA 1.0.06	Activate SAP HANA Cockpit	Optional Services	Execute tasks for SAP HANA Cockpit activation for SAO operations and monitoring.	not applicable	n/a
198	TO_HANA_SA 1.0.07	Configure Streaming Cluster - High Availability set-up	Optional Services	Configure for high availability by adding multiple nodes. Additional Infrastructure required.	not applicable	n/a
199	TO_HANA_SA 1.0.08	Provision of Disaster Recovery (Streaming Analytics option nodes)	Optional Services	Provisioning of identical number of nodes at a secondary site to mirror primary site using provisioning tool.	not applicable	n/a
200	TO_HANA_SA 1.0.09	Streaming Lite set-up	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	not applicable	n/a
201	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.	Application Operations or Data Integration	A1, D2
202	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.	Application Operations or Data Integration	A1, D2

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
203		<b>SAP HANA: Multiple Database Containers (MDC)</b>				
204		<b>Operational Set-up</b>		<b>Extended feature beyond the standard service scope.</b>		
205	TO_HANA_MD C.1.1.01	Install HANA MDC (HANA server, Client, AFL, Runtime Libraries and Studio)	Standard Services	MDC is default in SAP HANA 2.0.	not applicable	n/a
206	TO_HANA_MD C.1.1.06	Create technical users	Standard Services	MDC is default in SAP HANA 2.0. Customer responsible for user management using CUST_USER_ROLE_ADMIN	not applicable	n/a
207	TO_HANA_MD C.1.1.02	Convert an SAP HANA System to support Multitenant Database Containers	not offered		not applicable	n/a
208	TO_HANA_MD C.1.1.07	Create additional tenants for datamart scenarios on existing infrastructure	Optional Services	For use on existing infrastructure. A change request (CR) is required for backup retention requirements and the set-up of new continuous monitoring.	not applicable	n/a
209	TO_HANA_MD C.1.1.08	Create additional tenants for datamart scenarios on new infrastructure	Optional Services	Additional infrastructure consumption requires a change request (CR).	not applicable	n/a
210	TO_HANA_MD C.1.1.04	Install additional services for tenant DB containers	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.	not applicable	n/a
211	TO_HANA_MD C.1.1.05	Scale out of tenant database	Standard Services	SAP BW systems only.	not applicable	n/a
212	TO_HANA_MD C.1.2.17 AE	Tenant Copy/Move Preparation, Checks, Certificates, Pre-Steps, Move/Copy via replication, post processing steps	Standard Services	Move will drop the source database after the task is complete. Copy will keep the source after the task is complete.	not applicable	n/a
213	TO_HANA_MD C.1.2.01	Network: Reserve additional ports to one instance to adjust tenant overhead per instance	Standard Services		not applicable	n/a
214	TO_HANA_MD C.1.2.03	Auditing: Create and enable audit policies for systemdb and each tenant db	Standard Services		not applicable	n/a
215	TO_HANA_MD C.1.2.04	Data storage: DB-specific encryption keys	Standard Services	SSFS Source Key Change.	not applicable	n/a
216	TO_HANA_MD C.1.2.08	Data storage: DB-specific encryption keys (SSFS Source Key) Change	Standard Services		not applicable	n/a
217	TO_HANA_MD C.1.2.06	Backup of individual tenants	Additional Service	As per standard, backups are performed for the entire database. However, a tenant-individual backup - as a file based dump - is possible on individual request.	not applicable	n/a
218	TO_HANA_MD C.1.2.07	Restore of individual tenant	Additional Service		not applicable	n/a
219	TO_HANA_MD C.1.2.10	Authorization: Manage system privileges and tenant DB privileges	Standard Services		not applicable	n/a
220		<b>Active-Active Read Enabled Set-up</b>		<b>Extended feature beyond the standard service scope.</b>		
221	TO_HANA_AAR	Install primary and secondary SAP HANA system	Optional Services	Import delivery units, set-up users and roles.	not applicable	n/a
222	TO_HANA_AAR	Establish log replay between both SAP HANA instances	Optional Services	Import delivery units, set-up users and roles.	not applicable	n/a
223	TO_HANA_AAR	Establish monitoring for secondary system	Optional Services		not applicable	n/a
224		<b>Remote Data Sync (RDS)</b>		<b>Extended feature beyond the standard service scope.</b>		
225		<b>Set-up and Configuration</b>				
226	TO_HANA_RDS 1.1.01	Install Remote Data Sync component on SAP HANA	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.	not applicable	n/a
227	TO_HANA_RDS 1.1.02	Add Remote Data Sync Host	Optional Services		not applicable	n/a
228	TO_HANA_RDS 1.1.03	Activate RDS roles, privileges and object access for monitoring and operations	Optional Services		not applicable	n/a
229	TO_HANA_RDS 1.1.04	Import of RDS delivery units	Optional Services	This task is required only in MDC set-ups.	not applicable	n/a
230	TO_HANA_RDS 1.1.05	Set-up and configure RDS nodes for each tenant DB including service initialization, cockpit access, delivery units and verification	Optional Services	This task is required only in MDC set-ups.	not applicable	n/a
231	TO_HANA_RDS 1.1.06	RDS cockpit - Set-up and Configuration	Optional Services	Execute tasks for HANA Cockpit activation for RDS operations and monitoring.	not applicable	n/a
232		<b>High Availability Set-up</b>				
233	TO_HANA_RDS 1.2.01	Set-up of additional hosts for high availability	not offered		not applicable	n/a
234	TO_HANA_RDS 1.2.02	High availability configuration	not offered		not applicable	n/a
235	TO_HANA_RDS 1.2.03	Set-up and configure LoadBalancer for High Availability support	not offered		not applicable	n/a
236		<b>Other Services</b>				
237	TO_HANA_RDS 1.3.01	Set-up and configure synchronization scripts	not offered		not applicable	n/a
238	TO_HANA_RDS 1.3.02	Monitor synchronization requests, process and status	not offered		not applicable	n/a
239		<b>Capture and Replay</b>		<b>Extended feature beyond the standard service scope.</b>		
240	TO_HANA_CR	Prepare capture in source system	Optional Services	Import Delivery units, set-up users and roles.	not applicable	n/a
241	TO_HANA_CR	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).	not applicable	n/a
242	TO_HANA_CR	Set-up replay in target system	Optional Services	Import Delivery units, set-up users and roles.	not applicable	n/a
243	TO_HANA_CR	Configure replayer service	Optional Services	Configure replayer service.	not applicable	n/a
244	TO_HANA_CR	Preprocess and replay in target system	Cloud Application Services ("CAS"). Can be performed by customer.		not applicable	n/a
245		<b>SAP HANA: Accelerator for SAP ASE (AFA)</b>				
246		<b>Operational Set-up</b>				

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
247	TO_AFA_1.1.01	Install Accelerator for SAP ASE Package	Standard Services	HANA - AFA package is installed on the SAP HANA DB node.	not applicable	n/a
248	TO_AFA_1.1.02	Add Accelerator for ASE Host	Standard Services	Adding Accelerator for ASE host. For multi-tenant set-ups, AFA nodes are added exclusively to each tenant DB.	not applicable	n/a
249	TO_AFA_1.1.03	Install and configure SAP Replication Server	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 cloud landscape, replication server can be installed as managed server.	not applicable	n/a
250	TO_AFA_1.1.04	Authorization - Set-up	Standard Services	Activate accelerator for ASE roles, privileges and object access for monitoring and operations. Provision specific user and roles.	not applicable	n/a
251	TO_AFA_1.1.05	Enable Pushdown Optimization	Standard Services	AFA pushdown optimization is enabled on AFA nodes.	not applicable	n/a
252	TO_AFA_1.1.06	Import Delivery Units	Standard Services	Import of AFA Delivery units in HANA multi-container scenarios. This task is required only in MDC set-up.	not applicable	n/a
253	TO_AFA_1.1.07	Multitenant Set-up	Standard Services	Configure and set-up AFA nodes for each tenant DB including, service initialization, cockpit access, delivery units and verification.	not applicable	n/a
254	TO_AFA_1.1.08	Configure HTTP Access for Multi Database Containers (MDC)	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 set-up.	not applicable	n/a
255	TO_AFA_1.1.09	High availability set-up and configuration	Optional Services	High Availability set-up and configuration involving single or multi-tenant DB set-ups including ETS group set-up; only if standby nodes are part of the contractual landscape design.	not applicable	n/a
256		<b>Other Services</b>				
257	TO_AFA_1.2.01	Pushdown Analysis Tool Set-up	Cloud Application Services ("CAS"). Can be performed by customer.	Simulation tool to evaluate pushdown optimization. This is carried out prior to AFA Deployment.	Application Operations	A1
258	TO_AFA_1.2.02	Data Replication for Accelerated Reporting	Excluded Tasks	Set-up ASE OLTP data replication to HANA DB. Identify and set-up DB objects to be replicated.	not applicable	n/a
259	TO_AFA_1.2.03	Monitor Accelerator for ASE Pushdown Statements	Excluded Tasks	Monitoring Accelerator for ASE objects including pushdown statements using HANA Cockpits.	not applicable	n/a
260		<b>Pacemaker High Availability Set-up</b>				
261		<b>Installation and Configuration</b>				
262	TO_HANA_PM_1.1.01	Install SUSE Cluster (pacemaker) package	Standard Services	For HANA 2.0 or SAP NetWeaver application servers.	not applicable	n/a
263	TO_HANA_PM_1.1.02	Set-up and configure the SUSE Cluster for monitoring SAP HANA database or Application resources	Standard Services		not applicable	n/a
264	TO_HANA_PM_1.1.03	Start/stop the application and perform failover in case of failures	Standard Services		not applicable	n/a
265	TO_HANA_PM_1.1.04	Configure ability to fence nodes in error conditions	Standard Services		not applicable	n/a
266	TO_HANA_PM_1.1.05	Configure SAP HANA Hooks	Standard Services	System replication, index server.	not applicable	n/a
267	TO_HANA_PM_1.1.06	Enable monitoring of SUSE cluster services availability	Standard Services		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
268		<b>C2 - Database Management</b>	<b>Excluding SAP HANA and Sybase IQ which are described in the respective sections.</b>			
269		<b>Database operations</b>				
270	DB_1.1.17	Provide recommendations on database release management	Standard Services	Service provider will provide guidance on recommended database releases based on operational experience and information given by SAP Product Development.	not applicable	n/a
271	DB_1.1.19	Monitor database resource consumption (memory, CPU, storage) to detect issues in technical operations	Standard Services	Task output feeds into capacity management; recommendations for optimization may also be provided via SAP Enterprise Support services.	not applicable	n/a
272	DB_1.1.02	Perform database extensions to increase database capacity	Standard Services	Increased consumption will be charged according to contractual Agreement and may be a prerequisite to this task.	not applicable	n/a
273	DB_1.1.03	Monitor table extension parameters to avoid issues	Standard Services		not applicable	n/a
274	DB_1.1.20	Monitor database for technical issues; analyze and resolve technical database failures	Standard Services		not applicable	n/a
275	DB_1.1.24	System troubleshooting, e.g. blocked transactions to overcome issues and bring database back to normal state of operations	Standard Services		not applicable	n/a
276	DB_1.1.05	Schedule periodic statistical database collectors to generate statistical performance data	Standard Services		not applicable	n/a
277	DB_1.1.06	Perform reorganization to remove database fragmentation	Standard Services		not applicable	n/a
278	DB_1.1.07	Maintain/change database parameters	Standard Services	Based on vendor recommendations and standards.	not applicable	n/a
279	DB_1.1.21	Start/stop database	Standard Services		not applicable	n/a
280	DB_1.1.10	Create and check optimizer statistics to maintain database performance	Standard Services		not applicable	n/a
281	DB_1.1.11	Perform upgrades of database software	Standard Services		not applicable	n/a
282	DB_1.1.12	Apply database patches	Standard Services		not applicable	n/a
283	DB_1.1.13	Perform database backups (regular database and log backups)	Standard Services	Per backup policy.	not applicable	n/a
284	DB_1.1.14	Restore and recover database after technical issues	Standard Services	For technical issues. Restores on customer request provided at additional costs.	not applicable	n/a
285	DB_1.1.22	Perform database consistency check (DBCC)	Standard Services		not applicable	n/a
286	DB_1.1.23	Export/Import of database schema	Standard Services		not applicable	n/a
287	DB_1.1.18	Implement SAP ASE database encryption on SAP ASE database already installed in cloud	Standard Services	No downtime required.	not applicable	n/a
288	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.		Data Environment Health Checks	D1
289	DB_1.1.25	Create indexes for application tables	Standard Services		not applicable	n/a
290	DB_1.126	Shrink database	Excluded Tasks		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
291		<b>D - Core Technical Operations</b>				
292		<b>System Installation</b>				
293	BASIC_1.8.01	Install cloud solution landscape as specified in the cloud contract, based on SAP and standards and best-practices	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 the cloud, the respective effort and costs are covered by the general set-up and there will be no additional charge for a "system copy". Source systems not residing inside cloud is not addressed by this comment and is covered by the separately contracted cloud onboarding and migration service.	not applicable	n/a
294	BASIC_1.8.25	System Rebuild	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.	not applicable	n/a
295	BASIC_1.8.02	Technical configuration (installation post-processing) of installed systems (e.g. scheduling of standard batch jobs, backup etc.)	Standard Services	Scope is determined by this Roles & Responsibilities document.	not applicable	n/a
296	BASIC_1.8.15	Basic Technical Configuration of SAP BW and SAP BW/4HANA Systems	Additional Service	For ABAP Greenfield set-ups only.	not applicable	n/a
297	BASIC_1.8.23	Install a preconfigured system from an SAP delivered template solution in a cloud skeleton system	Standard Services	SAP delivered template. Service must be requested during the initial provisioning phase. Template solution requests coming after the initial delivery of systems require additional service costs. Validation of the compatibility of different SAP delivered templates is not included in this service. Underlying target infrastructure must be appropriately sized and suited for the preconfigured system.	not applicable	n/a
298	BASIC_1.5.01	Customize and configure application, maintain application, application support and application troubleshooting	Excluded Tasks	Service provider 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.	not applicable	n/a
299	BASIC_1.8.03	Integrate installed systems into cloud operations environment	Standard Services	Performed One (1) time for each entirely new system. If the initial set-up is a migration, One (1) additional test run of the production (PRD) system is included. If the initial set-up is a conversion to S/4HANA, Two (2) additional test runs are included: One (1) for a non-production (QAS, DEV, etc.) system and One (1) for the productive (PRD) system. Additional test runs are available as a billable service.	not applicable	n/a
300	BASIC_1.8.03_PCE	Integrate installed systems into cloud operations environment - additional test run requests	Additional Service	For additional test run requests as described in BASIC_1.8.03.	not applicable	n/a
301	BASIC_1.8.04	Enable system monitoring	Standard Services		not applicable	n/a
302	BASIC_1.8.22	Data transfer to service provider during onboarding	Additional Service	One (1) 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.	not applicable	n/a
303	BASIC_1.8.22A_PCE	Download data from BLOB (binary large object) storage to managed server	Standard Services	Used to copy data from on-premise to a target server in the managed environment. Data transfer from cloud storage (e.g. BLOB,S3,GCP) to managed server during onboarding.	not applicable	n/a
304	BASIC_1.8.20	Provide special support to customer during onboarding	Additional Service	Depending on scope and approach of 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.	not applicable	n/a
305	BASIC_1.8.05	Integrate system with other systems and applications	Cloud Application Services ("CAS"). Can be performed by customer.	Create RFC and/or JAVA connections to satellite systems.	Application Operations	A1
306	BASIC_1.8.14	Implementation of SAP Best Practices and similar packages	Standard Services	Customer to inform SAP of the Best Practice (BP) activation requirement during initial provisioning, otherwise existing business client will be overwritten by the new client copy issued from Best Practices activation. Customer is responsible for defining/selecting Best Practice business of the selected country by providing completed Best Practice questionnaire document. BP activation is restricted to single country only in this service. BP activation can only be requested once per system landscape. 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. The implementation of "Best Practices for SAP S/4HANA" includes the activation of required business functions in client 000, the provisioning of a client with the desired client set-up alternative, and Best Practice scope items activation in the systems (if requested in the Best Practice questionnaire document provided by the customer). Fiori technical enablement will be done in the (re-)created client. The activation of corresponding SAP Fiori Apps is not covered by this service.	not applicable	n/a
307	BASIC_1.8.24	Implement a preconfigured system from SAP Cloud Appliance Library (CAL) solution in a skeleton system	Standard Services	Optional part for installation of systems of customer's cloud solution landscape. The CAL image can only be used to set-up the sandbox system. Service must be requested during the initial provisioning phase. All CAL image deployment requests coming after the initial delivery of systems will generate additional service costs. Validation of the compatibility of different Model Companies is not included in this service. Underlying target infrastructure must be appropriately sized and suited for the preconfigured template.	not applicable	n/a
308	BASIC_1.8.19	Configure SAP online help (local installation)	Standard Services	Once (1) per system; subject to contractual change request (CR) to cover increased infrastructure consumption and additional administrative efforts.	not applicable	n/a
309	BASIC_1.8.21	Install ODBC Drivers to connect to external databases	Standard Services	On SLT/HANA SDS/BOBJ: customer needs to provide required software including appropriate usage rights for an installation in cloud; customer needs to provide specification for required connection (e.g. SSL/TLS).	not applicable	n/a
310	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) - requires infrastructure change	Optional Services	Contractual change request (CR) required to reflect higher infrastructure consumption, subject to additional service fees. If this is a software or configuration only type change then task BASIC_1.8.12A should be used.	not applicable	n/a
311	BASIC_1.8.12A	Increase system capacity by adding additional components (nodes, application servers etc.) or moving existing system to larger infrastructure (e.g. larger database server) - requires software or configuration change only	Additional Service	Non-infrastructure changes only. If there is a change to infrastructure, a change request (CR) is required and task BASIC_1.8.12 should be used.	not applicable	n/a
312	BASIC_1.8.10	Data handover from service provider to customer - one time	Standard Services	Delivered One (1) time per contract duration period. Efforts for a One (1) time data handover (creation of export/backup and transfer to media) as part of a contract or system termination are included in the 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.	not applicable	n/a
313	BASIC_1.8.13	Data handover from service provider to customer - additional requests	Additional Service	Efforts for additional data handover (creation of export/backup and transfer to media). Planning, coordination, media and logistics of shipment as well as all associated costs are customer responsibility.	not applicable	n/a
314		<b>Incident Management</b>				
315	BASIC_1.16.01	Operate Call Center receiving incidents 24x7x365	Standard Services	24x7 support only in English language, local languages where available during business hours and explicitly agreed with the customer.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
316	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	Standard Services		not applicable	n/a
317	BASIC_1.16.03	Sign-off/Approve solution and confirm incident resolution	Excluded Tasks		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
318		<b>Event detection and notification ("monitoring")</b>				
319	BASIC_1.8.17	Monitoring and event detection of SAP system availability and critical system states	Standard Services	Monitoring requirements are defined based on Roles & Responsibilities and SLAs; activated monitoring metrics and used thresholds are subject to constant change and tuning.	not applicable	n/a
320	BASIC_1.7.07	Monitor critical business transactions	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.	Application Monitoring or System Health Monitoring	M1, M2
321		<b>General Operations</b>				
322	BASIC_1.8.08	Start/Stop managed systems	Standard Services		not applicable	n/a
323	BASIC_1.1.15	Troubleshoot technical issues in managed systems	Standard Services	For technical issues only, application related problems must be resolved by the customer.	not applicable	n/a
324	BASIC_1.1.14	Assist customers with tasks in their area of responsibility if OS access is required	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 cloud. The 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.	not applicable	n/a
325	BASIC_1.1.16	Regular analysis and maintenance of SAP system profile parameters	Standard Services	Service provider is responsible for executing this task as it can have an impact on system performance and availability. Provider will provide recommendations for technical system parameters; Provider will also adjust parameters by customer request except for certain standardized settings required to maintain system stability or security.	not applicable	n/a
326		<b>SAP Security Management</b>				
327	BASIC_1.2.22	Define and implement security concept for application	Excluded Tasks		not applicable	n/a
328	BASIC_1.2.23	Define and implement infrastructure security concept	Standard Services		not applicable	n/a
329	BASIC_1.2.19	Customer specific Security Audit Log analysis	Cloud Application Services ("CAS"). Can be performed by customer.		Audit Readiness	C1
330	BASIC_1.2.20	Analyze the SAP system and identify relevant SAP security notes	Standard Services	SAP security notes will be analyzed for SAP NetWeaver based systems to identify critical notes.	not applicable	n/a
331	BASIC_1.2.27	Implement relevant SAP security notes	Standard Services	SAP security notes for priority "Very High" and "High" will be implemented in SAP NetWeaver based systems only if customers approve SAP to implement and transport SAP Notes from DEV to QAS and PRD systems by agreeing to a standard change process. Testing of implemented Notes is always customer's responsibility. Customers who do not agree to a standard change process will be informed about available security notes but implementation and transport need to be extra triggered via ad hoc service request.	not applicable	n/a
332	BASIC_1.2.17	Definition, maintenance, review and audit of roles, profiles, authorizations etc.	Cloud Application Services ("CAS"). Can be performed by customer.		Audit Readiness or Secure Users & Authorizations	C1, S2
333	BASIC_1.2.18	Administer customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, source data and passwords)	Cloud Application Services ("CAS"). Can be performed by customer.		Secure Users & Authorizations	S2
334	BASIC_1.2.15	Maintain user profiles, roles, authorizations, source data and passwords in client 000	Standard Services		not applicable	n/a
335	BASIC_1.2.16	Provide access to client 000 for customer	Standard Services	Restricted, predefined profile only; limited set of users provided; service provided on request only.	not applicable	n/a
336	BASIC_1.2.25	Design / Architecture of Single Sign On (SSO) for systems in cloud landscape	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
337	BASIC_1.2.24	Implementation of Single Sign On (SSO) for systems in cloud landscape	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
338	BASIC_1.2.21	Provide audit log information to customers	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.	not applicable	n/a
339	BASIC_1.2.26_AE	Update Global Change parameters and default system settings	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
340		<b>Homogeneous system copy (aka System refresh)</b>		<b>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.</b>		
341	BASIC_1.3.11	Pre-processing tasks, i.e. export tables with 'old' configuration	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
342	BASIC_1.3.10	Homogeneous system copy (Planning, preparations, checks, database backup, database restore, technical post processing tasks, test of technical system functionality)	Standard Services	Does not include activities such as data masking, scrambling etc.	not applicable	n/a
343	BASIC_1.3.07	Post processing tasks e.g. Embedded Search, BDLS	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1



#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
344		<b>Release Management</b>				
345	BASIC_1.5.13	Install new entities in the system after initial customer handover during Onboarding (applies to e.g. add-ons and other sorts of additional solution packages, languages, content packages etc.)	Standard Services	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.	not applicable	n/a
346	BASIC_1.5.13A	Install new software entities in the system after initial customer handover during Onboarding (applies to e.g. add-ons and other sorts of additional solution packages)	Standard Services	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.	not applicable	n/a
347	BASIC_1.5.13B	Install new content in the system after initial customer handover during Onboarding (applies to e.g. languages, content packages etc.)	Standard Services	Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.	not applicable	n/a
348	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 Roles & Responsibilities document; fixing issues that fall into the responsibility of service provider 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 standard service. The two areas, where the service mostly applies are BC-CST and BC-DB	Application Operations	A1
349	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)	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 Roles & Responsibilities document; fixing issues that fall into the responsibility of Provider 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 standard service. The two areas, where the 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.	not applicable	n/a
350	BASIC_1.5.06	Implementation of patches for system software running on OS level, e.g. SAP kernel	Standard Services	May require additional system downtime.	not applicable	n/a
351	BASIC_1.5.21	Implement kernel patches using Rolling Kernel Update Service	Standard Services	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 this procedure at least one application server instance is always available for business operations. Minimum Eligibility: A minimum of two (2) application servers are required to execute the service automatically and with minimized system downtime. The service can be used as of SAP kernel release 741 and SAP_BASIS equal to or greater than 740 SP5. This service is only for SAP ABAP systems. This service does not include the configuration an additional gateway in the ASCS instance because this gateway will fail when the ASCS instance is restarted.	not applicable	n/a
352	BASIC_1.5.09	Implement updates to the managed SAP solution using standard tools and methods	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.	not applicable	n/a
353	BASIC_1.5.11	Implement updates to the managed SAP solution using advanced tools and methods which are part of the Maintenance Downtime Minimization Service to minimize required downtime	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.	not applicable	n/a
354	BASIC_1.5.10	Ongoing maintenance of system languages, e.g. performing language fill-up	Standard Services		not applicable	n/a
355	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.	Release Version Upgrade	U3
356	BASIC_1.5.07	Version upgrade of SAP Software: Execute technical upgrade tasks	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.	not applicable	n/a
357	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.	Release Version Upgrade	U3
358	BASIC_1.5.08	Execute application related technical tasks as part of the continuous Release and Change Management	Cloud Application Services ("CAS"). Can be performed by customer.		Release Version Upgrade	U3

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
359	BASIC_1.5.20	Conversion of SAP ERP and SAP BW systems to SAP S/4HANA and SAP BW4/HANA	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. This service only applies to managed systems.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
<b>360</b>		<b>Proactive services</b>				
361	BASIC_1.7.02	Prepare SAP service sessions session by maintaining RTCCTOOL	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.	not applicable	n/a
362	BASIC_1.7.03	Analysis of SAP Service Session reports (incl. EarlyWatch Alert) for systems operated in the cloud for findings and recommendations regarding aspects within the service scope of cloud (technical operations)	Standard Services	Performed only for productive systems.	not applicable	n/a
363	BASIC_1.7.09	Analysis of SAP Service Session reports (incl. EarlyWatch Alert) for systems operated in the cloud. Provide recommendations for changes related to SAP application (outside technical operations scope of standard service).	Cloud Application Services ("CAS"). Can be performed by customer.	Performed only for productive systems.	Application Operations	A1
364	BASIC_1.7.11_AE	Process chain retriggering or cancellation	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
<b>365</b>		<b>System performance management</b>				
366	BASIC_1.12.01	Initial assessment of system performance issues	Standard Services	Service provider 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 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.	not applicable	n/a
367	BASIC_1.12.03	Troubleshoot SAP system performance issues (technical root causes within cloud service scope)	Standard Services	Based on the result of the initial assessment, troubleshooting by service provider is only performed in situations caused by technical issues within the service scope and where the system performance lies outside usual and expected behavior (e.g. as it has shown in the past in comparable load situations).	not applicable	n/a
368	BASIC_1.12.02	Performance and Benchmark Service	Additional Service	Includes the definition of performance metrics and measurements against those to identify deviations in system behavior; a detailed service description is available.	not applicable	n/a
369	BASIC_1.7.06	Analyze and troubleshoot performance issues (root causes outside service scope and application related root causes)	Cloud Application Services ("CAS"). Can be performed by customer.	In some situations service provider might be able to support the customer using Application Management as a CAS service.	Performance Optimization	P2
370	BASIC_1.7.12_AE	Identify the root cause of failing KPIs and define preventive/corrective actions and/or possible countermeasures	Cloud Application Services ("CAS"). Can be performed by customer.		Performance Benchmark or Performance Optimization	P1, P2
371	BASIC_1.12.04	Execute performance tuning	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 standard service. Performed only for productive systems.	not applicable	n/a
372	BASIC_1.7.08	Review and optimize customer code to improve system performance and stability	Excluded Tasks		not applicable	n/a
<b>373</b>		<b>Certificate Handling</b>				
374	BASIC_1.11.01	Generate Certificate Signing Request (CSR)	Standard Services	Except LoadBalancers, Web Dispatchers, Data Services, SAP Business Technology Platform (formerly SAP Cloud Platform) Integration - Data Services Agent, BO and other systems; for these systems service provider will generate the CSR and hand it over to the customer for further processing.	not applicable	n/a
375	BASIC_1.11.09	Generate Certificate Signing Request (CSR) for LoadBalancers, Web Dispatchers, Data Services and BO systems	Standard Services		not applicable	n/a
376	BASIC_1.11.02	Send certificate signing request to Certificate Authority	Excluded Tasks		not applicable	n/a
377	BASIC_1.11.08	Create SSL server / client identity with key pair	Standard Services		not applicable	n/a
378	BASIC_1.11.04	System (OS Level) configuration to enable SSL/TLS	Standard Services		not applicable	n/a
379	BASIC_1.11.05	System (Application Level) configuration to enable SSL/TLS	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: Establish the SSL Connection to SAP Business Technology Platform (formerly SAP Cloud Platform) via TA STRUST.	not applicable	n/a
380	BASIC_1.11.07	Implement signed certificate for LoadBalancers, Web Dispatchers, Data Services, SAP Business Technology Platform (formerly SAP Cloud Platform) - Data Services Agent and BO systems	Standard Services	Related to Fiori enablement only. Customer has to provide signed certificates	not applicable	n/a
381	BASIC_1.11.10	Implement other signed certificate to managed system	Standard Services	Related to Fiori enablement only. Other than LoadBalancers, Web Dispatchers, Data Services, SAP Business Technology Platform (formerly SAP Cloud Platform) - Data Services Agent, BO, and other systems.	not applicable	n/a
382	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.	Application Monitoring or System Health Monitoring	M1, M2

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
<b>383</b>		<b>Disaster Recovery</b>				
384	BASIC_1.9.01	Implement disaster recovery set-up according to architecture blueprint and contractual specifications. Test managed service internal data center and technical system infrastructure.	Optional Services	Performed only for productive systems; only included in service if disaster recovery solution is part of the contract/SOW/Order Form. Managed landscape internal testing requires additional downtime.	not applicable	n/a
385	BASIC_1.9.02	Develop and use disaster recovery procedures for database and file system replication only	Optional Services	Performed only for productive systems; only included in service if disaster recovery solution is part of the contract/SOW/Order Form.	not applicable	n/a
386	BASIC_1.9.03	Ongoing management of disaster recovery architecture: monitoring of data replication to secondary site including troubleshooting	Optional Services	Performed only for productive systems; only included in service if disaster recovery solution is part of the contract/SOW/Order Form.	not applicable	n/a
387	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	Optional Services	Performed only for productive systems; only included in service if disaster recovery solution is part of the contract/SOW/Order Form.	not applicable	n/a
388	BASIC_1.9.05	Develop and maintain disaster recovery procedures for those areas and aspects of the service which are in customer responsibility	Excluded Tasks	Included customer infrastructure, connectivity to managed system interfaces (including RFC connections, connection details in other integrated systems), organizational measures and processes etc.	not applicable	n/a
389	BASIC_1.9.06	Execute failover during disaster recovery test (DB, application and cnames)	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 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.	not applicable	n/a
390	BASIC_1.9.10	Execute failover during disaster recovery test (DB, application and cnames) - additional test	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 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.	not applicable	n/a
391	BASIC_1.9.09	Execute online disaster recovery tests (data center and technical system infrastructure only); primary systems remain accessible	Additional Service	Also known as fencing. 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.	not applicable	n/a
392	BASIC_1.9.07	Execute productive failover in case of an officially declared disaster by service provider - all HA/DR architecture scenarios	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 service if disaster recovery solution is part of the contract/SOW/Order Form.	not applicable	n/a
393	BASIC_1.9.11	Mixed High Availability (HA)/Disaster Recovery (DR): Execute productive failover for a specific SID and invert replication vector	not offered		not applicable	n/a
394	BASIC_1.9.12	Mixed High Availability (HA)/Disaster Recovery (DR): Execute productive failover for a specific SID and invert replication vector - additional customer requests	not offered		not applicable	n/a
<b>395</b>		<b>Operations Extension</b>	<b>These services provide possible extensions to areas of Incident, Change and Event Management beyond the standard scope of services.</b>			
396	BASIC_1.15.01	Incident Management: Troubleshoot technical/non-functional incidents not included in Standard Services as per R&R Definition	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.	Application Operations	A1
397	BASIC_1.15.02	Change Management: Changes of technical system configuration not included in Standard Services as per R&R Definition	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.	Application Operations	A1
398	BASIC_1.15.03	Event management: Monitor technical/non-functional event types not included in Standard Service as per R&R Definition	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.	Application Operations	A1
399	BASIC_1.15.04	Service Request Fulfillment: Perform Service Request Fulfillment for technical/non-functional task not included in Standard Service as per R&R Definition	Cloud Application Services ("CAS"). Can be performed by customer.	Only available for managed systems.	Application Operations	A1

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
400		<b>E - NetWeaver Operations (ABAP and JAVA)</b>		<b>Depending on technical conditions some tasks listed in this section are applicable to only one of the two platforms (NW ABAP or NW JAVA).</b>		
401		<b>General NetWeaver Operations</b>				
402	TO_NWABAP_1.1.04	Analyze SAP system log and fix technical failures included in scope of services	Standard Services	May require customer assistance.	not applicable	n/a
403	TO_NWABAP_1.1.06	Monitor update processes within SAP software to avoid system operations issues	Standard Services	Service provider informs customer of update process problems; RCA methods provided by SAP Enterprise Support may be used to find application related root causes for updates.	not applicable	n/a
404	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.	Application Operations	A1
405	TO_NWABAP_1.1.08	Clean up terminated updates	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
406	TO_NWABAP_1.1.10	Analyze lock entries, determine business impact and appropriate action	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
407	TO_NWABAP_1.1.11	Check/clear lock entries	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
408	TO_NWABAP_1.1.12	Check for ABAP dumps to detect serious system issues	Standard Services	Service provider informs customer in the event of serious application related issues that need to be resolved by the customer. Dumps relevant to provider's responsibility will be resolved by provider.	not applicable	n/a
409	TO_NWABAP_1.1.22	Regular ABAP dump check and classification	Cloud Application Services ("CAS"). Can be performed by customer.	Including application related dumps.	Application Operations	A1
410	TO_NWABAP_1.1.23	Analyze SAP application log and provide recommendations on fixing failures	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
411	TO_NWABAP_1.1.24	Reorganize qRFC/IRFC queues	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
412	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.		Application Operations or Data Lifecycle Management or Data Volume Optimization	A1, D3, D6
413	TO_NWABAP_1.1.13	Administer SAP Logon Groups	Standard Services	The customer may perform this activity; if service provider is requested to perform the task, the design/definition must be provided by customer.	not applicable	n/a
414	TO_NWABAP_1.1.26	Create/Update/Change the System-PSE (Personal Security Environment)	Standard Services	Customers may decide to perform this task themselves for convenience.	not applicable	n/a
415	TO_NWABAP_1.1.16	Implement/update tools to ensure readiness for SAP support services	Standard Services		not applicable	n/a
416	TO_NWABAP_1.1.20	Define archiving strategy	Excluded Tasks		not applicable	n/a
417	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 set-up, retention configuration, investigate / troubleshooting of the unarchivable documents/objects is customer's responsibility.	Data Lifecycle Management	D3
418	TO_NWABAP_1.1.17	Manage Web Service Runtime (WSRT)	Cloud Application Services ("CAS"). Can be performed by customer.	Activation of WSRT in client 000 is done by service provider on request and free of charge.	Application Operations	A1
419	TO_NWABAP_1.1.18	Configure technical RFC connections (TA SM59) to central systems managed by SAP used for system operations	Standard Services	Technical RFC connection = generic RFC connection required for all managed system based systems the same way, e.g. for monitoring configuration.	not applicable	n/a
420	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.		Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
421	TO_NWABAP_1.1.27_AE	Termination of User activity related to identified expensive statement	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
422	TO_NWABAP_1.1.28_AE	Temporary change of heap or extended memory allocation using RSMEMORY	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
423	TO_NWABAP_1.1.29_AE	Termination of dialog work processes	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
424	TO_NWABAP_1.1.30_AE	ICM service restart on Non-responsive situation or post SSL certificate renewal	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
425	TO_J2EE_1.1.01	Troubleshoot SAP J2EE in case of technical issues	Standard Services	For technical issues only; application related problems must be resolved by the customer.	not applicable	n/a
426	TO_J2EE_1.1.02	SAP J2EE: adjust/configure Java applications	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
427		<b>SAP Client Operations</b>				
428	TO_NWABAP_1.2.01	Copy client within one SAP System (including analysis and resolution of technical issues)	Standard Services	500GB upper limit, above that threshold, only system copies are performed because of technical restrictions.	not applicable	n/a
429	TO_NWABAP_1.2.06	Delete client within one SAP System (including analysis and resolution of technical issues)	Standard Services		not applicable	n/a
430	TO_NWABAP_1.2.02	Perform client export/import or remote client copy between SAP systems (including analysis and resolution of technical issues)	Standard Services	500GB upper limit, above that threshold, only system copies are performed because of technical restrictions. Does not include activities such as data masking, scrambling etc.	not applicable	n/a
431	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.		Application Operations	A1
432	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.		Application Operations	A1
433	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.		Application Operations	A1

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
434		<b>Interface Administration</b>				
435	TO_NWABAP_1.3.24	Create, execute, monitor, and troubleshoot batch input sessions	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.	Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
436	TO_NWABAP_1.3.25	Configure interface related functions (e.g. IDOCs, interface scripts and jobs, qRFC/IRFC/bgRFC, ALE scenarios etc.)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
437	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.	Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
438	TO_NWABAP_1.6.03	Establish trust relationships between SAP NW ABAP systems	Cloud Application Services ("CAS"). Can be performed by customer.	Performed for Fiori launchpad enablement only.	Application Operations	A1
439		<b>Job Scheduling</b>				
440	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	Standard Services	Per SAP guidelines as defined in SAP Note 16083; additional SAP standard jobs to be reviewed and agreed with customer.	not applicable	n/a
441	TO_NWABAP_1.4.14	Define production job schedule and dependencies based on business requirements	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
442	TO_NWABAP_1.4.15	Administer application batch jobs: - Monitor jobs - Troubleshoot according to troubleshooting handbook	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.	Application Operations	A1

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
443		<b>Transport Management</b>				
444	TO_NWABAP_1.5.10	Create and maintain transport domain in client 000 and transport directory	Standard Services	Migrating the transport method from HTC to HTA is not included in this task.	not applicable	n/a
445	TO_NWABAP_1.5.15_AE	Initial set-up of SAP transport management system (TMS) and configure transport routes	Standard Services		not applicable	n/a
446	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.		Application Operations or Release Planning & Execution	A1, U2
447	TO_NWABAP_1.5.12	Initial configuration of Transport-based correction instructions (TCI) in client 000	Standard Services		not applicable	n/a
448	TO_NWABAP_1.5.13	Implement SAP Note Transport-based correction instructions (TCI)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
449	TO_NWABAP_1.5.01	Set-up of CTS+	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations or Solution Manager - ChaRM	A1, U4
450	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 service provider and perform the transport as a scheduled activity.	Application Operations or Release Planning & Execution	A1, U2
451	TO_NWABAP_1.5.03	Execute transports to move objects between SAP systems	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Release Planning & Execution	A1, U2
452	TO_NWABAP_1.5.04	Troubleshoot SAP Transport Management System	Standard Services	Only for technical transport problems, not related to problems due to the content of the transports, e.g. locked objects.	not applicable	n/a
453	TO_NWABAP_1.5.05	Adjust 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.	Release Version Upgrade	U3
454	TO_NWABAP_1.5.14	Set-up and configuration of ChaRM	Cloud Application Services ("CAS"). Can be performed by customer.		Solution Manager - ChaRM	U4
455	TO_NWABAP_1.5.09	Testing and acceptance of object changes	Excluded Tasks		not applicable	n/a
456		<b>Output Management</b>				
457	TO_NWABAP_1.7.01	Create, change and delete printers within SAP solution	Cloud Application Services ("CAS"). Can be performed by customer.	Service provider would only support printer types contained in SAP published guidelines.	Application Operations	A1
458	TO_NWABAP_1.7.02	Analyze faulty output requests (transaction SP01)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
459	TO_NWABAP_1.7.03	Reorganize SAP spool system to keep system clean	Standard Services	Via SAP standard batch job.	not applicable	n/a
460	TO_NWABAP_1.7.04	Design and implementation of print forms	Excluded Tasks		not applicable	n/a
461	TO_NWABAP_1.7.05	Lock/unlock SAP printers	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
462	TO_NWABAP_1.7.06	Check spooler table consistency to prevent printing issues	Standard Services	Via SAP standard batch job.	not applicable	n/a
463	TO_NWABAP_1.7.07	Configure virtual spool (load balancing between spool processes)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
464	TO_NWABAP_1.7.08	Troubleshoot technical spool- and print-problems (within the SAP system)	Standard Services	Problems caused outside the SAP system/solution scope must be solved by the customer.	not applicable	n/a
465	TO_NWABAP_1.7.09	Local printing and support	not offered		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
466		<b>F - Server Provisioning (aka IaaS)</b>		<b>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).</b>		
467		<b>Security Planning</b>				
468	TO_SPROV_1_4.01	Provide application communication requirements	Excluded Tasks		not applicable	n/a
469	TO_SPROV_1_4.02	Determine communication and security requirements	Excluded Tasks		not applicable	n/a
470	TO_SPROV_1_4.03	Create and maintain security policies	Excluded Tasks		not applicable	n/a
471	TO_SPROV_1_4.04	Determine security strategy and implementation plans	Excluded Tasks		not applicable	n/a
472	TO_SPROV_1_4.05	Monitor and assess security strategies	Excluded Tasks		not applicable	n/a
473		<b>Hardware Operations</b>				
474	TO_SPROV_1_5.03	Plan and conduct cloud infrastructure maintenance	Standard Services		not applicable	n/a
475		<b>Server Management</b>				
476	TO_SPROV_1_6.11	Sizing of server infrastructure	Excluded Tasks	Virtual machines provided as specified in the SOW/Order Form; customer must ensure that sizing is accurate and provided VMs fulfill the requirements of the intended use case.	not applicable	n/a
477	TO_SPROV_1_6.01	Provide server infrastructure	Standard Services		not applicable	n/a
478	TO_SPROV_1_6.02	Provide licenses for OS	Standard Services	Licenses will be provided and charged by provider..	not applicable	n/a
479	TO_SPROV_1_6.03	Install basic operating system	Standard Services	Supported OS: SUSE LINUX and MS Windows Server (most up-to-date versions).	not applicable	n/a
480	TO_SPROV_1_6.04	Install OS patches and security updates	Excluded Tasks	Server will be shipped with the latest available security patch level, after hand over customer is responsible for updates.	not applicable	n/a
481	TO_SPROV_1_6.05	Install antivirus software and patterns updates	Excluded Tasks	Customer is responsible for Antivirus installation and virus pattern updates on a daily basis.	not applicable	n/a
482	TO_SPROV_1_6.06	Antivirus software licenses	Excluded Tasks		not applicable	n/a
483	TO_SPROV_1_6.07	Perform scheduled startup/shutdown of hardware	Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).	not applicable	n/a
484	TO_SPROV_1_6.08	Restart the hardware after failure	Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).	not applicable	n/a
485	TO_SPROV_1_6.09	Monitor hardware on hypervisor level	Standard Services	Infrastructure related services may be different depending on deployed infrastructure platform (e.g. Hyperscaler).	not applicable	n/a
486	TO_SPROV_1_6.10	Monitor operating system of provided OS instances	Excluded Tasks		not applicable	n/a
487		<b>Storage Management</b>				
488	TO_SPROV_1_7.01	Initial set-up and ongoing management of storage	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).	not applicable	n/a
489	TO_SPROV_1_7.02	Manage data files/file systems	Excluded Tasks		not applicable	n/a
490	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.	Excluded Tasks		not applicable	n/a
491	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.	Standard Services		not applicable	n/a
492	TO_SPROV_1_7.06	Mount of file system from managed server to an IaaS server	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 SAP Account Manager; customers must not execute tasks using this mount that put a risk to performance or stability of the managed cloud infrastructure (e. g. network services, large volume data syncs etc.).	not applicable	n/a
493	TO_SPROV_1_7.05	Scale storage capacity	Optional Services		not applicable	n/a
494		<b>Application Management</b>				
495	TO_SPROV_1_8.01	Define application requirements	Excluded Tasks		not applicable	n/a
496	TO_SPROV_1_8.02	Provide customer specific software licenses	Excluded Tasks	Customer must make sure that they hold valid licenses to run the installed software in the cloud environment.	not applicable	n/a
497	TO_SPROV_1_8.03	Install application	Excluded Tasks		not applicable	n/a
498	TO_SPROV_1_8.04	Operate application	Excluded Tasks		not applicable	n/a
499	TO_SPROV_1_8.05	Install patches and security updates	Excluded Tasks	Customer is responsible for software lifecycle management.	not applicable	n/a
500	TO_SPROV_1_8.06	Application monitoring	Excluded Tasks		not applicable	n/a
501		<b>IaaS VM Snapshot (offline image backup)</b>				



#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
502	TO_SPROV_1 10.01	Service Set-up	Optional Services		not applicable	n/a
503	TO_SPROV_1 10.02	Request additional storage for copy of block device	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.	not applicable	n/a
504	TO_SPROV_1 10.04	Snapshot of IaaS	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.	not applicable	n/a
505	TO_SPROV_1 10.05	Restart server and inform customer	Optional Services	After successful restart of VM, inform customer and update the ticket.	not applicable	n/a
506	TO_SPROV_1 10.06	Start required applications on server	Excluded Tasks	Customer needs to make sure that applications are started after the snapshot operation.	not applicable	n/a
<b>507</b>		<b>Disaster Recovery</b>				
508	TO_SPROV_1 9.01	Provide VM and related storage in the secondary data center	Optional Services	Only for those IaaS servers explicitly specified in the contract as relevant for DR.	not applicable	n/a
509	TO_SPROV_1 9.02	Set-up 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.	Excluded Tasks		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
<b>510</b>		<b>G - Cloud Application Services</b>				
<b>511</b>		<b>Cloud Application Services - Reactive Services</b>	<b>Only available for managed systems. Service delivery requires</b>	<b>Initial scoping for relevant application area before tasks can be delivered; transition to service execution may apply.</b>		
512	CAS_1.1.01	Incident Management: Troubleshoot functional incidents in SAP applications	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
513	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.		Custom Scope	XX
514	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.		Custom Scope	XX
515	CAS_1.1.04	Event Management: Monitor functional event types in SAP applications	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
516	CAS_1.1.05	Change Management: Changes of functional configuration in SAP applications	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>517</b>		<b>Cloud Application Services - Proactive Services</b>				
518	CAS_1.2.01	Continuous Operations	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
519	CAS_1.2.02	Extended Application Security Operations	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
520	CAS_1.2.03	Managed Operations Control Center	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
521	CAS_1.2.05	Deployment Management	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
522	CAS_1.2.06	Operations Improvement	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
523	CAS_1.2.07	Business Improvement	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
524	CAS_1.2.08	Data Integration and Lifecycle Management	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>525</b>		<b>Testing Services</b>				
526	CAS_2.1.01	Provide detailed plan for test management execution	Cloud Application Services ("CAS"). Can be performed by customer.		Regression Testing	U1
527	CAS_2.1.02	Perform manual tests based on defined test cases and report issues and defects	Cloud Application Services ("CAS"). Can be performed by customer.		Regression Testing	U1
528	CAS_2.1.03	Configure the Test Suite in SAP Solution Manager	Cloud Application Services ("CAS"). Can be performed by customer.		Regression Testing	U1
<b>529</b>		<b>Security Services</b>				
530	CAS_2.2.01	Execute Segregation of Duty check and provide report of risk assessment and recommendations for improvement	Cloud Application Services ("CAS"). Can be performed by customer.		Segregation of Duties Check	S3

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
531		<b>X1 - 3rd Party Software</b>				
532		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 contract for the customer).	Customer must ensure proper licensing of the respective 3rd party software allowing its usage in the managed system; 3rd party software in the context of the managed system 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 SAP has to be individually checked by the customer; service provider will not take responsibility for negative effects on the underlying system and infrastructure platform managed by service provider which are caused by any such 3rd Party Solution.			
533		<b>Managed 3rd Party ABAP add-ons</b>	For selected 3rd party NW ABAP add-ons which are listed on the SAP license price list 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 cloud contract.			
534	TO_PA_1.1.01	Installation	Standard Services		not applicable	n/a
535	TO_PA_1.1.02	Configuration	Excluded Tasks		not applicable	n/a
536	TO_PA_1.1.03	Application monitoring	Excluded Tasks		not applicable	n/a
537	TO_PA_1.1.04	Apply updates	Standard Services		not applicable	n/a
538	TO_PA_1.1.05	Application troubleshooting including engagement with the partners support organization	Excluded Tasks		not applicable	n/a
539	TO_PA_1.1.06	Uninstallation of ABAP Add-ons	Standard Services		not applicable	n/a
540		<b>Unmanaged 3rd Party ABAP add-ons</b>				
541	TO_PA_1.2.01	Installation	Excluded Tasks		not applicable	n/a
542	TO_PA_1.2.02	Configuration	Excluded Tasks		not applicable	n/a
543	TO_PA_1.2.03	Application monitoring	Excluded Tasks		not applicable	n/a
544	TO_PA_1.2.04	Apply updates	Excluded Tasks		not applicable	n/a
545	TO_PA_1.2.05	Application troubleshooting including engagement with the partners support organization	Excluded Tasks		not applicable	n/a
546		<b>Other unmanaged 3rd Party Software</b>	Any type of 3rd party software which is requested to be installed in total or in parts on the managed infrastructure is subject to prior evaluation. Details of this process and conditions are documented in the respective 3rd party software policies.			
547	TO_PA_1.3.01	3rd party software evaluation	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.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
548		<b>X2 - Business Connector</b>				
549		<b>Operations</b>				
550	TO_BC_1.1.04	Reorganization of Message Store	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
551		<b>X4 - SAP Data Services (DS)</b>				
552		<b>Operations</b>				
553	TO_DS_1.1.22	Authorization - Users and Rights Management	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
554	TO_DS_1.1.06	Create/Modify Data Services Jobs	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
555	TO_DS_1.1.07	Schedule Data Services jobs	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
556	TO_DS_1.1.08	Configure database connections	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
557	TO_DS_1.1.09	Monitor jobs	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.	Application Operations	A1
558	TO_DS_1.1.10	Repository backup DS and BOE	Standard Services		not applicable	n/a
559	TO_DS_1.1.11	Delete batch job history	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
560	TO_DS_1.1.12	Verify that job and access servers are running	Standard Services		not applicable	n/a
561	TO_DS_1.1.13	Remove obsolete repository contents	Standard Services		not applicable	n/a
562	TO_DS_1.1.14	Troubleshoot issues with DS Jobs	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
563	TO_DS_1.1.23	Create/Manage additional repositories	Cloud Application Services ("CAS"). Can be performed by customer.	System comes with default repositories. OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
564	TO_DS_1.1.26	Backup: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
565	TO_DS_1.1.27	Restore: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
566	TO_DS_1.1.28	Authentication set-up and Single Sign On (SSO) configuration	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
567	TO_DS_1.1.29	Install and configure Data Services Adapters	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
568	TO_DS_1.1.30	Add and configure additional Job Servers/ Job Groups for load balancing	Optional Services	Depending on sizing, additional infrastructure may be required.	not applicable	n/a
569	TO_DS_1.1.31	Configure Runtime Resources	Standard Services		not applicable	n/a
570	TO_DS_1.1.32	Configure SMTP Email	Standard Services		not applicable	n/a
571	TO_DS_1.1.33	Start/Stop services	Standard Services		not applicable	n/a
572	TO_DS_1.1.34	Enhanced Change and Transport System (CTS+) Integration Set-up	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations or Solution Manager - CharM	A1, U4
573	TO_DS_1.1.35	Configure transports via Data Services (DS) Object Promotion Management	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
574	TO_DS_1.1.36	Backup Data Services Repository using Import/Export Tool	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
575		<b>X6 - SAP BusinessObjects Business Intelligence (BI)</b>				
576		<b>Operations</b>				
577	TO_BI_1.1.06	Backup (Full content backup / BIAR backup)	Standard Services		not applicable	n/a
578	TO_BI_1.1.07	Scan / Repair and compact all repository errors	Standard Services		not applicable	n/a
579	TO_BI_1.1.11	Clean-up empty directories created for Repository Diagnostic Tool	Standard Services		not applicable	n/a
580	TO_BI_1.1.26	Cache Clean-up and Maintenance - Tomcat, Web Intelligence, Log Files	Standard Services		not applicable	n/a
581	TO_BI_1.1.17	Program Object Actions: Import and Execution	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	not applicable	n/a
582	TO_BI_1.1.18	Promote/deploy BI objects between environments	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
583	TO_BI_1.1.19	Create, rename, remove connections and Universes	Excluded Tasks		not applicable	n/a
584	TO_BI_1.1.21	Provide user access and maintain authorizations	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
585	TO_BI_1.1.47	SAML configuration	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	not applicable	n/a
586	TO_BI_1.1.27	Deploy templates and system configurations for hardware changes	Standard Services		not applicable	n/a
587	TO_BI_1.1.29	Auditing/Monitoring Driver Set-up and configuration for Audit reporting	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	not applicable	n/a
588	TO_BI_1.1.30	Perform ERP Integration Set-up and Configuration	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	not applicable	n/a
589	TO_BI_1.1.33	Backup: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
590	TO_BI_1.1.34	Restore: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
591	TO_BI_1.1.35	Authentication set-up and Single Sign On SSO configuration	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
592	TO_BI_1.1.37	Configure Web Application - reverse proxy settings	Standard Services		not applicable	n/a
593	TO_BI_1.1.38	Add and configure additional BI servers for load balancing	Optional Services	Additional infrastructure may be required.	not applicable	n/a
594	TO_BI_1.1.39	Manage Server Process and Server Groups	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
595	TO_BI_1.1.40	Set-up/Support technical tasks for BI Report Version Management	Standard Services	Customer responsible for maintaining report versions.	not applicable	n/a
596	TO_BI_1.1.41	Enhanced Change and Transport System (CTS+) Integration Set-up	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
597		<b>X7 - SAP PI</b>				
598		<b>SAP PI Implementation</b>				
599	TO_PI_1.1.01	Install adapters and software components provided by SAP	Standard Services	Included only for items explicitly specified in the 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.	not applicable	n/a
600	TO_PI_1.1.02	Install adapters provided by external partners	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.	not applicable	n/a
601	TO_PI_1.1.03	Configure the required system connections to partner systems	Cloud Application Services ("CAS"). Can be performed by customer.	Time and material basis for changes in network set-up (routers, firewalls access lists). Customer must provide network connections to target systems.	Custom Scope	XX
602	TO_PI_1.1.04	Create SSL views and PSEs	Excluded Tasks		not applicable	n/a
603		<b>SAP PI Operations</b>				
604	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.	Application Monitoring or System Health Monitoring	M1, M2
605	TO_PI_2.1.03	Monitor the message processing in PI (success and performance)	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.	Application Monitoring or System Health Monitoring	M1, M2
606	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.	Application Monitoring or System Health Monitoring	M1, M2
607	TO_PI_2.1.05	Monitor BPM processes (success and performance)	Cloud Application Services ("CAS"). Can be performed by customer.	Manual monitoring; effort based per execution.	Application Monitoring or System Health Monitoring	M1, M2
608	TO_PI_2.1.06	Configure adapters	Excluded Tasks		not applicable	n/a
609	TO_PI_2.1.07	Deal with incorrect messages	Excluded Tasks		not applicable	n/a
610	TO_PI_2.1.08	Configure message archiving	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
611	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.	Application Operations	A1
612	TO_PI_2.1.11	Role/authorization maintenance (except SAP and initial customer administrator role)	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
613	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.		Secure Users & Authorizations	S2
614	TO_PI_2.1.17	Set-up of PI / BPM / AEX housekeeping	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
615	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.	Application Operations	A1
616	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).	Application Operations	A1
617	TO_PI_2.1.21	Maintain the system landscape directory (SLD)	Cloud Application Services ("CAS"). Can be performed by customer.	Related to PI scenarios.	Application Operations	A1
618	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.		Application Operations	A1
619	TO_PI_2.1.23	Handle errors and analyze root cause for incorrect message processing in PI (AEX)	Excluded Tasks		not applicable	n/a
620	TO_PI_2.1.24	Check PI / PO / AEX readiness after changes (upgrades, patches, notes)	Excluded Tasks		not applicable	n/a
621	TO_PI_2.1.25	Configure the required system connections to partner systems	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
622	TO_PI_2.1.26	Transport management of PI objects	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
623		<b>X8 - Enterprise Portal</b>				
624		<b>Operations</b>				
625	TO_EP_1.1.01	Monitoring of application services for Portal, Unifiers, Unification Server, PCD, and CM	Standard Services	Monitors application services only; customer responsible to monitor portal content.	not applicable	n/a
626	TO_EP_1.1.03	Maintain LDAP (Novell, ADS, iPlanet and others)	Excluded Tasks		not applicable	n/a
627	TO_EP_1.1.04	Analyze Portal System logs and revise failures occurred	Standard Services	Provider to inform customer of required assistance.	not applicable	n/a
628	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.	Application Operations	A1
629	TO_EP_1.1.07	User mapping	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
630	TO_EP_1.1.08	Role/Channel/iPanel allocation	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
631	TO_EP_1.1.09	Content administration	Excluded Tasks		not applicable	n/a
632	TO_EP_1.1.10	Set-up and maintain Portal user source data	Cloud Application Services ("CAS"). Can be performed by customer.		Secure Users & Authorizations	S2
633	TO_EP_1.1.11	Lock and delete portal user source data	Cloud Application Services ("CAS"). Can be performed by customer.		Secure Users & Authorizations	S2
634	TO_EP_1.1.12	Release locked portal users	Cloud Application Services ("CAS"). Can be performed by customer.		Secure Users & Authorizations	S2
635	TO_EP_1.1.13	Define and change Customer specific portal authorization profiles	Cloud Application Services ("CAS"). Can be performed by customer.		Secure Users & Authorizations	S2
636	TO_EP_1.1.14	Administer Content Repository	Excluded Tasks		not applicable	n/a
637	TO_EP_1.1.20	Customize, upgrade POE including all components	Excluded Tasks	Set J2EE passwords, configure Java port, add service packs.	not applicable	n/a
638	TO_EP_1.1.22	Upgrade of pages, roles, static html content	Excluded Tasks		not applicable	n/a
639	TO_EP_1.1.23	Maintenance of Java services	Standard Services	Customer responsible to develop new Java services, and to customize existing java services.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
640		<b>X9 - Sybase IQ (used as data persistency for NLS, ILM or 3rd party archiving solutions)</b>				
641		<b>Database Installation/Configuration</b>				
642	TO_SIQ_1.1.01	Check/prepare system requirements (BW Release, SAP Notes, Source/target set-up)	Excluded Tasks		not applicable	n/a
643	TO_SIQ_1.1.03	Initial configuration / parameter settings	Standard Services		not applicable	n/a
644	TO_SIQ_1.1.06	Initialize connection between BW/NLS and Sybase IQ	Standard Services	Provider will perform required set-up. Customer must configure the NLS connection from the BW side.	not applicable	n/a
645		<b>Database Operations</b>				
646	TO_SIQ_1.2.02	Database capacity management	Standard Services		not applicable	n/a
647	TO_SIQ_1.2.03	Reorg/Statistic update	Standard Services		not applicable	n/a
648	TO_SIQ_1.2.04	Perform database consistency check (DBCC)	Standard Services		not applicable	n/a
649	TO_SIQ_1.2.05	Troubleshoot technical database issues	Standard Services		not applicable	n/a
650	TO_SIQ_1.2.06	Set-up backup	Standard Services		not applicable	n/a
651	TO_SIQ_1.2.07	Restore backup	Standard Services		not applicable	n/a
652	TO_SIQ_1.2.08	Monitor database connection	Standard Services	Customer must check connection from BW side.	not applicable	n/a
653		<b>Application</b>				
654	TO_SIQ_1.4.01	Create/schedule/restore data archiving requests	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
655	TO_SIQ_1.4.02	Query handling	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
656	TO_SIQ_1.4.03	Install partner add-ons in backend systems	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
657	TO_SIQ_1.5.01	Provision server for the archiving solution server	Optional Services	If partner solution requires extra server; refer to Server Provisioning section in this document for details.	not applicable	n/a
658	TO_SIQ_1.4.04	Install partner archiving 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 the cloud environment.	Data Lifecycle Management	D3
659	TO_SIQ_1.4.05	Configure partner archiving software	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
660	TO_SIQ_1.4.06	Managed services for archiving partner software (issue handling)	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
661		<b>SAP Information Lifecycle Management (ILM) for Sybase IQ</b>				
662	TO_SIQ_1.6.01	Check and prepare system requirements (Sizing, SAP Notes)	Excluded Tasks		not applicable	n/a
663	TO_SIQ_1.6.02	Activate of ILM Store in NetWeaver	Standard Services		not applicable	n/a
664	TO_SIQ_1.6.03	Set parameters in SAP IQ for ILM Store	Standard Services		not applicable	n/a
665	TO_SIQ_1.6.05	Set-up ILM Store Authorizations	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
666	TO_SIQ_1.6.06	Integrate ILM Store to Archiving Process	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
667	TO_SIQ_1.6.07	Configure of ArchiveLink connection to ILM Store	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
668	TO_SIQ_1.6.08	Configure of Storage Connections	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
669	TO_SIQ_1.6.09	Check ICM Parameters	Standard Services		not applicable	n/a
670	TO_SIQ_1.6.10	Set-up Clients and Origins in the ILM Store	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
671	TO_SIQ_1.6.11	Integration to OpenText Storage	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
672	TO_SIQ_1.6.12	Integration to other ILM Certified Storage	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
673	TO_SIQ_1.6.13	Data destruction and data compliance	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
674	TO_SIQ_1.6.14	License generation and deployment for Live Systems	Standard Services		not applicable	n/a
675		<b>X11 - SAP Cloud Connector</b>				
676		<b>Installation and Configuration</b>				
677	TO_SCC_1.1.0 2	Configuration - Enable outbound connection via LoadBalancer to connect with SAP Business Technology Platform (formerly SAP Cloud Platform)	Standard Services		not applicable	n/a
678	TO_SCC_1.1.0 3	Configuration - Establish connection to customer's cloud account	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: Configure BTP subaccount connection; Connect SAP Business Technology Platform (formerly SAP Cloud Platform) subaccount to the Cloud Connector.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
679	TO_SCC_1.1.0.4	Configuration - On-premise resources (OData services) customer wants to use in SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)	Cloud Application Services ("CAS"). Can be performed by customer.	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only. Create destination for ABAP backend system (Mapping virtual to internal system); Configure accessible resources /sap/bc/tp and /sap/bc/tpads.	Application Operations or Data Lifecycle Management	A1, D3
680	TO_SCC_1.1.0.5	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.	Application Operations or Data Lifecycle Management	A1, D3
681	TO_SCC_1.1.0.6	Define and provide two user groups (Cloud Portal Admin, Cloud Portal User)	Standard Services		not applicable	n/a
682	TO_SCC_1.1.0.7	Tunnel Availability monitoring	Standard Services	For version 2.12 and higher only. Service provider can monitor tunnel availability for informational purposes only but is not covered under the Service Level Agreement.	not applicable	n/a
683	TO_SCC_1.1.0.8_AE	Test execution for every update of SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) Integration	Cloud Application Services ("CAS"). Can be performed by customer.		Cloud Integration Testing	I1
684	TO_SCC_1.1.0.9_AE	Create test automation scripts for SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)	Cloud Application Services ("CAS"). Can be performed by customer.		Cloud Integration Testing	I1
685	TO_SCC_1.1.1.0_AE	Application of changes (Test automation script modification)	Cloud Application Services ("CAS"). Can be performed by customer.		Cloud Integration Testing	I1
686		<b>X12 - SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) Integration - Data Services Agent (BTPi-DS) (Formerly HCI-DS)</b>				
687		<b>Installation and Configuration</b>				
688	TO_BTPIDS_1.1.01	Install SAP BTPi - Data Service agent	Standard Services		not applicable	n/a
689	TO_BTPIDS_1.1.02	Configuration - Enable outbound connection via LoadBalancer to connect with BTPi	Standard Services		not applicable	n/a
690	TO_BTPIDS_1.1.03	Configuration - Establish connection to customer's cloud account	Standard Services	Need access to BTPi portal or service provider will request the configuration file from customer. Configuration performed at OS level. Provider will verify that agent status is green in BTPi portal.	not applicable	n/a
691	TO_BTPIDS_1.1.04	Configuration - Business backend preparation steps for BTPi consumption	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
692		<b>Monitoring Set-up</b>				
693	TO_BTPIDS_1.2.01	Monitoring set-up for process level availability - Nagios	Standard Services		not applicable	n/a
694		<b>Data Handling and Data Services</b>				
695	TO_BTPIDS_1.3.01	Migrate or replicate data between data stores	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
696		<b>X13 - SAP Fiori</b>				
697		<b>Installation and Configuration</b>				
698	TO_FIORI_1.1.01	Install application specific packages in respective SAP Systems	Standard Services	Initial set-up in managed system.	not applicable	n/a
699	TO_FIORI_1.1.03	Configuration - Web Dispatcher Fiori App redirects	Standard Services	SSL is a prerequisite for this task. Scope during Initial Provisioning includes all systems defined in the initial contract.	not applicable	n/a
700	TO_FIORI_1.1.10_AE	Configuration - Web Dispatcher Fiori App redirects - additional requests	Cloud Application Services ("CAS"). Can be performed by customer.	Efforts for additional requests. Includes SSL configuration and certificate handling and is limited to technical SAP Fiori Launchpad enablement for additional clients or products other than SAP S/4HANA only.	Application Operations	A1
701	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.	Application Operations	A1
702	TO_FIORI_1.1.09	Initial enablement of Fiori launchpad including all required connectivity set-up	Standard Services	Includes SAP Fiori Launchpad enablement for One (1) client (client 100) per SAP S/4HANA system for Greenfield deployments. This includes the activation of predefined sample SAP Fiori apps to validate SAP Fiori Launchpad enablement. For systems migrated to environments which use SAP as the service provider, it is customer's responsibility to enable existing SAP Fiori app(s) and is covered by a separately contracted cloud onboarding and migration service.	not applicable	n/a
703	TO_FIORI_1.1.06	Re-enable Fiori launchpad including all required connectivity set-up	Cloud Application Services ("CAS"). Can be performed by customer.	Covers additional charge for re-enablement.	Application Operations	A1
704	TO_FIORI_1.1.07	Configuration - Fiori applications	Excluded Tasks	In some situations service provider might be able to support the customer using an Application Management service, however due to the large variety of possible scenarios this item has been generally excluded from the service; customers should seek assistance via SAP Consulting.	not applicable	n/a
705	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.	Application Operations	A1
706	TO_FIORI_1.1.11_AE	Enable Fiori Launchpad for the standard Fiori applications for additional business clients or SAP products other than S/4HANA	Cloud Application Services ("CAS"). Can be performed by customer.	Includes example Fiori Catalog, example Fiori Group and example PFCG role.	Application Operations	A1
707	TO_FIORI_1.1.12_AE	Re-enable technical integration points after system/client copy	Cloud Application Services ("CAS"). Can be performed by customer.	Performed for additional business clients or products other than SAP S/4HANA.	Application Operations	A1
708		<b>X15 - Web Dispatcher</b>				
709		<b>Web Dispatcher Operations</b>				
710	TO_WD_1.1.01	Register/Remove Systems in Web Dispatcher and their options regarding SSL	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.	not applicable	n/a
711	TO_WD_1.1.02	General memory management definition	Standard Services		not applicable	n/a
712	TO_WD_1.1.03	General security parameter definition	Standard Services		not applicable	n/a
713	TO_WD_1.1.04	General Configuration for Support SSL in Parameter File or PSE Maintenance Tool in Admintool (Handling HTTPS Requests)	Standard Services		not applicable	n/a
714	TO_WD_1.1.05	Communication with the message server / application server using SSL	Standard Services		not applicable	n/a
715	TO_WD_1.1.06	Modify HTTP requests	Standard Services		not applicable	n/a
716	TO_WD_1.1.07	Set-up error handling	Standard Services		not applicable	n/a
717	TO_WD_1.1.08	Maintain authentication File	Standard Services		not applicable	n/a
718	TO_WD_1.1.09	Changes in client 000 of the backend systems related to Web Dispatcher (HTTPURLLOC)	Standard Services		not applicable	n/a
719	TO_WD_1.1.10	Log and trace strategy	Standard Services		not applicable	n/a
720	TO_WD_1.1.11	Encryption policy (protocols, ciphersuites, key length)	Standard Services		not applicable	n/a
721	TO_WD_1.1.12	Connection counts	Standard Services		not applicable	n/a
722	TO_WD_1.1.13	Metadata Exchange Using SSL	Standard Services		not applicable	n/a
723	TO_WD_1.1.14	Define port ranges	Standard Services		not applicable	n/a
724	TO_WD_1.1.15	LoadBalancer configuration for Web Dispatcher	Standard Services	Configuration details (routing rules, redirection information, backend system details etc.) must be provided by customer. Service provider will be update the Load Balancer and Web Dispatcher accordingly.	not applicable	n/a
725	TO_WD_1.1.16	DNS Changes for Web Dispatcher Service	Excluded Tasks	There are no options to have personalized DNS.	not applicable	n/a
726		<b>X16 - LoadBalancer</b>				
727		<b>LoadBalancer operation</b>				
728	TO_LRP_1.1.01	Set-up LoadBalancer instance	Standard Services		not applicable	n/a
729	TO_LRP_1.1.02	Register/Remove Systems in LoadBalancer	Standard Services		not applicable	n/a
730	TO_LRP_1.1.03	Configure load distribution to application servers	Standard Services		not applicable	n/a
731	TO_LRP_1.1.04	Provide external IP for Internet facing scenarios	Standard Services		not applicable	n/a



#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
732	TO_LRP_1.1.0 5	Configure SSL offloading (Encryption)	Standard Services		not applicable	n/a
733	TO_LRP_1.1.0 7	Perform DNS handling for customer own Domain	Excluded Tasks		not applicable	n/a
734	TO_LRP_1.1.0 8	Provide X.509 certificate for customer domain to enable SSL	Excluded Tasks		not applicable	n/a
735	TO_LRP_1.1.0 9	Provide X.509 certificate for SAP own URL like *.xxx.ondemand.com domain	Standard Services		not applicable	n/a
736	TO_LRP_1.1.1 0	Install customer X.509 certificate	Standard Services		not applicable	n/a
737	TO_LRP_1.1.1 1	Configure Web Application Firewall	Standard Services		not applicable	n/a
738	TO_LRP_1.1.1 2	Configure persistence handling	Standard Services		not applicable	n/a
739	TO_LRP_1.1.1 4	Configure health checks	Standard Services		not applicable	n/a
740	TO_LRP_1.1.1 5	Configure URL/IP based blocklist and allowlist filtering	Standard Services		not applicable	n/a
741	TO_LRP_1.1.1 6	Configure sorry page function	Standard Services		not applicable	n/a
742	TO_LRP_1.1.1 7	Configure outgoing connections to Internet	Standard Services		not applicable	n/a
743	TO_LRP_1.1.1 8	Enable access from managed system to internet/public domain	Standard Services	Supported using outbound LoadBalancer. Used to integrate managed system with other clouds or customer public services etc.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
744		<b>X17 - OpenText Solutions</b>				
745		<b>Cloud Editions</b>				
746		<b>SAP S/4HANA Common Tasks</b>				
747	TO_OT_1.10.1	Install OpenText Cloud Edition Add-On	Standard Services	Includes SAP Archiving and Document Access by OpenText (ADA), SAP Vendor Invoice Management (VIM), SAP Extended Enterprise Content Management by OpenText (xECM).	not applicable	n/a
748	TO_OT_1.10.2	Activate/Maintain ICF nodes required for Apps to be enabled/updated	Standard Services		not applicable	n/a
749	TO_OT_1.10.3	Activate/Maintain OData Services required for Apps to be enabled/updated	Standard Services		not applicable	n/a
750		<b>Vendor Invoice Management for SAP Solutions (VIM)</b>				
751	TO_OT_1.11.1	Establish/Maintain secure connection to OpenText Core Capture for SAP Solutions (IES Cloud)/OT2	Standard Services	Create and maintain connections from S/4HANA SM59. Client ID and secret password from Admin Center need to be provided.	not applicable	n/a
752		<b>Extended Enterprise Content Management for SAP Solutions (xECM)</b>				
753	TO_OT_1.12.1	Establish/Maintain secure connection to OpenText Cloud (OTK)	Standard Services	Create and maintain connections from S/4HANA SM59, STRUST and in xECM's IMG hierarchy "Create HTTP Connections".	not applicable	n/a
754		<b>Archiving and Document Access for SAP Solutions (ADA)</b>				
755		<b>OpenText Core Archive Connector</b>				
756		<b>Operations</b>				
757	TO_OT_1.13.1	Install OpenText Core Archive Connector and Document Pipelines	Standard Services	Application installation only.	not applicable	n/a
758	TO_OT_1.13.2	Establish/Maintain secure connection to OpenText Core Archive for SAP Solutions (ADA Cloud)/OT2	Standard Services	Initial configuration and customer tenant registration.	not applicable	n/a
759	TO_OT_1.13.3	Add/Maintain SAP S/4HANA systems connection	Standard Services		not applicable	n/a
760	TO_OT_1.13.4	Administration of Collections and Data Sources	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
761	TO_OT_1.13.5	Configure scan host and profile	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
762	TO_OT_1.13.6	Configure/Maintain file archive job	Cloud Application Services ("CAS"). Can be performed by customer.		Data Lifecycle Management	D3
763	TO_OT_1.13.7	Maintain Core Archive Connector setting	Standard Services	Activity includes replacing/generating certificate and private key.	not applicable	n/a
764	TO_OT_1.13.8	User Administration	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
765		<b>Software Lifecycle Management</b>				
766	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)	Additional Service		not applicable	n/a
767		<b>X17A - OpenText Extended Enterprise Content Management (OT xECM)</b>				
768		<b>Installation</b>				
769	TO_OT_xECM 1.1.1	Install OT xECM Components (Content Server, Archive Server, AppWorks, OTDS Server, Database repository)	Standard Services	Content Server, Archive Server, AppWorks, OTDS Server, Database repository.	not applicable	n/a
770	TO_OT_xECM 1.1.2	Install OT xECM NetWeaver ABAP Add-on(s)	Standard Services	Install OT xECM , OT ADA and OTA Fiori Add-on on S4HANA System.	not applicable	n/a
771	TO_OT_xECM 1.1.3	Install additional OT xECM application server deployment for HA	Standard Services	May require Change Request (CR) for HA option.	not applicable	n/a
772		<b>Set-up and Configuration</b>				
773	TO_OT_xECM 1.2.1	Post install configuration	Standard Services		not applicable	n/a
774	TO_OT_xECM 1.2.2	Monitoring	Standard Services		not applicable	n/a
775	TO_OT_xECM 1.2.3	Application configuration	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
776	TO_OT_xECM 1.2.4	Data Archiving	Excluded Tasks		not applicable	n/a
777	TO_OT_xECM 1.2.5	S4HANA integration and connectivity	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
778	TO_OT_xECM 1.2.6	SSL/TLS Secure Communication	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
779	TO_OT_xECM 1.2.7	SSO with Windows AD	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
780		<b>X18 - SAP Information Steward</b>				
781		<b>Operations</b>				
782	TO_IS_1.1.0.2	Add additional IS job servers for load balancing on existing infrastructure	Additional Service	Adding additional server on existing infrastructure. A Change Request (CR) is required if additional infrastructure needs to be deployed.	not applicable	n/a
783	TO_IS_1.1.1.3	Add additional IS job servers for load balancing on new infrastructure	Optional Services	Adding additional server on new infrastructure. A Change Request (CR) is required.	not applicable	n/a
784	TO_IS_1.1.0.3	User and access management	Cloud Application Services ("CAS"). Can be performed by customer.		Secure Users & Authorizations	S2
785	TO_IS_1.1.0.4	Create and manage IS application jobs	Cloud Application Services ("CAS"). Can be performed by customer.		Data Quality Management	D4
786	TO_IS_1.1.0.5	Execute Information Steward utilities	Cloud Application Services ("CAS"). Can be performed by customer.		Data Quality Management	D4
787	TO_IS_1.1.0.6	Data Insight, Metadata, Cleansing Package and Match Review administration	Cloud Application Services ("CAS"). Can be performed by customer.		Data Quality Management	D4
788	TO_IS_1.1.0.8	IS repository and file system backup	Standard Services		not applicable	n/a
789	TO_IS_1.1.0.9	IS job server and services monitoring	Standard Services		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
790	TO_IS_1.1.10	IS repository management	Cloud Application Services ("CAS"). Can be performed by customer.		Data Quality Management	D4
791	TO_IS_1.1.11	Troubleshoot issues with IS jobs and utilities (Data Insight, Rule Tasks, Metadata Management, Data Cleansing)	Cloud Application Services ("CAS"). Can be performed by customer.		Data Quality Management	D4
792	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.		Data Quality Management	D4
793	TO_IS_1.1.14_AE	Validate Information Steward set-up and configuration	Cloud Application Services ("CAS"). Can be performed by customer.		Data Quality Optimization	D5
794	TO_IS_1.1.15_AE	Collect metadata and assess data quality	Cloud Application Services ("CAS"). Can be performed by customer.		Data Quality Optimization	D5
795		<b>X19 - SAP Policy Management</b>	This section represents an extension of the standard service as described in the Roles & Responsibilities. It applies only to customers using SAP Policy Management in the cloud environment in combination with the full managed service including the components pm.msg and TomatosX.			
796		<b>TomatosX for Policy Management</b>				
797	TO_PM_1.1.01	Install solution	Additional Service		not applicable	n/a
798	TO_PM_1.1.02	Technical configuration (installation post-processing) of installed systems	Additional Service		not applicable	n/a
799	TO_PM_1.1.03	Configure or integrate TomatosX system with other SAP systems (TA SM59)	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
800	TO_PM_1.1.05	Configure application (post-installation configuration) of installed systems	Excluded Tasks		not applicable	n/a
801	TO_PM_1.1.06	Troubleshoot application	Excluded Tasks		not applicable	n/a
802		<b>MSG.PM designer and CAIMAN for Policy Management</b>				
803	TO_PM_2.1.01	Install solution	Additional Service	MSG.PM designer and CAIMAN can only be installed on the windows platform.	not applicable	n/a
804	TO_PM_2.1.02	Technical configuration (installation post-processing) of installed systems	Additional Service		not applicable	n/a
805	TO_PM_2.1.08	Technical integration of system with other systems and applications	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
806	TO_PM_2.1.05	Configure application (post-installation configuration) of installed systems	Excluded Tasks		not applicable	n/a
807	TO_PM_2.1.06	Troubleshoot application	Excluded Tasks		not applicable	n/a
808	TO_PM_2.1.07	Install additional client tools	Excluded Tasks		not applicable	n/a
809		<b>Security Management</b>				
810	TO_PM_3.1.1	Administer customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, source data and passwords)	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
811		<b>X21 - SAP Identity Management IDM</b>				
812	TO_IDM_1.0.01	Assist customer with IDM related tasks that require access to operating system	Standard Services		not applicable	n/a
813	TO_IDM_1.0.02	Install IDM dispatchers as part of the initial cloud environment installation	Standard Services		not applicable	n/a
814	TO_IDM_1.0.03	Connect IDM UI to IDM system	Standard Services	SSL configuration is not covered by this task.	not applicable	n/a
815		<b>X22 - SAP Financial Consolidation (FC)</b>				
816		<b>Administration of Data Sources</b>				
817	TO_FC_1.1.01	Start/Stop/Set Administrator Password and activity views for Datasources	Standard Services		not applicable	n/a
818	TO_FC_1.1.02	Add Webservices	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
819	TO_FC_1.1.03	Add FC Application Server/Websver on existing infrastructure	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
820	TO_FC_1.1.15	Add FC Application Server/Websver on new infrastructure	Optional Services		not applicable	n/a
821	TO_FC_1.1.04	Migrate and filter data source	Excluded Tasks		not applicable	n/a
822	TO_FC_1.1.05	Install software configuration	Excluded Tasks		not applicable	n/a
823	TO_FC_1.1.06	Sending/Broadcasting messages to End-users	Excluded Tasks		not applicable	n/a
824	TO_FC_1.1.07	Define log configuration for application servers	Excluded Tasks		not applicable	n/a
825	TO_FC_1.1.08	Define commands available for machines and instances	Excluded Tasks		not applicable	n/a
826	TO_FC_1.1.09	Activate/Deactivate machine in the FC Admin console	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
827	TO_FC_1.1.10	Start/Stop instances in the FC Admin console	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
828	TO_FC_1.1.11	Create scheduled tasks for starting and stopping servers	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
829	TO_FC_1.1.12	Create/Delete Data Source(s)	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
830	TO_FC_1.1.13	Create FC transport folder	Standard Services		not applicable	n/a
831	TO_FC_1.1.14	Restart FC platform periodically	Standard Services		not applicable	n/a
832		<b>Monitoring</b>				
833	TO_FC_1.2.04	Monitoring one FC application URL per SID	Standard Services	Limited to one URL per SID. Customer needs to provide URL to be monitored.	not applicable	n/a
834	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.	Application Operations	A1
835		<b>Administration of HANA Databases</b>				
836	TO_FC_1.3.01	Prerequisites for creating SAP HANA Modeling Views with Cube Designer	Excluded Tasks	Customer require access to HANA Studio and require HANA Customer Administration authorization.	not applicable	n/a
837	TO_FC_1.3.02	Deleting rights created during Cube Deployments	Excluded Tasks	Customer require access to HANA Studio and require HANA Customer Administration authorization.	not applicable	n/a
838		<b>Configure SAP Financial Consolidation Web Site</b>				
839	TO_FC_1.4.01	Reconnecting Automatically	Standard Services		not applicable	n/a
840	TO_FC_1.4.02	Activate the SAP Financial Consolidation Web Technical Log	Standard Services		not applicable	n/a
841	TO_FC_1.4.03	Support long-term HTTP sessions with firewalls	Standard Services		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
842	TO_FC_1.4.04	Publish documents via a URL	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
843	TO_FC_1.4.05	Configure HTTPS	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
844	TO_FC_1.4.06	Customize the SAP Financial Consolidation Web Site Home page	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
845		<b>Configure SAP Financial Consolidation Web HTML5 Site</b>				
846	TO_FC_1.5.01	Configure/Customize SAP Financial Consolidation Web HTML5 site advanced settings	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
847		<b>Archiving Tool</b>				
848	TO_FC_1.6.01	Install and access the Archiving Tool	Standard Services		not applicable	n/a
849	TO_FC_1.6.02	Execute archiving process	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
850		<b>Install and Configure the SAP NetWeaver BW Server to deploy Infocubes with SAP Financial Consolidation Cube Designer</b>				
851	TO_FC_1.8.01	Install the FPM Basis component on the SAP NetWeaver BW server	Standard Services		not applicable	n/a
852	TO_FC_1.8.02	Create BW NetWeaver Roles to deploy Infocubes with Cube Designer	Excluded Tasks		not applicable	n/a
853	TO_FC_1.8.03	Install SAP EPM Solutions Connection Manager on the BOE platform	Standard Services		not applicable	n/a
854	TO_FC_1.8.04	Configure the Central Management Console for SAP Cube Designer	Excluded Tasks		not applicable	n/a
855	TO_FC_1.8.05	Configure the Central Management Server for a distributed installation	Excluded Tasks		not applicable	n/a
856	TO_FC_1.8.06	Configure reverse proxy	Standard Services		not applicable	n/a
857	TO_FC_1.8.07	Create an EPM Connection for SAP Financial Consolidation with NetWeaver BW Cubes or SAP PCM or SAP SSM or SAP HANA	Excluded Tasks		not applicable	n/a
858		<b>Financial Information Management</b>				
859	TO_FC_1.9.01	Configure the number of lines in a Flat File Preview	Standard Services		not applicable	n/a
860	TO_FC_1.9.02	Configure Time-out Parameters	Standard Services		not applicable	n/a
861		<b>X29 - SAP TREX</b>				
862		<b>TREX operations</b>				
863	TO_TREX_1.1.14	Post-Installation Configuration and Connection TREX with an Application (Java or ABAP)	Cloud Application Services ("CAS"). Can 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)	Application Operations	A1
864	TO_TREX_1.1.15	Administer TREX indices	Excluded Tasks		not applicable	n/a
865	TO_TREX_1.1.16	Administer Taxonomies	Excluded Tasks		not applicable	n/a
866		<b>X31 - SAP Solution Manager</b>				
867		<b>Installation and Configuration</b>				
868	TO_SOLM_1.1.01	Set-up and configuration of ITSM	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
869	BASIC_1.8.07	Set-up monitoring with Customer Solution Manager located in the cloud: Install additional Diagnostics Agent on customer systems	Standard Services	Connecting an SAP Solution Manager system owned by the customer operated in the cloud (not the central SAP Solution Manager system owned by service provider).	not applicable	n/a
870	BASIC_1.8.18	Set-up monitoring with Customer Solution Manager located in cloud: Configure monitoring within the customers SAP Solution Manager system	Cloud Application Services ("CAS"). Can be performed by customer.	Service charge is calculated per server; monitoring set-up is done using only SAP Solution manager standard templates, no customer specific settings and adjustments included.	Application Operations or Application Monitoring or System Health Monitoring	A1, M1, M2
871	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.	Application Operations	A1
872		<b>X33 - SAP Test Data Migration Server (TDMS)</b>				
873		<b>Installation and Configuration</b>				
874	TO_TDMS_1.1.01	Set-up of Control System (TDMS server) and set-up of receiver system (target server)	Standard Services		not applicable	n/a
875	TO_TDMS_1.1.02	Patching of the sender systems (source system)	Standard Services		not applicable	n/a
876	TO_TDMS_1.1.03	TDMS initial configuration, client creation, set-up RFC connections, set-up authorizations, Shell Creation	Standard Services		not applicable	n/a
877	TO_TDMS_1.1.04	Set scrambling data, customize, using BPL modeler	Excluded Tasks		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
878		<b>X34 - SAP PowerDesigner</b>				
879		<b>Operational Set-up</b>				
880	TO_PWR_1.1.01	Install components (Portal, Repo, Proxy)	Standard Services	Install and set-up SAP PowerDesigner repository including any support package and patch updates. SAP ASE database will be set-up as repository server. Install and configure Apache Tomcat Server on portal server for remote web access. Install and set-up SAP PowerDesigner admin server as staging server for initial deployment. Export/import of SAP PowerDesigner Web application files to portal server.	not applicable	n/a
881	TO_PWR_1.1.02	Install Proxy	Standard Services	Install and set-up SAP PowerDesigner proxy server - will be installed on same server as SAP PowerDesigner admin server. This is an optional component.	not applicable	n/a
882	TO_PWR_1.1.03	Set-up and configuration	Standard Services	Install and set-up ODBC drivers for SAP HANA as data source. Additional data sources set-up will incur extra service charge. Set-up and configure authentication for portal and repository servers. Authorization set-up - provision specific user and roles for SAP PowerDesigner portal and repository Access.	not applicable	n/a
883	TO_PWR_1.1.04	SSL/TLS Configuration - Portal Set-up	Cloud Application Services ("CAS"). Can be performed by customer.	Set-up secure communication through SSL/TLS configuration.	Application Operations	A1
884	TO_PWR_1.1.05	Single Sign On (SSO) with Windows Active Directory	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
885		<b>X35 - bowbridge Anti-Virus for SAP Solutions</b>				
886		<b>Installation and Configuration</b>				
887	TO_BB_AV_1.1.01	Verify files signature or comparing checksum	Standard Services	Check that bowbridge software is original and unmodified.	not applicable	n/a
888	TO_BB_AV_1.1.02	Install bowbridge software	Standard Services		not applicable	n/a
889	TO_BB_AV_1.1.03	Configure application layer	Excluded Tasks		not applicable	n/a
890	TO_BB_AV_1.1.04	Update bowbridge software	Standard Services	Customer must inform provider and provide software update.	not applicable	n/a
891		<b>X36 - SAP Billing and Revenue Innovation Management</b>				
892		<b>SAP Convergent Charging</b>				
893		<b>Installation and Configuration</b>				
894	TO_BRIM_CC_1.1.01	Install SAP Convergent Charging database	Standard Services		not applicable	n/a
895	TO_BRIM_CC_1.1.02	Install SAP Convergent Charging core server	Standard Services		not applicable	n/a
896	TO_BRIM_CC_1.1.03	Post Installation steps - Convergent Charging Cockpit and Core tool installation	Standard Services		not applicable	n/a
897		<b>Operations</b>				
898	TO_BRIM_CC_1.2.01	Start/stop system	Standard Services		not applicable	n/a
899	TO_BRIM_CC_1.2.02	Apply Updates	Standard Services		not applicable	n/a
900	TO_BRIM_CC_1.2.03	Version upgrade	Standard Services		not applicable	n/a
901	TO_BRIM_CC_1.2.04	Monitoring	Standard Services		not applicable	n/a
902	TO_BRIM_CC_1.2.05	Standard technical parameter setting and activation with restart	Standard Services	If required per SAP Note, the product support team, or a top issue.	not applicable	n/a
903	TO_BRIM_CC_1.2.06	Additional parameter settings	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
904		<b>SAP Convergent Mediation by DigitalRoute</b>				
905		<b>Installation and Configuration</b>				
906	TO_BRIM_CM_1.1.01	Install SAP Convergent Mediation Database	Standard Services		not applicable	n/a
907	TO_BRIM_CM_1.1.02	Install SAP Convergent Mediation Control Zone and Execution Zone set-up	Standard Services		not applicable	n/a
908	TO_BRIM_CM_1.1.03	Post Installation steps	Standard Services		not applicable	n/a
909		<b>Operations</b>				
910	TO_BRIM_CM_1.2.01	Disaster Recovery procedures and testing for reprocessing of events	Excluded Tasks		not applicable	n/a
911	TO_BRIM_CM_1.2.02	Deletion of collected files after checkpoint batch	Excluded Tasks		not applicable	n/a
912	TO_BRIM_CM_1.2.03	Push Data Records from customer sFTP server to cloud environment sFTP server	Excluded Tasks		not applicable	n/a
913	TO_BRIM_CM_1.2.04	Start/stop system	Standard Services		not applicable	n/a
914	TO_BRIM_CM_1.2.05	Start/stop specific Pico instance	Standard Services		not applicable	n/a
915	TO_BRIM_CM_1.2.06	Monitoring	Standard Services	Availability monitoring only.	not applicable	n/a
916	TO_BRIM_CM_1.2.07	Standard technical parameter setting and activation with restart	Standard Services	If required per SAP Note, the product support team, or a Top Issue.	not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
917	TO_BRIM_CM_1.2.08	Additional parameter settings	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	not applicable	n/a
918	TO_BRIM_CM_1.2.09	Install, add, and upgrade Pico instances	Additional Service		not applicable	n/a
919	TO_BRIM_CM_1.2.10	Import/Export Workflows configuration	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
920	TO_BRIM_CM_1.2.11	Maintain External Reference files	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
921	TO_BRIM_CM_1.2.12	Install license	Standard Services		not applicable	n/a
<b>922</b>		<b>X37 - SAP Manufacturing Integration and Intelligence</b>				
<b>923</b>		<b>Implementation and Configuration</b>				
924	TO_MII_1.1.01	Set-up Plant Connectivity (PCo) for SAP Overall Equipment Effectiveness (OEE) Functionality	Excluded Tasks		not applicable	n/a
925	TO_MII_1.1.02	Set-up ALE user	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
926	TO_MII_1.1.03	Establish ALE connection to customer's ERP system	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
927	TO_MII_1.1.04	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: SAP NetWeaver	Excluded Tasks		not applicable	n/a
928	TO_MII_1.1.05	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: Integration Interfaces	Excluded Tasks		not applicable	n/a
929	TO_MII_1.1.06	Configure SAP Overall Equipment Effectiveness Management	Excluded Tasks		not applicable	n/a
930	TO_MII_1.1.07	Create XMII Users and perform Roles Assignments	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
<b>931</b>		<b>X38 - SAP Manufacturing Execution</b>				
<b>932</b>		<b>Operational Set-up</b>				
933	TO_ME_1.1.01	Execute CTC Template for SAP NetWeaver Engine Configuration	Standard Services		not applicable	n/a
934	TO_ME_1.1.02	Execute CTC Template for SAP Database Set-up	Standard Services		not applicable	n/a
935	TO_ME_1.1.03	Execute CTC Template for SAP ME Configuration	Excluded Tasks		not applicable	n/a
936	TO_ME_1.1.04	Execute SAP ME Scripts	Excluded Tasks		not applicable	n/a
937	TO_ME_1.1.05	Perform SAP ME and ERP Integration	Excluded Tasks		not applicable	n/a
938	TO_ME_1.1.06	Install Adobe Document Services	Optional Services		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
939		<b>X39 - R Integration</b>				
940		<b>Operational Set-up</b>				
941	TO_RINT_1.1.0.2	Install R Integration Components	Standard Services	R, R Server, and dependent packages are installed independently from the SAP HANA database.	not applicable	n/a
942	TO_RINT_1.1.0.3	Perform technical post-installation tasks	Standard Services	Set-up SAP HANA configuration for index and XS Engine parameters for R Integration. Set-up R Server authentication and authorization. Provision cloud environment specific user and roles for R Integration. Configure and set-up R Integration nodes for each tenant database including, service initialization, cockpit access, delivery units, and verification.	not applicable	n/a
943	TO_RINT_1.1.0.4	R Integration - Additional hosts set-up for High Availability (HA)	Optional Services	Add and set-up R Integration additional nodes. High Availability set-up and configuration involves single or multi-tenant database set-up including R Integration group set-up. For R Integration LoadBalancer set-up, check R&R Section "LoadBalancer".	not applicable	n/a
944		<b>X40 - SAP SQL Anywhere - Mobilink</b>				
945		<b>Implementation and Configuration</b>				
946	TO_SQLA_ML_1.1.01	Install and activate SQLAnywhere Mobilink Services	Standard Services	Install and set-up 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.	not applicable	n/a
947	TO_SQLA_ML_1.1.02	Perform technical post-installation tasks	Standard Services	Activate Mobilink roles, privileges and object access for monitoring and operations. Provision cloud environment specific user and roles. Configure and set-up Mobilink nodes for each SAP HANA tenant database including, service initialization, delivery units and verification.	not applicable	n/a
948	TO_SQLA_ML_1.1.03	Mobilink - Single Sign On (SSO) Set-up	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
949	TO_SQLA_ML_1.1.04	Mobilink - Additional Host Set-up for High Availability (HA)	Optional Services	Add and configuring additional hosts for high availability set-up. For multi-tenant set-up, Mobilink nodes are added exclusively to each tenant database. For Mobilink LoadBalancer set-up, check R&R Section "LoadBalancer".	not applicable	n/a
950	TO_SQLA_ML_1.1.05	Set-up and configure synchronization scripts	Excluded Tasks	Configure synchronization script for upload and download of data between remote and consolidated databases.	not applicable	n/a
951		<b>X41 - SAP Analytics Cloud</b>				
952		<b>SAP Analytics Cloud Tenant</b>				
953	TO_SAC_1.1.0.1	Establish connection between SAP Analytics Cloud and managed system	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
954	TO_SAC_1.1.0.2	Set-up Single Sign On (SSO) communication with Principle Propagation from SAP Analytics Cloud to SAP S/4HANA	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
955	TO_SAC_1.1.0.3	Create or change user/roles or SAP as Identity Provider	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
956		<b>SAP Analytics Cloud Agent</b>				
957	TO_SAC_1.2.0.1	Install SAP Analytics Cloud Agent	Standard Services		not applicable	n/a
958	TO_SAC_1.2.0.2	Configure SAP Analytics agent, Cloud Connector, Java Connector	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
959	TO_SAC_1.2.0.3	Configure SAP Analytics agent connection with other systems like SAP S/4HANA, ERP	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
960	TO_SAC_1.2.0.4	Configure SAP Analytics Cloud with SAP Analytics agent	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
961		<b>SAP S/4HANA Tasks for SAP Analytics Cloud</b>				
962	TO_SAC_1.3.0.1	Configure STRUST for SSL settings	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
963	TO_SAC_1.3.0.2	Activate Embedded BW content (BEx queries etc.)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
964	TO_SAC_1.3.0.3	Enable INA for Analytics Cloud	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
965	TO_SAC_1.3.0.4	Enable CORS Analytics Cloud and edit allowlist	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
966		<b>X42 - SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)</b>				
967		<b>Global Account and Subaccount(s)</b>				
968	TO_BTP_1.1.0 1	Create or change subaccounts related to cloud system (DEV, QAS, PRD etc.)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
969	TO_BTP_1.1.0 1_PCE	Create or change of subaccounts related to managed system (DEV, QAS, PRD etc.) - SAP Forms by Adobe (Adobe Document Services/ADS)	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: Create sub account for ADS processing in SAP-owned global account.	not applicable	n/a
970	TO_BTP_1.1.0 2	Create or change entitlements in the Global Account	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
971	TO_BTP_1.1.0 3	Activate Business Technology Platform service(s)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
972	TO_BTP_1.1.0 3_PCE	Activate Business Technology Platform service(s) - SAP Forms by Adobe (Adobe Document Services/ADS)	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: Enable ADS service in BTP subaccount (created in SAP-owned global account).	not applicable	n/a
973	TO_BTP_1.1.0 4	Create or change user/roles	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
974	TO_BTP_1.1.0 4_PCE	Create or change user/roles - SAP Forms by Adobe (Adobe Document Services/ADS)	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: In SAP-owned global account - Perform basic role assignment: Assign relevant user to ADSAdmin role; Assign relevant user to ADSCaller role.	not applicable	n/a
975	TO_BTP_1.1.0 5	Create or change connectivity destinations	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
976	TO_BTP_1.1.0 5_PCE	Create or change connectivity destinations - SAP Forms by Adobe (Adobe Document Services/ADS)	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: Create destination for ABAP backend system.	not applicable	n/a
977	TO_BTP_1.1.0 6	Manage certificates (issue, import, export)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
978	TO_BTP_1.1.0 7	Create or change custom application domains settings	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
979		<b>Identity Provider</b>				
980	TO_BTP_1.2.0 1	Configure local provider settings	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
981	TO_BTP_1.2.0 2	Configure Trust Relationships and Federation Settings for external Identity Providers (e.g. Microsoft, Okta)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
982	TO_BTP_1.2.0 3	Configure Trust Relationships and Federation Settings for SAP Identity Authentication Tenant	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
983	TO_BTP_1.2.0 4	Configure Principle Propagation Business Technology Platform, SAP Cloud Connector and SAP S/4HANA	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
984	TO_BTP_1.2.0 5	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.	Application Operations	A1
985	TO_BTP_1.2.0 6	User Migration to Business Technology Platform Identity Authentication Tenant	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
986		<b>SAP S/4HANA Tasks for SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)</b>				
987	TO_BTP_1.3.0 1	Configure STRUST for SSL settings	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
988	TO_BTP_1.3.0 1_PCE	Configure STRUST for SSL settings - SAP Forms by Adobe (Adobe Document Services/ADS)	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: Import the required security certificates into AS ABAP.	not applicable	n/a
989	TO_BTP_1.3.0 2	Activate ICF nodes required for sample Apps to be enabled	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
990	TO_BTP_1.3.0 3	Activate OData Services required for sample Apps to be enabled	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
991	TO_BTP_1.3.0 4	Enterprise Search Enablement (ESH)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
992	TO_BTP_1.3.0 5	Create authorization role in backend system for OData processing	Cloud Application Services ("CAS"). Can be performed by customer.	For relevant sample Apps.	Application Operations	A1
993	TO_BTP_1.3.0 6	Activate Embedded BW content for Analytical Fiori Apps	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
994	TO_BTP_1.3.0 7	Enable INA for Analytical SAP Fiori Apps	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
995	TO_BTP_1.3.0 8	Establish backend connectivity to Business Technology 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.	Application Operations	A1
996	TO_BTP_1.3.0 8_PCE	Establish backend connectivity to Business Technology Platform Forms by Adobe - Create and configure an RFC destination for SAP Forms by Adobe in AS ABAP	Standard Services	For X43 - SAP Forms by Adobe (Adobe Document Services/ADS) only: Create and configure an RFC destination for SAP Forms by Adobe in AS ABAP; Configure ICF Service to enable HTTP communication with SAP Forms by Adobe; Create the service user ADS_AGENT.	not applicable	n/a
997		<b>Portal</b>				
998	TO_BTP_1.4.0 1	Create or change SAP Fiori Launchpad sites (site directory and site settings)	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
999	TO_BTP_1.4.0 2	Create or change roles	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Secure Users & Authorizations	A1, S2
1000	TO_BTP_1.4.0 3	Create or change groups including role assignment	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Secure Users & Authorizations	A1, S2
1001	TO_BTP_1.4.0 4	Create or change catalogs including role assignment	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations or Secure Users & Authorizations	A1, S2
1002	TO_BTP_1.4.0 5	Enable SAP Fiori sample apps and perform required connectivity set-up	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1



#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1003		X43 - SAP Forms by Adobe (Adobe Document Services/ADS)	SAP Cloud Connector and SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) are prerequisites.			
1004		Installation and Configuration				
1005	TO_ADS_1.1.0 1	Testing	Cloud Application Services ("CAS"). Can be performed by customer.	Test and check communications and functionality.	Regression Testing	U1
1006	TO_ADS_1.1.0 2	Data Migration from on premise ADS to ADS on BTP	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
1007	TO_ADS_1.1.0 3	Configure Fonts and Print Information using XDC and XCI Files	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
1008	TO_ADS_1.1.0 4	Configure document security	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
1009	TO_ADS_1.1.0 5	Configure job profiles	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
<b>1010</b>		<b>X44 - SAP Enterprise Threat Detection (ETD)</b>				
<b>1011</b>		<b>Installation</b>				
1012	TO_ETD_1.1.0 1	Create specific SAP HANA tenant for ETD	Standard Services		not applicable	n/a
1013	TO_ETD_1.1.0 4	Import the ETD delivery unit	Standard Services		not applicable	n/a
<b>1014</b>		<b>Configuration</b>				
1015	TO_ETD_1.2.0 1	Create ETD service users in SAP HANA independent of source systems	Standard Services	Users to be created: ETD_DATA_COMMITTER, ETD_DART_COMMITTER;SDS_ADMIN;ETD_BATCH.	not applicable	n/a
1016	TO_ETD_1.2.0 2	Create dependent source system user: SDS_RT_<SID>	Excluded Tasks		not applicable	n/a
1017	TO_ETD_1.2.0 3	Schedule individual background jobs	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1018	TO_ETD_1.2.0 4	Finish installation	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1019	TO_ETD_1.2.0 5	Provision initial ETDAdmin Administrator	Standard Services		not applicable	n/a
1020	TO_ETD_1.2.0 6	Define namespaces	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1021</b>		<b>Apache Kafka</b>				
1022	TO_ETD_1.3.0 4	Install Kafka	Excluded Tasks	Customer must provide Kafka cluster.	not applicable	n/a
<b>1023</b>		<b>Streaming solution based on HANA Streaming Analytics</b>				
1024	TO_ETD_1.4.0 5	Install SAP HANA Streaming Analytics Option (Formerly Smart Data Streaming/SDS)	Standard Services	For cluster set-up see SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS).	not applicable	n/a
1025	TO_ETD_1.4.0 6	Run ETD installation script for SDS data service, projects and adapters	Standard Services		not applicable	n/a
1026	TO_ETD_1.4.0 7	Enable configuration checks	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1027	TO_ETD_1.4.0 8	Enable custom configuration checks	Excluded Tasks		not applicable	n/a
<b>1028</b>		<b>Streaming solution based on ETD streaming</b>				
1029	TO_ETD_1.5.1 6	Run ETD installation script for ETD streaming	Standard Services		not applicable	n/a
1030	TO_ETD_1.5.1 7	Install individual components of ETD streaming	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1031</b>		<b>Source system logs</b>				
1032	TO_ETD_1.6.0 5	Configure provisioning logs from SAP NetWeaver ABAP based system	Excluded Tasks		not applicable	n/a
1033	TO_ETD_1.6.0 6	Configure provisioning logs from SAP HANA-based system	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1034	TO_ETD_1.6.0 7	Configure provisioning logs from SAP NetWeaver JAVA-based system	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1035	TO_ETD_1.6.0 8	Configure provisioning logs from other systems including OS	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1036</b>		<b>Secure communications with log providers</b>				
1037	TO_ETD_1.7.0 1	Encrypt communications between log providers and HANA Streaming Analytics	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1038	TO_ETD_1.7.0 2	Encrypt communications between log providers and ETD Streaming	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1039</b>		<b>X45 - Zscaler ZPA Connector</b>				
<b>1040</b>		<b>Implementation and Configuration</b>				
1041	TO_ZPA_1.1.0 1	Install ZPA Connector and required OS packages	Optional Services		not applicable	n/a
1042	TO_ZPA_1.1.0 2	Configure ZPA Connector	Optional Services		not applicable	n/a
1043	TO_ZPA_1.1.0 3	Allowlist ZPA Connector IP addresses in LoadBalancer	Optional Services		not applicable	n/a
1044	TO_ZPA_1.1.0 4	Configure connector in ZPA Admin Console	Excluded Tasks		not applicable	n/a
1045	TO_ZPA_1.1.0 5	Provision ZPA Connector provisioning keys	Excluded Tasks		not applicable	n/a
1046	TO_ZPA_1.1.0 6	Install client software	Excluded Tasks		not applicable	n/a
1047	TO_ZPA_1.1.0 7	Client and end-user support	Excluded Tasks		not applicable	n/a
1048	TO_ZPA_1.1.0 8	Sizing of required number of connectors	Excluded Tasks		not applicable	n/a
1049	TO_ZPA_1.1.0 9	Integration with customer's IDP (SAML)	Excluded Tasks		not applicable	n/a
1050	TO_ZPA_1.1.1 0	Install provisioning keys	Optional Services		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1051		<b>X46 - SAP Omnichannel Banking (OCB)</b>			-	-
1052		<b>Implementation and Configuration</b>			-	-
1053	TO_OCB_1.1.0 1	Install Tomcat	Optional Services		not applicable	n/a
1054	TO_OCB_1.1.0 2	Install OCB software Retail Banking or Business Banking (Digital)	Standard Services		not applicable	n/a
1055	TO_OCB_1.1.0 3	Deploy Business Central and deploy Platform with customized .war files	Excluded Tasks	Provider performs task for customer for SAP product .war files and Customer provided customized .war files	not applicable	n/a
1056	TO_OCB_1.1.0 4	Develop .war files	Excluded Tasks		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
<b>1057</b>		<b>X47 - SAP Multi-Bank Connectivity Connector (MBC)</b>				
<b>1058</b>		<b>Configuration for Transport Level Security (STRUST)</b>				
1059	TO_MBC_1.1.0 1	Sign SSL client standard by a Trusted Authority in the SAP Multi-Bank Connectivity firewall	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1060	TO_MBC_1.1.0 2	Send SSL client public certificate to MBC team	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1061	TO_MBC_1.1.0 3	Configure SSL client standard PSE	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1062</b>		<b>Configuration of XI within customer's S/4HANA system landscape</b>				
1063	TO_MBC_1.2.0 1	Activate XI Engine using transaction SICF	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1064	TO_MBC_1.2.0 2	Define logical system in table LCRT_CLNTCACHE	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1065	TO_MBC_1.2.0 3	Configure Integration Engine in SXMB_ADM	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1066	TO_MBC_1.2.0 4	Activate queues for XI Message Processing	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1067	TO_MBC_1.2.0 5	Configure Interface-specific XI Engine	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1068	TO_MBC_1.2.0 6	Configure XI queue retry	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1069</b>		<b>Message Level Security Configuration</b>				
1070	TO_MBC_1.3.0 1	Set-up MLS key store SSF BSNAGT PSE	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1071	TO_MBC_1.3.0 2	Install MBC MLS certificate in SSF BSNAGT PSE	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1072	TO_MBC_1.3.0 3	Configure SSSFA parameters	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1073	TO_MBC_1.3.0 4	Maintain application-dependent parameters for Secure Store and Forward	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1074	TO_MBC_1.3.0 5	Maintain Secure Store and Forward profile data	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1075</b>		<b>Configure SAP MBC Connector</b>				
1076	TO_MBC_1.4.0 1	Define number ranges for message Ids	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1077	TO_MBC_1.4.0 2	Maintain Sender ID for Payment Medium Workbench	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1078	TO_MBC_1.4.0 3	Configure SWIFT parameters	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1079	TO_MBC_1.4.0 4	Create Bank Statement import format variant	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1080	TO_MBC_1.4.0 5	Maintain selection variants for Bank Statements	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1081	TO_MBC_1.4.0 6	Create Lockbox Import Variant	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1082	TO_MBC_1.4.0 7	Maintain Selection Variants for Lockbox	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1083</b>		<b>Other Tasks</b>				
1084	TO_MBC_1.5.0 1	Configure Payment Medium Workbench as the default payment engine for outbound payments	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1085	TO_MBC_1.5.0 2	Schedule background jobs for messages pulling	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
1086	TO_MBC_1.5.0 3	Perform connectivity test	Cloud Application Services ("CAS"). Can be performed by customer.		Custom Scope	XX
<b>1087</b>		<b>X48 - Redwood RunMyJobs</b>				
<b>1088</b>		<b>Installation and Configuration</b>				
1089	TO_RMJ_1.1.0 1	Install Redwood platform agent and configure as Secure gateway	Standard Services	Installation and configuration of the agent on dedicated VMs. Installation of agents on servers running on managed systems is not allowed.	not applicable	n/a
1090	TO_RMJ_1.1.0 2	Monitor agent	Standard Services		not applicable	n/a
1091	TO_RMJ_1.1.0 3	Restart agent	Standard Services		not applicable	n/a
1092	TO_RMJ_1.1.0 4	Scheduling of jobs	Excluded Tasks		not applicable	n/a
1093	TO_RMJ_1.1.0 5	Manual design and implementation of process definitions	Excluded Tasks		not applicable	n/a
1094	TO_RMJ_1.1.0 6	Integrate SAP system to Redwood RunMyJobs Cloud	Cloud Application Services ("CAS"). Can be performed by customer.	Connect business client to the customer tenant. Technical user for communication needs to be provided by the customer.	Advanced Job Management	A2
<b>1095</b>		<b>X49 - SMTP Relay to Office365</b>				
<b>1096</b>		<b>Installation and Configuration</b>				
1097	TO_SMTP_1.1. 01	Install smtp relay and required OS packages	Standard Services		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1098	TO_SMTP_1.1.02	Configure smtp relay servers and LoadBalancers	Standard Services		not applicable	n/a
1099	TO_SMTP_1.1.03	Allowlist of smtp relay IP's/FQDN in LoadBalancer and NSG	Standard Services		not applicable	n/a
1100	TO_SMTP_1.1.04	Provisioning of certificates for TLS and authentication	Excluded Tasks		not applicable	n/a
1101	TO_SMTP_1.1.05	Configure systems to use smtp relay server	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
1102	TO_SMTP_1.1.06	Configure O365 connector in O365	Excluded Tasks		not applicable	n/a
1103	TO_SMTP_1.1.07	Install certificates	Standard Services		not applicable	n/a
1104	TO_SMTP_1.1.08	Restart after failure	Standard Services		not applicable	n/a
1105	TO_SMTP_1.1.09	Monitor smtp relay service	Standard Services		not applicable	n/a
1106	TO_SMTP_1.1.10	Apply updates	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
1107	TO_SMTP_1.1.11	Application troubleshooting including engagement with the vendor's support organization	Cloud Application Services ("CAS"). Can be performed by customer.	Includes engagement with the vendor's support organization.	Application Operations	A1
1108		<b>X50 - SAP Data Custodian (SDC) - Integration Service</b>				
1109		<b>Transparency and Control Service (SAP S/4 HANA, ECC)</b>				
1110	TO_SDC_1.1.01	Install on SAP S/4 HANA or ECC	Standard Services	Install on existing SAP S/4 HANA or ECC system with required version provided by customer for SDC integration.	not applicable	n/a
1111	TO_SDC_1.1.02	SAP system profile parameters	Standard Services	Service Provider is responsible for executing this task as it can have an impact on system performance and availability. Includes recommendations for technical system parameters. Provider will also adjust parameters by customer request except for certain standardized settings required to maintain system stability or security. For SAP Data Custodian Transparency and Control to work, Service Provider needs to set profile parameter - downtime is required due to system restart.	not applicable	n/a
1112	TO_SDC_1.1.03	Enable outbound connection via LoadBalancer	Standard Services	Allow outbound connection to SDC tenant. Customer to provide the URL for SDC tenant to allow outbound connection; customer will get this from customer's SDC team during the onboarding process.	not applicable	n/a
1113	TO_SDC_1.1.04	Onboarding activities including configuring tenant with principal masking, and assessments/questionnaires	Excluded Tasks	Performed by customer's SDC team.	not applicable	n/a
1114	TO_SDC_1.1.05	Configure the tenant with the SAP S/4HANA system	Excluded Tasks		not applicable	n/a
1115	TO_SDC_1.1.06	Configure application synchronization for Principal[User] attributes	Excluded Tasks		not applicable	n/a
1116	TO_SDC_1.1.07	Maintain use case policies in the Data Custodian tenant	Excluded Tasks		not applicable	n/a
1117	TO_SDC_1.1.08	Remediate incidents for unauthorized accesses in the tenant	Excluded Tasks		not applicable	n/a
1118	TO_SDC_1.1.09	Generate access log and other reports	Excluded Tasks		not applicable	n/a

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1119		<b>X51 - SAP Disclosure Management (DM)</b>				
1120		<b>Installation</b>				
1121	TO_SDM_1.1.0.1	Install DM components	Standard Services	IIS Web Server, DM Application Server, Task Engine, XBRL Service, and MS-SQL DB.	not applicable	n/a
1122	TO_SDM_1.1.0.2	Install DM BW Connector	Standard Services		not applicable	n/a
1123	TO_SDM_1.1.0.3	Install DM content packages	Standard Services	Scenario based.	not applicable	n/a
1124		<b>Set-up and Configuration</b>				
1125	TO_SDM_1.2.0.1	Post-install configuration	Standard Services		not applicable	n/a
1126	TO_SDM_1.2.0.2	Configure BW connector	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
1127	TO_SDM_1.2.0.3	Configure DM Application Server SSL/TLS Secure Communication	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
1128	TO_SDM_1.2.0.4	Configure DM Application Server SSO with Windows AD	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
1129		<b>X52 - SAP 3D Visual Enterprise Generator (VEG)</b>				
1130		<b>Installation</b>				
1131	TO_VEG_1.1.0.1	Install VEG components	Standard Services	IIS Web Server, MSMQ Server, Application Server (Source) with Embedded MS-SQL Express DB.	not applicable	n/a
1132	TO_VEG_1.1.0.2	Install additional VEG subordinate host	Standard Services		not applicable	n/a
1133		<b>Set-up and Configuration</b>				
1134	TO_VEG_1.2.0.1	Post-install configuration	Standard Services		not applicable	n/a
1135	TO_VEG_1.2.0.2	Configure VEG SSL/TLS Secure Communication	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
1136	TO_VEG_1.2.0.3	Integration with ERP/ECC/S4HANA	Cloud Application Services ("CAS"). Can be performed by customer.	OS access required, access can be requested via task BASIC_1.1.14.	Application Operations	A1
1137	TO_VEG_1.2.0.4	Configure SSO with Windows AD	Excluded Tasks	Customer may engage SAP Consulting for services pertaining to SSO solutions for cloud environment.	not applicable	n/a
1138		<b>X53 - SAP Content Server</b>				
1139		<b>Installation</b>				
1140	TO_SCS_1.1.0.1	Install Content Server	Standard Services		not applicable	n/a
1141	TO_SCS_1.1.0.2	Install specific parameter definition	Standard Services		not applicable	n/a
1142		<b>Configure repositories</b>				
1143	TO_SCS_1.2.0.1	Generate server certificate (in case of SSL enablement)	Standard Services	After CA signing of SAPSSLS pse, certificate should be generated.	not applicable	n/a
1144	TO_SCS_1.2.0.2	Add server certificate to SYSTEM PSE, SSL Server standard PSE in Strust transaction (in case of SSL enablement)	Cloud Application Services ("CAS"). Can be performed by customer.	Per customer request.	Application Operations	A1
1145	TO_SCS_1.2.0.3	Technical configuration of repositories in OAC0	Cloud Application Services ("CAS"). Can be performed by customer.	Strategic/conceptual decisions to be made by customers/consulting.	Application Operations	A1
1146	TO_SCS_1.2.0.4	Connection test via RSCMST	Cloud Application Services ("CAS"). Can be performed by customer.		Application Operations	A1
1147		<b>Patch Update</b>				
1148	TO_SCS_1.3.0.1	SP update for content server version	Standard Services		not applicable	n/a
1149	TO_SCS_1.3.0.2	SP update for MaxDB database	Standard Services		not applicable	n/a
1150		<b>Version Upgrade</b>				
1151	TO_SCS_1.4.0.1	Pre-checks for repository connection	Cloud Application Services ("CAS"). Can be performed by customer.	Connection test via RSCMST for all given repositories needs to be done.	Application Operations	A1
1152	TO_SCS_1.4.0.2	Technical Upgrade procedure	Optional Services		not applicable	n/a
1153	TO_SCS_1.4.0.3	Migrate repositories and post-upgrade configuration (OS level steps)	Optional Services		not applicable	n/a
1154	TO_SCS_1.4.0.4	Technical post-checks for repository connection	Cloud Application Services ("CAS"). Can be performed by customer.	Connection test via RSCMST for all given repositories needs to be done.	Application Operations	A1
1155	TO_SCS_1.4.0.5	Functional validation of repositories	Excluded Tasks		not applicable	n/a
1156		<b>X54 - SAP HANA Cockpit 2.0</b>				
1157		<b>Installation and Configuration</b>				
1158	TO_HANA_CP	Set-up/Configure for SAP HANA system on customer side	Excluded Tasks	Configure HANA cockpit deployed on managed landscape to manage HANA systems at customer premises. Customer can perform this task with a user provided by service provider.	not applicable	n/a
1159	TO_HANA_CP	Monitor database resource consumption	Standard Services	To detect issues in technical operations.	not applicable	n/a
1160	TO_HANA_CP	User management	Excluded Tasks	Customer must maintain their users for HANA Cockpit.	not applicable	n/a
1161		<b>X55 - SAP Focus Run for Solution Manager (FRUN)</b>				
1162		<b>Configuration</b>				

#	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1163	TO_FRUN_1.1.01	Allowlist IP addresses of customer's FRUN through managed system's firewall	Standard Services		not applicable	n/a
1164	TO_FRUN_1.1.02	Create dedicated SSL client PSE in STRUST (self signed or signed by certificate authority) in FRUN	Excluded Tasks		not applicable	n/a
1165	TO_FRUN_1.1.03	Import customer provided certificate into the SAP Host Agent	Standard Services		not applicable	n/a
1166	TO_FRUN_1.1.04	Enable certificate based authentication to simple diagnostic agent	Standard Services		not applicable	n/a
1167	TO_FRUN_1.1.05	Configure outside discovery to connect the managed system's Host Agent with customer FRUN system and maintain SLDR	Standard Services		not applicable	n/a
1168	TO_FRUN_1.1.06	Configure SSI and monitoring in FRUN	Excluded Tasks		not applicable	n/a

Package Name	Code 2	Category
Application Operations	A1	Application
Advanced Job Management	A2	Application
Audit Readiness	C1	Compliance
Custom Scope	XX	Custom
Data Environment Health Checks	D1	Data
Data Integration	D2	Data
Data Lifecycle Management	D3	Data
Data Quality Management	D4	Data
Data Quality Optimization	D5	Data
Data Volume Optimization	D6	Data
Cloud Integration Testing	I1	Integration
Application Monitoring	M1	Monitoring
System Health Monitoring	M2	Monitoring
Performance Benchmark	P1	Performance
Performance Optimization	P2	Performance
Application Security Updates	S1	Security / Users
Secure Users & Authorizations	S2	Security / Users
Segregation of Duties Check	S3	Security / Users
Regression Testing	U1	Upgrade/Update/Maintenance
Release Planning & Execution	U2	Upgrade/Update/Maintenance
Release Version Upgrade	U3	Upgrade/Update/Maintenance
Solution Manager - ChaRM	U4	Upgrade/Update/Maintenance