



## **SAP Enterprise Cloud Services**

**RISE with SAP S/4HANA Cloud, private edition and SAP ERP, PCE v.3-2023**

**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>SAP Cloud Application Services<sup>1</sup> ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.</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. CAS is subject to additional service fees as agreed in a customer's contract.
	<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.

Row	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 Onboarding and Operations Review	Standard Services		not applicable	n/a
4	SM_1.1.02	Capacity Management Review: Provide data via report and/or self-service reporting tool for 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: Provide 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	Service Request Management: - Create service requests via the service request platform - Update and resend service requests back to service provider via the service request platform when additional customer action/attention/information is required	Excluded Tasks	Change Requests (CR) or Change Orders subject to process defined in Agreement. Service requests which require commercial change requests (CR) or which need to be planned and coordinated are performed during customer business hours only.	not applicable	n/a
10	SM_1.2.09	Service Request Management - Receive and acknowledge service requests via the service request platform - Assess critically/priority of service requests, effort and approvals required - Coordinate request approval - Notify requester of approval or rejection - Coordinate service request scheduling - Notification of service request completion	Standard Services	Provider will address service requests during the hours of operations as defined in the Service Level Agreement. Change Requests (CR) or Change Orders subject to process defined in Agreement. Service requests which require commercial change requests (CR) or which need to be planned and coordinated are performed during customer business hours only.	not applicable	n/a
11	SM_1.2.11_AE	Create service plan for recurring and proactive CAS tasks / Create and maintain service plan for recurring and proactive services	Standard Services	Only applicable if CAS packages are part of the contract.	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>	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 managed services contract; examples for industry standards that may be addressed with these services are GxP or HIPAA.		-	-
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

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
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	Move an existing system in a customer landscape to new subnet for the purpose of network segregation - initial landscape build	Additional Service	During initial landscape build only. Two (2) additional subnets are covered as part of standard offering during the initial landscape build. Customers can request more subnets as an Additional Service if more subnets are needed during the initial network build or in an existing landscape via INFRA_1.2.03A. 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_1.2.03A	Provision additional subnets as part of initial landscape build or after network build to segregate tiers (e.g. PROD, DEV, QA) or move VMs	Additional Service	Up to Two (2) additional subnets are covered as part of standard offering during the initial landscape build. Customers can request more subnets using this Additional Service if more subnets are needed during the initial network build or in an existing landscape. This service covers subnet creation for tiers such as Sandbox, DEV, QA etc. only and does not cover isolation or restrictions between subnets using SG/NSG/Firewall services; for this use INFRA_1.2.03B. Not in scope for application or DB server separation.	not applicable	n/a
31	INFRA_1.2.03B	Configure communication restrictions between production and non-production tiers	Additional Service	This service can be used if restrictions are needed between tiers or on-premise systems. Customer must provide communication matrix to provision restrictions (e.g. allow trans mount access across tiers; allow port 3299 from prod to QA etc.) Restriction rules (such as ACLs) are limited to Twenty (20) per tier (default are exe.). Such restrictions between application and DB servers within a tier are not in scope not permitted. Service provider access can't be restricted.	not applicable	n/a
32	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
33	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
34	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
35	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
36		<b>Hardware Operations</b>	<b>Applies to equipment managed by service provider.</b>		-	-
37	INFRA_1.4.03	Plan and conduct managed service infrastructure maintenance	Standard Services		not applicable	n/a
38	INFRA_1.4.05	Monitor critical operations parameters of computing environment	Standard Services		not applicable	n/a
39	INFRA_1.4.06	Monitor disk capacity	Standard Services	Subject to additional fees for additional capacity.	not applicable	n/a
40	INFRA_1.4.07	Monitor server capacity	Standard Services	Subject to additional fees for additional capacity.	not applicable	n/a
41	INFRA_1.4.08	Monitor network utilization	Standard Services		not applicable	n/a
42	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
43	INFRA_1.4.11	Scale compute capacity (memory and CPU)	Optional Services		not applicable	n/a
44		<b>Storage Management</b>			-	-
45	INFRA_1.5.01	Manage data files, file systems and disks per standards and practices	Standard Services		not applicable	n/a
46	INFRA_1.5.02	Scale storage capacity	Optional Services		not applicable	n/a
47	INFRA_1.5.03	Enable SnapLock/WORM/Immutability capability for archiving use cases	not offered		not applicable	n/a
48	INFRA_1.5.04_AE	Review and analyze the impact of data volume/load on data environment performance	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Volume Optimization	D6
49	INFRA_1.5.05_AE	Determine if existing hardware can meet growth	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Volume Optimization	D6
50	INFRA_1.5.06_AE	Develop alternative plans (e.g. archiving, consolidation, hardware upgrades)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Volume Optimization	D6
51		<b>Operating System</b>			-	-
52	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
53	INFRA_1.6.04	Inform customer regarding security incidents	Standard Services		not applicable	n/a
54	INFRA_1.6.05	Configure OS parameters	Standard Services		not applicable	n/a
55	INFRA_1.6.06	Troubleshoot operating system problems, monitor system log and file systems	Standard Services		not applicable	n/a
56	INFRA_1.6.07	Work with OS vendor to resolve operating system issues	Standard Services		not applicable	n/a
57	INFRA_1.6.08	Monitoring of swap and page areas	Standard Services		not applicable	n/a
58	INFRA_1.6.09	Monitoring of memory load	Standard Services		not applicable	n/a
59	INFRA_1.6.12	Software Lifecycle Management of operating system	Standard Services		not applicable	n/a
60		<b>System Startup/Shutdown</b>			-	-
61	INFRA_1.7.01	Perform scheduled startup/shutdown of computing environment	Standard Services		not applicable	n/a
62	INFRA_1.7.03	Restart computing environment after failure	Standard Services		not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
63		<b>Backup/Restore</b>			.	.
64		<b>General</b>			.	.
65	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
66	INFRA_1.8.10	Perform exceptional ad-hoc backup upon request	Additional Service	Lead time for backup to be aligned in advance. This backup is not applicable for systems which are already fully backed up on a daily basis.	not applicable	n/a
67	INFRA_1.8.09	Provide non-standard backup services (e.g. extended retention period for long-term backups)	Optional Services	Change request required to cover extra storage requirements for the retention period. Lead times for change request processing to be factored in when ordering the service. BLOB (binary large object) storage to be factored in as per size requirements.	not applicable	n/a
68	INFRA_1.8.11	Monitor backup processes	Standard Services		not applicable	n/a
69	INFRA_1.8.07	Test backup/restore procedures periodically	Standard Services	This task cannot be ordered by customers. This task is used to verify procedures and operational readiness; testing is not performed for each individual system but for representative scenarios.	not applicable	n/a
70	INFRA_1.8.03	Perform data restore and recovery (file system, database) as required after system failures	Standard Services		not applicable	n/a
71	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	Up to Six (6) restores per SID, per contract year, are included.	not applicable	n/a
72	INFRA_1.8.06	Validate logical integrity and consistency of restored information	Excluded Tasks		not applicable	n/a
73		<b>NFS DB Volume Consistent Snapshot and Restore</b>			.	.
74	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
75	INFRA_1.13.02	Perform ad-hoc NFS DB volume consistent snapshot	Additional Service	Lead time to be aligned in advance.	not applicable	n/a
76	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 snapshot frequency and retention period is offered.	not applicable	n/a
77	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
78	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
79	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
80	INFRA_1.13.07	Restore standard flat filesystem NFS volume snapshot (non-DB volumes) - on customer request (other reasons than as a response to system failures)	Additional Service		not applicable	n/a
81	INFRA_1.13.07A	Restore standard flat filesystem NFS volume snapshot (non-DB volumes) - as required after system failures	Standard Services		not applicable	n/a
82		<b>Infrastructure Integration</b>			.	.
83	INFRA_1.9.02	Integrate customer Active Directory, Google IdP and other identity management solutions	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
84	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
85		<b>File transfer capabilities: CIFS shares</b>			.	.
86	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
87	INFRA_1.10.01A	Provide Samba Server Share on managed landscape LINUX server for remote SMB clients	Standard Services	Within contractually agreed infrastructure capacity.	not applicable	n/a
88	INFRA_1.10.03	User and access management	Standard Services	Once/initially when share is created.	not applicable	n/a
89	INFRA_1.10.04	Create and maintain folder structure on shares	Standard Services		not applicable	n/a
90	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
91	INFRA_1.10.06	Implement virus protection on server	Standard Services		not applicable	n/a
92	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
93		<b>Managed SFTP Server</b>	<b>To be installed on existing application server in managed system</b>		.	.
94	INFRA_1.11.01	Configure sftp daemon	Standard Services	Only available on Linux.	not applicable	n/a
95	INFRA_1.11.02_AE	Create and maintain sftp user accounts and groups	Standard Services	Up to 10 users.	not applicable	n/a
96	INFRA_1.11.02A	Create and maintain sftp user accounts and groups - additional requests	Additional Service	Requests for additional users beyond those provided in INFRA_1.11.02_AE	not applicable	n/a
97	INFRA_1.11.03	Manage file systems	Standard Services	Within contractually agreed infrastructure capacity.	not applicable	n/a
98	INFRA_1.11.04	Provide user list	Excluded Tasks		not applicable	n/a
99	INFRA_1.11.05	Create and delete files	Excluded Tasks		not applicable	n/a
100		<b>Management of Wide Area Network</b>			.	.
101	INFRA_1.12.01	Provide network infrastructure at customer data center/site	Excluded Tasks		not applicable	n/a
102	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
103	INFRA_1.12.03	Determine appropriate size and purchase network connection between customer and managed system after manage telecommunication provider/ISP	Excluded Tasks		not applicable	n/a
104	INFRA_1.12.04	SAP Cloud Peering: Establish a virtual connection to an SAP datacenter via a customer's interconnection provider	Standard Services	Can only be used if SAP is connected to same interconnection provider. Monthly subscription fee via Change Request based on bandwidth. Connection of customer on-premise networks to interconnection hub is performed by the customer with their selected interconnect provider. Includes up to Four (4) x 100 Mbit/s cloud peering packages equal to a total of Four Hundred (400) Mbit/s. Customer can substitute cloud peering packages with a maximum of Five (5) VPN tunnels. Redundant VPN tunnels are not available.	not applicable	n/a
105	INFRA_1.12.04_PCE	Add additional SAP Cloud Peering packages - 100Mbit/s increments	Standard Services	Add additional SAP Cloud Peering packages in 100) Mbit/s increments. A total of Four (4) x 100 Mbit/s packages equal to a total of Four Hundred (400) Mbit/s is available.	not applicable	n/a
106	INFRA_1.2.05	Add additional VPN or MPLS – Hyperscaler only	Standard Services	Maximum of Ten (10) non-redundant tunnels or Five (5) redundant tunnels.	not applicable	n/a
107	INFRA_1.2.05_PCE	Add additional SAP DC VPN or SAP DC MPLS – SAP datacenter only	Standard Services	Maximum of Five (5) tunnels. Redundant VPN tunnels are not available.	not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
108		C1 - Database Management SAP HANA				
109		SAP HANA (general database operations)	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.		
110	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
111	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
112	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
113	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. Monitoring and alerting is performed through automated system. Recommendations for limitation of data growth may also be provided via SAP Enterprise Support services.	not applicable	n/a
114	HANA_1.1.25	Design table partitioning strategy/architecture	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
115	HANA_1.1.04	Partition tables (technical execution)	Standard Services	If required as a consequence of extensive table growth; One (1) execution per SID, per year included; any further requests will be charged separately.	not applicable	n/a
116	HANA_1.1.35	Partition tables (technical execution) - additional requests	Additional Service	Efforts for additional table partition requests.	not applicable	n/a
117	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
118	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
119	HANA_1.1.37	Database Defragmentation (Data Volume Reclamation)	Standard Services		not applicable	n/a
120	HANA_1.1.38	Database Row Store Fragmentation	Standard Services		not applicable	n/a
121	HANA_1.1.06	Monitor database for technical issues; analyze and resolve technical database failures	Standard Services		not applicable	n/a
122	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
123	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
124	HANA_1.1.09	Start/stop database	Standard Services		not applicable	n/a
125	HANA_1.1.10	Address/remove SAP HANA node to adjust SAP HANA capacity	Optional Services	For HANA scale-out configurations only.	not applicable	n/a
126	HANA_1.1.28	Create additional schema for existing SAP HANA dataset	Standard Services		not applicable	n/a
127	HANA_1.1.29	Change of SAP HANA database ID and instance number	Standard Services		not applicable	n/a
128	HANA_1.1.26	Change SAP HANA database architecture (single node to multi node or vice versa)	not offered		not applicable	n/a
129	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
130	HANA_1.1.12	Update SAP HANA database software	Standard Services	Additional downtime for maintenance required. Systems with HA nodes include the use of advanced update approaches by default such as ZDO/Downtime Minimization. The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements. DB client updates are merged with the SAP application kernel update method.	not applicable	n/a
131	HANA_1.1.12A	Install or Update SAP HANA client	Standard Services	Install or update SAP HANA client software on application instances and non SAP HANA systems. Applicable for Production and Non-Production systems.	not applicable	n/a
132	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
133	HANA_1.1.22	SAP HANA Transports Management Set-up	Standard Services	Limited to the setup of the transport management system and does not include ongoing operation of the transport management system.	not applicable	n/a
134	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
135	HANA_1.1.15	Identify, analyze and optimize expensive SQL-statements to improve application performance	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Data Environment Health Checks or Performance Optimization or Proactive Performance Management	A1, D1, P2, P3
136	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
137	HANA_1.1.17	Create/modify users for HANA modelling in the SAP HANA Studio	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Data Environment Health Checks or Proactive Performance Management	A1, D1, P3
138	HANA_1.1.18	User, roles, and permissions management for non-technical users	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Customer has ownership and responsibility for SAP HANA role CUST_USER_ROLE_ADMIN.	Application Operations or Secure Users & Authorizations	A1, S2
139	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
140	HANA_1.1.20	Perform database backups (regular full backups and log backups)	Standard Services	Per backup policy.	not applicable	n/a
141	HANA_1.1.21	Restore and recover SAP HANA after technical issues	Standard Services		not applicable	n/a
142	HANA_1.1.30	Perform database consistency check (DBCC)	Standard Services		not applicable	n/a
143	HANA_1.1.32	Export/Import of database schema	Excluded Tasks		not applicable	n/a
144	HANA_1.1.23	Implement SAP HANA database encryption on SAP HANA database already installed during Operations	Optional Services	Enable encryption on systems in operation. Downtime required for re-installation of database; potential additional storage consumption is subject to a change request (CR).	not applicable	n/a
145	HANA_1.1.24	Implement SAP HANA database encryption on SAP HANA database already installed during Build	Standard Services	Encryption enabled at system build only if it has been requested.	not applicable	n/a
146	HANA_1.1.39	Implement SAP HANA log encryption on SAP HANA database already installed	Standard Services		not applicable	n/a
147	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
148	HANA_1.1.41	Activate SAP HANA Fast Restart Option	Standard Services		not applicable	n/a
149	HANA_1.1.42	Deactivate SAP HANA Fast Restart Option	Standard Services		not applicable	n/a
150	HANA_1.1.43	Install or Update HANA plug-ins	Standard Services	Used for installation or update of HANA plug-ins on the selected HANA database.	not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
151		<b>SAP HANA XS</b>			-	-
152	HANA_1.2.01	Maintain technical configuration parameters for SAP HANA XS based on SAP standards and recommendations	Standard Services		not applicable	n/a
153	HANA_1.2.02	Maintain Application Runtime Configurations	Standard Services		not applicable	n/a
154	HANA_1.2.03	Manage Trust Relationships	Standard Services		not applicable	n/a
155	HANA_1.2.04	Maintain SAML Providers	Standard Services		not applicable	n/a
156	HANA_1.2.05	Maintain SMTP Server Configurations	Standard Services		not applicable	n/a
157	HANA_1.2.06	Maintain HTTP Access to SAP HANA	Standard Services		not applicable	n/a
158	HANA_1.2.08	Maintain User Self Service Tools	Standard Services		not applicable	n/a
159	HANA_1.2.09	Schedule XS Jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
160	HANA_1.2.11	Maintain HTTP Traces for SAP HANA XS Applications	Standard Services		not applicable	n/a
161		<b>SAP HANA XSA</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).		-	-
162	HANA_1.9.01	Install along with HANA Server	Optional Services		not applicable	n/a
163	HANA_1.9.02	Install XSA Components as an add-on for already installed HANA Server	Optional Services		not applicable	n/a
164	HANA_1.9.04	Set-up/Configure XSA for HANA Development at customer side	Excluded Tasks		not applicable	n/a
165	HANA_1.9.05	Configure XS-CLI Tool for HANA Development	Excluded Tasks		not applicable	n/a
166	HANA_1.9.06	User management for HANA Development	Excluded Tasks		not applicable	n/a
167	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
168	HANA_1.9.08	Set-up Logical database (Register Tenant Database)	Additional Service		not applicable	n/a
169	HANA_1.9.10	Backup and restore of XSA specific files	Standard Services		not applicable	n/a
170	HANA_1.9.11	Web Dispatcher configuration for the applications installed by service provider and built by customers	Additional Service		not applicable	n/a
171	HANA_1.9.13	Support customer built applications	Excluded Tasks		not applicable	n/a
172	HANA_1.9.14	Availability monitoring of customer built applications	Excluded Tasks		not applicable	n/a
173	HANA_1.9.15	Backup of custom applications if using file system storage	Standard Services		not applicable	n/a
174	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
175	HANA_1.9.17	Post-restore task checking and connection of custom applications	Excluded Tasks		not applicable	n/a
176	HANA_1.9.18	HANA XS (XS classic) to XSA model conversion	Additional Service		not applicable	n/a
177		<b>SAP HANA: Smart Data Integration (Formerly Enterprise Information Management - EIM)</b>	Extended feature beyond the standard service scope.		-	-
178		<b>Set-up - Technical Set-up Only - Does Not Include Application Set-up</b>			-	-
179	TO_HANA_SDI_1.1.01	Enable Data Provisioning Server	Standard 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
180	TO_HANA_SDI_1.1.02A	Install, configure, and register Data Provisioning Agents	Standard Services	Two (2) DP Agents are included with the standard service. For additional DP Agents see TO_HANA_SDI_1.1.02.	not applicable	n/a
181	TO_HANA_SDI_1.1.02	Install, configure, and register Data Provisioning Agents - Additional Agents	Optional Services	For additional DP Agents.	not applicable	n/a
182	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
183	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
184	TO_HANA_SDI_1.1.06	Administration of Agile Data Preparation (ADP)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Setting Export Options, worksheet expiration, password features, warehouse workspace, and size and policy for queues.	Application Operations or Data Integration	A1, D2
185	TO_HANA_SDI_1.1.07	Set-up replications, federation and transformations	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Data Integration	A1, D2
186	TO_HANA_SDI_1.1.08	FlowGraph jobs backup	Excluded Tasks	Customer can use SAP SDI Web application interface and/or SDI Fiori Catalog/Tiles for this task.	not applicable	n/a
187	TO_HANA_SDI_1.1.09	Replication task backup	Excluded Tasks	Customer can use SAP SDI Web application interface and/or SDI Fiori Catalog/Tiles for this task.	not applicable	n/a
188	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
189	TO_HANA_SDI_1.1.11	Deploy standard adapters with SAP HANA	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters.	Application Operations or Data Integration	A1, D2
190	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
191	TO_HANA_SDI_1.1.13	Monitor Data Provisioning tasks and remote subscriptions	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Data Integration	A1, D2
192	TO_HANA_SDI_1.1.14	Process remote subscription exceptions	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Data Integration	A1, D2
193		<b>SAP HANA: Streaming Analytics Option (Formerly Smart Data Streaming SDS)</b>	Extended feature beyond the standard service scope.		-	-
194		<b>Operational Set-up</b>			-	-
195	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
196	TO_HANA_SA_1.0.02	Add Streaming Analytics option hosts	Optional Services		not applicable	n/a
197	TO_HANA_SA_1.0.04	Configure data source on Streaming Analytics option host	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Configure odbc.ini for SAP HANA connection from each of the SAO hosts.	Application Operations or Data Integration	A1, D2
198	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
199	TO_HANA_SA_1.0.06	Activate SAP HANA Cockpit	Optional Services	Execute tasks for SAP HANA Cockpit activation for operations and monitoring.	not applicable	n/a
200	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
201	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
202	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
203	TO_HANA_SA_1.0.10	Create and deploy Streaming Analytics option streaming projects	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
204	TO_HANA_SA_1.0.11	Monitor Streaming Analytics option objects and projects	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Monitoring SAO objects and projects using SAP HANA/ESP Cockpits.	Application Operations or Data Integration	A1, D2



Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
205		<b>SAP HANA: Multiple Database Containers (MDC)</b>	Extended feature beyond the standard service scope.		.	.
206		<b>Operational Set-up</b>			.	.
207	TO_HANA_MDC_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
208	TO_HANA_MDC_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
209	TO_HANA_MDC_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
210	TO_HANA_MDC_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
211	TO_HANA_MDC_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
212	TO_HANA_MDC_1.1.05	Scale out of tenant database	Standard Services	SAP BW systems only.	not applicable	n/a
213	TO_HANA_MDC_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
214	TO_HANA_MDC_1.2.01	Network: Reserve additional ports to one instance to adjust tenant overhead per instance	Standard Services		not applicable	n/a
215	TO_HANA_MDC_1.2.03	Auditing: Create and enable audit policies for systemdb and each tenant DB	Standard Services		not applicable	n/a
216	TO_HANA_MDC_1.2.08	Data storage: DB-specific encryption keys (SSFS Source Key) Change	Standard Services	Change some/all keys upon request by customer. Used for Instance SSFS and System PKI SSFS master key, data volume encryption root key, redo log encryption root key, page encryption keys.	not applicable	n/a
217	TO_HANA_MDC_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_MDC_1.2.07	Restore backup of individual tenant	Additional Service		not applicable	n/a
219	TO_HANA_MDC_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>	Extended feature beyond the standard service scope.		.	.
221	TO_HANA_AAR_1.1.01	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_1.1.03	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_1.1.04	Establish monitoring for secondary system	Optional Services		not applicable	n/a
224		<b>Remote Data Sync (RDS)</b>	Extended feature beyond the standard service scope.		.	.
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>	Extended feature beyond the standard service scope.		.	.
240	TO_HANA_CR_1.1.01	Prepare capture in source system	Optional Services	Import Delivery units, set-up users and roles.	not applicable	n/a
241	TO_HANA_CR_1.1.02	Start capture	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Customer must ensure sufficient capacity to store capture of workload; capacity extension requires change request (CR).	Custom Scope	XX
242	TO_HANA_CR_1.1.03	Set-up replay in target system	Optional Services	Import Delivery units, set-up users and roles.	not applicable	n/a
243	TO_HANA_CR_1.1.04	Configure replay service	Optional Services	Configure replay service.	not applicable	n/a
244	TO_HANA_CR_1.1.05	Preprocess and replay in target system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
245		<b>SAP HANA: Accelerator for SAP ASE (AFA)</b>			-	-
246		<b>Operational Set-up</b>			-	-
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	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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>	<b>Subject to assessment and validation by solution architects on a case-by-case basis. Optional Service/Change Request (CR) required for Service Level Agreement (SLA).</b>		-	-
261		<b>Installation and Configuration</b>			-	-
262	TO_HANA_PM_1.1.01	Install SUSE Cluster (Pacemaker) package	Optional 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	Optional Services		not applicable	n/a
264	TO_HANA_PM_1.1.03	Start/stop the application and perform failover in case of failures	Optional Services		not applicable	n/a
265	TO_HANA_PM_1.1.04	Configure ability to fence nodes in error conditions	Optional Services		not applicable	n/a
266	TO_HANA_PM_1.1.05	Configure SAP HANA Hooks	Optional Services	System replication, index server.	not applicable	n/a
267	TO_HANA_PM_1.1.06	Enable monitoring of SUSE cluster services availability	Optional Services		not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
268		C2 - Database Management	Excluding SAP HANA and Sybase IQ which are described in the respective sections.		-	-
269		Database operations			-	-
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_1.1.20	Monitor database for technical issues; analyze and resolve technical database failures	Standard Services		not applicable	n/a
274	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
275	DB_1.1.05	Schedule periodic statistical database collectors to generate statistical performance data	Standard Services		not applicable	n/a
276	DB_1.1.06	Perform reorganization to remove database fragmentation	Standard Services		not applicable	n/a
277	DB_1.1.07	Maintain/change database parameters	Standard Services	Based on vendor recommendations and standards.	not applicable	n/a
278	DB_1.1.21	Start/stop database	Standard Services		not applicable	n/a
279	DB_1.1.11	Perform upgrades of database software	Standard Services		not applicable	n/a
280	DB_1.1.12	Apply database patches	Standard Services		not applicable	n/a
281	DB_1.1.13	Perform database backups (regular database and log backups)	Standard Services	Per backup policy.	not applicable	n/a
282	DB_1.1.14	Restore and recover database after technical issues	Standard Services		not applicable	n/a
283	DB_1.1.22	Perform database consistency check (DBCC)	Standard Services		not applicable	n/a
284	DB_1.1.23	Export/Import of database schema	Standard Services		not applicable	n/a
285	DB_1.1.16	Assist customer in optimizing SQL statements (indexes, selects etc.) for application improvements	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP-CAS Service is not used.		Data Environment Health Checks or Proactive Performance Management	D1, D3
286	DB_1.1.25	Create indexes for application tables	Standard Services		not applicable	n/a
287	DB_1.1.26	Shrink database	Additional Service	Valid only for Sybase ASE.	not applicable	n/a
288	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
289		SAP ASE Database			-	-
290	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
291	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

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
292		<b>D - Core Technical Operations</b>				
293		<b>System Installation</b>				
294	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
295	BASIC_1.8.25	SAP system re-installation after system handover	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
296	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
297	BASIC_1.8.15	Basic Technical Configuration of SAP BW/4HANA Systems	Standard Services	For ABAP Greenfield set-up only.	not applicable	n/a
298	BASIC_1.8.23	Install a preconfigured system from an SAP delivered template solution in a cloud skeleton system	Standard Services	This service performs a restore of a purchased SAP delivered template into a cloud skeleton system. The build of the template is not included in this service. 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. In case of image from SAP Cloud Appliance Library (CAL), the image can only be used to set-up the sandbox system.	not applicable	n/a
299	BASIC_1.5.01	Customize and configure application, maintain application, application support and application troubleshooting	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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.	Custom Scope	XX
300	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 (CAS, DEV, etc.) system and One (1) for the productive (PRD) system. If the test run is not utilized for a non-production system, then it can be used for a production system with non-production timelines. Additional test runs are available as a billable service.	not applicable	n/a
301	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
302	BASIC_1.8.04	Enable system monitoring	Standard Services	Setup technical monitoring of system components only. Does not include monitoring of solutions, customer configuration, interfaces, connections and jobs which can be covered with additional services.	not applicable	n/a
303	BASIC_1.8.22	Data transfer to service provider during onboarding using methods other than the provided standard data copy option	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
304	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
305	BASIC_1.8.20	Provide special support to customer during onboarding - general	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
306	BASIC_1.8.20A	Provide special support to customer during onboarding - Brownfield Post-Migration Downtime Optimization Service	Additional Service	Subject to assessment and approval by Service Provider and provided on a case-by-case basis. Lead time of Two (2) months required. Optimize post processing timelines and activities performed during post migration. Reduce business downtime by using parallelism in manual activities. Includes: 1) Analysis of post migration activities to identify areas which can be optimized resulting in a reduction of business downtime required for typical migrations; 2) Where applicable, deployment of additional resources to perform manual post migration activities.	not applicable	n/a
307	BASIC_1.8.20_HS	Hypercare - Small Package (4 Week Service)	Additional Service	The Hypercare enhanced service package helps safeguard critical phases of the solution lifecycle and provides a defined and intense suite of services and checks to support customers during critical project periods such as go-live, business cutover, migrations, etc.	not applicable	n/a
308	BASIC_1.8.20_HL	Hypercare - Large Package (8 Week Service)	Additional Service	The Hypercare enhanced service package helps safeguard critical phases of the solution lifecycle and provides a defined and intense suite of services and checks to support customers during critical project periods such as go-live, business cutover, migrations, etc.	not applicable	n/a
309	BASIC_1.8.05	Integrate system with other systems and applications	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Create RFC and/or JAVA connections to satellite systems.	Application Operations	A1
310	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). Best Practices scope items import and activation, if requested during system build, happens after the system is handed-over to 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
311	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
312	BASIC_1.8.21	Install ODBC Drivers to connect to external databases	Standard Services	On S/4HANA SDS(BOBI), 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
313	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
314	BASIC_1.8.12A	Increase system capacity - requiring 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
315	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 using SAP standard tools 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
316	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. Note: One (1) time per contract duration period handover is included as a Standard Service per BASIC_1.8.10.	not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
317		<b>Incident Management</b>			-	-
318	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
319	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
320	BASIC_1.16.03	Sign-off/Approve solution and confirm incident resolution	Excluded Tasks		not applicable	n/a
321		<b>Event detection and notification ("monitoring")</b>			-	-
322	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
323	BASIC_1.7.07	Monitor critical business transactions	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring, effort based per execution.	Customer Application Monitoring	M2
324		<b>General Operations</b>			-	-
325	BASIC_1.8.08	Start/Stop managed systems	Standard Services	Used for a variety of scenarios including, but not limited to: daylight saving/standard time adjustment; restarting managed systems with reboot option; restarting additional application servers; restarting SAP Solution Manager diagnostic agent, etc.	not applicable	n/a
326	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
327	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
328	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
329		<b>SAP Security Management</b>			-	-
330	BASIC_1.2.22	Define and implement security concept for application	Excluded Tasks	Customer may engage other SAP services to define and implement security concept for application.	not applicable	n/a
331	BASIC_1.2.23	Define and implement infrastructure security concept	Standard Services		not applicable	n/a
332	BASIC_1.2.19	Customer specific Security Audit Log analysis	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Audit Readiness	C1
333	BASIC_1.2.20	Analyze the SAP system and identify relevant SAP security notes	Standard Services	SAP will proactively identify and analyze security notes for installed systems to identify critical notes relevant for ABAP-stack only.	not applicable	n/a
334	BASIC_1.2.27	Implement Security Notes - SAP Basis / ABAP related	Standard Services	SAP Security Notes for SAP Basis without manual activities will be implemented in DEV systems (ABAP stack). Customer responsible for transport of implemented Notes to QAS and Production Systems and testing accordingly.	not applicable	n/a
335	BASIC_1.2.28	Implement Security Notes - Application related	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	SAP Security Notes without manual activities will be implemented in DEV systems (ABAP stack). Transport of implemented Notes to Quality and Production Systems are only relevant if Customers approve SAP to transport SAP Notes by agreeing to a standard change process. Testing of implemented Notes is Customer's responsibility. Transports are not applicable for Customers using Enhanced Change and Transport System in SAP Solution Manager (CTS+).	Application Security Updates	S1
336	BASIC_1.2.29	Implement relevant ABAP and Application related Security Notes with manual activities	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	SAP Security Notes with manual activities should be analyzed and remediated as part of the Functional Application Support or Release process.	Custom Scope	XX
337	BASIC_1.2.17	Definition, maintenance, review and audit of roles, profiles, authorizations etc.	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Audit Readiness or Secure Users & Authorizations	C1, S2
338	BASIC_1.2.18	Administer customer users (e.g. user creation, change, deletion, maintenance of user profiles, roles, authorizations, source data and passwords)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
339	BASIC_1.2.15	Maintain user profiles, roles, authorizations, source data and passwords in client 000	Standard Services		not applicable	n/a
340	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
341	BASIC_1.2.25	Design / Architecture of Single Sign On (SSO) for systems in cloud landscape	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
342	BASIC_1.2.24	Implementation of Single Sign On (SSO) for systems in cloud landscape	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
343	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
344	BASIC_1.2.26_AE	Update Global Change parameters and default system settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
345		<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.</b>	<b>Copies for non-NetWeaver systems is not possible during initial build phase. After initial build phase copies for non-NetWeaver systems need to be evaluated on a case by case basis and is not possible in all cases.</b>	.	.
346	BASIC_1.3.01	Homogeneous system copy (aka System refresh) for non-Netweaver systems during initial build phase.	Excluded Tasks	Only available after initial build phase is complete.	not applicable	n/a
347	BASIC_1.3.11	Pre-processing tasks which are not covered by PCA (Post-Copy Automation) - i.e. export customer defined tables with 'old' configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Additional examples of tasks which are not covered by PCA include but are not limited to: saving configuration for HANA remote connections; implementing "Export Customer Defined Configuration Tables" for use in PCA; and transaction screenshots defined by customer.	Application Operations	A1
348	BASIC_1.3.10	Homogeneous system copy - post build phase (Planning, preparations, checks, database backup, database restore, technical post processing tasks, test of technical system functionality) - Intra-regional (same region) refresh only	Standard Services	Up to Six (6) refreshes per SID, per contract year, are included; additional refreshes are available as a chargeable request. Only available after initial build phase is complete. Note: copies for non-NetWeaver systems need to be evaluated on a case by case basis and is not possible in all cases. Intra-regional (same region) only (e.g. restore a system in region 2 from backup from region 1 is not possible). Extra-regional (between region) refreshes are available as an Optional Service. Does not include activities such as data masking, scrambling etc.	not applicable	n/a
349	BASIC_1.3.10A	Homogeneous system copy - post build phase (Planning, preparations, checks, database backup, database restore, technical post processing tasks, test of technical system functionality) - Extra-regional (between regions) refresh	Optional Services	Extra-regional (between region) refreshes are available as an Optional Service. Note: This service is not available in all regions and/or datacenters and is not available from all service providers. Does not include activities such as data masking, scrambling etc.	not applicable	n/a
350	BASIC_1.3.10_PCE	Homogeneous system copy - additional requests	Additional Service	Requests for additional refreshes beyond entitlement noted in BASIC_1.3.10. Available after initial build phase is complete. Note: copies for non-NetWeaver systems need to be evaluated on a case by case basis and is not possible in all cases. Intra-regional (same region) only (e.g. restore a system in region 2 from backup from region 1 is not possible). Extra-regional see Optional Service BASIC_1.3.10A.	not applicable	n/a
351	BASIC_1.3.07	Post processing tasks e.g. Embedded Search, BDLS - pre-existing systems	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	For existing/five systems	Application Operations	A1
352	BASIC_1.3.07A	Post processing tasks e.g. Embedded Search, BDLS - new builds, post migration switch back to main instance	Standard Services	For new builds for brownfield system-copy scenarios	not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
353		<b>Release Management</b>			-	-
354	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
355	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
356	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)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Fixing issues that fall into the responsibility of the customer per this Roles and Responsibilities document and which are therefore not covered by the respective Standard Service for technical SAP Note implementation are considered "application" related and corresponding SAP Notes would be applied as defined in this task. This would typically belong to the application layer and/or presentation layer of the NetWeaver as well as S/4-stack. SAP Notes which belong to application components like FI, CO etc. are excluded.	Application Operations	A1
357	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 the criticality of repair and only if no appropriate Support Package is available; fixing issues that fall into the responsibility of Provider per the Roles and Responsibility and/or require activities which cannot be performed by customer are considered "technical" and corresponding SAP notes would be applied as defined in this 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
358	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
359	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
360	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 release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; if a particular SAP component is not modelled in the PAM, this activity can be considered an "update" for that component unless where explicitly noted; 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. Available for systems maintained in an SAP Enterprise Cloud Services (ECS) environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	not applicable	n/a
361	BASIC_1.5.11	Implement updates or upgrades to the managed SAP business software - ABAP solution using Zero Downtime Option (ZDO) of SUM which is part of the Maintenance Downtime Minimization Service	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); 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 or upgrades may require additional system downtime or pre-requisites for system resources including but not limited to additional memory, CPU, and a QA or Pre-production system to perform testing and validation. If system resources are not available in the existing customer landscape they will 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 are 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. Supported as per SAP Notes 2163060 and 2707731 - Prerequisites and Restrictions of Zero Downtime Option of SUM for SAP Business Suite and S/4 HANA.	not applicable	n/a
362	BASIC_1.5.11B	Implement updates, upgrades, or system conversion of an SAP ABAP based system with Near Zero Downtime Maintenance (nZDM) of Software Update Manager (SUM)	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); 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, upgrades, or system conversion may require additional system downtime or pre-requisite system resources including, but not limited to additional memory, CPU, and a QA or pre-production system to perform testing and validation. If system resources are not available in the existing customer landscape they will 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 are 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. Supported as per SAP Note 1675646 - Prerequisites and restrictions of nZDM (near Zero Downtime Maintenance) for ABAP-based solutions. Available for systems maintained in an SAP Enterprise Cloud Services (ECS) environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	not applicable	n/a
363	BASIC_1.5.10	Ongoing maintenance of system languages, e.g. performing language fill-up	Standard Services		not applicable	n/a
364	BASIC_1.1.01	Version upgrade/update of SAP Software: planning and coordination	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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). 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, upgrades, or system conversion may require additional system downtime or pre-requisite system resources including, but not limited to additional memory, CPU, and a QA or pre-production system to perform testing and validation. If system resources are not available in the existing customer landscape they will 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 are 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. Supported as per SAP Note 1675646 - Prerequisites and restrictions of nZDM (near Zero Downtime Maintenance) for ABAP-based solutions. Available for systems maintained in an SAP Enterprise Cloud Services (ECS) environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	Release Version Upgrade	U3
365	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. Available for systems maintained in an SAP Enterprise Cloud Services (ECS) environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	not applicable	n/a
366	BASIC_1.5.22	Version update of SAP Software: Pre- and Post BASIS Tasks	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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). 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
367	BASIC_1.5.22A	Version upgrade of SAP Software: Pre- and Post BASIS Tasks	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
368	BASIC_1.5.08	Execute application related technical tasks as part of the continuous Release and Change Management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Release Version Upgrade	U3
369	BASIC_1.5.20	Conversion of SAP ERP and SAP BW systems to SAP S/4HANA and SAP BW4HANA	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/DIAD, 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 other SAP services might be required. This service only applies to managed systems.	not applicable	n/a
370		<b>Proactive services</b>			-	-

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
371	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
372	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
373	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).	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Performed only for productive systems.	Application Operations	A1
374	BASIC_1.7.11_AE	Process chain retriggering or cancellation	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operation or Customer Application Monitoring	A1, M2
375		<b>System performance management</b>				
376	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
377	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 expectable behavior (e.g. as it has shown in the past in comparable load situations).	not applicable	n/a
378	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
379	BASIC_1.12.05	Perform load test execution	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Demonstrate the load capabilities of the target SAP system based on the software and hardware configuration. Identify potential scalability bottlenecks with respect to the target environment. Simulation of end user behavior. Maximum 500 concurrent users.	Performance Testing	P1
380	BASIC_1.7.06	Analyze and troubleshoot performance issues (root causes outside service scope and application related root causes)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	In some situations service provider might be able to support the customer using Application Management as a CAS service.	Performance Optimization	P2
381	BASIC_1.7.12_AE	Identify the root cause of failing KPIs and define preventive/corrective actions and/or possible countermeasures	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Performance Optimization	P2
382	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
383	BASIC_1.7.08	Review and optimize customer code to improve system performance and stability	Excluded Tasks		not applicable	n/a



Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
384		<b>Certificate Handling</b>			-	-
385	BASIC_1.11.01	Generate Certificate Signing Request (CSR)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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.	Application Operations	A1
386	BASIC_1.11.09	Generate / Renew / Extend Certificate Signing Request (CSR) for LoadBalancers, Web Dispatchers, Data Services and BO systems	Standard Services		not applicable	n/a
387	BASIC_1.11.02	Send certificate signing request to Certificate Authority	Excluded Tasks		not applicable	n/a
388	BASIC_1.11.08	Create SSL server / client identity with key pair	Standard Services		not applicable	n/a
389	BASIC_1.11.04	System (OS Level) configuration to enable SSL/TLS	Standard Services		not applicable	n/a
390	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. In SAP-owned global account. Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
391	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
392	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
393	BASIC_1.11.06	Monitor validity period of certificates	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Customer to provide URL for certificate check (e.g. FLP). Manual monitoring, effort based per execution.	Application Monitoring or Customer Application Monitoring	M1, M2
394	BASIC_1.11.11	Add or Renew of SSL certificate	Standard Services		not applicable	n/a
395	BASIC_1.11.12	Renewal of Expiring Certificates	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	For new SAP standard certificate in trust only.	Application Monitoring or Customer Application Monitoring	M1, M2
396		<b>Disaster Recovery</b>			-	-
397	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
398	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
399	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
400	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
401	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
402	BASIC_1.9.06	Execute failover during disaster recovery test (DB, application and crames)	Optional Services	Note: This Service is not applicable for Short Distance DR offering, HA/DR architecture scenarios; 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
403	BASIC_1.9.10	Execute failover during disaster recovery test (DB, application and crames) - additional test	Additional Service	Note: This Service is not applicable for Short Distance DR offering, HA/DR architecture scenarios; 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
404	BASIC_1.9.09	Execute online disaster recovery tests (data center and technical system infrastructure only); primary systems remain accessible	Additional Service	Note: This Service is not applicable for Short Distance DR offering, HA/DR architecture scenarios; Not available on all Hyperscalers. 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
405	BASIC_1.9.07	Execute productive failover in case of an officially declared disaster by service provider - all HA/DR architecture scenarios	Optional Services	Note: This Service is not applicable for long distance DR. True disaster declaration for all HA/DR architecture scenarios or Short Distance DR. "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
406	BASIC_1.9.11	Mixed High Availability (HA)/Disaster Recovery (DR): Execute productive failover for a specific SID and invert replication vector	Optional Services	Note: This Service is not applicable for long distance DR. Full productive failover. For Mixed HA/DR architecture. Not available on all Hyperscalers. Maximum of One (1) full-cycle, customer requested failover per calendar year, per SID is included ("flip-flop"). Failovers which are the result of SAP-declared disasters do not count against maximum. Additional customer requested failovers are billable. Only included in service if disaster recovery solution is part of the contract/SOW/Order Form.	not applicable	n/a
407	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	Additional Service	Note: This Service is not applicable for long distance DR. Full productive failover. For Mixed HA/DR architecture. Not available on all Hyperscalers. Maximum of One (1) full-cycle, customer requested failover per calendar year, per SID is included ("flip-flop"). Failovers which are the result of SAP-declared disasters do not count against maximum. Additional customer requested failovers are billable. Only included in service if disaster recovery solution is part of the contract/SOW/Order Form.	not applicable	n/a
408		<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>		-	-
409	BASIC_1.15.01	Incident Management: Troubleshoot technical/non-functional incidents not included in Standard Services as per R&R Definition	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Only available for managed systems.	Application Operations	A1
410	BASIC_1.15.02	Change Management: Changes of technical system configuration not included in Standard Services as per R&R Definition	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Only available for managed systems.	Application Operations	A1
411	BASIC_1.15.03	Event management: Monitor technical/non-functional event types not included in Standard Services as per R&R Definition	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Only available for managed systems.	Application Operations	A1
412	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	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Only available for managed systems.	Application Operations	A1

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
413		<b>E - NetWeaver Operations (ABAP and JAVA)</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).		.	.
414		<b>General NetWeaver Operations</b>			.	.
415	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
416	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
417	TO_NWABAP_1.1.07	Analyze update terminations, determine business impact and appropriate action	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	With regards to application issues and impact.	Application Operations	A1
418	TO_NWABAP_1.1.08	Clean up terminated updates	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
419	TO_NWABAP_1.1.10	Analyze lock entries, determine business impact and appropriate action	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
420	TO_NWABAP_1.1.11	Check/clear lock entries	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
421	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
422	TO_NWABAP_1.1.22	Regular ABAP dump check and classification	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Including application related dumps.	Application Operations	A1
423	TO_NWABAP_1.1.23	Analyze SAP application log and provide recommendations on fixing failures	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
424	TO_NWABAP_1.1.24	Reorganize qRFC/IRFC queues	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
425	TO_NWABAP_1.1.25	Regularly check fastest growing tables in the SAP system and provide recommendations for archiving or reorganization	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Data Lifecycle Management or Data Volume Optimization	A1, D3, D6
426	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
427	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
428	TO_NWABAP_1.1.16	Implement/update tools to ensure readiness for SAP support services	Standard Services		not applicable	n/a
429	TO_NWABAP_1.1.20	Define archiving strategy	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
430	TO_NWABAP_1.1.21	Execution and monitoring of archiving process	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
431	TO_NWABAP_1.1.17	Manage Web Service Runtime (WSRT)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
432	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
433	TO_NWABAP_1.1.19	Configure RFC connections (TA SM59) to technical systems managed by the customer and any application-related RFC connection	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
434	TO_NWABAP_1.1.27_AE	Termination of User activity related to identified expensive statement	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
435	TO_NWABAP_1.1.28_AE	Temporary change of heap or extended memory allocation using RSMEMORY	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
436	TO_NWABAP_1.1.29_AE	Termination of dialog work processes	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
437	TO_NWABAP_1.1.30_AE	ICM service restart on Non-responsive situation or post SSL certificate renewal	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
438	TO_NWABAP_1.1.31	Work process cancellation; Optimization of Batch Jobs load post analysis	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Monitoring or Customer Application Monitoring	M1, M2
439	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
440	TO_J2EE_1.1.02	SAP J2EE: adjust/configure Java applications	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
441		<b>SAP Client Operations</b>			.	.
442	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. Available for systems maintained in an SAP Enterprise Cloud Services (ECS) environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	not applicable	n/a
443	TO_NWABAP_1.2.06	Delete client within one SAP System (including analysis and resolution of technical issues)	Standard Services	Available for systems maintained in an SAP Enterprise Cloud Services (ECS) environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	not applicable	n/a
444	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. Available for systems maintained in an SAP Enterprise Cloud Services (ECS) environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	not applicable	n/a
445	TO_NWABAP_1.2.07	Pre-processing tasks, i.e. suspend jobs, lock users, export tables with 'old' configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
446	TO_NWABAP_1.2.08	Post processing tasks, i.e. Enterprise Search, Fiori Launchpad, unlock user, release jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
447	TO_NWABAP_1.2.05	Investigate and resolve application related issues (e.g. with certain database tables and fields)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
448		<b>Interface Administration</b>			.	.
449	TO_NWABAP_1.3.24	Create, execute, monitor, and troubleshoot batch input sessions	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Application Operations	A1
450	TO_NWABAP_1.3.25	Configure interface related functions (e.g. IDOCs, interface scripts and jobs, qRFC/IRFC (to/RECE, ALE scenarios etc.)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
451	TO_NWABAP_1.3.26	Monitoring of interfaces and interface related functions	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Application Monitoring or Customer Application Monitoring	A1, M1, M2
452	TO_NWABAP_1.6.03	Establish trust relationships between SAP NW ABAP systems	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Performed for Fiori launchpad enablement only.	Application Operations	A1

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
453		<b>Job Scheduling</b>			-	-
454	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
455	TO_NWABAP_1.4.14	Define production job schedule and dependencies based on business requirements	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
456	TO_NWABAP_1.4.15	Administer application batch jobs: - Monitor jobs - Troubleshoot according to troubleshooting handbook	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Application Monitoring or Customer Application Monitoring	A1, M1, M2
457		<b>Transport Management</b>			-	-
458	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. Limited to a default setup. Customer specific domains or configurations not included.	not applicable	n/a
459	TO_NWABAP_1.5.15 AE	Initial set-up of SAP transport management system (TMS) and configure transport routes	Standard Services	Limited to a default setup. Customer specific domains or configurations not included.	not applicable	n/a
460	TO_NWABAP_1.5.16	Copy and delete SAP Transport profiles and data files	Standard Services		not applicable	n/a
461	TO_NWABAP_1.5.11	Initial maintenance of SAP transport management system after system build	Standard Services		not applicable	n/a
462	TO_NWABAP_1.5.11A	Maintain SAP transport management system incl. configuration of transport routes and any further configuration (automatic import, scheduled import etc.)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Release Planning & Execution	A1, U2
463	TO_NWABAP_1.5.12	Initial configuration of Transport-based correction instructions (TCI) in client 000	Standard Services	Limited to a default setup. Customer specific domains or configurations not included.	not applicable	n/a
464	TO_NWABAP_1.5.13	Implement SAP Note Transport-based correction instructions (TCI)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
465	TO_NWABAP_1.5.01	Set-up of CTS+	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.1.4.	Application Operations or Solution Manager - ChaRM	A1, U4
466	TO_NWABAP_1.5.02	Transfer and release of transport orders	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
467	TO_NWABAP_1.5.03	Execute transports to move objects between SAP systems	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Release Planning & Execution	A1, U2
468	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
469	TO_NWABAP_1.5.08	Adjust repository objects as part of software changes	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Execution of adjustments in SPDD/SPAU for SAP objects. Customer objects in SPDD/SPAU require customers decision during execution.	Release Version Upgrade	U3
470	TO_NWABAP_1.5.14	Set-up and configuration of ChaRM in SAP Solution Manager	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Solution Manager - ChaRM	U4
471	TO_NWABAP_1.5.09	Testing and acceptance of object changes	Excluded Tasks		not applicable	n/a
472		<b>Output Management</b>			-	-
473	TO_NWABAP_1.7.01	Create, change and delete printers within SAP solution	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Service provider would only support printer types contained in SAP published guidelines.	Application Operations	A1
474	TO_NWABAP_1.7.02	Analyze faulty output requests (transaction SP01)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
475	TO_NWABAP_1.7.03	Reorganize SAP spool system to keep system clean	Standard Services	Via SAP standard batch job.	not applicable	n/a
476	TO_NWABAP_1.7.04	Design and implementation of print forms	Excluded Tasks		not applicable	n/a
477	TO_NWABAP_1.7.05	Lock/unlock SAP printers	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
478	TO_NWABAP_1.7.06	Check spooler table consistency to prevent printing issues	Standard Services	Via SAP standard batch job.	not applicable	n/a
479	TO_NWABAP_1.7.07	Configure virtual spool (load balancing between spool processes)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
480	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
481	TO_NWABAP_1.7.09	Local printing and support	not offered		not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
482		<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>		.	.
483		<b>Security Planning</b>			.	.
484	TO_SPROV_1.4.01	Provide application communication requirements	Excluded Tasks		not applicable	n/a
485	TO_SPROV_1.4.02	Determine communication and security requirements	Excluded Tasks		not applicable	n/a
486	TO_SPROV_1.4.03	Create and maintain security policies	Excluded Tasks		not applicable	n/a
487	TO_SPROV_1.4.04	Determine security strategy and implementation plans	Excluded Tasks		not applicable	n/a
488	TO_SPROV_1.4.05	Monitor and assess security strategies	Excluded Tasks		not applicable	n/a
489		<b>Hardware Operations</b>			.	.
490	TO_SPROV_1.5.03	Plan and conduct cloud infrastructure maintenance	Standard Services		not applicable	n/a
491		<b>Server Management</b>			.	.
492	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
493	TO_SPROV_1.6.01	Provide server infrastructure	Standard Services		not applicable	n/a
494	TO_SPROV_1.6.02	Provide licenses for OS	Standard Services	Licenses will be provided and charged by provider.	not applicable	n/a
495	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
496	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
497	TO_SPROV_1.6.05	Install antivirus software and platform updates	Excluded Tasks	Customer is responsible for Antivirus installation and virus pattern updates on a daily basis.	not applicable	n/a
498	TO_SPROV_1.6.06	Antivirus software licenses	Excluded Tasks		not applicable	n/a
499	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
500	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
501	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
502	TO_SPROV_1.6.10	Monitor operating system of provided OS instances	Excluded Tasks		not applicable	n/a
503		<b>Storage Management</b>			.	.
504	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
505	TO_SPROV_1.7.02	Manage data file/file systems	Excluded Tasks		not applicable	n/a
506	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
507	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
508	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
509	TO_SPROV_1.7.05	Scale storage capacity	Optional Services		not applicable	n/a
510		<b>Application Management</b>			.	.
511	TO_SPROV_1.8.01	Define application requirements	Excluded Tasks		not applicable	n/a
512	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
513	TO_SPROV_1.8.03	Install application	Excluded Tasks		not applicable	n/a
514	TO_SPROV_1.8.04	Operate application	Excluded Tasks		not applicable	n/a
515	TO_SPROV_1.8.05	Install patches and security updates	Excluded Tasks	Customer is responsible for software lifecycle management.	not applicable	n/a
516	TO_SPROV_1.8.06	Application monitoring	Excluded Tasks		not applicable	n/a
517		<b>IaaS VM Snapshot (offline image backup)</b>			.	.
518	TO_SPROV_1.10.01	Service Set-up	Optional Services		not applicable	n/a
519	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
520	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, sync 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
521	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
522	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
523		<b>Disaster Recovery</b>			.	.
524	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
525	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

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
526		<b>G - Cloud Application Services</b>				
527		<b>Cloud Application Services - Reactive Services</b>	Only available for managed systems. Service delivery requires initial scoping for relevant application area before tasks can be delivered; transition to service execution may apply.		-	-
528	CAS_1.1.01	Incident Management: Troubleshoot functional incidents in SAP applications	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
529	CAS_1.1.02	Problem Management: root cause analysis and resolution of problems in SAP applications	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
530	CAS_1.1.03	Service Request Fulfillment: Perform Service Request Fulfillment for functional tasks in SAP applications	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
531	CAS_1.1.04	Event Management: Monitor functional event types in SAP applications	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
532	CAS_1.1.05	Change Management: Changes of functional configuration in SAP applications	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
533		<b>Cloud Application Services - Proactive Services</b>			-	-
534	CAS_1.2.01	Continuous Operations	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
535	CAS_1.2.02	Extended Application Security Operations	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
536	CAS_1.2.03	Managed Operations Control Center	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
537	CAS_1.2.05	Deployment Management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
538	CAS_1.2.06	Operations Improvement	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
539	CAS_1.2.07	Business Improvement	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
540	CAS_1.2.08	Data Integration and Lifecycle Management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
541		<b>Testing Services</b>			-	-
542	CAS_2.1.01	Provide detailed plan for test management execution	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Regression Testing	U1
543	CAS_2.1.02	Perform manual tests based on defined test cases and report issues and defects	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Regression Testing	U1
544	CAS_2.1.03	Configure the Test Suite in SAP Solution Manager	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Regression Testing	U1
545		<b>Security Services</b>			-	-
546	CAS_2.2.01	Execute Segregation of Duty check and provide report of risk assessment and recommendations for improvement	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Segregation of Duties Check	S3

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
547		<b>H - SAP S/4HANA Movement Program</b>				
548		<b>Technical Services</b>				
549	MOVE_1.1.01	SAP S/4HANA Technical Roadmap Service	Standard Services	Service can only be applied to the ECC landscape indicated in the contract. Includes review of system landscape, software component, OS, and DB version. A virtual session with the customer will be provided to: present the benefits and drawbacks of the conversion scenario versus a Greenfield scenario; clarify architectural and functional changes; and review preparation tasks.	not applicable	n/a
550	MOVE_1.1.02	SAP Readiness Check for SAP S/4HANA	Standard Services	Service can only be applied to the ECC landscape indicated in the contract. Includes implementation of SAP Readiness Check for SAP S/4HANA. Notes in the corresponding system and generation of the required files with subsequent handover of the export file to the customer. Customer must submit the request for SAP Readiness Check report and dashboard generation or SAP will perform this on behalf of the customer. Target scenario for this service is an SAP S/4HANA conversion from SAP ECC system.	not applicable	n/a
551	MOVE_1.1.03	Custom Code Analysis - Setup	Standard Services	The service can only be applied during an ECC to SAP S/4HANA conversion or upgrade of a SAP S/4HANA solution landscape. The entire ERP system landscape is evaluated to determine the right approach to provide the setup for a custom code analysis. Required SAP Notes will be implemented. Based on the determined approach, at the end of the service, the customer will be handed over a functional SAP S/4HANA custom code analysis setup in the local S/4HANA system, Remote Central ATC system, or the Custom Code Migration App.	not applicable	n/a
552	MOVE_1.1.04	SAP Signavio Process Insights	Standard Services	Service can only be applied to the ECC landscape indicated in the contract. Includes implementation of the technical prerequisites for SAP Signavio Process Insights in the corresponding system; and generation of the ZIP file with hand over to customer.	not applicable	n/a
553	MOVE_1.1.05	SAP Innovation and Optimization Pathfinder	Standard Services	The service can only be applied to the ECC or SAP S/4HANA landscape indicated in the contract. Includes implementation of the technical prerequisites for SAP Innovation and Optimization Pathfinder in the corresponding system; and generation of the ZIP file with hand over to customer. Target scenario for this service is an ECC-to-ECC or SAP S/4HANA upgrade; No conversion from ECC to S/4.	not applicable	n/a
554	MOVE_1.1.06	SAP Readiness Check for SAP S/4HANA upgrades	Standard Services	The service can only be applied to the SAP S/4HANA landscape indicated in the contract. Includes implementation of SAP Readiness Check for SAP S/4HANA upgrades Notes in the corresponding system and generation of the required files with subsequent handover of the export file to the customer. Customer must submit the request for SAP Readiness Check report and dashboard generation or SAP will perform this on behalf of the customer. Target scenario for this service is an SAP S/4HANA upgrade.	not applicable	n/a
555	MOVE_1.1.07	SAP Readiness Check for SAP BW/4HANA	Standard Services	The service can only be applied to the SAP BW landscape indicated in the contract. Includes implementation of SAP Readiness Check for SAP BW/4HANA Notes in the corresponding system and generation of the required files with subsequent handover of the export file to the customer. Customer must submit the request for SAP Readiness Check report and dashboard generation or SAP will perform this on behalf of the customer. Target scenario for this service is an SAP BW/4HANA conversion from SAP BW system.	not applicable	n/a
556		<b>Functional Services</b>				
557	MOVE_1.2.01	SAP S/4HANA Functional Roadmap Service	Additional Service	The service can only be applied during an ECC to SAP S/4HANA conversion or upgrade of a SAP S/4HANA solution landscape. Includes review and impact analysis of relevant simplification item from the SAP Readiness Check for SAP S/4HANA (upgrade); evaluation of effort for item handling for high prioritized and uncategorized items; discussion of the action plan for high prioritized items; and evaluation of an action plan for uncategorized items.	not applicable	n/a
558	MOVE_1.2.02	SAP S/4HANA Custom Code Analysis	Additional Service	The service can only be applied during an ECC to SAP S/4HANA conversion or upgrade of a SAP S/4HANA solution landscape. Includes review of the Custom Code Impact analysis results (out of ABAP Test Cockpit or Custom Code Migration App) for a SAP S/4HANA conversion or an upgrade, evaluation of the results, and remediation approach.	not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
559		<b>X1 - 3rd Party Software</b>			-	-
560		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.		-	-
561		<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.		-	-
562	TO_PA_1.1.01	Installation	Standard Services		not applicable	n/a
563	TO_PA_1.1.02	Configuration	Excluded Tasks		not applicable	n/a
564	TO_PA_1.1.03	Application monitoring	Excluded Tasks		not applicable	n/a
565	TO_PA_1.1.04	Apply updates	Standard Services		not applicable	n/a
566	TO_PA_1.1.05	Application troubleshooting including engagement with the partners support organization	Excluded Tasks		not applicable	n/a
567	TO_PA_1.1.06	Uninstallation of ABAP Add-ons	Standard Services		not applicable	n/a
568		<b>Unmanaged 3rd Party ABAP add-ons</b>			-	-
569	TO_PA_1.2.01	Installation	Excluded Tasks		not applicable	n/a
570	TO_PA_1.2.02	Configuration	Excluded Tasks		not applicable	n/a
571	TO_PA_1.2.03	Application monitoring	Excluded Tasks		not applicable	n/a
572	TO_PA_1.2.04	Apply updates	Excluded Tasks		not applicable	n/a
573	TO_PA_1.2.05	Application troubleshooting including engagement with the partners support organization	Excluded Tasks		not applicable	n/a
574		<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.		-	-
575	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

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
576		<b>X2 - Business Connector</b>			.	.
577		<b>Operations</b>			.	.
578	TO_BC_1.1.04	Reorganization of Message Store	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
579		<b>X4 - SAP Data Services (DS)</b>			.	.
580		<b>Operations</b>			.	.
581	TO_DS_1.1.22	Authorization - Users and Rights Management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
582	TO_DS_1.1.06	Create/Modify Data Services jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
583	TO_DS_1.1.07	Schedule Data Services jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
584	TO_DS_1.1.08	Configure database connections	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
585	TO_DS_1.1.09	Monitor jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Application Operations	A1
586	TO_DS_1.1.10	Repository backup DS and BOE	Standard Services		not applicable	n/a
587	TO_DS_1.1.11	Delete batch job history	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
588	TO_DS_1.1.12	Verify that job and access servers are running	Standard Services		not applicable	n/a
589	TO_DS_1.1.13	Remove obsolete repository contents	Standard Services		not applicable	n/a
590	TO_DS_1.1.14	Troubleshoot issues with DS Jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
591	TO_DS_1.1.23	Create/Manage additional repositories	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	System comes with default repositories. OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
592	TO_DS_1.1.26	Backup: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
593	TO_DS_1.1.27	Restore: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
594	TO_DS_1.1.28	Authentication set-up and Single Sign On (SSO) configuration	Excluded Tasks	Customer may engage other SAP services for SSO solutions for cloud environment.	not applicable	n/a
595	TO_DS_1.1.29	Install and configure Data Services Adapters	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
596	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
597	TO_DS_1.1.31	Configure Runtime Resources	Standard Services		not applicable	n/a
598	TO_DS_1.1.32	Configure SMTP Email	Standard Services		not applicable	n/a
599	TO_DS_1.1.33	Start/Stop services	Standard Services		not applicable	n/a
600	TO_DS_1.1.34	Enhanced Change and Transport System (CTS+) Integration Set-up	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations or Solution Manager - ChatRM	A1, U4
601	TO_DS_1.1.35	Configure transports via Data Services (DS) Object Promotion Management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
602	TO_DS_1.1.36	Backup Data Services Repository using Import/Export Tool	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
603		<b>X6 - SAP BusinessObjects Business Intelligence (BI)</b>			.	.
604		<b>Operations</b>			.	.
605	TO_BI_1.1.06	Backup (Full content backup / BIAR backup)	Standard Services		not applicable	n/a
606	TO_BI_1.1.07	Scan / Repair and compact all repository errors	Standard Services		not applicable	n/a
607	TO_BI_1.1.11	Clean-up empty directories created for Repository Diagnostic Tool	Standard Services		not applicable	n/a
608	TO_BI_1.1.26	Cache Clean-up and Maintenance - Tomcat, Web Intelligence, Log Files	Standard Services		not applicable	n/a
609	TO_BI_1.1.17	Program Object Actions: Import and Execution	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Custom Scope	XX
610	TO_BI_1.1.18	Promote/deploy BI objects between environments	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
611	TO_BI_1.1.19	Create, rename, remove connections and Universes	Excluded Tasks		not applicable	n/a
612	TO_BI_1.1.21	Provide user access and maintain authorizations	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
613	TO_BI_1.1.47	SAML configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Custom Scope	XX
614	TO_BI_1.1.27	Deploy templates and system configurations for hardware changes	Standard Services		not applicable	n/a
615	TO_BI_1.1.29	Auditing/Monitoring Driver Set-up and configuration for Audit reporting	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Custom Scope	XX
616	TO_BI_1.1.30	Perform ERP Integration Set-up and Configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Custom Scope	XX
617	TO_BI_1.1.33	Backup: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
618	TO_BI_1.1.34	Restore: On-Demand - BI Database and File Repo Sync	Additional Service		not applicable	n/a
619	TO_BI_1.1.35	Authentication set-up and Single Sign On (SSO) configuration	Excluded Tasks	Customer may engage other SAP services for SSO solutions for cloud environment.	not applicable	n/a
620	TO_BI_1.1.37	Configure Web Application - reverse proxy settings	Standard Services		not applicable	n/a
621	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
622	TO_BI_1.1.39	Manage Server Process and Server Groups	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
623	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
624	TO_BI_1.1.41	Enhanced Change and Transport System (CTS+) Integration Set-up	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Custom Scope	XX



Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
625		<b>X7 - SAP PI</b>			-	-
626		<b>SAP PI Implementation</b>			-	-
627	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
628	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
629	TO_PI_1.1.03	Configure the required system connections to partner systems	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
630	TO_PI_1.1.04	Create SSL views and PSEs	Excluded Tasks		not applicable	n/a
631		<b>SAP PI Operations</b>			-	-
632	TO_PI_2.1.02	Monitor application-specific PI functions, e.g. messaging, queues etc.	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Customer Application Monitoring	M2
633	TO_PI_2.1.03	Monitor the message processing in PI (success and performance)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Customer Application Monitoring	M2
634	TO_PI_2.1.04	Monitor communication channels, queues, backlogs of PI (AEX)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Customer Application Monitoring	M2
635	TO_PI_2.1.05	Monitor BPM processes (success and performance)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Application Operations	A1
636	TO_PI_2.1.06	Configure adapters	Excluded Tasks		not applicable	n/a
637	TO_PI_2.1.07	Deal with incorrect messages	Excluded Tasks		not applicable	n/a
638	TO_PI_2.1.08	Configure message archiving	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
639	TO_PI_2.1.27	Execute and monitor message archiving	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Application Operations	A1
640	TO_PI_2.1.11	Role/authorization maintenance (except SAP and initial customer administrator role)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
641	TO_PI_2.1.16	Maintain users (except for the SAP and initial customer administrator role)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
642	TO_PI_2.1.17	Set-up of PI / BPM / AEX housekeeping	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
643	TO_PI_2.1.28	Monitor housekeeping activities of PI / BPM / AEX	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manual monitoring; effort based per execution.	Application Operations	A1
644	TO_PI_2.1.19	Adjust PO/PI/AEX parameterization and configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	The configuration doesn't cover the realization of integration scenarios (content development).	Application Operations	A1
645	TO_PI_2.1.21	Maintain the system landscape directory (SLD)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Related to PI scenarios.	Application Operations	A1
646	TO_PI_2.1.22	Apply SAP basic application content update to the Enterprise Service Repository (ESR)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
647	TO_PI_2.1.23	Handle errors and analyze root cause for incorrect message processing in PI (AEX)	Excluded Tasks		not applicable	n/a
648	TO_PI_2.1.24	Check PI / PO / AEX readiness after changes (upgrades, patches, notes)	Excluded Tasks		not applicable	n/a
649	TO_PI_2.1.25	Configure the required system connections to partner systems	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
650	TO_PI_2.1.26	Transport management of PI objects	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
651		<b>X8 - Enterprise Portal</b>			-	-
652		<b>Operations</b>			-	-
653	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
654	TO_EP_1.1.03	Maintain LDAP (Novell, ADS, iPlanet and others)	Excluded Tasks		not applicable	n/a
655	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
656	TO_EP_1.1.05	System landscape maintenance, connection of external systems – e.g. SAP	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Port connection required.	Application Operations	A1
657	TO_EP_1.1.07	User mapping	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
658	TO_EP_1.1.08	Role/Channel/Panel allocation	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
659	TO_EP_1.1.09	Content administration	Excluded Tasks		not applicable	n/a
660	TO_EP_1.1.10	Set-up and maintain Portal user source data	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
661	TO_EP_1.1.11	Lock and delete portal user source data	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
662	TO_EP_1.1.12	Release locked portal users	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
663	TO_EP_1.1.13	Define and change Customer specific portal authorization profiles	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
664	TO_EP_1.1.14	Administer Content Repository	Excluded Tasks		not applicable	n/a
665	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
666	TO_EP_1.1.22	Upgrade of pages, roles, static html content	Excluded Tasks		not applicable	n/a
667	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
668		<b>X9 - Sybase IQ (used as data persistency for NLS, ILM or 3rd party archiving solutions)</b>			-	-
669		<b>Database Installation/Configuration</b>			-	-
670	TO_SIQ_1.1.01	Check/prepare system requirements (BW Release, SAP Notes, Source/target set-up)	Excluded Tasks		not applicable	n/a
671	TO_SIQ_1.1.03	Initial configuration / parameter settings	Standard Services		not applicable	n/a
672	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
673		<b>Database Operations</b>			-	-
674	TO_SIQ_1.2.02	Database capacity management	Standard Services		not applicable	n/a
675	TO_SIQ_1.2.04	Perform database consistency check (DBCC)	Standard Services		not applicable	n/a
676	TO_SIQ_1.2.05	Troubleshoot technical database issues	Standard Services		not applicable	n/a
677	TO_SIQ_1.2.06	Set-up backup	Standard Services		not applicable	n/a
678	TO_SIQ_1.2.07	Restore backup	Standard Services		not applicable	n/a
679	TO_SIQ_1.2.08	Monitor database connection	Standard Services	Customer must check connection from BW side.	not applicable	n/a
680		<b>Application</b>			-	-
681	TO_SIQ_1.4.01	Create/schedule/restore data archiving requests	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
682	TO_SIQ_1.4.02	Query handling	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
683	TO_SIQ_1.4.03	Install partner add-ons in backend systems	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
684	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
685	TO_SIQ_1.4.04	Install partner archiving software	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Customer must make sure, that they hold valid licenses to run the installed software in the cloud environment.	Data Lifecycle Management	D3
686	TO_SIQ_1.4.05	Configure partner archiving software	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
687	TO_SIQ_1.4.06	Managed services for archiving partner software (issue handling)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
688		<b>SAP Information Lifecycle Management (ILM) for Sybase IQ</b>			-	-
689	TO_SIQ_1.6.01	Check and prepare system requirements (Sizing, SAP Notes)	Excluded Tasks		not applicable	n/a
690	TO_SIQ_1.6.02	Activate of ILM Store in NetWeaver	Standard Services		not applicable	n/a
691	TO_SIQ_1.6.03	Set parameters in SAP IQ for ILM Store	Standard Services		not applicable	n/a
692	TO_SIQ_1.6.05	Set-up ILM Store Authorizations	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
693	TO_SIQ_1.6.06	Integrate ILM Store to Archiving Process	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
694	TO_SIQ_1.6.07	Configure of ArchiveLink connection to ILM Store	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
695	TO_SIQ_1.6.08	Configure of Storage Connections	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
696	TO_SIQ_1.6.09	Check ICM Parameters	Standard Services		not applicable	n/a
697	TO_SIQ_1.6.10	Set-up Clients and Origins in the ILM Store	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
698	TO_SIQ_1.6.11	Integration to OpenText Storage	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
699	TO_SIQ_1.6.12	Integration to other ILM Certified Storage	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
700	TO_SIQ_1.6.13	Data destruction and data compliance	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
701	TO_SIQ_1.6.14	License generation and deployment for Live Systems	Standard Services		not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
702		<b>X11 - SAP Cloud Connector</b>			-	-
703		<b>Installation and Configuration</b>			-	-
704	TO_SCC_1.1.02	Configuration - Enable outbound connection via LoadBalancer	Standard Services	Enable Cloud Connector to connect with SAP Business Technology Platform application domains / IP ranges or SAP Business Network domains / IP ranges (e.g., Arriba, IBN, AIN)	not applicable	n/a
705	TO_SCC_1.1.03	Configuration - Establish connection to SAP Business Technology Platform (formerly SAP Cloud Platform) sub-accounts	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. RISE integration specific, or Business Network specific Sub-accounts required for default RISE integration. Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
706	TO_SCC_1.1.04	Configuration - On-premise resources (OData services) customer wants to use in SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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/fp and /sap/bc/fpads.	Application Operations or Data Lifecycle Management	A1, D3
707	TO_SCC_1.1.05	Monitoring - SCC service monitoring (Linux / Windows Services)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
708	TO_SCC_1.1.06	Define and provide two user groups (Cloud Portal Admin, Cloud Portal User)	Standard Services		not applicable	n/a
709	TO_SCC_1.1.07	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
710	TO_SCC_1.1.08_AE	Test execution for every update of SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) integration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	RISE integration specific, or Business Network specific Sub-accounts required for default RISE integration	Cloud Integration Testing	IT
711	TO_SCC_1.1.09_AE	Create test automation scripts for SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Cloud Integration Testing	IT
712	TO_SCC_1.1.10_AE	Application of changes (Test automation script modification)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Cloud Integration Testing	IT
713		<b>X12 - SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) Integration - Data Services Agent (BTPI-DS) (Formerly HCI-DS)</b>			-	-
714		<b>Installation and Configuration</b>			-	-
715	TO_BTPI_DS_1.1.01	Install SAP BTPI - Data Service agent	Standard Services		not applicable	n/a
716	TO_BTPI_DS_1.1.02	Configuration - Enable outbound connection via LoadBalancer to connect with BTPI	Standard Services		not applicable	n/a
717	TO_BTPI_DS_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
718	TO_BTPI_DS_1.1.04	Configuration - Business backend preparation steps for BTPI consumption	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
719		<b>Monitoring Set-up</b>			-	-
720	TO_BTPI_DS_1.2.01	Monitoring set-up for process level availability - Nagios	Standard Services		not applicable	n/a
721		<b>Data Handling and Data Services</b>			-	-
722	TO_BTPI_DS_1.3.01	Migrate or replicate data between data stores	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
723		<b>X13 - SAP Fiori</b>			-	-
724		<b>Installation and Configuration</b>			-	-
725	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
726	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. If more systems are added a Change Request (CR) is required and extra charges may apply. For systems migrated to environments for which SAP is the Service Provider, it is the customer's responsibility to configure the Web Dispatcher for the migrated system; this configuration can be delivered through a separately contracted cloud onboarding and migration service.	not applicable	n/a
727	TO_FIORI_1.1.10_AE	Configuration - Web Dispatcher Fiori App redirects - additional requests	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
728	TO_FIORI_1.1.05	Configuration - HANA XS Engine Web Dispatcher	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	SSL is a prerequisite for this task. Scope during Initial Provisioning includes all systems defined in the initial contract.	Application Operations	A1
729	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
730	TO_FIORI_1.1.06	Re-enable Fiori launchpad including all required connectivity set-up	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Covers additional charge for re-enablement.	Application Operations	A1
731	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 other SAP services.	not applicable	n/a
732	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	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Access to customer client required.	Application Operations	A1
733	TO_FIORI_1.1.11_AE	Enable Fiori Launchpad for the standard Fiori applications for additional business clients, brownfield / migration deployments or SAP products other than S/4HANA	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Includes example Fiori Catalog, example Fiori Group and example PFCG role.	Application Operations	A1
734	TO_FIORI_1.1.12_AE	Re-enable technical integration points after system/client copy	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Performed for additional business clients or products other than SAP S/4HANA.	Application Operations	A1

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
735		<b>X15 - Web Dispatcher</b>			-	-
736		<b>Web Dispatcher Operations</b>			-	-
737	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
738	TO_WD_1.1.02	General memory management definition	Standard Services		not applicable	n/a
739	TO_WD_1.1.03	General security parameter definition	Standard Services		not applicable	n/a
740	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
741	TO_WD_1.1.05	Communication with the message server / application server using SSL	Standard Services		not applicable	n/a
742	TO_WD_1.1.06	Modify HTTP requests	Standard Services		not applicable	n/a
743	TO_WD_1.1.07	Set-up error handling	Standard Services		not applicable	n/a
744	TO_WD_1.1.08	Maintain authentication File	Standard Services		not applicable	n/a
745	TO_WD_1.1.09	Changes in client 000 of the backend systems related to Web Dispatcher (HTTPTURLOO)	Standard Services		not applicable	n/a
746	TO_WD_1.1.10	Log and trace strategy	Standard Services		not applicable	n/a
747	TO_WD_1.1.11	Encryption policy (protocols, ciphersuites, key length)	Standard Services		not applicable	n/a
748	TO_WD_1.1.12	Connection counts	Standard Services		not applicable	n/a
749	TO_WD_1.1.13	Metadata Exchange Using SSL	Standard Services		not applicable	n/a
750	TO_WD_1.1.14	Define port ranges	Standard Services		not applicable	n/a
751	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 update the Load Balancer and Web Dispatcher accordingly.	not applicable	n/a
752	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
753		<b>X16 - LoadBalancer</b>			-	-
754		<b>LoadBalancer operation</b>			-	-
755	TO_LRP_1.1.01	Set-up LoadBalancer instance	Standard Services		not applicable	n/a
756	TO_LRP_1.1.02	Register/Remove Systems in LoadBalancer	Standard Services		not applicable	n/a
757	TO_LRP_1.1.03	Configure load distribution to application servers	Standard Services		not applicable	n/a
758	TO_LRP_1.1.04	Provide external IP for Internet facing scenarios	Standard Services		not applicable	n/a
759	TO_LRP_1.1.05	Configure SSL offloading (Encryption)	Standard Services		not applicable	n/a
760	TO_LRP_1.1.07	Perform DNS handling for customer own Domain	Excluded Tasks		not applicable	n/a
761	TO_LRP_1.1.08	Provide X.509 certificate for customer domain to enable SSL	Excluded Tasks		not applicable	n/a
762	TO_LRP_1.1.09	Provide X.509 certificate for SAP own URL like *.xxx.ondemand.com domain	Standard Services		not applicable	n/a
763	TO_LRP_1.1.10	Install customer X.509 certificate	Standard Services		not applicable	n/a
764	TO_LRP_1.1.11	Configure Web Application Firewall	Standard Services		not applicable	n/a
765	TO_LRP_1.1.12	Configure persistence handling	Standard Services		not applicable	n/a
766	TO_LRP_1.1.14	Configure health checks	Standard Services		not applicable	n/a
767	TO_LRP_1.1.15	Configure URL/IP based blacklist and allowlist filtering	Standard Services		not applicable	n/a
768	TO_LRP_1.1.16	Configure sorry page function	Standard Services		not applicable	n/a
769	TO_LRP_1.1.17	Configure outgoing connections to Internet	Standard Services		not applicable	n/a
770	TO_LRP_1.1.18	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
771		<b>X17 - OpenText Solutions</b>			-	-
772		<b>Cloud Editions</b>			-	-
773		<b>SAP S/4HANA Common Tasks</b>			-	-
774	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
775	TO_OT_1.10.2	Activate/Maintain ICF nodes required for Apps to be enabled/updated	Standard Services		not applicable	n/a
776	TO_OT_1.10.3	Activate/Maintain OData Services required for Apps to be enabled/updated	Standard Services		not applicable	n/a
777		<b>Vendor Invoice Management for SAP Solutions (VIM)</b>			-	-
778	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
779		<b>Extended Enterprise Content Management for SAP Solutions (xECM)</b>			-	-
780	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
781		<b>Archiving and Document Access for SAP Solutions (ADA)</b>			-	-
782		<b>OpenText Core Archive Connector</b>			-	-
783		<b>Operations</b>			-	-
784	TO_OT_1.13.1	Install OpenText Core Archive Connector and Document Pipelines	Standard Services	Application installation only.	not applicable	n/a
785	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
786	TO_OT_1.13.3	Add/Maintain SAP S/4HANA systems connection	Standard Services		not applicable	n/a
787	TO_OT_1.13.4	Administration of Collections and Data Sources	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
788	TO_OT_1.13.5	Configure scan host and profile	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
789	TO_OT_1.13.6	Configure/Maintain file archive job	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Lifecycle Management	D3
790	TO_OT_1.13.7	Maintain Core Archive Connector setting	Standard Services	Activity includes replacing/generating certificate and private key.	not applicable	n/a
791	TO_OT_1.13.8	User Administration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
792		<b>Software Lifecycle Management</b>			-	-
793	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

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
794		<b>X17A - OpenText Extended Enterprise Content Management (OT xECM)</b>			-	-
795		<b>Installation</b>			-	-
796	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
797	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 S/4HANA System.	not applicable	n/a
798	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
799		<b>Set-up and Configuration</b>			-	-
800	TO_OT_XECM_1.2.1	Post install configuration	Standard Services		not applicable	n/a
801	TO_OT_XECM_1.2.2	Monitoring	Standard Services		not applicable	n/a
802	TO_OT_XECM_1.2.3	Application configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
803	TO_OT_XECM_1.2.4	Data Archiving	Excluded Tasks		not applicable	n/a
804	TO_OT_XECM_1.2.5	S/4HANA integration and connectivity	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
805	TO_OT_XECM_1.2.6	SSL/TLS Secure Communication	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
806	TO_OT_XECM_1.2.7	SSO with Windows AD	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
807		<b>X18 - SAP Information Steward</b>			-	-
808		<b>Operations</b>			-	-
809	TO_IS_1.1.02	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
810	TO_IS_1.1.13	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
811	TO_IS_1.1.03	User and access management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Secure Users & Authorizations	S2
812	TO_IS_1.1.04	Create and manage IS application jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Management	D4
813	TO_IS_1.1.05	Execute Information Steward utilities	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Management	D4
814	TO_IS_1.1.06	Data Insight, Metadata, Cleansing Package and Match Review administration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Management	D4
815	TO_IS_1.1.08	IS repository and file system backup	Standard Services		not applicable	n/a
816	TO_IS_1.1.09	IS job server and services monitoring	Standard Services		not applicable	n/a
817	TO_IS_1.1.10	IS repository management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Management	D4
818	TO_IS_1.1.11	Troubleshoot issues with IS jobs and utilities (Data Insight, Rule Tasks, Metadata Management, Data Cleansing)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Management	D4
819	TO_IS_1.1.12	Execute performance tuning for Data Insight, Data Cleansing, Metadata Management, Metapedia and Match Review	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Management	D4
820	TO_IS_1.1.14_AE	Validate Information Steward set-up and configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Optimization	D5
821	TO_IS_1.1.15_AE	Collect metadata and assess data quality	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Data Quality Optimization	D5
822		<b>X21 - SAP Identity Management IDM</b>			-	-
823		<b>Configuration</b>			-	-
824	TO_IDM_1.0.01	Assist customer with IDM related tasks that require access to operating system	Standard Services		not applicable	n/a
825	TO_IDM_1.0.02	Install IDM dispatchers as part of the initial cloud environment installation	Standard Services		not applicable	n/a
826	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

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
827		<b>X22 - SAP Financial Consolidation (FC)</b>			-	-
828		<b>Administration of Data Sources</b>			-	-
829	TO_FC_1.1.01	Start/Stop/Set Administrator Password and activity views for Datasources	Standard Services		not applicable	n/a
830	TO_FC_1.1.02	Add Webservices	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
831	TO_FC_1.1.03	Add FC Application Server/Webserver on existing infrastructure	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
832	TO_FC_1.1.15	Add FC Application Server/Webserver on new infrastructure	Optional Services		not applicable	n/a
833	TO_FC_1.1.04	Migrate and filter data source	Excluded Tasks		not applicable	n/a
834	TO_FC_1.1.05	Install software configuration	Excluded Tasks		not applicable	n/a
835	TO_FC_1.1.06	Sending/Broadcasting messages to End-users	Excluded Tasks		not applicable	n/a
836	TO_FC_1.1.07	Define log configuration for application servers	Excluded Tasks		not applicable	n/a
837	TO_FC_1.1.08	Define commands available for machines and instances	Excluded Tasks		not applicable	n/a
838	TO_FC_1.1.09	Activate/Deactivate machine in the FC Admin console	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
839	TO_FC_1.1.10	Start/Stop instances in the FC Admin console	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
840	TO_FC_1.1.11	Create scheduled tasks for starting and stopping servers	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
841	TO_FC_1.1.12	Create/Delete Data Source(s)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
842	TO_FC_1.1.13	Create FC transport folder	Standard Services		not applicable	n/a
843	TO_FC_1.1.14	Restart FC platform periodically	Standard Services		not applicable	n/a
844		<b>Monitoring</b>			-	-
845	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
846	TO_FC_1.2.03	Monitoring of further FC application URLs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Customer needs to provide URL to be monitored.	Application Operations	A1
847		<b>Administration of HANA Databases</b>			-	-
848	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
849	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
850		<b>Configure SAP Financial Consolidation Web Site</b>			-	-
851	TO_FC_1.4.01	Reconnecting Automatically	Standard Services		not applicable	n/a
852	TO_FC_1.4.02	Activate the SAP Financial Consolidation Web Technical Log	Standard Services		not applicable	n/a
853	TO_FC_1.4.03	Support long-term HTTP sessions with firewalls	Standard Services		not applicable	n/a
854	TO_FC_1.4.04	Publish documents via a URL	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
855	TO_FC_1.4.05	Configure HTTPS	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
856	TO_FC_1.4.06	Customize the SAP Financial Consolidation Web Site Home page	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
857		<b>Configure SAP Financial Consolidation Web HTML5 Site</b>			-	-
858	TO_FC_1.5.01	Configure/Customize SAP Financial Consolidation Web HTML5 site advanced settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
859		<b>Archiving Tool</b>			-	-
860	TO_FC_1.6.01	Install and access the Archiving Tool	Standard Services		not applicable	n/a
861	TO_FC_1.6.02	Execute archiving process	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
862		<b>Install and Configure the SAP NetWeaver BW Server to deploy Infocubes with SAP Financial Consolidation Cube Designer</b>			-	-
863	TO_FC_1.8.01	Install the FPM Basis component on the SAP NetWeaver BW server	Standard Services		not applicable	n/a
864	TO_FC_1.8.02	Create BW NetWeaver Roles to deploy Infocubes with Cube Designer	Excluded Tasks		not applicable	n/a
865	TO_FC_1.8.03	Install SAP EPM Solutions Connection Manager on the BOE platform	Standard Services		not applicable	n/a
866	TO_FC_1.8.04	Configure the Central Management Console for SAP Cube Designer	Excluded Tasks		not applicable	n/a
867	TO_FC_1.8.05	Configure the Central Management Server for a distributed installation	Additional Service	If requested during initial build, this will be configured as standard service.	not applicable	n/a
868	TO_FC_1.8.06	Configure reverse proxy	Standard Services		not applicable	n/a
869	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
870		<b>Financial Information Management</b>			-	-
871	TO_FC_1.9.01	Configure the number of lines in a Flat File Preview	Standard Services		not applicable	n/a
872	TO_FC_1.9.02	Configure Time-out Parameters	Standard Services		not applicable	n/a
873		<b>X29 - SAP TREX</b>			-	-
874		<b>TREX operations</b>			-	-
875	TO_TREX_1.1.14	Post-Installation Configuration and Connection TREX with an Application (Java or ABAP)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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
876	TO_TREX_1.1.15	Administer TREX indices	Excluded Tasks		not applicable	n/a
877	TO_TREX_1.1.16	Administer Taxonomies	Excluded Tasks		not applicable	n/a
878		<b>X31 - SAP Solution Manager</b>			-	-
879		<b>Installation and Configuration</b>			-	-
880	TO_SOLM_1.1.01	Set-up and configuration of ITSM in SAP Solution Manager	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
881	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
882	BASIC_1.8.18	Set-up monitoring with Customer Solution Manager located in cloud: Configure monitoring within the customers SAP Solution Manager system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	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 Customer Application Monitoring	A1, M2
883	BASIC_1.8.26	Configure Solution Manager: Focused Insight standard dashboard	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	No customer specific settings and adjustments included.	Application Operations or Customer Application Monitoring	A1, M2

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
884		<b>X33 - SAP Test Data Migration Server (TDMS)</b>			.	.
885		<b>Installation and Configuration</b>			.	.
886	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
887	TO_TDMS_1.1.02	Patching of the sender systems (source system)	Standard Services		not applicable	n/a
888	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
889	TO_TDMS_1.1.04	Set scrambling data, customize, using BPL modeler	Excluded Tasks		not applicable	n/a
890		<b>X34 - SAP PowerDesigner</b>			.	.
891		<b>Operational Set-up</b>			.	.
892	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
893	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
894	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
895	TO_PWR_1.1.04	SSL/TLS Configuration - Portal Set-up	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Set-up secure communication through SSL/TLS configuration.	Application Operations	A1
896	TO_PWR_1.1.05	Single Sign On (SSO) with Windows Active Directory	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
897		<b>X35 - bowbridge Anti-Virus for SAP Solutions</b>			.	.
898		<b>Installation and Configuration</b>			.	.
899	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
900	TO_BB_AV_1.1.02	Install bowbridge software	Standard Services		not applicable	n/a
901	TO_BB_AV_1.1.03	Configure application layer	Excluded Tasks		not applicable	n/a
902	TO_BB_AV_1.1.04	Update bowbridge software	Standard Services	Customer must inform provider and provide software update.	not applicable	n/a
903		<b>X36 - SAP Billing and Revenue Innovation Management</b>			.	.
904		<b>SAP Convergent Charging</b>			.	.
905		<b>Installation and Configuration</b>			.	.
906	TO_BRIM_CC_1.1.01	Install SAP Convergent Charging database	Standard Services		not applicable	n/a
907	TO_BRIM_CC_1.1.02	Install SAP Convergent Charging core server	Standard Services		not applicable	n/a
908	TO_BRIM_CC_1.1.03	Post Installation steps - Convergent Charging Cockpit and Core tool installation	Standard Services		not applicable	n/a
909		<b>Operations</b>			.	.
910	TO_BRIM_CC_1.2.01	Start/stop system	Standard Services		not applicable	n/a
911	TO_BRIM_CC_1.2.02	Apply Updates	Standard Services		not applicable	n/a
912	TO_BRIM_CC_1.2.03	Version upgrade	Standard Services		not applicable	n/a
913	TO_BRIM_CC_1.2.04	Monitoring	Standard Services		not applicable	n/a
914	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
915	TO_BRIM_CC_1.2.06	Additional parameter settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
916	TO_BRIM_CC_1.2.07	Additional instance installation	Additional Service		not applicable	n/a
917	TO_BRIM_CC_1.2.08	System refresh	Additional Service		not applicable	n/a
918	TO_BRIM_CC_1.2.09	Configure Transports	Standard Services		not applicable	n/a
919		<b>SAP Convergent Mediation by DigitalRoute</b>			.	.
920		<b>Installation and Configuration</b>			.	.
921	TO_BRIM_CM_1.1.01	Install SAP Convergent Mediation Database	Standard Services		not applicable	n/a
922	TO_BRIM_CM_1.1.02	Install SAP Convergent Mediation Control Zone and Execution Zone set-up	Standard Services		not applicable	n/a
923	TO_BRIM_CM_1.1.03	Post Installation steps	Standard Services		not applicable	n/a
924	TO_BRIM_CM_1.1.04	Install SAP Convergent Mediation Execution Control Standalone (ECSA) set-up	Standard Services		not applicable	n/a
925		<b>Operations</b>			.	.
926	TO_BRIM_CM_1.2.01	Disaster Recovery procedures and testing for reprocessing of events	Excluded Tasks		not applicable	n/a
927	TO_BRIM_CM_1.2.02	Deletion of collected files after checkpoint batch	Excluded Tasks		not applicable	n/a
928	TO_BRIM_CM_1.2.03	Push Data Records from customer sFTP server to cloud environment sFTP server	Excluded Tasks		not applicable	n/a
929	TO_BRIM_CM_1.2.04	Start/stop system	Standard Services		not applicable	n/a
930	TO_BRIM_CM_1.2.05	Start/stop specific Pico instance	Standard Services		not applicable	n/a
931	TO_BRIM_CM_1.2.06	Monitoring	Standard Services	Availability monitoring only.	not applicable	n/a
932	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
933	TO_BRIM_CM_1.2.08	Additional parameter settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Custom Scope	XX
934	TO_BRIM_CM_1.2.09	Install, add, and upgrade Pico instances	Additional Service		not applicable	n/a
935	TO_BRIM_CM_1.2.10	Import/Export Workflows configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
936	TO_BRIM_CM_1.2.11	Maintain External Reference files	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
937	TO_BRIM_CM_1.2.12	Install license	Standard Services		not applicable	n/a
938	TO_BRIM_CM_1.2.13	System refresh	Additional Service		not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
939		<b>X37 - SAP Manufacturing Integration and Intelligence</b>			-	-
940		<b>Implementation and Configuration</b>			-	-
941	TO_MII_1.1.01	Set-up Plant Connectivity (PCo) for SAP Overall Equipment Effectiveness (OEE) Functionality	Excluded Tasks		not applicable	n/a
942	TO_MII_1.1.02	Set-up ALE user	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
943	TO_MII_1.1.03	Establish ALE connection to customer's ERP system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
944	TO_MII_1.1.04	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: SAP NetWeaver	Excluded Tasks		not applicable	n/a
945	TO_MII_1.1.05	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: Integration Interfaces	Excluded Tasks		not applicable	n/a
946	TO_MII_1.1.06	Configure SAP Overall Equipment Effectiveness Management	Excluded Tasks		not applicable	n/a
947	TO_MII_1.1.07	Create XML Users and perform Roles Assignments	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
948		<b>X38 - SAP Manufacturing Execution</b>			-	-
949		<b>Operational Set-up</b>			-	-
950	TO_ME_1.1.01	Execute CTC Template for SAP NetWeaver Engine Configuration	Standard Services		not applicable	n/a
951	TO_ME_1.1.02	Execute CTC Template for SAP Database Set-up	Standard Services		not applicable	n/a
952	TO_ME_1.1.03	Execute CTC Template for SAP ME Configuration	Excluded Tasks		not applicable	n/a
953	TO_ME_1.1.04	Execute SAP ME Scripts	Excluded Tasks		not applicable	n/a
954	TO_ME_1.1.05	Perform SAP ME and ERP Integration	Excluded Tasks		not applicable	n/a
955	TO_ME_1.1.06	Install Adobe Document Services	Optional Services		not applicable	n/a
956		<b>X39 - R Integration</b>			-	-
957		<b>Operational Set-up</b>			-	-
958	TO_RINT_1.1.02	Install R Integration Components	Standard Services	R, R Server, and dependent packages are installed independently from the SAP HANA database.	not applicable	n/a
959	TO_RINT_1.1.03	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
960	TO_RINT_1.1.04	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
961		<b>X40 - SAP SQL Anywhere - Mobilink</b>			-	-
962		<b>Implementation and Configuration</b>			-	-
963	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
964	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
965	TO_SQLA_ML_1.1.03	Mobilink - Single Sign On (SSO) Set-up	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
966	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
967	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
968		<b>X41 - SAP Analytics Cloud</b>			-	-
969		<b>SAP Analytics Cloud Tenant</b>			-	-
970	TO_SAC_1.1.01	Establish connection between SAP Analytics Cloud and managed system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
971	TO_SAC_1.1.02	Set-up Single Sign On (SSO) communication with Principle Propagation from SAP Analytics Cloud to SAP S/4HANA	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
972	TO_SAC_1.1.03	Create or change user/roles or SAP as Identity Provider	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
973		<b>SAP Analytics Cloud Agent</b>			-	-
974	TO_SAC_1.2.01	Install SAP Analytics Cloud Agent	Standard Services		not applicable	n/a
975	TO_SAC_1.2.02	Configure SAP Analytics agent - Cloud Connector	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
976	TO_SAC_1.2.02A	Configure SAP Analytics - Java Connector	Standard Services		not applicable	n/a
977	TO_SAC_1.2.03	Configure SAP Analytics Cloud with connections requiring SAP Analytics agent such as SAP S/4HANA, ERP	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
978		<b>SAP S/4HANA Tasks for SAP Analytics Cloud</b>			-	-
979	TO_SAC_1.3.01	Configure STRUST for SSL settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
980	TO_SAC_1.3.02	Activate Embedded BW content (BEx queries etc.)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
981	TO_SAC_1.3.03	Enable INA for Analytics Cloud	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
982	TO_SAC_1.3.04	Enable CORS Analytics Cloud and edit allowlist	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1



Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
983		<b>X42 - SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)</b>			.	.
984		<b>Global Account and Subaccount(s)</b>			.	.
985	TO_BTP_1.1.01	Create or change subaccounts related to cloud system (DEV, QAS, PRD etc.)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
986	TO_BTP_1.1.01_PCE	Create or change 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. Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
987	TO_BTP_1.1.02	Create or change entitlements in the Global Account	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
988	TO_BTP_1.1.03	Activate Business Technology Platform service(s)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
989	TO_BTP_1.1.03_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). Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
990	TO_BTP_1.1.04	Create or change user/roles	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
991	TO_BTP_1.1.04_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. Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
992	TO_BTP_1.1.05	Create or change connectivity destinations	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
993	TO_BTP_1.1.05_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. Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
994	TO_BTP_1.1.06	Manage certificates (issue, import, export)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
995	TO_BTP_1.1.07	Create or change custom application domains settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
996	TO_BTP_1.1.08_PCE	Create subaccounts related to S/4 PCE system for BTP starter pack	Standard Services	Limited to One (1) for non-production tier and One (1) for production tier. Includes Cloud Foundry enablement and Default Space creation and core services activation.	not applicable	n/a
997	TO_BTP_1.1.09_PCE	Application subscription and subaccount configuration to integrate and establish connectivity with S/4 HANA PCE	Standard Services	Example: LBN shipper, LBN Carrier sub-account related activities.	not applicable	n/a
998		<b>Identity Provider</b>			.	.
999	TO_BTP_1.2.01	Configure local provider settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1000	TO_BTP_1.2.02	Configure Trust Relationships and Federation Settings for external Identity Providers (e.g. Microsoft, Okta)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1001	TO_BTP_1.2.03	Configure Trust Relationships and Federation Settings for SAP Identity Authentication Tenant	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1002	TO_BTP_1.2.04	Configure Principle Propagation Business Technology Platform, SAP Cloud Connector and SAP S/4HANA	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1003	TO_BTP_1.2.05	Activate CERTRULE for the purpose of client based certificates	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	If an existing SAP S/4HANA system is to be used for the integration.	Application Operations	A1
1004	TO_BTP_1.2.06	User Migration to Business Technology Platform Identity Authentication Tenant	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1005		<b>SAP S/4HANA Tasks for SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)</b>			.	.
1006	TO_BTP_1.3.01	Configure STRUST for SSL settings	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1007	TO_BTP_1.3.01_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. Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
1008	TO_BTP_1.3.02	Activate ICF nodes required for sample Apps to be enabled	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1009	TO_BTP_1.3.03	Activate OData Services required for sample Apps to be enabled	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1010	TO_BTP_1.3.04	Enterprise Search Enablement (ESH)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1011	TO_BTP_1.3.05	Create authorization role in backend system for OData processing	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	For relevant sample Apps.	Application Operations	A1
1012	TO_BTP_1.3.06	Activate Embedded BW content for Analytical Fiori Apps	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1013	TO_BTP_1.3.07	Enable INA for Analytical SAP Fiori Apps	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1014	TO_BTP_1.3.08	Establish backend connectivity to Business Technology Platform Forms by Adobe	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Enables generation of print and interactive forms using Adobe Document Services (ADS); includes mandatory baseline configuration.	Application Operations	A1
1015	TO_BTP_1.3.08_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. Limited to S/4HANA and SAP ERP Central Component (SAP ECC) deployments.	not applicable	n/a
1016		<b>Portal</b>			.	.
1017	TO_BTP_1.4.01	Create or change SAP Fiori Launchpad sites (site directory and site settings)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1018	TO_BTP_1.4.02	Create or change roles	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Secure Users & Authorizations	A1, S2
1019	TO_BTP_1.4.03	Create or change groups including role assignment	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Secure Users & Authorizations	A1, S2
1020	TO_BTP_1.4.04	Create or change catalogs including role assignment	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations or Secure Users & Authorizations	A1, S2
1021	TO_BTP_1.4.05	Enable SAP Fiori sample apps and perform required connectivity set-up	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1022		<b>X43 - SAP Forms by Adobe (Adobe Document Services/ADS)</b>	SAP Cloud Connector and SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) are prerequisites.		-	-
1023		<b>Installation and Configuration</b>			-	-
1024	TO_ADS_1.1.01	Test ADS functionality and create test PDF	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Test and check communications and functionality. Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in a customer owned BTP account.	Regression Testing	U1
1025	TO_ADS_1.1.02	Data Migration from on premise ADS to ADS on BTP - customer account	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in a customer owned BTP account.	Application Operations	A1
1026	TO_ADS_1.1.02A	Data Migration from on premise ADS to ADS on BTP - SAP account	Standard Services	Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account.	not applicable	n/a
1027	TO_ADS_1.1.03	Configure Fonts and Print Information using XDC and XCI Files - customer account	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in a customer owned BTP account.	Application Operations	A1
1028	TO_ADS_1.1.03A	Configure Fonts and Print Information using XDC and XCI Files - SAP account	Standard Services	Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account.	not applicable	n/a
1029	TO_ADS_1.1.04	Configure document security - customer account	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in a customer owned BTP account.	Application Operations	A1
1030	TO_ADS_1.1.04A	Configure document security - SAP account	Standard Services	Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account.	not applicable	n/a
1031	TO_ADS_1.1.05	Configure job profiles- customer account	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in a customer owned BTP account.	Application Operations	A1
1032	TO_ADS_1.1.05A	Configure job profiles - SAP account	Standard Services	Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account.	not applicable	n/a
1033		<b>X44 - SAP Enterprise Threat Detection (ETD)</b>			-	-
1034		<b>Installation</b>			-	-
1035	TO_ETD_1.1.01	Create specific SAP HANA tenant for ETD	Standard Services		not applicable	n/a
1036	TO_ETD_1.1.04	Import the ETD delivery unit	Standard Services		not applicable	n/a
1037		<b>Configuration</b>			-	-
1038	TO_ETD_1.2.01	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
1039	TO_ETD_1.2.02	Create dependent source system user: SDS_RT_<SID>	Excluded Tasks		not applicable	n/a
1040	TO_ETD_1.2.03	Schedule individual background jobs	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	For job scheduling in ETD HANA only, during RUN phase.	Custom Scope	XX
1041	TO_ETD_1.2.04	Initialize ETD	Excluded Tasks		Custom Scope	XX
1042	TO_ETD_1.2.05	Provision initial ETDAdmin Administrator	Standard Services	Customer owned user with role sap.secmon.dtc:EtDAdmin must open the following URL in order to finish the installation: https://<host>-<port>-sap/secmon/services/install/finish.xsis.	not applicable	n/a
1043	TO_ETD_1.2.06	Define namespaces	Excluded Tasks	Performed through customer user account.	not applicable	n/a
1044		<b>Apache Kafka</b>	For version 2.0 SP 02 and above.		-	-
1045	TO_ETD_1.3.04	Install Kafka	Excluded Tasks	Customer must provide Kafka cluster.	not applicable	n/a
1046		<b>Streaming solution based on HANA Streaming Analytics</b>	For version 2.0 SP 02 and below.		-	-
1047	TO_ETD_1.4.05	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
1048	TO_ETD_1.4.06	Run ETD installation script for SDS data service, projects and adapters	Standard Services		not applicable	n/a
1049	TO_ETD_1.4.07	Enable configuration checks	Excluded Tasks		Custom Scope	XX
1050	TO_ETD_1.4.08	Enable custom configuration checks	Excluded Tasks		not applicable	n/a
1051		<b>Streaming solution based on ETD streaming</b>	For version 2.0 SP 02 and above.		-	-
1052	TO_ETD_1.5.16	Run ETD installation script for ETD streaming	Excluded Tasks		not applicable	n/a
1053	TO_ETD_1.5.17	Install individual components of ETD streaming	Excluded Tasks		Custom Scope	XX
1054		<b>Connecting new source systems to ETD</b>	For new source system connection to SAP during run phase.		-	-
1055	TO_ETD_1.6.05	Configure provisioning logs from SAP NetWeaver ABAP based system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		not applicable	n/a
1056	TO_ETD_1.6.06	Configure provisioning logs from SAP HANA-based system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
1057	TO_ETD_1.6.07	Configure provisioning logs from SAP NetWeaver JAVA-based system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
1058	TO_ETD_1.6.08	Configure provisioning logs from other systems including OS	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
1059		<b>Secure communications with new source system</b>			-	-
1060	TO_ETD_1.7.01	Encrypt communications between new source system (ABAP/HANA/JAVA) and HANA Streaming Analytics	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	For new source system connection to SAP ETD during run phase and there is need for encrypting the communication between the new source system and HANA Streaming Analytics.	Custom Scope	XX
1061	TO_ETD_1.7.02	Encrypt communications between new source system (ABAP/HANA/JAVA) and ETD Streaming	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	For new source system connection to SAP ETD during run phase and there is need for encrypting the communication between the new source system and ETD Streaming Analytics.	Custom Scope	XX
1062		<b>Content Delivery</b>			-	-
1063	TO_ETD_1.8.01	Import New Content Packages	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	For run phase, SAP regularly delivers configurable standard content packages with predefined patterns to expand the attack detection scope of SAP Enterprise Threat Detection. Customers can use the Content Delivery app to see which content packages are already imported and import new content packages.	Custom Scope	XX
1064		<b>X45 - Zscaler ZPA Connector</b>			-	-
1065		<b>Implementation and Configuration</b>			-	-
1066	TO_ZPA_1.1.01	Install ZPA Connector and required OS packages	Optional Services		not applicable	n/a
1067	TO_ZPA_1.1.02	Configure ZPA Connector	Optional Services		not applicable	n/a
1068	TO_ZPA_1.1.03	Allowlist ZPA Connector IP addresses in LoadBalancer	Optional Services		not applicable	n/a
1069	TO_ZPA_1.1.04	Configure connector in ZPA Admin Console	Excluded Tasks		not applicable	n/a
1070	TO_ZPA_1.1.05	Provision ZPA Connector provisioning keys	Excluded Tasks		not applicable	n/a
1071	TO_ZPA_1.1.06	Install client software	Excluded Tasks		not applicable	n/a
1072	TO_ZPA_1.1.07	Client and end-user support	Excluded Tasks		not applicable	n/a
1073	TO_ZPA_1.1.08	Sizing of required number of connectors	Excluded Tasks		not applicable	n/a
1074	TO_ZPA_1.1.09	Integration with customer's IDP (SAML)	Excluded Tasks		not applicable	n/a
1075	TO_ZPA_1.1.10	Install provisioning keys	Optional Services		not applicable	n/a
1076		<b>X46 - SAP Omnichannel Banking (OCB)</b>			-	-
1077		<b>Implementation and Configuration</b>			-	-
1078	TO_OCB_1.1.01	Install Tomcat	Optional Services		not applicable	n/a
1079	TO_OCB_1.1.02	Install OCB software Retail Banking or Business Banking (Digital)	Standard Services		not applicable	n/a
1080	TO_OCB_1.1.03	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
1081	TO_OCB_1.1.04	Develop WAR files	Excluded Tasks		not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1082		<b>X48 - Redwood RunMyJobs</b>			-	-
1083		<b>Installation and Configuration</b>			-	-
1084	TO_RMJ_1.1.01	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
1085	TO_RMJ_1.1.02	Monitor agent	Standard Services		not applicable	n/a
1086	TO_RMJ_1.1.03	Restart agent	Standard Services		not applicable	n/a
1087	TO_RMJ_1.1.04	Scheduling of jobs	Excluded Tasks		not applicable	n/a
1088	TO_RMJ_1.1.05	Manual design and implementation of process definitions	Excluded Tasks		not applicable	n/a
1089		<b>X49 - SMTP Relay to Office365</b>			-	-
1090		<b>Installation and Configuration</b>			-	-
1091	TO_SMTP_1.1.01	Install smtp relay and required OS packages	Standard Services		not applicable	n/a
1092	TO_SMTP_1.1.02	Configure smtp relay servers and LoadBalancers	Standard Services		not applicable	n/a
1093	TO_SMTP_1.1.03	Allowlist of smtp relay IP's/FQDN in LoadBalancer and NSG	Standard Services		not applicable	n/a
1094	TO_SMTP_1.1.04	Provisioning of certificates for TLS and authentication	Excluded Tasks		not applicable	n/a
1095	TO_SMTP_1.1.05	Configure systems to use smtp relay server	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1096	TO_SMTP_1.1.06	Configure O365 connector in O365	Excluded Tasks		not applicable	n/a
1097	TO_SMTP_1.1.07	Install certificates	Standard Services		not applicable	n/a
1098	TO_SMTP_1.1.08	Restart after failure	Standard Services		not applicable	n/a
1099	TO_SMTP_1.1.09	Monitor smtp relay service	Standard Services		not applicable	n/a
1100	TO_SMTP_1.1.10	Apply updates	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1101	TO_SMTP_1.1.11	Application troubleshooting including engagement with the vendor's support organization	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Includes engagement with the vendor's support organization.	Application Operations	A1
1102		<b>X50 - SAP Data Custodian (SDC) - Integration Service</b>	<b>Subject to availability on a case-by-case basis. SDC provides a subset of components which are each ordered separately.</b>		-	-
1103		<b>Transparency and Control Service (SAP S/4 HANA, ECC)</b>			-	-
1104	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
1105	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
1106	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
1107		<b>Transparency and Control Service for Infrastructure (Hyperscaler)</b>			-	-
1108	TO_SDC_1.1.04A	Create infrastructure components on respective hyperscaler	Standard Services	There are infrastructure components (EventHub, PUB/SUB,S3 etc.) for each Hyperscaler which are required to enable the integration service.	not applicable	n/a
1109	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
1110	TO_SDC_1.1.05	Configure the tenant with the SAP S/4HANA system	Excluded Tasks		not applicable	n/a
1111	TO_SDC_1.1.06	Configure application synchronization for Principal[User] attributes	Excluded Tasks		not applicable	n/a
1112	TO_SDC_1.1.07	Maintain use case policies in the Data Custodian tenant	Excluded Tasks		not applicable	n/a
1113	TO_SDC_1.1.08	Remediate incidents for unauthorized accesses in the tenant	Excluded Tasks		not applicable	n/a
1114	TO_SDC_1.1.09	Generate access log and other reports	Excluded Tasks		not applicable	n/a
1115		<b>External Key Management (KMS) Integration</b>			-	-
1116		<b>Enabling HANA LSS and Keys Migration</b>			-	-
1117	TO_SDC_1.2.01	Installation HANA LSS and Key Migration	Additional Service	Requires HANA 2.0 SP06 or later and HANA encryption to be enabled.	not applicable	n/a
1118	TO_SDC_1.3.01	Integration to Data Custodian	Additional Service	Customer should have subscription to Data Custodian KMS and completed their on-board. HANA LSS should be installed.	not applicable	n/a
1120		<b>X51 - SAP Disclosure Management (DM)</b>			-	-
1121		<b>Installation</b>			-	-
1122	TO_SDM_1.1.01	Install DM components	Standard Services	IIS Web Server, DM Application Server, Task Engine, XBRL Service, and MS-SQL DB.	not applicable	n/a
1123	TO_SDM_1.1.02	Install DM BW Connector	Standard Services		not applicable	n/a
1124	TO_SDM_1.1.03	Install DM content packages	Standard Services	Scenario based.	not applicable	n/a
1125		<b>Set-up and Configuration</b>			-	-
1126	TO_SDM_1.2.01	Post-install configuration	Standard Services		not applicable	n/a
1127	TO_SDM_1.2.02	Configure BW connector	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1128	TO_SDM_1.2.03	Configure DM Application Server SSL/TLS Secure Communication	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
1129	TO_SDM_1.2.04	Configure DM Application Server SSO with Windows AD	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a
1130		<b>X52 - SAP 3D Visual Enterprise Generator (VEG)</b>			-	-
1131		<b>Installation</b>			-	-
1132	TO_VEG_1.1.01	Install VEG components	Standard Services	IIS Web Server, MSMQ Server, Application Server (Source) with Embedded MS-SQL Express DB.	not applicable	n/a
1133	TO_VEG_1.1.02	Install additional VEG subordinate host	Standard Services		not applicable	n/a
1134		<b>Set-up and Configuration</b>			-	-
1135	TO_VEG_1.2.01	Post-install configuration	Standard Services		not applicable	n/a
1136	TO_VEG_1.2.02	Configure VEG SSL/TLS Secure Communication	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
1137	TO_VEG_1.2.03	Integration with ERP/ECC/S4HANA	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations	A1
1138	TO_VEG_1.2.04	Configure SSO with Windows AD	Excluded Tasks	Customer may engage other SAP services pertaining to SSO solutions for cloud environment.	not applicable	n/a

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1139		<b>X53 - SAP Content Server</b>			.	.
1140		<b>Installation</b>			.	.
1141	TO_SCS_1.1.01	Install Content Server	Standard Services		not applicable	n/a
1142	TO_SCS_1.1.02	Install specific parameter definition	Standard Services		not applicable	n/a
1143		<b>Configure repositories</b>			.	.
1144	TO_SCS_1.2.01	Generate server certificate (in case of SSL enablement)	Standard Services	After CA signing of SAPSSLs pse, certificate should be generated.	not applicable	n/a
1145	TO_SCS_1.2.02	Add server certificate to SYSTEM PSE, SSL Server standard PSE in Strust transaction (in case of SSL enablement)	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Per customer request.	Application Operations	A1
1146	TO_SCS_1.2.03	Technical configuration of repositories in OAC0	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Strategic/conceptual decisions to be made by customers/consulting.	Application Operations	A1
1147	TO_SCS_1.2.04	Connection test via RSCMST	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1148	TO_SCS_1.2.05	Set SAPR3 password in customer's backend system	Standard Services		not applicable	n/a
1149		<b>Patch Update</b>			.	.
1150	TO_SCS_1.3.01	SP update for content server version	Standard Services		not applicable	n/a
1151	TO_SCS_1.3.02	SP update for MaxDB database	Standard Services		not applicable	n/a
1152		<b>Version Upgrade</b>			.	.
1153	TO_SCS_1.4.01	Pre-checks for repository connection	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Connection test via RSCMST for all given repositories needs to be done.	Application Operations	A1
1154	TO_SCS_1.4.02	Technical Upgrade procedure	Additional Service		not applicable	n/a
1155	TO_SCS_1.4.03	Post-upgrade configuration changes for repositories	Additional Service		not applicable	n/a
1156	TO_SCS_1.4.04	Technical post-checks for repository connection	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Connection test via RSCMST for all given repositories needs to be done.	Application Operations	A1
1157	TO_SCS_1.4.05	Functional validation of repositories	Excluded Tasks		not applicable	n/a
1158		<b>X54 - SAP HANA Cockpit 2.0</b>			.	.
1159		<b>Installation and Configuration</b>			.	.
1160	TO_HANA_CP_1.1.03	Add and Maintain resources (ex: HANA Systems) and resource groups	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
1161	TO_HANA_CP_1.1.04	Monitor database resource consumption of HANA Cockpit	Standard Services	To detect issues in technical operations.	not applicable	n/a
1162	TO_HANA_CP_1.1.05	User management	Excluded Tasks	Customer must maintain their users for HANA Cockpit.	not applicable	n/a
1163	TO_HANA_CP_1.1.06	Update and upgrade of HANA Cockpit	Standard Services		not applicable	n/a
1164		<b>X55 - SAP Focus Run for Solution Manager (FRUN)</b>			.	.
1165		<b>Configuration</b>			.	.
1166	TO_FRUN_1.1.01	Allowlist IP addresses of customer's FRUN through managed system's firewall	Standard Services		not applicable	n/a
1167	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
1168	TO_FRUN_1.1.03	Import customer provided certificate into the SAP Host Agent	Standard Services		not applicable	n/a
1169	TO_FRUN_1.1.04	Enable certificate based authentication to simple diagnostic agent	Standard Services		not applicable	n/a
1170	TO_FRUN_1.1.05	Configure outside discovery to connect the managed system's Host Agent with customer FRUN system and maintain SLD	Standard Services		not applicable	n/a
1171	TO_FRUN_1.1.06	Configure SSI and monitoring in FRUN	Excluded Tasks		not applicable	n/a
1172		<b>X56 - SAP S/4 HANA Integration Tasks for RISE with SAP PCE</b>			.	.
1173		<b>Configuration</b>			.	.
1174	TO_S4H_1.1.01_PCE	Configure Outbound internet proxy setting	Standard Services	Default integration tasks during provisioning only.	not applicable	n/a
1175	TO_S4H_1.1.02_PCE	Integration of users and standard business roles	Standard Services	Default integration tasks during provisioning only.	not applicable	n/a
1176	TO_S4H_1.1.03_PCE	SSL configuration	Standard Services	Default integration tasks during provisioning only.	not applicable	n/a
1177	TO_S4H_1.1.04_PCE	Webservices activation - SICF, OData, SOAMANGER, RFC	Standard Services	Default integration tasks during provisioning only.	not applicable	n/a
1178	TO_S4H_1.1.05_PCE	IMG/SPRO activities	Standard Services	Default integration tasks during provisioning only.	not applicable	n/a
1179	TO_S4H_1.1.06_PCE	Pori enablement tasks	Standard Services	Default integration tasks during provisioning only.	not applicable	n/a
1180	TO_S4H_1.1.07_PCE	SLD configuration - RZ70 and Business system configuration	Standard Services	For Ariba Integration starter pack only. Default integration tasks during provisioning only.	not applicable	n/a
1181		<b>X57 - SAP Cloud Application Lifecycle Management (CALM)</b>			.	.
1182		<b>Installation and Configuration</b>			.	.
1183	TO_CALM_1.1.01	Request and provision	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1184	TO_CALM_1.1.02	Basic setup	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1185	TO_CALM_1.1.03	Set-up connectivity to CALM	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1186	TO_CALM_1.1.04	Set-up connectivity to Cloud TMS	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Application Operations	A1
1187	TO_CALM_1.1.05	Set-up Change and Deployment Management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX
1188	TO_CALM_1.1.06	Set-up test management	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.		Custom Scope	XX

Row	Identifier	Task	Responsibility	Remarks	CAS Package	Package Code
1189		<b>X58 - SAP Teamcenter by Siemens</b>				
1190		<b>Installation and Configuration</b>				
1191	TO_TC_1.1.01	Setup of Teamcenter environment: Initial Build	Standard Services	Initial installation of the Teamcenter including the Deployment Center, BMIDE 4 tier, Active workspace client builder, MS-SQL DB, web-tier (Tomcat, Active workspace gateway, Enterprise tier (Corporate server, Server manager, Pool Manager, Microservice Node, FSC, Indexer, Indexing Engine) and License Server.	not applicable	n/a
1192	TO_TC_1.1.03	CAD integration (Solidworks, NX etc.)	Excluded Tasks	Client builds of CAD integration are not included. Installation of the CAD integrations are included as part of the License Feature Extension Service as these are additional add-ons to the base build.	not applicable	n/a
1193	TO_TC_1.1.04	Build client	Excluded Tasks	All 4-Tier client builds on customer desktops are excluded.	not applicable	n/a
1194	TO_TC_1.1.05	BMIDE client	Excluded Tasks	Customer responsible for managing the BMIDE installation on their desktop.	not applicable	n/a
1195	TO_TC_1.1.06	Add new Enterprise Tier / Web server to Deployment Center	Optional Services	May be required when extending the default reference architecture to include additional server infrastructure. This will generate build scripts from Deployment Center.	not applicable	n/a
1196	TO_TC_1.1.07	Add new FSC service	Optional Services	Add FSC server to enable additional remote file processing and management capability.	not applicable	n/a
1197	TO_TC_1.1.08	Resilient Teamcenter infrastructure	Standard Services	As part of planned maintenance or issue resolution.	not applicable	n/a
1198	TO_TC_1.1.09	Rebuild indexing service	Additional Service	If indexes need to be rebuilt or repaired. Can be triggered to rebuild itself from the command line utility.	not applicable	n/a
1199	TO_TC_1.1.10	Backup: On-Demand - Teamcenter Database and TC_Volume/File Repo Sync	Additional Service	Lead time for backup to be aligned in advance. MS SQL SERVER adhoc database and Teamcenter TC_Volume/File repo back up on demand from customer.	not applicable	n/a
1200	TO_TC_1.1.11	Restore: On-Demand - Teamcenter Database and TC_Volume/File Repo Sync	Additional Service	Lead time for restore to be aligned in advance. MS SQL SERVER adhoc restore and Teamcenter TC_Volume/File repo restore on demand from customer.	not applicable	n/a
1201	TO_TC_1.1.12	Update / patch Teamcenter components	Standard Services	Corporate server, Pool Server, web-server/tomcat, BMIDE, Active workspace client builder, FMS/FSC, License Server using Deployment Center scripts.	not applicable	n/a
1202	TO_TC_1.1.13	Revision upgrade of Teamcenter components	Additional Service	Using Deployment Center scripts.	not applicable	n/a
1203	TO_TC_1.1.14	License Feature Extension	Additional Service	Extend the installed features of the Teamcenter application to include elements purchased by the customer outside those of the standard build.	not applicable	n/a
1204	TO_TC_1.1.15	Add additional features through Deployment Center	Additional Service	Make new license features available to other Teamcenter applications.	not applicable	n/a
1205	TO_TC_1.1.16	Add BMIDE configurations	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Extend configuration and development tools to accommodate license features purchased by the customer beyond the standard deployment of Teamcenter. Apply feature extension to the BMIDE application.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1206	TO_TC_1.1.17	Generate Active Workspace client build	Additional Service	Generate new WAR file with the additional licensed features added beyond the base build of the application	not applicable	n/a
1207	TO_TC_1.1.18	Deploy new WAR File	Additional Service	Deploy WAR file on the work server	not applicable	n/a
1208	TO_TC_1.1.19	Create new users	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Creation of new client user in the system. For bulk population of the Teamcenter system using the Make_user scripts and Excel based User / Role / Group definition template. Customer is responsible for the population of the template; Service Provider will execute the scripts.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1209	TO_TC_1.1.20	Create new groups	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Creation of new client groups in the system. For bulk population of the Teamcenter system using the Make_user scripts and Excel based User / Role / Group definition template. Customer is responsible for the population of the template; Service Provider will execute the scripts.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1210	TO_TC_1.1.21	Create new roles	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Creation of new client role groups in the system. For bulk population of the Teamcenter system using the Make_user scripts and Excel based User / Role / Group definition template. Customer is responsible for the population of the template; Service Provider will execute the scripts.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1211	TO_TC_1.1.22	Apply ADA license configuration	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Manage user license assignment within the application. ADA licenses are required for complex data access scenarios where specific licenses are required to be able to view and consume information. Requires user administration and license assignment.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1212	TO_TC_1.1.23	Teamcenter license assignment	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Management and application of licenses to users within Teamcenter.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1213	TO_TC_1.1.24	Activate/de-activate users	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Activating and deactivating user accounts. A deactivated account will no longer be able to login to Teamcenter, however data owned or records about the user are retained in the system. Unused licenses are returned to the pool.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1214	TO_TC_1.1.25	Deploy BMIDE template	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	A deployment package is created by the customer for deployment following the configuration extension of Teamcenter. The BMIDE application is used to trigger a deployment of the configuration in the specific environment required. This action should be preceded with a system backup.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1215	TO_TC_1.1.26	Deploy development configuration to production system	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Copy the development environment and deploy configuration to PRD as part of Release Management.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1216	TO_TC_1.1.27	Manage BMIDE template	Excluded Tasks	Customer responsibility to manage and maintain the source BMIDE template and to verify the template being deployed.	not applicable	n/a
1217	TO_TC_1.1.28	Export configuration package	Additional Service	Export the BMIDE package from the Teamcenter systems as a baseline configuration package.	not applicable	n/a
1218	TO_TC_1.1.29	Create new volume	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Create a Teamcenter volume for data storage.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1219	TO_TC_1.1.30	Setup volume access	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Enable user access to Teamcenter volume.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1220	TO_TC_1.1.31	Change group volume access	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Change group access to Teamcenter volume.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1221	TO_TC_1.1.32	Run clearlocks	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Run the clearlock process to unlock any lock data objects in the system caused by stale sessions or crashed tcserver processes	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1222	TO_TC_1.1.33	Run Release_Man	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Un-release status data from the system.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1223	TO_TC_1.1.34	Administrative locked workflows	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Resolve locked workflows.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1224	TO_TC_1.1.35	Update database indexes	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Update SQL Server indexes for the purpose of performance tuning.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1225	TO_TC_1.1.36	Troubleshoot Teamcenter system performance issues (technical root causes within cloud service scope)	Standard Services	Based on the result of an 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 expectable behavior (e.g. as it has shown in the past in comparable load situations).	not applicable	n/a
1226	TO_TC_1.1.37	Create classification hierarchy	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Create structure inside Teamcenter that enable the user to associate a business object for the purpose of reuse, easy identification or definition of common parts structures.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1227	TO_TC_1.1.38	Create new classification attribute	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Create information required about business objects being classified under this branch of the hierarchy.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1228	TO_TC_1.1.39	Classify information	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Ability to associate and populate the business object to the classification structure.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1229	TO_TC_1.1.40	Remove classified data	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Removal of an object classification.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1230	TO_TC_1.1.41	Remove classified hierarchies	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Remove branches of the classification structure.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1231	TO_TC_1.1.42	Workflow import	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Import workflows.	SAP Applications Operations for SAP Teamcenter by Siemens	TC
1232	TO_TC_1.1.43	Workflow export	SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.	Export workflows.	SAP Applications Operations for SAP Teamcenter by Siemens	TC

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
Customer Application Monitoring	M2	Monitoring
Performance Testing	P1	Performance
Performance Optimization	P2	Performance
Proactive Performance Management	P3	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
SAP Applications Operations for SAP Teamcenter by Siemens	TC	Teamcenter