SAP Global Cloud Operations

ROLES AND RESPONSIBILITIES ("R&R")
Applicable To:

SAP Cloud ERP Private and SAP ERP PCE

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

RISE with SAP S/4HANA Cloud private Edition and SAP ERP, private edition and SAP Business Data Cloud

SAP S4HANA Cloud, private edition and SAP ERP, PCE Roles and Responsibilities

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. Additionally, the availability of a specific service may also be limited for sandbox or other test environments.

Service	Definition
Standard Services	All tasks/services that are included as part of the Standard Services, covered by the Service Fee and performed by SAP2, as applicable to customer. Some services can be ordered as part of a "Bundled Service".(3)
Excluded Tasks	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 Packaged Services(1).
Additional Service	Additional Service: Include one-off tasks/services which are not covered by Standard, Optional and/or Packaged Services(1). These tasks/services: may be elected by customer; are subject to additional service fees and; can only be performed by SAP(2).
Optional Services	Optional Services: these tasks/services are not covered in the Standard Services, and are not and cannot be covered by the Packaged Services(1). These tasks/services: may be elected by customer; are subject to additional service fees; must be specifically contracted for and itemized in the customer's contract (original contract or via a change request), and can only be performed by SAP(2).
Packaged Services	Packaged Services(1): Include tasks/services that a customer can perform, but the customer may elect to have SAP(2) to deliver. Needs to be performed by customer if applicable and if a Packaged Service is not used. Packaged Services are subject to additional service fees as agreed in a customer's contract. (Formerly: "SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.")

Open Definitions

(1) Packaged Services is a category of supplementary services identified as "Packaged Services" in this document. Packaged Services are subject to additional service fees as agreed in a customer's contract. Packaged Services excludes all services involving the extension, reduction, or change of the customer's existing landscape, e.g. provisioning additional infrastructure resources. SAP may provide Packaged Services in either proactive or reactive mode. For SAP to provide services in a reactive mode, the customer is required to submit Packaged Services service requests to SAP via the ticketing/service request system made available to customer for such purpose. Packaged Services Table Available at: https://d.dam.sap.com/s/c/a/9QAybbF/SAP_RR_Service_Package_Detail.pdf
(2) The term "SAP" when used herein refers to SAP as defined in the customer Order Form, and means either SAP or the relevant SAP third-party provider or subcontractor.
Not all tasks or services listed in the 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.
(3) A "Bundled Service" comprises multiple related Standard Services/tasks that are performed sequentially or in parallel to accommodate a maintenance activity in the same timeframe and optimize the ordering and execution. The availability of Bundled Services is indicated in the Service Request Application/SAP for Me.

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. The availability of a specific service may also be limited for sandbox or other test environments.

			ROLES AND RESPONSIBILITIES			
Row	**Identifier**	**Task**	**Responsibility**	**Remarks**	**Package**	**Package Code**
1		**A - Service Management**	**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		**Account Management**				
3	SM_1.1.01	Conduct Delivery and Operations Kick-Off -Review Support Manual -Landscape Review and Scope Alignment -Detailed Engagement and Operations Review	Standard Services		n/a	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		n/a	n/a
5	SM_1.1.03	Capacity Management Planning: Provide periodic capacity plan based on technical capacity management review	Standard Services		n/a	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.	n/a	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		n/a	n/a
8		**Service Request Management - Technical Support**				
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 are subject to the 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. SAP delivery can only assist if/when the customer is unable to create, submit, and/or approve on their own. All Service Requests/Change Requests will still require customer's approval in writing (typically by email). In certain rare cases (e.g., to trigger delivery of already contracted services), SAP delivery personnel can create (but not submit) a service request in the system on behalf of the customer, however the customer must still submit the service request whether it is billable or not. The customer can also send an email confirmation that they want to submit the Service Request in which case SAP delivery personnel can also submit the request by attaching the email approval from the customer. SAP delivery personnel cannot submit a Service Request without written approval from the customer.	n/a	n/a
10	SM_1.2.09	Service Request Management - Receive and acknowledge service requests via the service request platform - Assess criticality/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.	n/a	n/a
11	SM_1.2.11_AE	Create service plan for reoccurring and proactive CAS tasks / Create and maintain service plan for reoccurring and proactive services	Standard Services	Only applicable if CAS packages are part of the contract.	n/a	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.	n/a	n/a
13		**Services to support industry regulations**	**This section does not define a fixed-scope service package but represents an open list of possible services that can be offered to support specific compliance needs; a detailed service scope must be specified in the managed services contract; examples for industry standards that may be addressed with these services are GxP or HIPAA.**			
14		**Qualifications Services**				
15	SM_1.6.02	Qualification deliverables (project and lifecycle documentation)	Optional Services		n/a	n/a
16	SM_1.6.03	Personnel qualification and training as mandatory requirement for administrator access to regulated industries systems	Optional Services		n/a	n/a
17	SM_1.6.04	Onboarding / system set-up with additional Installation Qualification	Optional Services		n/a	n/a
18		**Process Services**				
19	SM_1.6.06	Documents and records management for regulated industries	Optional Services		n/a	n/a
20	SM_1.6.07	Change and configuration management for regulated industries	Optional Services		n/a	n/a
21	SM_1.6.08	Problem management for regulated industries	Optional Services		n/a	n/a
22	SM_1.6.09	Audits and periodic review	Optional Services		n/a	n/a
23	SM_1.6.10	System decommission for regulated industries	Optional Services		n/a	n/a

24		**B - Managed Infrastructure**	**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).** **SAP provides standard software applications that often cross industry boundaries, and because each customer has a unique set of system needs, there are numerous possibilities with regard to different types of business usages and thus sizing KPIs. In a typical sizing project, the customer perform a series of evaluations and tasks to get accurate sizing results.**			
25		**Data Center Management**				
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.	n/a	n/a
27		**Network Management**				
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.	n/a	n/a
29	INFRA_1.2.03	Move an existing system in a Customer landscape to new subnet for the purpose of network segregation	Additional Service	For moving or reconfiguring existing virtual machines from one subnet to another subnet. Does not include Customer Gateway Servers (CGS) - see INFRA_1.2.06 for CGS.	n/a	n/a
30	INFRA_1.2.03A	Provision additional subnets	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.	n/a	n/a
31	INFRA_1.2.03B	Configure communication restrictions between production and non-production tiers and enable micro-segmentation	Additional Service	Can be used if restrictions are needed between tiers or subnets. Customer must provide a 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 customer environment (CID). The Firewall-as-a-Service (FWaaS) offering is suggested if more restriction rules are needed. Restrictions between application and DB servers of the same tier are not in scope and not permitted. SAP service provider access can't be restricted. This item is also used to enable micro-segmentation service for AWS customers. Requires One (1) request per SID and provides Ten (10) additional restriction rules. Implementation of best practices for certain scenarios are available from the service provider representative.	n/a	n/a
32	INFRA_1.2.03C	Move existing virtual machine in a Customer landscape from non-zonal to zonal deployment - Azure only	Standard Services	This service is applicable only for existing customer builds with AvSets. This service allows a conversion of availability sets (non-zonal) to Availability zones. Zonal to non-zonal conversion is not offered on Azure platform. All VMs of a SID need to be converted.	n/a	n/a
33	INFRA_1.2.03D	Prepare Customer landscape for zonal migration - Azure only	Standard Services	This service is applicable only for existing customer builds with AvSets. This service allows a conversion of availability sets (non-zonal) to Availability zones. Zonal to non-zonal conversion is not offered on Azure platform. A complete customer landscape must be migrated within in Six (6) months from service start. After the landscape is prepared for zonal migration, all new builds will be zonal. New AvSet builds are not supported. Additional services may be required such as: Network GW resilience / Storage resilience - and must be checked by Customer and ordered separately.	n/a	n/a
34	INFRA_1.2.04	Modify existing customer connectivity (VPN, MPLS, Cloud Peering, ExpressRoute, Direct Connect, Interconnect, VPC/VNET Peering, etc.).	Standard Services	One (1) ticket per each feature change is required (after initial connectivity is established). Service modifications require downtime.	n/a	n/a
35	INFRA_1.2.06	IP address migration of Customer Gateway Servers (CGS) - Change IP addressing of existing network segment to new IP addressing	Additional Service	For use where the original IP range needs to be changed of a Customer Gateway Servers (CGS). Only offered in SAP data center.	n/a	n/a
36	INFRA_1.2.07	Enable DNS integration of on-premise customer domains into customer DNS servers to resolve on-premise host names	Standard Services	Standard service during initial set-up and onboarding phases only. If required after system handover use INFRA_1.2.11. Supported through DNS forwarding on the DNS server. This task does not add /etc/hosts file entries on individual servers.	n/a	n/a
37	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.	n/a	n/a
38	INFRA_1.2.11	Change DNS configuration	Standard Services	DNS forwarding to Customer on-premise domains; zone transfers to multiple remote sites; and changes to existing DNS config.	n/a	n/a
39	INFRA_1.2.12	Generate shared access key for hyperscalers and allow IP	Standard Services	For brownfield migrations. Allow access to SAP delivered cloud storage to upload on-premise data for migration purposes. Establish connection between on-premise to SAP delivery cloud storage by whitelisting the on-premise public IPs.	n/a	n/a
40		**Hardware Operations**	**Applies to equipment managed by service provider.**			
41	INFRA_1.4.03	Plan and conduct managed service infrastructure maintenance	Standard Services		n/a	n/a
42	INFRA_1.4.05	Monitor critical operations parameters of computing environment	Standard Services		n/a	n/a
43	INFRA_1.4.06	Monitor disk capacity	Standard Services	Subject to additional fees for additional capacity.	n/a	n/a
44	INFRA_1.4.07	Monitor server capacity	Standard Services	Subject to additional fees for additional capacity.	n/a	n/a
45	INFRA_1.4.08	Monitor network utilization	Standard Services		n/a	n/a
46	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).	n/a	n/a
47	INFRA_1.4.11	Scale compute capacity (memory and CPU)	Optional Services		n/a	n/a
48		**Storage Management**				
49	INFRA_1.5.01	Manage data files, file systems and disks per standards and practices	Standard Services	Process flow - additional information available.	n/a	n/a
50	INFRA_1.5.02	Scale storage capacity	Optional Services		n/a	n/a
51	INFRA_1.5.07	Encrypt EBS root volumes	Standard Services		n/a	n/a
52	INFRA_1.5.08	Remove SWAP disk from HANA database machines	Standard Services		n/a	n/a
53		**Operating System**				

54	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.	n/a	n/a
55	INFRA_1.6.04	Inform customer regarding security incidents	Standard Services		n/a	n/a
56	INFRA_1.6.05	Configure OS parameters	Standard Services	Used for various activities such as Time Zone parameter changes/updates.	n/a	n/a
57	INFRA_1.6.06	Troubleshoot operating system problems, monitor system log and file systems	Standard Services		n/a	n/a
58	INFRA_1.6.07	Work with OS vendor to resolve operating system issues	Standard Services		n/a	n/a
59	INFRA_1.6.08	Monitoring of swap and page areas	Standard Services		n/a	n/a
60	INFRA_1.6.09	Monitoring of memory load	Standard Services		n/a	n/a
61	INFRA_1.6.12	Software Lifecycle Management of operating system	Standard Services	Process flow - additional information available. Can be ordered as part of a "Bundled Service".	n/a	n/a
62		**System Startup/Shutdown**				
63	INFRA_1.7.01	Perform scheduled startup/shutdown of computing environment	Standard Services		n/a	n/a
64	INFRA_1.7.03	Restart computing environment after failure	Standard Services		n/a	n/a
65		**Backup/Restore**				
66	INFRA_1.8.01	Perform standard file system and database backups	Standard Services	Per standards, or according to specific terms of the Agreement.	n/a	n/a
67	INFRA_1.8.10	On-demand backup / Extension of existing on-demand backup	Additional Service	Lead time for backup to be aligned in advance. Retention period cannot be more than the contract end date or Twelve (12) months, whichever is earlier. Backups retained for more than Twelve (12) months are not covered in this offering. BLOB (binary large object) storage to be factored additionally as per size requirements using INFRA_1.5.02. Log backups for the database will not be retained.	n/a	n/a
68	INFRA_1.8.09	Long Term Backup: SKU-based, Supplementary Service-based	Optional Services	This service is based on the standard scheduled backup offering as described in Customer's contracted service type: for example, LTB backups from supplementary or SKU-based backups for PCE contracts. Retention period cannot be longer than the contract end date. This service will utilize an online backup mechanism for DB/FS, and log backups for the database will not be retained. Lead times for change request processing are to be factored in when ordering the service, BLOB (binary large object) storage to be factored in as per size requirements.	n/a	n/a
69	INFRA_1.8.11	Monitor backup processes	Standard Services		n/a	n/a
70	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.	n/a	n/a
71	INFRA_1.8.03	Perform data restore and recovery (file system, database) as required after system failures	Standard Services		n/a	n/a
72	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 Twelve (12) restores per SID (target system), per contract year are included. Restorations performed during a system copy count towards this limit. For additional restores use BASIC_1.8.20.	n/a	n/a
73	INFRA_1.8.06	Validate logical integrity and consistency of restored information	Excluded Tasks		n/a	n/a
74		**NFS DB Volume Consistent Snapshot and Restore**	**Tasks and services for NFS are restricted to existing Customers and not currently available for new Customers. Available only in an SAP Datacenter. Note the following restrictions when requesting non-standard fileshare replication. Storage and file count of custom folder/mount must be equal to or less than 512GB and equal to or less than 1 Million respectively.**			
75	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.	n/a	n/a
76	INFRA_1.13.02	Perform ad-hoc NFS DB volume consistent snapshot	Standard Services	Lead time to be aligned in advance.	n/a	n/a
77	INFRA_1.13.03	Perform exceptional ad-hoc NFS DB volume consistent snapshot	Standard Services	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.	n/a	n/a
78	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.	n/a	n/a
79	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	Standard Services		n/a	n/a
80	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.	n/a	n/a
81	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)	Standard Services		n/a	n/a
82	INFRA_1.13.07A	Restore standard flat filesystem NFS volume snapshot (non-DB volumes) - as required after system failures	Standard Services		n/a	n/a
83		**NFS Mount for On-Premise and Hyperscaler**				
84	INFRA_1.14.01	Mount Customer-provided On-Premise and/or Hyperscaler NFS	Standard Services	Only available for NFSv4.1 and higher. Service Level Agreement (SLA) is not applicable to NFS mounts via WAN. May require system restart. Only "soft mount" is supported. Performance and bandwidth monitoring is Customer's responsibility.	n/a	n/a
85		**Infrastructure integration**				
86	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.	n/a	n/a
87	INFRA_1.9.04	Provide access to systems/resources within customer infrastructure	Excluded Tasks	If required to fulfil agreed contractual obligations.	n/a	n/a
88		**File transfer capabilities: CIFS shares**				
89	INFRA_1.10.01	Mount remote customer SMB shares locally on managed landscape Windows clients and Linux clients (aka CIFS)	Standard Services	Within contractually agreed infrastructure capacity. SMB shares on DB servers are not allowed.	n/a	n/a
90	INFRA_1.10.01A	Provide Samba Server Share on managed landscape LINUX server for remote SMB clients	Standard Services	Within contractually agreed infrastructure capacity. Samba Server Share configurations are not allowed on DB servers.	n/a	n/a
91	INFRA_1.10.03	User and access management	Standard Services	Once/initially when share is created.	n/a	n/a
92	INFRA_1.10.04	Create and maintain folder structure on shares	Standard Services		n/a	n/a
93	INFRA_1.10.05	Ensure up-to-date anti-virus protection on end user equipment connecting to the provided shares	Excluded Tasks		n/a	n/a
94	INFRA_1.10.06	Implement virus protection on server	Standard Services		n/a	n/a

95	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.	n/a	n/a
96		**Managed SFTP Server**	**To be installed on existing application server in managed system**			
97	INFRA_1.11.01	Configure sftp daemon	Standard Services	Only available on Linux. External inbound (from internet) is not permitted.	n/a	n/a
98	INFRA_1.11.02_AE	Create and maintain sftp user accounts and groups	Standard Services	Up to Ten (10) users per server.	n/a	n/a
99	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	n/a	n/a
100	INFRA_1.11.03	Manage file systems	Standard Services	Within contractually agreed infrastructure capacity.	n/a	n/a
101	INFRA_1.11.04	Provide user list	Excluded Tasks		n/a	n/a
102	INFRA_1.11.05	Create and delete files	Excluded Tasks		n/a	n/a
103		**Management of Wide Area Network**				
104	INFRA_1.12.01	Provide network infrastructure at customer data center/site	Excluded Tasks		n/a	n/a
105	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.	n/a	n/a
106	INFRA_1.12.03	Determine appropriate size and purchase network connection between customer and managed system sites; manage telecommunication provider/ISP	Excluded Tasks		n/a	n/a
107	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.	n/a	n/a
108	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.	n/a	n/a
109	INFRA_1.2.05_PCE_AZ	Deploy customer connectivity options in SAP Datacenters and Hyperscalers	Standard Services	Allotment is based on regional Hyperscaler. Site-to-Site VPN Connections: Five (5) Private Connectivity: Azure: One (1) ExpressRoute 1 Gbit/s gateway package with 200 Mbit/s port speed and 2 TB egress traffic VPC/VNet Peering: One (1) Peering. Applicable only for Hyperscalers (public cloud providers). Two (2) TB egress limit. Customer can purchase additional connections for any connectivity requirements higher than the quantity above.	n/a	n/a
110	INFRA_1.2.05_PCE_GCP	Deploy customer connectivity options in SAP Datacenters and Hyperscalers	Standard Services	Allotment is based on regional Hyperscaler. Site-to-Site VPN Connections: Five (5); Note: Two (2) TB egress limit for all deployment scenarios. Private Connectivity: GCP: One (1) (redundant) Partner Interconnect 200 Mbit/s package with 2 TB egress traffic. VPC/VNet Peering: One (1) Peering. Applicable only for Hyperscalers (public cloud providers). Two (2) TB egress limit. Customer can purchase additional connections for any connectivity requirements higher than the quantity above.	n/a	n/a
111	INFRA_1.2.05_PCE_SAPDC	Deploy customer connectivity options in SAP Datacenters and Hyperscalers	Standard Services	Allotment is based on selected Hyperscaler. Site-to-Site VPN Connections: SAP Datacenter: Five (5). Note: Two (2) TB egress limit for all deployment scenarios. Private Connectivity: SAP Datacenter: One (1) MPLS local extension link of 1 or 10 G between Customer MPLS routers and SAP delivered internal routers, and One (1) Cloud Peering connection up to 400mbps. VPC/VNet Peering: One (1) Peering. Applicable only for Hyperscalers (public cloud providers). Two (2) TB egress limit. In case of S/4HANA Cloud, private edition, base option: Currently applicable for SAP Datacenter only. Allowed options - One (1) redundant Site-to-Site VPN OR One (1) MPLS up to 1Gbps OR One (1) Cloud Peering up to 400Mbps. Customer can purchase additional connections for any connectivity requirements higher than the quantity above.	n/a	n/a

112	INFRA_1.2.05_PCE_AWS	Deploy customer connectivity options in SAP Datacenters and Hyperscalers	Standard Services	Allotment is based on regional Hyperscaler. Site-to-Site VPN Connections: Amazon Web Services (AWS): Five (5) Private Connectivity: AWS: One (1) Direct Connect 200 Mbit/s package with 2 TB egress traffic VPC/VNet Peering: One (1) Peering. Applicable only for Hyperscalers (public cloud providers). Two (2) TB egress limit. In case of S/4HANA Cloud, private edition, base option: Currently applicable for SAP Datacenter only. Allowed options - One (1) redundant Site-to-Site VPN OR One (1) MPLS up to 1Gbps OR One (1) Cloud Peering up to 400Mbps. Customer can purchase additional connections for any connectivity requirements higher than the quantity above.	n/a	n/a
113	INFRA_1.2.05_PCE_CN	Special Remark for China Deploy customer connectivity options in SAP Datacenters and Hyperscalers	Standard Services	Special Remark for China	n/a	n/a
114		**Firewall-as-a-Service (FWaaS)**	**Firewall as a Service (FWaaS) brings UTM-based firewall technology to customer landscapes on Hyperscalers and includes features such as advanced traffic filtering, intrusion prevention (IPS) and bot detection. The service is fully managed by the Service Provider, but customers will have the possibility to request new rules to be added to their firewall or existing rules deleted. Customers can also request an export of their rulebase. FWaaS does not take over firewalling responsibilities for customers in their respective on-premise landscapes. The scope of FWaaS is to filter traffic within the SAP delivered Private Cloud Landscape where customers cannot do this by themselves. Customers are still required to filter on their side which user/server is allowed to go the landscape. FWaaS usually accepts all connectivity from customer networks as checked and trusted. FWaaS has been designed to fit easily and smoothly into new and existing environments while being as transparent to configuration efforts as possible. Customers may be required to perform some technical reconfigurations on their side.**				
115	FWAAS_1.1.01	Install Network Virtual Appliance	Optional Services	Base FWaaS installation.	n/a	n/a
116	FWAAS_1.1.02	Modify firewall rulebase	Standard Services	Adding/removing rules or modifying existing rules. Requests are limited to Two (2) changes per workweek with a maximum of Ten (10) rule changes per request. This task is included only if the Firewall-as-a-Service (FWaaS) offering is included in the base customer contract or later added as a Change Request.	n/a	n/a
117	FWAAS_1.1.03	Export Customer rulebase	Optional Services	Limited to One (1) rulebase export per month.	n/a	n/a
118		**C1 - Database Management SAP HANA**				
119		**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.**			
120	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.	n/a	n/a
121	HANA_1.1.01	Plan and perform file system extensions for e.g. backup activities	Standard Services	Additional infrastructure consumption requires a CR.	n/a	n/a
122	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.	n/a	n/a
123	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.	n/a	n/a
124	HANA_1.1.04	Partition tables (technical execution)	Standard Services	Task to be performed by Service Provider Only; cannot be performed by Customer. If partitioning is required due to extensive table growth, the Standard Service includes the partitioning of only One (1) table per SID, per contract year, whether the request is for online or offline table partition. Requests for the creation of empty partitions shall be submitted by the Customer and will be treated as standard services. Any additional partitioning requests will be billed separately under HANA_1.1.35.	n/a	n/a
125	HANA_1.1.35	Partition tables (technical execution) - additional requests	Additional Service	Efforts for additional table partition requests.	n/a	n/a
126	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).	n/a	n/a
127	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.	n/a	n/a

128	HANA_1.1.37	Database Defragmentation (Data Volume Reclamation)	Standard Services		n/a	n/a
129	HANA_1.1.38	Row Store reorganization	Standard Services		n/a	n/a
130	HANA_1.1.06	Monitor database for technical issues; analyze and resolve technical database failures	Standard Services		n/a	n/a
131	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		n/a	n/a
132	HANA_1.1.08	Maintain technical configuration parameters for SAP HANA and SAP HANA XS based on and standards and recommendations	Standard Services		n/a	n/a
133	HANA_1.1.09	Start/stop database	Standard Services		n/a	n/a
134	HANA_1.1.10	Add/remove SAP HANA node to adjust SAP HANA capacity	Optional Services	For HANA scale-out configurations only.	n/a	n/a
135	HANA_1.1.28	Create additional schema for existing SAP HANA datamart	Standard Services		n/a	n/a
136	HANA_1.1.26	Change SAP HANA database architecture (single node to multi node or vice versa)	not offered		n/a	n/a
137	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.	n/a	n/a
138	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.	n/a	n/a
139	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. Can be ordered as part of a "Bundled Service".	n/a	n/a
140	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.	n/a	n/a
141	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.	n/a	n/a
142	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.	n/a	n/a
143	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		n/a	n/a
144	HANA_1.1.17	Create/modify users for HANA modelling in the SAP HANA Studio	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
145	HANA_1.1.18	User, roles, and permissions management for non-technical users	Packaged Services	Customer has ownership and responsibility for SAP HANA role CUST_USER_ROLE_ADMIN.	Application Operations, User Management,CAS for Cloud ERP private	A1,S2,C1
146	HANA_1.1.19	User, roles and permissions management for technical and administration users	Standard Services	Process flow - additional information available. 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.	n/a	n/a
147	HANA_1.1.20	Perform database backups (regular full backups and log backups)	Standard Services	Per backup policy.	n/a	n/a
148	HANA_1.1.21	Restore and recover SAP HANA after technical issues	Standard Services		n/a	n/a
149	HANA_1.1.30	Perform database consistency check (DBCC)	Standard Services		n/a	n/a
150	HANA_1.1.32	Export/Import of database schema	Excluded Tasks		n/a	n/a
151	HANA_1.1.23	Implement SAP HANA database encryption on SAP HANA database already installed during Operations	Standard Services	Enable encryption on systems in operation. Downtime should not be required but may be in extreme cases; potential additional storage consumption is subject to a change request (CR). Applicable for SAP HANA Platform 2.0 SPS 07 or higher systems. Downtime may be needed for lower versions.	n/a	n/a
152	HANA_1.1.24	Implement SAP HANA database encryption on SAP HANA database already installed during Build	Standard Services	Encryption enabled by default for SAP HANA Platform 2.0 SPS 07 or higher systems. For SAP HANA Platform 2.0 SPS 05, encryption enabled at system build only if it has been requested.	n/a	n/a
153	HANA_1.1.39	Implement SAP HANA log encryption on SAP HANA database already installed	Standard Services		n/a	n/a
154	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.	n/a	n/a
155	HANA_1.1.41	Activate SAP HANA Fast Restart Option	Standard Services		n/a	n/a
156	HANA_1.1.42	Deactivate SAP HANA Fast Restart Option	Standard Services		n/a	n/a
157	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.	n/a	n/a
158	HANA_1.1.44	System (OS Level) configuration to enable SSL/TLS on HANA	Standard Services		n/a	n/a

159	HANA_1.1.45	Refresh test data	Additional Service	Copies application data based on business objects from Production (PRD) to Non-Production environment for testing purposes. Minimum required software version is S/4HANA 2023.	n/a	n/a
160	HANA_1.1.46	Workload Management	Standard Services	Workload class configuration is intended for the Customer to perform. However, the Customer can request that the Service Provider perform this task; the Customer must provide the configuration, thresholds, and values in the service request.	n/a	n/a
161	HANA_1.1.47	Migration Services - Database Migration Option (DMO)	Additional Service	Additional infrastructure is required and must be ordered separately. (Formerly SAP ASE database to SAP HANA database - in-place migration)	n/a	n/a
162		**SAP HANA XS**				
163	HANA_1.2.01	Maintain technical configuration parameters for SAP HANA XS based on SAP standards and recommendations	Standard Services		n/a	n/a
164	HANA_1.2.02	Maintain Application Runtime Configurations	Standard Services		n/a	n/a
165	HANA_1.2.03	Manage Trust Relationships	Standard Services		n/a	n/a
166	HANA_1.2.04	Maintain SAML Providers	Standard Services		n/a	n/a
167	HANA_1.2.05	Maintain SMTP Server Configurations	Standard Services		n/a	n/a
168	HANA_1.2.06	Maintain HTTP Access to SAP HANA	Standard Services		n/a	n/a
169	HANA_1.2.08	Maintain User Self Service Tools	Standard Services		n/a	n/a
170	HANA_1.2.09	Schedule XS Jobs	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
171	HANA_1.2.11	Maintain HTTP Traces for SAP HANA XS Applications	Standard Services		n/a	n/a
172		**SAP HANA XSA**	**SAP HANA XSA is a separate technical component and not part of a standard installation of an SAP HANA database; SAP HANA XSA needs to be explicitly included/scoped in the initial contract or subsequent Change Request (CR).**			
173	HANA_1.9.01	Install along with HANA Server	Optional Services		n/a	n/a
174	HANA_1.9.02	Install XSA Components as an add-on for already installed HANA Server	Optional Services		n/a	n/a
175	HANA_1.9.04	Set-up/Configure XSA for HANA Development at customer side	Excluded Tasks		n/a	n/a
176	HANA_1.9.05	Configure XS-CLI Tool for HANA Development	Excluded Tasks		n/a	n/a
177	HANA_1.9.06	User management for HANA Development	Excluded Tasks		n/a	n/a
178	HANA_1.9.07	Monitoring of XSA services and its applications	Standard Services	Super set will be included in monitoring if selected.	n/a	n/a
179	HANA_1.9.08	Set-up Logical database (Register Tenant Database)	Standard Services		n/a	n/a
180	HANA_1.9.10	Backup and restore of XSA specific files	Standard Services		n/a	n/a
181	HANA_1.9.11	Web Dispatcher configuration for the applications installed by service provider and built by customers	Standard Services		n/a	n/a
182	HANA_1.9.13	Support customer built applications	Excluded Tasks		n/a	n/a
183	HANA_1.9.14	Availability monitoring of customer built applications	Excluded Tasks		n/a	n/a
184	HANA_1.9.15	Backup of custom applications if using file system storage	Standard Services		n/a	n/a
185	HANA_1.9.16	Restore of customer built applications using file system storage provided the backup has been enabled prior	Standard Services		n/a	n/a
186	HANA_1.9.17	Post-restore task checking and connection of custom applications	Excluded Tasks		n/a	n/a
187	HANA_1.9.19	Upgrade XSA	Standard Services	Includes add-ons.	n/a	n/a
188	HANA_1.9.20	Customer-specific pre and post-activity for XSA upgrades	Excluded Tasks		n/a	n/a
189		**SAP HANA: Smart Data Integration (Formerly Enterprise Information Management - EIM)**	**Extended feature beyond the standard service scope.**			
190	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.	n/a	n/a
191	TO_HANA_SDI_1.1.02 A	Install, configure, and register Data Provisioning Agents	Standard Services	Provided for DP Agents as part of the contract/SOW/Order Form and/or for DP Agents that were added with a contractual Change Request. For additional DP Agents see TO_HANA_SDI_1.1.02. Note: Agent registration is the Customer's responsibility for HANA as the target in an SAP BTP deployment scenario.	n/a	n/a

192	TO_HANA_SDI_1.1.02	Install, configure, and register Data Provisioning Agents - Additional Agents	Optional Services	For additional DP Agents. Requested for either additional tier or for High-Availability (HA) setup. Note: Agent registration is the Customer's responsibility for HANA as the target in an SAP BTP deployment scenario.	n/a	n/a
193	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.	n/a	n/a
194	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.	n/a	n/a
195	TO_HANA_SDI_1.1.06	Administration of Agile Data Preparation (ADP)	Packaged Services	Setting Export Options, worksheet expiration, password features, warehouse workspace, and size and policy for queues.	Application Operations, CAS for Cloud ERP private	A1,C1
196	TO_HANA_SDI_1.1.07	Set-up replications, federation and transformations	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
197	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.	n/a	n/a
198	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.	n/a	n/a
199	TO_HANA_SDI_1.1.10	DP Agent - High Availability set-up	Optional Services	DP Agent can be configured in High Availability mode by introduction of agent group, comprising of additional agent instances (not available for target cloud HANA connections); included only if explicitly mentioned in the contract,	n/a	n/a
200	TO_HANA_SDI_1.1.11	Deploy standard adapters with SAP HANA	Standard Services	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters delivered with DP Agent installation.	n/a	n/a
201	TO_HANA_SDI_1.1.12	Deploy custom adapters with SAP HANA	Standard Services	See the SDI guide on the SAP Help Portal for a list of standard and custom adapters.	n/a	n/a
202	TO_HANA_SDI_1.1.13	Monitor Data Provisioning tasks and remote subscriptions	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
203	TO_HANA_SDI_1.1.14	Process remote subscription exceptions	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
204	TO_HANA_SDI_1.1.15	Re-connect DP Agent	Standard Services	Disconnect the agent from the current target HANA database and register it with a new one. Adapter related activities (start, stop) are Customer's responsibility.	n/a	n/a
205		**Capture and Replay**	**Extended feature beyond the standard service scope.**			
206	TO_HANA_CR_1.1.01	Prepare capture in source system	Optional Services	Import Delivery units, set-up users and roles.	n/a	n/a
207	TO_HANA_CR_1.1.02	Start capture	Optional Services	Customer must ensure sufficient capacity to store capture of workload; capacity extension requires change request (CR).	n/a	n/a
208	TO_HANA_CR_1.1.03	Set-up replay in target system	Optional Services	Import Delivery units, set-up users and roles.	n/a	n/a
209	TO_HANA_CR_1.1.04	Configure replayer service	Optional Services	Configure replayer service.	n/a	n/a
210	TO_HANA_CR_1.1.05	Preprocess and replay in target system	Optional Services		n/a	n/a
211		**SAP HANA: Accelerator for SAP ASE (AFA)**	**Will be deprecated by 2027.**			
212		**Operational Set-up**				
213	TO_AFA_1.1.01	Install Accelerator for SAP ASE Package	Standard Services	HANA - AFA package is installed on the SAP HANA DB node.	n/a	n/a
214	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.	n/a	n/a
215	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.	n/a	n/a
216	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.	n/a	n/a
217	TO_AFA_1.1.05	Enable Pushdown Optimization	Standard Services	AFA pushdown optimization is enabled on AFA nodes.	n/a	n/a
218	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.	n/a	n/a
219	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.	n/a	n/a
220	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.	n/a	n/a
221	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.	n/a	n/a
222		**SAP ASE AFA - Other Services**				
223	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.	n/a	n/a

224	TO_AFA_1.2.03	Monitor Accelerator for ASE Pushdown Statements	Excluded Tasks	Monitoring Accelerator for ASE objects including pushdown statements using HANA Cockpits.	n/a	n/a
225		**SAP HANA Native Storage Extension (NSE)**	**NSE is enabled by default on systems running HANA 2.0 SP04 or later. Customer is responsible for evaluating and requesting additional disk space for persistent storage. Additional storage for warm data must be included as part of contract or added as part of a Change Request (CR).**			
226	TO_NSE_1.1.01	Change buffer cache size	Standard Services	Does not include calculating appropriate buffer cache size; Customer must provide buffer cache size. Change Request (CR) required if additional storage is needed.	n/a	n/a
227		**Pacemaker High Availability Set-up**	**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).**			
228	TO_HANA_PM_1.1.01	Install SUSE Cluster (Pacemaker) package	Optional Services	For HANA 2.0 or SAP NetWeaver application servers.	n/a	n/a
229	TO_HANA_PM_1.1.01A	Convert non-Pacemaker System to Pacemaker based System	Optional Services	Convert existing system to Pacemaker combines all activities to restructure existing system to the target Pacemaker HA architecture and install/configure Pacemaker on top according to the Service Provider standards. Conversion is executed during a Customer provided downtime window. As a prerequisite, Customer needs to order all required infrastructure for the target Pacemaker/HA system deployment as well as the related Pacemaker packages (SBD, Cluster and Majority Maker if required). Change Request required.	n/a	n/a
230		**C2 - Database Management**	**Excluding SAP HANA and Sybase IQ which are described in the respective sections.**			
231		**Database operations**				
232	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.	n/a	n/a
233	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.	n/a	n/a
234	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.	n/a	n/a
235	DB_1.1.20	Monitor database for technical issues; analyze and resolve technical database failures	Standard Services		n/a	n/a
236	DB_1.1.24	System troubleshooting, e.g. blocked transactions to overcome issues and bring database back to normal state of operations	Standard Services		n/a	n/a

237	DB_1.1.05	Schedule periodic statistical database collectors to generate statistical performance data	Standard Services		n/a	n/a
238	DB_1.1.06	Perform reorganization to remove database fragmentation	Standard Services		n/a	n/a
239	DB_1.1.07	Maintain database parameters - static and dynamic	Standard Services	Based on vendor recommendations and standards.	n/a	n/a
240	DB_1.1.21	Start/stop database	Standard Services		n/a	n/a
241	DB_1.1.11	Perform upgrades of database software	Standard Services	Process flow - additional information available. Can be ordered as part of a "Bundled Service".	n/a	n/a
242	DB_1.1.12	Apply database patches	Standard Services	Process flow - additional information available. Can be ordered as part of a "Bundled Service".	n/a	n/a
243	DB_1.1.13	Perform database backups (regular database and log backups)	Standard Services	Per backup policy.	n/a	n/a
244	DB_1.1.14	Restore and recover database after technical issues	Standard Services		n/a	n/a

245	DB_1.1.22	Perform database consistency check (DBCC)	Standard Services		n/a	n/a
246	DB_1.1.25	Create indexes for application tables	Standard Services		n/a	n/a
247	DB_1.1.26	Shrink database	Additional Service	Valid only for Sybase ASE.	n/a	n/a
248	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.	n/a	n/a
249		**SAP ASE Database**				
250	DB_1.1.18	Implement SAP ASE database encryption on SAP ASE database already installed in cloud	Standard Services	No downtime required.	n/a	n/a
251	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.	n/a	n/a
252		**IBM Db2**				
253	DB_DB2_1.1.01	Install and/or update Db2 client	Standard Services		n/a	n/a
254	DB_DB2_1.1.02	Implement Db2 database encryption on Db2 database already installed during Operations	Standard 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).	n/a	n/a
255	DB_DB2_1.1.03	Implement Db2 database encryption on Db2 database already installed during Build	Standard Services	Encryption is enabled at system build only if it has been requested.	n/a	n/a
256	DB_DB2_1.1.04	Manage standby databases (Db2 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.	n/a	n/a
257	DB_DB2_1.1.05	Manage standby databases (Db2 System Replication) for Disaster Recovery (DR)	Standard Services	Disaster Recovery is an Optional Service and is only provided in the managed service if Disaster Recovery is part of the contract/SOW/Order Form and/or added with a Change Request.	n/a	n/a
258	DB_DB2_1.1.06	Integrate Db2 system in the DBA Cockpit	Standard Services		n/a	n/a
259	DB_DB2_1.1.07	Check growing tables and provide recommendations for archiving or reorganization	Excluded Tasks		n/a	n/a
260	DB_DB2_1.1.08	Reorganize Tables (Technical Execution)	Standard Services	Automatic table reorganization done via scheduled jobs. Additional requests can be made via DB_DB2_1.09.	n/a	n/a
261	DB_DB2_1.1.09	Reorganize Tables (Technical Execution) - Additional Requests	Additional Service	Used for additional requests for DB_DB2_1.08. Any additional table reorganization to be done manually other than the ones that are scheduled for automatic reorganization via job.	n/a	n/a
262	DB_DB2_1.1.10	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.	n/a	n/a
263	DB_DB2_1.1.11	Create tablespace	Standard Services	Tablespace layout created initially during system build.	n/a	n/a
264	DB_DB2_1.1.12	Create additional tablespace and/or table movement (Technical Execution)	Additional Service	Used to request any change in tablespace layout and new tablespace configuration. Changes must be decided and provided by customer. Tables to be moved to be decided and provided by customer.	n/a	n/a
265	DB_DB2_1.1.13	Data Storage: DB specific encryption keys	Standard Services	Backup and maintenance of the keystore	n/a	n/a
266	DB_DB2_1.1.14	Change: DB specific encryption keys	Standard Services	Change the keys upon request by customer	n/a	n/a
267	DB_DB2_1.1.15	User, roles and permissions management for DB technical and administration users required for regular operations	Standard Services		n/a	n/a
268		**D - Core Technical Operations**				
269		**System Installation**				
270	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.	n/a	n/a

271	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. Some examples where this Identifier is utilized include changing the IP Address or existing system SID or changing the implementation type from Greenfield to Brownfield or vice versa etc.	n/a	n/a
272	BASIC_1.8.25_A	System Rebuild – SAP NetWeaver and other database-based solutions (e.g., SAP S/4HANA, SAP BW, SAP CRM, SAP BusinessObjects (BOBJ), etc. greenfield/skeleton	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.	n/a	n/a
273	BASIC_1.8.25_B	System Rebuild - Breakup small (non-DB solutions, e.g., DNS, Web Dispatcher, cloud Connector, etc.)	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.	n/a	n/a
274	BASIC_1.8.25_C	System Rebuild - Breakup SAP Solution Manager (SOLMAN)Solman - greenfield and/or brownfield	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.	n/a	n/a
275	BASIC_1.8.25_D	System Rebuild - Breakup additional and/or redo SAP Fiori launchpad, TMS, and/or Adobe setup	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.	n/a	n/a
276	BASIC_1.8.25_E	System Rebuild - Breakup additional and/or redo of Best Practice enablement or EML/MC deployment	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.	n/a	n/a
277	BASIC_1.8.25_F	Deploy SAP Template Solution after initial build	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.	n/a	n/a
278	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.	n/a	n/a
279	BASIC_1.8.27	Update license for managed software solution	Standard Services	Update installation numbers and corresponding license (e.g. ABAP, Java, SAP BOBJ system with any database or HANA stand-alone database, etc.)	n/a	n/a
280	BASIC_1.8.15	Basic Technical Configuration of SAP BW/4HANA Systems	Standard Services	For ABAP Greenfield set-ups only.	n/a	n/a
281	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.	n/a	n/a
282	BASIC_1.5.01	Customize and configure application, maintain application, application support and application troubleshooting	Packaged Services	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.	Application Management,CAS for Business Data Cloud	F1,C2
283	BASIC_1.8.03	Integrate installed systems into cloud operations environment	Standard Services	Performed One (1) time for each entirely new system. If the initial set-up is a migration, One (1) additional test run of the production (PRD) system is included. If the initial set-up is a conversion to S/4HANA, Two (2) additional test runs are included: One (1) for a non-production (QAS, DEV, etc.) system and One (1) for the productive (PRD) system). 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.	n/a	n/a
284	BASIC_1.8.03A	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. For Brownfield Post Processing Dry Run PROD in cutover mode (during 24x7). Additional PRD mock test in cutover mode and/or upgrade of SAP delivered post processing of a Non-PRD (DEV/QAS) system to cutover mode execution.	n/a	n/a
285	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.	n/a	n/a
286	BASIC_1.8.22A	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.	n/a	n/a
287	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.	n/a	n/a
288	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; 3) Pre-arranged activities that can reduce the number of action items required during the post processing execution.	n/a	n/a

289	BASIC_1.8.20_HC	Hypercare - project safeguarding 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. See separate service description document for details. A planning window of at least Twenty-One (21) business days required.	n/a	n/a
290	BASIC_1.8.20_NPA	Active entitlement for Non-Productive Systems weekend support - initial system setup	Additional Service	Availability of service and request to be validated with Service Provider. Used for original/initial contract system setup. Customer can request this during initial contract.	n/a	n/a
291	BASIC_1.8.20_SRA	Service Request Acceleration	Additional Service	Service to safeguard critical phases of a service solution lifecycle by executing a series of checks and monitoring routines during and after the service delivery. This service addresses customer requests for a significant reduction of service request lead times.	n/a	n/a
292	BASIC_1.8.20_SRA_1	Service Request Acceleration Option 1: 5 Business Days - Does NOT include weekend service requests	Additional Service	Service to safeguard critical phases of a service solution lifecycle by executing a series of checks and monitoring routines during and after the service delivery. This service addresses customer requests for a significant reduction in service request lead times.	n/a	n/a
293	BASIC_1.8.20_SRA_2	Service Request Acceleration Option 2: 5 Business Days and Weekend - 24/7 Hours	Additional Service	Service to safeguard critical phases of a service solution lifecycle by executing a series of checks and monitoring routines during and after the service delivery. This service addresses customer requests for a significant reduction in service request lead times.	n/a	n/a
294	BASIC_1.8.05	Configure application related connection to technical systems managed by the customer	Packaged Services	Create connections to satellite systems.	Application Operations, CAS for Cloud ERP private	A1,C1
295	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.	n/a	n/a
296	BASIC_1.8.14A	Implementation of SAP Best Practices and similar packages for additional countries	Packaged 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 per request 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.	Application Operations, CAS for Cloud ERP private	A1,C1
297	BASIC_1.8.14B	Activate model company for SAP Business Suite (formerly SAP Standard Content - SSC)	Optional Services	Formerly known as SAP Standard Content (SSC). Customer to inform Service Provider of the required scope for the activation of one or more model company bundle(s) offered in the model company bundle for SAP Business Suite using instructions in SAP Note 3631601. A DB copy will be provided - Customer is responsible for installing the DB copy. SAP recommends installing the DB copy on a fresh/clean sandbox. Conditions and available bundles are explained in SAP Note 3631601.	n/a	n/a
298	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.	n/a	n/a
299	BASIC_1.8.21	Install ODBC Drivers to connect to external databases	Standard Services	On SLT/HANA SDS/BOBJ; customer needs to provide required software including appropriate usage rights for an installation in cloud; customer needs to provide specification for required connection (e. g. SSL/TLS).	n/a	n/a
300	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.	n/a	n/a
301	BASIC_1.8.10	Data handover from service provider to customer - one time during offboarding/end-of-contract only	Standard Services	Delivered One (1) time per contract duration period as part of the offboarding/termination process. Efforts for a One (1) time data handover (creation of export/backup using SAP standard tools and transfer to storage) as part of a contract or system termination are included in the service. Planning, coordination, transfer to storage, and all associated costs are Customer's responsibility. Any other occurrence of data handover during an active contract phase is an additional service using BASIC_1.8.13.	n/a	n/a
302	BASIC_1.8.13	Data handover from Service Provider to customer - for requests during active contract	Additional Service	Requests for additional data handover (creation of export or copy of existing backup using SAP Tools to Customer storage) during active contract. Planning, coordination, transfer to storage, and all associated costs are the Customer's responsibility. Note: One (1) time final data handover is a separate service and is already included under Identifier BASIC_1.8.10 for offboarding/contract termination scenarios.	n/a	n/a

303	BASIC_1.8.13A	Data handover from service provider to customer - additional requests for SAP HANA database backup or for filesystem only	Additional Service	Requests for additional data handover (creation of export/backup or copy of existing backup to Customer storage) during active contract. Planning, coordination, transfer to storage, and all associated costs are the Customer's responsibility. Note: One (1) time handover is included as a Standard Service per BASIC_1.8.10 for offboarding/contract termination. This Service includes only the SAP HANA database backup or the data handover from Service Provider to customer for the filesystem.	n/a	n/a
304		**Incident Management**				
305	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. Further details are described in the Support Schedule for Cloud Services available from the SAP Trust Center.	n/a	n/a
306	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		n/a	n/a
307	BASIC_1.16.03	Sign-off/Approve solution and confirm incident resolution	Excluded Tasks		n/a	n/a
308		**Event detection and notification ("monitoring")**				
309	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.	n/a	n/a
310	BASIC_1.7.07	Monitor critical business transactions	Packaged Services	Manual monitoring; effort based per execution.	Customer Application Monitoring	M2
311		**General Operations**				
312	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.	n/a	n/a
313	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.	n/a	n/a
314	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.	n/a	n/a
315	BASIC_1.1.16	Maintain application parameters – static and dynamic	Standard Services	Process flow - additional information available. 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.	n/a	n/a
316		**SAP Security Management**				
317	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.	n/a	n/a
318	BASIC_1.2.23	Define and implement application and infrastructure security concept	Standard Services		n/a	n/a
319	BASIC_1.2.19	Customer specific Security Audit Log analysis	Packaged Services		Audit Readiness	S4
320	BASIC_1.2.20	Analyze the SAP system and identify relevant SAP security notes	Packaged Services	Security notes for installed systems can be evaluated and analyzed to identify critical notes relevant for the ABAP-stack. This task is automatically delivered if the Customer has relevant Cloud Application (CAS) Package(s). Customers without relevant CAS Package(s) need to evaluate and analyze security notes on SAP for Me (formerly known as the ONE Support Launchpad). Customers are also responsible for analyzing related SAP Knowledge Base Articles (KBAs) and determining if the KBAs should be applied. If needed, a Service Request can be created using BASIC_1.2.27 to request implementation of the security note(s) that are not application-related.	Application Security Updates,CAS for Cloud ERP private	S1,C1
321	BASIC_1.2.27	Implement SAP Security Notes - SAP Basis / ABAP related	Standard Services	Implement SAP Security Notes for SAP Basis without manual activities. This task is automatically delivered if Customer has relevant CAS Package(s). Customers without relevant CAS Package(s) can check security notes on SAP for Me (formerly known as the ONE Support Launchpad) and create a Service Request to implement note(s).	n/a	n/a
322	BASIC_1.2.28	Implement relevant SAP Security Notes - Application related (ABAP and JAVA stack only)	Packaged Services	Relevant SAP Security Notes with and without manual activities will be analyzed and implemented in DEV systems. Perform transport of implemented Notes to QAS and PROD systems (for ABAP stack only). Analyze relevant Security Notes for Java and create service request on behalf of Customer to initiate implementation of required Java components. Testing of implemented Notes is Customer's responsibility.	Application Security Updates,CAS for Cloud ERP private	S1,C1
323	BASIC_1.2.18	Administer users (creation, change, delete, lock, unlock)	Packaged Services		User Management,CAS for Cloud ERP private	S2,C1
324	BASIC_1.2.18A	Administer roles, like role creation and role change	Packaged Services		Roles and Authorizations	S10
325	BASIC_1.2.15	Maintain user profiles, roles, authorizations, source data and passwords in client 000	Standard Services		n/a	n/a
326	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.	n/a	n/a

327	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.	n/a	n/a
328	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.	n/a	n/a
329	BASIC_1.2.21	Provide audit log information to customers	Excluded Tasks	Customers can manage/archive logs per SAP Note 3137004. The default configuration for the audit recording target is "Record in Database" and is the only supported method. Recording the target as "File System" is not permitted.	n/a	n/a
330	BASIC_1.2.26_AE	Update Global Change parameters (SE06) and default system settings (SCC4)	Standard Services		n/a	n/a
331	BASIC_1.2.31	Security for Interface	Packaged Services	Provides guidance for secure access to remote function call (RFC) modules by implementing a secure framework for RFC modules and restricting access to needed modules only.	Security for Interface	S7
332	BASIC_1.2.32	Application Security Monitoring	Packaged Services	Monitor Customer's applications related to security statuses. Report Security KPIs and remediation activities.	Application Security Monitoring,CAS for Cloud ERP private	S8,C1
333	BASIC_1.2.37	Configure SAP delivered UCON CA (Unified Connectivity Communication Assembly) for Client 000	Standard Services	Customer owns the configuration of UCON (via T-code UCONCOCKPIT) from Business Client. Customer implements the UCON configuration (customer Default CA list of RFMs). Customer must raise a Customer Service Request for SAP delivered UCON CA configuration which automatically triggers an automation to deploy the SAP delivery CA allowlist.	n/a	n/a
334		**Security - General**				
335	BASIC_2.1.01	Deploy Azure Key Vault Managed HSM (Hardware Security Module)	Optional Services	Safeguard cryptographic keys for cloud applications. Additional infrastructure required. Operating System driver maintenance is included as part of the service.	n/a	n/a
336	BASIC_2.1.02	Manage cryptographic keys	Standard Services	Applicable to systems managed by SAP delivery. This task provides for automatic key rotation every One (1) year, archives the previous key, and enforces a key expiration policy of Three (3) years. Key management applies specifically at the storage layer and includes all types of storage: object storage, block/volume storage, and file shares, and is applicable to SAPDC and to the following hyperscalers: Azure, AWS, and GCP.	n/a	n/a
337		**SAP Infrastructure and Application Logging service (LogServ)**				
338	BASIC_1.2.33	Enable SAP Infrastructure and Application Logging service (LogServ) for systems within SAP delivered systems	Optional Services	SAP delivered systems only. The SAP Infrastructure and Application Logging service (LogServ) allows for centralization, real-time collection, retention, and recovery of logs for systems, applications and other services.	n/a	n/a
339	BASIC_1.2.34	LogServ activities on Customer SIEM	Excluded Tasks	Service does not include the following activities in Customer SIEM: validation and confirmation of receiving logs; creating correlation rules; or monitoring of offenses.	n/a	n/a
340		**SAP Infrastructure and Application Security Service (RAVEN)**	**SAP delivered systems only.**			
341	BASIC_1.2.35	Enable RAVEN within SAP delivered systems	Optional Services	For SAP delivered systems only. Provides centralized security monitoring, vulnerability assessment, compliance reporting, SAP application threat analytics, and enriched security dashboards via the SAP delivery Security Portal.	n/a	n/a
342	BASIC_1.2.36	Activities within Customer SIEM, SOC, or external analytics platforms	Excluded Tasks	RAVEN provides enriched security telemetry and reports via object storage and the SAP delivery Security Portal. Integration, correlation rule creation, alert tuning, incident response, threat hunting, dashboard customization, and operationalization within the Customer's SIEM or SOC platform remain the customer's responsibility.	n/a	n/a
343		**Homogeneous system copy (aka System refresh)**	**A homogenous system copy is defined either as 1) a new system which is built as copy from an existing system in a landscape within the same data center or hyperscaler platform or 2) a "data refresh" overwriting the database of an already existing system in the landscape within the same data center or hyperscaler platform.** **Copies for non-NetWeaver systems 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. Note: Operating System and Database versions across Source and Target System must be the same.**			
344	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 and the system is live (with the according status displayed all the tools).	n/a	n/a
345	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	Packaged Services	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, CAS for Cloud ERP private	A1,C1
346	BASIC_1.3.10B	Homogeneous system copy for ABAP systems - 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	Process flow - additional information available. Up to Twelve (12) refreshes per SID, per contract year, are included; additional refreshes are available as a chargeable request. Only available after initial build phase is complete and the system is live (with the according status displayed all the tools). 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 Additional Service. Does not include activities such as data masking, scrambling etc. Customer must check to make sure there is sufficient storage on server to complete service.	n/a	n/a
347	BASIC_1.3.10B1	Homogeneous system copy for ABAP systems - additional requests	Additional Service	Requests for additional refreshes beyond entitlement noted in BASIC_1.3.10B for ABAP systems.	n/a	n/a

348	BASIC_1.3.10C	Homogeneous system copy for non-ABAP systems - 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	Process flow - additional information available. Up to Two (2) refreshes per SID, per contract year, are included; additional refreshes are available as a chargeable request. Only available after initial build phase is complete and the system is live (with the according status displayed all the tools). 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.	n/a	n/a
349	BASIC_1.3.10D	Homogeneous system copy for non-ABAP systems - additional requests	Additional Service	Requests for additional refreshes beyond entitlement noted in BASIC_1.3.10C for non-ABAP systems.	n/a	n/a
350	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	Process flow - additional information available. 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.	n/a	n/a
351	BASIC_1.3.07	Post processing tasks e.g. Embedded Search, BDLS - pre-existing systems	Packaged Services	For existing/live systems	Application Operations, CAS for Cloud ERP private	A1,C1
352	BASIC_1.3.07A	Post processing tasks e.g. Embedded Search, BDLS - new builds, post migration switch back to main instance	Standard Services	New builds for SAP delivered to SAP delivered system copy scenarios.	n/a	n/a
353		**Release Management**				
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	Process flow - additional information available. Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.	n/a	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	Process flow - additional information available. Contractual Change Request (CR) required in case of changed managed service scope or increased infrastructure consumption.	n/a	n/a
356	BASIC_1.5.03	Implement SAP Notes, transport-based corrections instructions (TCI), 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)	Packaged Services	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.	Application Operations, CAS for Cloud ERP private	A1,C1
357	BASIC_1.5.04	Implement SAP Notes, transport-based corrections instructions (TCI), 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.	n/a	n/a
358	BASIC_1.5.05	Apply Application SAP Notes for License Auditing	Standard Services	Automated License Metering allows automatic measurement of user and engine consumption to check compliance against customer licenses. Dependent on the criticality of repair of License Metering functionality, and only if no appropriate Support Package is available; fixing issues that fall into the responsibility of Service Provider per the Roles and Responsibility. This typically belongs to the application layer and/or presentation layer of SAP NetWeaver as well as the S/4-stack. SAP Notes which belong to application components like FI, CO etc. are included. Any post-installation tasks required 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.	n/a	n/a
359	BASIC_1.5.06	Implementation of patches for system software running on OS level, e.g. SAP kernel	Standard Services	Process flow - additional information available. May require additional system downtime. Can be ordered as part of a "Bundled Service".	n/a	n/a
360	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.	n/a	n/a
361	BASIC_1.5.09	Implement updates to the managed SAP solution using standard tools and methods	Standard Services	Process flow - additional information available. The term "update" denotes the change to a new minor release of the hosted SAP software, typically focused on bug fixes and small enhancements. The terminology for such events differs within the SAP portfolio, however frequently used terms in this context are "patch", "Support Package" and the like; this line item also includes the implementation of S/4HANA Feature Pack Stacks (FPS) but does not include the upgrade of S/4HANA to the next major release; the release sequence and the categorization of versions for each SAP product is available in the Product Availability Matrix (PAM) in SAP Service Marketplace; 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 delivery environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	n/a	n/a

362	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 Note 2707731 - Prerequisites and Restrictions of Zero Downtime Option of SUM.	n/a	n/a
363	BASIC_1.5.10	Ongoing maintenance of system languages, e.g. performing language fill-up	Standard Services	Available for systems maintained in an SAP delivered environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	n/a	n/a
364	BASIC_1.1.01	Version upgrade/update of SAP Software: planning and coordination	Packaged Services	Order Package from SAP Store. 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. 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. Maintenance planner (stack.xml) can be created by customer or delegated to Service Provider; Customer is responsible for confirming stack.xml, target version, and add-on. Available for systems maintained in an SAP delivered environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	Enhanced operations service for managed upgrades and updates	8011051
365	BASIC_1.5.01A	Orchestrate technical upgrade project	Standard Services	Used for technical execution. Used to request the upgrade of application software project orchestration for complete landscape to a new major (product) release or to a new Enhancement Package. E.g. S/4HANA 2021 to 2023, EHP 7 to 8, and NetWeaver 7.4 to 7.5. It is recommended to request this service only when the high-level timeline, scope, prerequisites, and dependencies, for the upgrade are defined.	n/a	n/a
366	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.	n/a	n/a
367	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 delivered environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable. The activity described under BASIC_1.5.07 is intended to support standard operational requirements and cannot be used for upgrade rehearsals, repeated testing activities, repeated system refreshes, or dry runs. Any activities involving multiple upgrade executions to the same target release level for rehearsal, validation, or dry-run purposes must be planned and handled under a separate project or engagement scope and are not included with this task.	n/a	n/a
368	BASIC_1.5.22	Version update of SAP Software: Pre- and Post BASIS Tasks	Packaged Services	Order Package from SAP Store. 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. Examples for this service include: run simplification check; unlock objects; remove inactive objects; implement update related notes; support modification adjustment.	Enhanced operations service for managed upgrades and updates	8011051
369	BASIC_1.5.22A	Version upgrade of SAP Software: Pre- and Post BASIS Tasks	Packaged Services	Order Package from SAP Store. Examples for this service include, run simplification check; unlock objects; remove inactive objects; implement upgrade related notes; support modification adjustment for technical issues, supporting and monitoring of Silent Data Migration. 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.	Enhanced operations service for managed upgrades and updates	8011051

370	TO_NWABAP_1.5.08	Adjust repository objects as part of software changes	Packaged Services	Order Package from SAP Store. Execution of adjustments in SPDD/SPAU for SAP objects. Customer objects in SPDD/SPAU require customers decision during execution.	Enhanced operations service for managed upgrades and updates	8011051
371	BASIC_1.5.08	Execute application related technical error handling tasks as part of the technical execution process for upgrades and updates and for Change Management	Packaged Services	Order Package from SAP Store. Troubleshoot and SAP note correction implementation related to technical upgrade or update activities. Functional decisions to be confirmed by Customer's functional team or SAP product support if required during implementation of resolution.	Enhanced operations service for managed upgrades and updates	8011051
372		**Proactive services**				
373	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.	n/a	n/a
374	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.	n/a	n/a
375		**System performance management**				
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.	n/a	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).	n/a	n/a
378	BASIC_1.12.05	Perform load test execution	Packaged Services	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
379	BASIC_1.12.06	Monitor predefined application-related performance KPI's against SAP best practices reference response times	Packaged Services		Core Performance Management,CAS for Cloud ERP private	P4,C1
380	BASIC_1.7.12_AE	Identify the root cause of failing KPIs and define preventive/corrective actions and/or possible countermeasures	Packaged Services		Core Performance Management,CAS for Cloud ERP private	P4,C1
381	BASIC_1.7.08	Review and optimize customer code to improve system performance and stability	Excluded Tasks	Customer may engage other SAP services,	n/a	n/a
382		**Certificate Handling**				
383	BASIC_1.11.01	Generate, Renew, Extend and/or Implement certificates	Standard Services	Customer must provide signed certificate after Provider submits certificate request file.	n/a	n/a
384	BASIC_1.11.02	Send certificate signing request to Certificate Authority	Excluded Tasks		n/a	n/a
385	BASIC_1.11.06	Monitor validity period of certificates	Packaged Services	Restricted to only certificates for URLs. Customer to provide URL for certificate check.	Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private	M1,M2,C1
386		**Disaster Recovery**	**Disaster Recovery is an Optional Service and is only provided in the managed service if Disaster Recovery is part of the contract/SOW/Order Form and/or added with a Change Request.**			
387	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.	n/a	n/a
388	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.	n/a	n/a
389	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.	n/a	n/a

390	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.	n/a	n/a
391	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.	n/a	n/a
392	BASIC_1.9.06	Execute failover during disaster recovery test (DB, application and cnames) - Offline DR Test	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. There is no replication from the DR site to the primary site during the testing period.	n/a	n/a
393	BASIC_1.9.10	Execute failover during disaster recovery test (DB, application and cnames) - Offline DR Test - 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. There is no replication from the DR site to the primary site during the testing period.	n/a	n/a
394	BASIC_1.9.09	Perform online disaster recovery tests (also known as "fencing"); primary systems remain accessible	Additional Service	Also known as "fencing". Note: Solution "SAP Cloud Connector" can not be supported; this Service is not applicable for Short Distance DR offering. Mixed HA/DR available for SAP data centers and the following hyperscalers: Azure, AWS and GCP. Performed only for productive systems; on request; only possible to be delivered if disaster recovery solution is part of the contract/SOW/Order Form. Customer must support certain technical aspects, e.g. regarding interfaces, connectivity, etc.	n/a	n/a
395	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 applicable for Short and 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	n/a	n/a
396	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.	n/a	n/a
397	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.	n/a	n/a
398		**Operations Extension**	**These services provide possible extensions to areas of Incident, Change and Event Management beyond the standard scope of services.**			
399	BASIC_1.15.01	Analyze Technical Issue - SAP Basis / Customer Client	Packaged Services	Only available for managed systems.	Application Operations, CAS for Cloud ERP private	A1,C1
400	BASIC_1.15.02	Change Management: Changes of technical system configuration not included in Standard Services as per R&R Definition	Packaged Services	Only available for managed systems.	Application Operations, CAS for Cloud ERP private	A1,C1
401	BASIC_1.15.03	Event management: Monitor technical/non-functional event types not included in Standard Service as per R&R Definition	Packaged Services	Only available for managed systems. One (1) time System Monitoring.	Application Operations, CAS for Cloud ERP private	A1,C1
402	BASIC_1.15.04	Cloud Application Service - Generic Service Request: Perform Service Request Fulfillment for technical/non-functional tasks not included in Standard Service as per R&R Definition	Packaged Services	Only available for managed systems.	Application Operations, CAS for Cloud ERP private	A1,C1
403	BASIC_1.15.06	Additional Service – Generic Service Request: Used for one-off tasks/services which are not covered by Standard, Optional and/or Cloud Application Services.	Additional Service	Only available for managed systems.	n/a	n/a

404		**SAP Starter System for SAP S/4HANA Cloud Private Edition**	**Note: SAP Starter System for SAP S/4HANA Cloud Private Edition is available for all SAP PCE Packaged Customers by default. Deployment is done via SAP Cloud Appliance Library (CAL). This sandbox environment not to be used for Production data. The Starter System is not applicable for PCE Tailored Option, NS2, Sovereign Cloud, Premium Partner Customers, or customers in China.**			
405	BASIC_1.17.01	Provision Starter System - powered by CAL	Standard Services	Provisioning SAP Starter System on Hyperscaler Platform using SAP owned Infrastructure powered by CAL. It will be delivered as per committed delivery date. This service is limited to Ninety (90) days.	n/a	n/a
406	BASIC_1.17.02	Start/Stop/Reboot Starter System	Standard Services	Start, stop, or reboot system.	n/a	n/a
407	BASIC_1.17.03	Redeploy Starter System	Standard Services	Reset or redeploy system to the initial state.	n/a	n/a
408	BASIC_1.17.04	Backup Starter System	Standard Services	A consistent snapshot can be taken from the system. System must be suspended to ensure consistent backup, approximately Thirty (30) minutes minimum downtime is required.	n/a	n/a
409	BASIC_1.17.05	Restore Starter System using available snapshot	Standard Services	Restoration of the system to one of the existing available snapshots. Data created since the last snapshot cannot be restored.	n/a	n/a
410	BASIC_1.17.06	Troubleshoot Starter System powered by CAL	Standard Services	Typical use cases for this service are trial, sandboxing, proof-of-concept, or scoping exercises only. Therefore, support for this environment will be reactive in nature. Customer must proactively raise requests for service and assistance.	n/a	n/a
411		**SAP Safekeeper Service**				
412	BASIC_1.18.01	SAP Safekeeper Service	Optional Services	See SAP Safekeeper Service Description for details. Provides services and temporary sandbox infrastructure to accelerate upgrades to the current S/HANA version.	n/a	n/a
413		**E - NetWeaver Operations (ABAP and Java)**	**Depending on technical conditions some tasks listed in this section are applicable to only one of the two platforms (NW ABAP or NW Java).**			
414		**General NetWeaver Operations**				
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.	n/a	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.	n/a	n/a
417	TO_NWABAP_1.1.07	Analyze update terminations, determine business impact and appropriate action	Packaged Services	With regards to application issues and impact.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
418	TO_NWABAP_1.1.10	Analyze lock entries, determine business impact and appropriate action	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
419	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.	n/a	n/a
420	TO_NWABAP_1.1.22	ABAP dump check and classification	Packaged Services	Including application related dumps.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
421	TO_NWABAP_1.1.23	Analyze SAP application log and provide recommendations on fixing failures	Packaged Services	Customer specifies which errors should be analyzed (in SLG1). Service request is limited to Four (4) errors per ticket	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
422	TO_NWABAP_1.1.24	Reorganize qRFC/tRFC queues	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2

423	TO_NWABAP_1.1.25	Check fastest growing tables in the SAP system and provide recommendations for archiving or reorganization	Packaged Services	In the context of Application Operations this service is intended to provide information about top growing tables and provide basic recommendations for table archiving and reorganization. Creating a full scope Archiving Strategy is not part of this service.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
424	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.	n/a	n/a
425	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.	n/a	n/a
426	TO_NWABAP_1.1.16	Implement/update tools to ensure readiness for SAP support services	Standard Services	Process flow - additional information available.	n/a	n/a
427	TO_NWABAP_1.1.17	Manage Web Service Runtime (WSRT)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
428	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.	n/a	n/a
429	TO_NWABAP_1.1.28_AE	Temporary change of heap or extended memory allocation using RSMEMORY	Standard Services		n/a	n/a
430	TO_NWABAP_1.1.31	Work process cancellation; Optimization of Batch Jobs load post analysis	Packaged Services		Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private,CAS for Business Data Cloud	M1,M2,C1,C2
431	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.	n/a	n/a
432	TO_J2EE_1.1.02	SAP J2EE: adjust/configure Java applications	Standard Services		n/a	n/a
433	TO_NWABAP_1.1.32	Deactivate critical ICF services in SAP ABAP instance	Standard Services	Recommended that certain critical ICF services (32 ICF Services) must not be active for ABAP application servers in productive managed landscapes.	n/a	n/a
434		**SAP Client Operations**				
435	TO_NWABAP_1.2.01	Copy client within one SAP System (including analysis and resolution of technical issues) – equal to or less than 500GB	Standard Services	Process flow - additional information available. Client sizes over 500GB must be requested through an Assisted Service Request using TO_NWABAP_1.2.01A and requires alignment with an SAP delivery representative for planning due to technical limitations. Available for systems maintained in an SAP delivered environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable. Customer must check to make sure there is sufficient storage on server to complete service.	n/a	n/a
436	TO_NWABAP_1.2.01A	Copy client within one SAP System (including analysis and resolution of technical issues) – greater than 500GB	Standard Services	Client sizes over 500GB must be requested through an Assisted Service Request using TO_NWABAP_1.2.01A. This service can be requested only after completing a migration by a Partner, if applicable. Customer must check to make sure there is sufficient storage on server to complete service.	n/a	n/a
437	TO_NWABAP_1.2.06	Delete client within one SAP System (including analysis and resolution of technical issues)	Standard Services	Process flow - additional information available. Available for systems maintained in an SAP delivered environment for which SAP is the Service Provider. This service can be requested only after completing a migration by a Partner if applicable.	n/a	n/a
438	TO_NWABAP_1.2.02	Perform client export/import or remote client copy between SAP systems (including analysis and resolution of technical issues) – equal to or less than 300GB	Standard Services	Client sizes over 300GB must be requested through an Assisted Service Request using TO_NWABAP_1.2.02A. This service can be requested only after completing a migration by a Partner, if applicable. Customer must check to make sure there is sufficient storage on server to complete service.	n/a	n/a

439	TO_NWABAP_1.2.02A	Perform client export/import or remote client copy between SAP systems (including analysis and resolution of technical issues) – greater than 300GB	Standard Services	Client sizes over 300GB must be requested through an Assisted Service Request using TO_NWABAP_1.2.02A. System copies are recommended because of technical restrictions as described in SAP Note 489690. Customers are advised to check the pre-conditions mentioned in SAP Note 489690 and confirm in the Assisted Service Request template. This service can be requested only after completing a migration by a Partner, if applicable. Customer must check to make sure there is sufficient storage on server to complete service.	n/a	n/a
440	TO_NWABAP_1.2.07	Pre-processing tasks, i.e. suspend jobs, lock users, export tables with 'old' configuration	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
441	TO_NWABAP_1.2.08	Post processing tasks, i.e. Enterprise Search, Fiori Launchpad, unlock user, release jobs)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
442	TO_NWABAP_1.2.05	Investigate and resolve application related issues (e.g. with certain database tables and fields)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
443	TO_NWABAP_1.2.09	Create new client	Standard Services	Make new entry in transaction SCC4. Filling of the client performed as sperate service request via client copy.	n/a	n/a
444		**Interface Administration**				
445	TO_NWABAP_1.3.24	Create, execute, and troubleshoot batch input sessions	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
446	TO_NWABAP_1.3.25	Configure interface related functions (e.g. IDOCs, interface scripts and jobs, qRFC/tRFC/bgRFC, ALE scenarios etc.)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
447	TO_NWABAP_1.3.26	Monitoring of interfaces and interface related functions	Packaged Services	In context of Application Operations, monitoring activities are restricted to a short period of time and for One (1) interface only.	Application Operations, Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private,CAS for Business Data Cloud	A1,M1,M2,C1,C2
448		**Job Scheduling**				
449	TO_NWABAP_1.4.09	Schedule standard jobs (SM36 / SJOBREPO). Monitor SAP system batch jobs to facilitate best-practice housekeeping of the SAP system	Standard Services	Per SAP guidelines as defined in SAP Notes 2190119 (S/4HANA) or 16083 (ECC); additional SAP standard jobs to be reviewed and agreed with customer.	n/a	n/a
450	TO_NWABAP_1.4.14	Schedule/Change/Delete jobs as per customer requirement	Packaged Services	Up to Eight (8) jobs can be handled in one service request.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
451	TO_NWABAP_1.4.15	Administer application batch jobs: - Monitor jobs - Troubleshoot according to troubleshooting handbook	Packaged Services		Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private,CAS for Business Data Cloud	M1,M2,C1,C2
452		**Transport Management**				
453	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.	n/a	n/a

454	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.	n/a	n/a
455	TO_NWABAP_1.5.16	Copy and delete SAP Transport cofiles and data files	Standard Services		n/a	n/a
456	TO_NWABAP_1.5.11A	Maintain SAP transport management system incl. configuration of transport routes and any further configuration (automatic import, scheduled import etc.)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
457	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.	n/a	n/a
458	TO_NWABAP_1.5.01	Set-up of CTS+	Packaged Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
459	TO_NWABAP_1.5.03	Execute transports to move objects between SAP systems	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
460	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.	n/a	n/a
461	TO_NWABAP_1.5.09	Testing and acceptance of object changes	Excluded Tasks		n/a	n/a
462		**Output Management**				
463	TO_NWABAP_1.7.01	Create, change and delete printers within SAP solution	Packaged Services	Service provider would only support printer types contained in SAP published guidelines.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
464	TO_NWABAP_1.7.02	Analyze faulty output requests (transaction SP01)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
465	TO_NWABAP_1.7.03	Reorganize SAP spool system to keep system clean	Standard Services	Via SAP standard batch job.	n/a	n/a
466	TO_NWABAP_1.7.04	Design and implementation of print forms	Excluded Tasks		n/a	n/a
467	TO_NWABAP_1.7.05	Lock/unlock SAP printers	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
468	TO_NWABAP_1.7.06	Check spooler table consistency to prevent printing issues	Standard Services	Via SAP standard batch job.	n/a	n/a
469	TO_NWABAP_1.7.07	Configure virtual spool (load balancing between spool processes)	Standard Services		n/a	n/a
470	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.	n/a	n/a
471	TO_NWABAP_1.7.09	Local printing and support	not offered	Creation and support of local OS printers at managed server instances.	n/a	n/a
472		**F - Server Provisioning (aka IaaS)**	**Not included in baseline service, additional SKU and/or contract required. 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).**			
473		**Security Planning**				
474	TO_SPROV_1.4.01	Provide application communication requirements	Excluded Tasks		n/a	n/a
475	TO_SPROV_1.4.02	Determine communication and security requirements	Excluded Tasks		n/a	n/a
476	TO_SPROV_1.4.03	Create and maintain security policies	Excluded Tasks		n/a	n/a

477	TO_SPROV_1.4.04	Determine security strategy and implementation plans	Excluded Tasks		n/a	n/a
478	TO_SPROV_1.4.05	Monitor and assess security strategies	Excluded Tasks		n/a	n/a
479		**Hardware Operations**				
480	TO_SPROV_1.5.03	Plan and conduct cloud infrastructure maintenance	Standard Services		n/a	n/a
481		**Server Management**				
482	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 fulfil the requirements of the intended use case.	n/a	n/a
483	TO_SPROV_1.6.01	Provide server infrastructure	Standard Services		n/a	n/a
484	TO_SPROV_1.6.02	Provide licenses for OS	Standard Services	Licenses will be provided and charged by provider..	n/a	n/a
485	TO_SPROV_1.6.03	Install basic operating system	Standard Services	Supported OS: SUSE LINUX and MS Windows Server (most up-to-date versions).	n/a	n/a
486	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.	n/a	n/a
487	TO_SPROV_1.6.05	Install antivirus software and patterns updates	Excluded Tasks	Customer is responsible for Antivirus installation and virus pattern updates on a daily basis.	n/a	n/a
488	TO_SPROV_1.6.06	Antivirus software licenses	Excluded Tasks		n/a	n/a
489	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).	n/a	n/a
490	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).	n/a	n/a
491	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).	n/a	n/a
492	TO_SPROV_1.6.10	Monitor operating system of provided OS instances	Excluded Tasks		n/a	n/a
493		**Storage Management**				
494	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).	n/a	n/a
495	TO_SPROV_1.7.02	Manage data files/file systems	Excluded Tasks		n/a	n/a
496	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		n/a	n/a
497	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		n/a	n/a
498	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.).	n/a	n/a
499	TO_SPROV_1.7.05	Scale storage capacity	Optional Services		n/a	n/a
500		**Application Management**				
501	TO_SPROV_1.8.01	Define application requirements	Excluded Tasks		n/a	n/a
502	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.	n/a	n/a
503	TO_SPROV_1.8.03	Install application	Excluded Tasks		n/a	n/a
504	TO_SPROV_1.8.04	Operate application	Excluded Tasks		n/a	n/a

505	TO_SPROV_1.8.05	Install patches and security updates	Excluded Tasks	Customer is responsible for software lifecycle management.	n/a	n/a
506	TO_SPROV_1.8.06	Application monitoring	Excluded Tasks		n/a	n/a
507		**IaaS VM Snapshot (offline image backup)**				
508	TO_SPROV_1.10.01	Service Set-up	Optional Services		n/a	n/a
509	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.	n/a	n/a
510	TO_SPROV_1.10.05	Restart server and inform customer	Optional Services	After successful restart of VM, inform customer and update the ticket.	n/a	n/a
511	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.	n/a	n/a
512		**Disaster Recovery**				
513	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.	n/a	n/a
514	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		n/a	n/a
515		**G - Cloud Application Services**				
516		**Cloud Application Services - Reactive Services**	**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.**			
517	CAS_1.1.01	Incident Management: Troubleshoot functional incidents in SAP applications	Packaged Services	SAP will perform reactive application management for Incidents, where the resolution may include: Restoration of the service or resolution of the underlying issue; Provision of a Workaround; Creation of an action plan.	Application Management	F1
518	CAS_1.1.02	Problem Management: root cause analysis and resolution of problems in SAP applications	Packaged Services	SAP will perform root cause analysis and propose a resolution for problems, which may include: Analysis of the root cause of an Incident; Providing an approach to prevent the Incident from reoccurring; Resolution of problems; Recommendations on application and system optimization; Request involvement of Product Support as necessary.	Application Management	F1
519	CAS_1.1.03	Service Request Management: Perform Service Request Fulfillment for functional tasks in SAP applications	Packaged Services	SAP will accept tickets from Key Users to request a service. Service Request Tickets include: Agreed Standard Service Request or Standard Change with implementation; Service Request for non-standard scope, including: Scope definition and commercial validation and approval.	Application Management	F1
520	CAS_1.1.05	Change Management: Changes of functional configuration in SAP applications	Packaged Services	SAP will accept tickets for non-standard scope from Key Users and provide analysis of Requests for change, including: Scope definition and commercial validation and approval.	Application Management	F1
521		**Cloud Application Services - Proactive Services**				
522	CAS_1.2.03	Managed Operations Control Center	Packaged Services		Customer Application Monitoring	M2
523		**Testing Services**				
524	CAS_2.1.01	Provide detailed plan for test management execution	Packaged Services	SAP will align with Customer's test strategy and approach and schedule test execution with respect to the Customer defined test scope.	Regression Testing	T1
525	CAS_2.1.02	Perform outcome based functional testing on the defined scope, report defects, and report issues	Packaged Services	SAP will use Customer provided test case documentation for test execution.	Regression Testing	T1
526	CAS_2.1.03	Configure the Test Suite in SAP Solution Manager	Packaged Services	SAP will leverage Customer's instance of Test Management Tool (e.g. Solution Manager) as system for record of testing.	Regression Testing	T1
527	CAS_2.1.05	Execution of automated interface test scripts	Packaged Services		Regression Testing	T1
528		**Security Services**				
529	CAS_2.2.01	Execute Segregation of Duty check and provide report of risk assessment and recommendations for improvement	Packaged Services		Segregation of Duties Check,CAS for Business Data Cloud	S3,C2
530	CAS_2.2.03	Continuous management of existing and new RFC enabled function modules	Packaged Services		Security for Interface,CAS for Business Data Cloud	S7,C2
531	CAS_2.2.04	Continuously monitor Customer's applications for security status and identify vulnerabilities	Packaged Services	Includes providing solutions for critical severity security checks based on monitoring alerts.	Application Security Monitoring,CAS for Business Data Cloud	S8,C2

532	CAS_2.2.05	Prepare regular security audits and identify issues during and after regular audits	Packaged Services		Audit Readiness, CAS for Business Data Cloud	S4,C2
533		**Monitoring Services**				
534	CAS_2.3.01	Setup job and automation monitoring	Packaged Services	Monitoring setup activity will be performed post Go-Live and after the monitoring elements are available in the production environment and includes ABAP Jobs and BI Process Chains for Monitoring. Customer to provide the list of service elements to be monitored.	Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private	M1,M2,C1
535	CAS_2.3.02	Setup integration and exception monitoring	Packaged Services	Monitoring setup activity will be performed post Go-Live and after the monitoring elements are available in the production environment and includes ABAP Web Services, BDoc, Gateway, HTTP(s), IDoc, Process Integration, RFC/ bgRFC/ qRFC/ tRFC, SAP AIF, SLT, SAP Cloud Integration - Iflows. Customer to provide the list of service elements to be monitored.	Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private	M1,M2,C1
536	CAS_2.3.03	Setup URL monitoring (certificates and availability)	Packaged Services	Customer to provide the URLs for setup. Monitoring setup activity will be performed post Go-Live and after the monitoring elements are available in the production environment.	Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private	M1,M2,C1
537	CAS_2.3.04	Setup real user monitoring	Packaged Services	Monitoring setup activity will be performed post Go-Live and after the monitoring elements are available in the production environment.	Customer Application Monitoring	M2
538	CAS_2.3.05	Setup technical system monitoring	Packaged Services	Monitoring setup activity will be performed in the production environment SAP will apply a standard template for technical system monitoring.	Customer Application Monitoring	M2
539	CAS_2.3.06	Generate report for monitoring	Packaged Services		Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private	M1,M2,C1
540		**H - Movement Services for System Conversion and Transition**				
541		**Transformation Discovery - Technical Preparation Services**				
542	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.	n/a	n/a
543	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.	n/a	n/a
544	MOVE_1.1.04	SAP Signavio Process Insights, discovery edition	Standard Services	Service can only be applied to the SAP ECC and SAP S/4HANA landscape indicated in the contract. Includes implementation of the technical prerequisites for SAP Signavio Process Insights, discovery edition in the corresponding system; and generation of the ZIP file with hand over to customer.	n/a	n/a
545	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.	n/a	n/a
546	MOVE_1.1.08	SAP Readiness Check for SAP Datasphere, SAP BW bridge	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 Datasphere, SAP BW bridge 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 the transition from SAP BW to SAP Datasphere, SAP BW bridge.	n/a	n/a

547	MOVE_1.1.09	Starter Tools Setup for BW4/HANA conversion	Standard Services	This service is a bundle of multiple tool setups and can only be applied to the SAP BW landscape indicated in the contract. It includes the implementation of the technical requirements in the corresponding system for the execution of the following tool environments: a) SAP BW/4HANA Transfer Cockpit; b) SAP Note Analyzer; c) SAP BW Starter Add-on. Brief explanation of the tools and the deliverable: a) The BW/4HANA Transfer Cockpit is a collection of tools relevant for conversion. The tools are grouped by prepare and realization phases. This includes the precheck, sizing, code scan, scope transfer, and authorization transfer tools to process objects that are not compatible with SAP BW/4HANA. b) The SAP BW and SAP BW/4HANA Note Analyzer provides a clear and consistent process to update a particular component or process of SAP BW or SAP BW/4HANA without implementing support packages. The Note Analyzer is used to install all tools and updates required for a given component or process. c) The first step of the in-place conversion process is to install the SAP BW/4HANA Starter Add-on. After the installation, the several modes are available in the SAP BW system, which define the road to SAP BW/4HANA: BW, Compatibility, B4H and Ready for conversion mode. To help transition the SAP BW system from one mode to the next, the system provides a program that scans the entire system for incompatibilities and creates a to-do list.	n/a	n/a
548		**End-To-End Conversion Planning**				
549	MOVE_1.6.01	Conversion Planning and Coordination End-To-End	Excluded Tasks	The End-to-end system conversion planning for SAP products refers to the process of converting an existing SAP system to a new software platform. It is a complex task in which all aspects of the system must be considered, including business processes, data migration, security settings and integration with other systems. Planning such a system conversion requires a thorough analysis of the existing system and a detailed roadmap for the transition to the new SAP solution. This includes the identification and prioritization of required system adjustments and configurations, the planning and execution of application tests and process verifications, the creation and documentation of training plans for employees and the definition of rollout strategies. However, it should be noted that an end-to-end system conversion planning requires very specialized expertise and is not part of the providers portfolio.	n/a	n/a
550		**Conversion Preparation**				
551	MOVE_1.3.01	Sandbox Conversion Project environment setup and operations	Optional Services	Used for building sandbox systems in the private cloud landscape. These temporary systems can be used by Customer to successfully carry out S/4HANA conversion projects. Application uses for scenarios such as trial runs of the S/4HANA conversion, testing S/4HANA conversion with production data, executing multiple technical iterations to familiarize with the process, and also to determine realistic S/4HANA conversion duration. These sandbox systems can be ordered for any duration needed according to the Customer project needs.	n/a	n/a
552		**Conversion Execution for ECC and BW system**				
553	MOVE_1.3.04	Planning and coordination of the technical system conversion of SAP ERP and SAP BW systems to SAP S/4HANA and SAP BW4/HANA	Additional Service	This service is strongly recommended in addition to the technical system conversion. This managed system conversion approach provides the customer with a dedicated team, partial planning and coordination for the technical execution of the system conversion, including the production cutover planning of the technical conversion and the integration of the technical system conversion activities into the customer's overall planning. The overall responsibility for the system conversion (functional conversion, pre- and post-conversion activities) remains with the customer and are not part of this service. This service must be ordered separately for each conversion execution. Once this planning and coordination service has been performed for a system conversion execution, it has to be requested for all further conversion runs, over the entire duration of the conversion project. This service is applicable for SAP ECC and SAP BW system.	n/a	n/a
554	BASIC_1.5.20	Technical System Conversion of SAP ERP and SAP BW systems to SAP S/4HANA and SAP BW4/HANA	Additional Service	The term "system conversion" refers to the transition from an older SAP ERP to a current SAP S/4HANA release, or an older SAP BW release to a current SAP BW/4HANA release. This service component alone is a non-managed system conversion approach that only provides the customer with technical execution support without having it planned and coordinated by SAP; therefore, communication between all parties involved is ticket-based only. The Database Migration Option, which is relevant for DB migration from anyDB to SAP HANA, is not part of this service and must be requested separately, if required. This service includes the preparation and execution of the SUM tool for the system conversion, including tasks only SAP can provide. The overall responsibility for the system conversion (functional conversion, pre- and post-conversion activities) remains with the customer and are not part of this service. This item does not include the use of more sophisticated system conversion approaches such as nZDT/ZDO/Downtime Minimization, etc. A standard planned downtime is required for this standard system conversion approach. As this service component alone is a non-managed and ticket-based system conversion approach, it requires the addition of the corresponding planning service (Planning and coordination of the technical system conversion). The integration of other SAP services (in terms of the functional conversion and pre- and post-conversion activities) is also recommended. This service must be ordered separately for each system conversion execution and is only applicable for SAP ECC and SAP BW systems.	n/a	n/a
555		**Conversion Execution for NetWeaver Based systems**				

556	MOVE_1.7.01	Planning and coordination of the technical system conversion to SAP S/4HANA Foundation	Additional Service	This service is strongly recommended in addition to the technical system conversion. This managed system conversion approach provides the customer with a dedicated team, partial planning and coordination for the technical execution of the system conversion, including the production cutover planning of the technical conversion and the integration of the technical system conversion activities into the customer's overall planning. The overall responsibility for the system conversion (functional conversion, pre- and post-conversion activities) remains with the customer and are not part of this service. This service must be ordered separately for each conversion execution. Once this planning and coordination service has been performed for a system conversion execution, it has to be requested for all further conversion runs, over the entire duration of the conversion project. This service is applicable for SAP GTS 11.0. Other SAP products only on request and subject to change.	n/a	n/a
557	MOVE_1.7.02	Technical System Conversion of NetWeaver systems to SAP S/4HANA Foundation	Standard Services	The term "system conversion" refers to the transition from an older SAP NetWeaver based system to the current SAP S/4HANA Foundation release. This service component alone is a non-managed system conversion approach that only provides the customer with technical execution support without having it planned and coordinated by SAP; therefore, communication between all parties involved is purely ticket-based. The Database Migration Option, which is relevant for DB migration from anyDB to SAP HANA, is not part of this service and must be requested separately, if required. This service includes the preparation and execution of the SUM tool for the system conversion, including tasks only SAP can provide. The overall responsibility for the system conversion (functional conversion, pre- and post-conversion activities) remains with the customer and are not part of this service. This item does not include the use of more sophisticated system conversion approaches such as nZDT/ZDO/Downtime Minimization, etc. A standard planned downtime is required for this standard system conversion approach. As this service component alone is a non-managed and ticket-based system conversion approach, it requires the addition of the corresponding planning service (Planning and coordination of the technical system conversion). The integration of other SAP services (in terms of the functional conversion and pre- and post-conversion activities) is also recommended. This service must be ordered separately for each system conversion execution and is applicable for SAP GTS 11.0. Other SAP products only on request and subject to change.	n/a	n/a
558		**Functional Conversion Activities**				
559	MOVE_1.3.03	Functional Conversion and Conversion Project Management	Excluded Tasks	Excludes all components of a functional conversion as well as pre- and post-conversion activities and the overall project and planning responsibility. The service offering for System Conversion does not include the adaptation and redesign of customer's business processes or any changes or adjustments to customer's specific functional requirements. This includes, for example, tasks such as customer vendor integration, ledger changes and migrations, simplification item handling, custom code remediation, etc. Additionally, System Conversion services do not cover activities prior to or after the technical conversion. This excludes preparation and clean-up activities, process optimization, training and customization of user permissions or special requirements that may occur after the conversion. These activities are not included in the scope of services. Customer takes overall responsibility for the conversion project as well as the resulting overall planning.	n/a	n/a
560		**X1 - 3rd Party Software**				
561		**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).**	**Not included in baseline service, additional SKU and/or contract required. 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.**			
562		**Managed 3rd Party ABAP add-ons**				
563	TO_PA_1.1.01	Installation	Standard Services		n/a	n/a
564	TO_PA_1.1.02	Configuration	Excluded Tasks		n/a	n/a
565	TO_PA_1.1.03	Application monitoring	Excluded Tasks		n/a	n/a
566	TO_PA_1.1.04	Apply updates	Standard Services		n/a	n/a
567	TO_PA_1.1.05	Application troubleshooting including engagement with the partners support organization	Excluded Tasks		n/a	n/a
568	TO_PA_1.1.06	Uninstallation of ABAP Add-ons	Standard Services		n/a	n/a
569		**Unmanaged 3rd Party ABAP add-ons**				
570	TO_PA_1.2.01	Installation	Excluded Tasks		n/a	n/a
571	TO_PA_1.2.02	Configuration	Excluded Tasks		n/a	n/a
572	TO_PA_1.2.03	Application monitoring	Excluded Tasks		n/a	n/a
573	TO_PA_1.2.04	Apply updates	Excluded Tasks		n/a	n/a
574	TO_PA_1.2.05	Application troubleshooting including engagement with the partners support organization	Excluded Tasks		n/a	n/a
575		**Other unmanaged 3rd Party Software**	**Any type of 3rd party software which is requested to be installed in total or in parts on the managed infrastructure is subject to prior evaluation. Details of this process and conditions are documented in the respective 3rd party software policies.**			
576	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.	n/a	n/a
577	TO_PA_1.3.02	Complex 3rd party software installation that cannot be done by Customer	Additional Service	Examples: OS agents; print driver, Java addons etc.	n/a	n/a
578		**X2 - Business Connector**				
579		**Operations**				

580	TO_BC_1.1.01	SSL Activation	Standard Services		n/a	n/a
581	TO_BC_1.1.02	Update SAP Business Connector parameters	Standard Services		n/a	n/a
582	TO_BC_1.1.03	Create/Reset Administrator User for SAP Business Connector	Standard Services	Create/Reset user CUST_BC_ADMIN which is used by Customer to log in.	n/a	n/a
583	TO_BC_1.1.04	Reorganization of Message Store	Excluded Tasks	Task involves editing, changing, and/or manipulating Customer data and must be performed only by Customer.	n/a	n/a
584	TO_BC_1.1.05	Create destinations	Excluded Tasks		n/a	n/a
585		**X4 - SAP Data Services (DS)**				
586		**Operations**				
587	TO_DS_1.1.22	Authorization - Users and Rights Management	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
588	TO_DS_1.1.06	Create/Modify Data Services jobs	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
589	TO_DS_1.1.07	Schedule Data Services jobs	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
590	TO_DS_1.1.08	Configure database connections	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
591	TO_DS_1.1.09	Monitor jobs	Packaged Services	Manual monitoring; effort based per execution.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
592	TO_DS_1.1.10	Repository backup DS and BOE	Standard Services		n/a	n/a
593	TO_DS_1.1.11	Delete batch job history	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
594	TO_DS_1.1.12	Verify that job and access servers are running	Standard Services		n/a	n/a
595	TO_DS_1.1.13	Remove obsolete repository contents	Standard Services		n/a	n/a
596	TO_DS_1.1.14	Troubleshoot issues with DS Jobs	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
597	TO_DS_1.1.23	Create/Manage additional repositories	Standard Services	System comes with default repositories. OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
598	TO_DS_1.1.26	Backup: On-Demand - BI Database and File Repo Sync	Additional Service		n/a	n/a
599	TO_DS_1.1.27	Restore: On-Demand - BI Database and File Repo Sync	Additional Service		n/a	n/a

600	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.	n/a	n/a
601	TO_DS_1.1.29	Install and configure Data Services Adapters	Standard Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
602	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.	n/a	n/a
603	TO_DS_1.1.31	Configure Runtime Resources	Standard Services		n/a	n/a
604	TO_DS_1.1.32	Configure SMTP Email	Standard Services		n/a	n/a
605	TO_DS_1.1.33	Start/Stop services	Standard Services		n/a	n/a
606	TO_DS_1.1.34	Enhanced Change and Transport System (CTS+) Integration Set-up	Standard Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
607	TO_DS_1.1.35	Configure transports via Data Services (DS) Object Promotion Management	Standard Services		n/a	n/a
608	TO_DS_1.1.36	Backup Data Services Repository using Import/Export Tool	Standard Services		n/a	n/a
609		**X6 - SAP BusinessObjects Business Intelligence (BI)**				
610		**Operations**				
611	TO_BI_1.1.06	Backup (Full content backup / BIAR backup)	Standard Services		n/a	n/a
612	TO_BI_1.1.07	Scan / Repair and compact all repository errors	Standard Services		n/a	n/a
613	TO_BI_1.1.11	Clean-up empty directories created for Repository Diagnostic Tool	Standard Services		n/a	n/a
614	TO_BI_1.1.26	Cache Clean-up and Maintenance - Tomcat, Web Intelligence, Log Files	Standard Services		n/a	n/a
615	TO_BI_1.1.17	Program Object Actions: Import and Execution	Packaged Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Management,CAS for Business Data Cloud	F1,C2
616	TO_BI_1.1.18	Promote/deploy BI objects between environments	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
617	TO_BI_1.1.19	Create, rename, remove connections and Universes	Excluded Tasks		n/a	n/a
618	TO_BI_1.1.21	Provide user access and maintain authorizations	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
619	TO_BI_1.1.47	SAML configuration	Packaged Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Management,CAS for Business Data Cloud	F1,C2
620	TO_BI_1.1.27	Deploy templates and system configurations for hardware changes	Standard Services		n/a	n/a

621	TO_BI_1.1.29	Auditing/Monitoring Driver Set-up and configuration for Audit reporting	Packaged Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Management,CAS for Business Data Cloud	F1,C2
622	TO_BI_1.1.30	Perform ERP Integration Set-up and Configuration	Packaged Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Management,CAS for Business Data Cloud	F1,C2
623	TO_BI_1.1.33	Backup: On-Demand - BI Database and File Repo Sync	Additional Service		n/a	n/a
624	TO_BI_1.1.34	Restore: On-Demand - BI Database and File Repo Sync	Additional Service		n/a	n/a
625	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.	n/a	n/a
626	TO_BI_1.1.37	Configure Web Application - reverse proxy settings	Standard Services		n/a	n/a
627	TO_BI_1.1.38	Add and configure additional BI servers for load balancing	Optional Services	Additional infrastructure may be required.	n/a	n/a
628	TO_BI_1.1.39	Manage Server Process and Server Groups	Standard Services		n/a	n/a
629	TO_BI_1.1.40	Set-up/Support technical tasks for BI Report Version Management	Standard Services	Customer responsible for maintaining report versions.	n/a	n/a
630	TO_BI_1.1.41	Enhanced Change and Transport System (CTS+) Integration Set-up	Packaged Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
631		**X7 - SAP PI**				
632		**SAP PI Implementation**				
633	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.	n/a	n/a
634	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.	n/a	n/a
635	TO_PI_1.1.04	Create SSL views and PSEs	Excluded Tasks		n/a	n/a
636		**SAP PI Operations**				
637	TO_PI_2.1.02	Monitor application-specific PI functions, e.g. messaging, queues etc.	Packaged Services		Application Monitoring,Customer Application Monitoring,CAS for Cloud ERP private	M1,M2,C1
638	TO_PI_2.1.03	Monitor the message processing in PI (success and performance)	Packaged Services		Application Management	F1
639	TO_PI_2.1.04	Monitor communication channels, queues, backlogs of PI (AEX)	Packaged Services		Application Management	F1
640	TO_PI_2.1.05	Monitor BPM processes (success and performance)	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
641	TO_PI_2.1.06	Configure adapters	Excluded Tasks		n/a	n/a
642	TO_PI_2.1.07	Deal with incorrect messages	Excluded Tasks		n/a	n/a

643	TO_PI_2.1.08	Configure message archiving	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
644	TO_PI_2.1.27	Execute and monitor message archiving	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
645	TO_PI_2.1.11	Role/authorization maintenance (except SAP and initial customer administrator role)	Packaged Services		Application Management	F1
646	TO_PI_2.1.16	Maintain users (except for the SAP and initial customer administrator role)	Packaged Services		User Management	S2
647	TO_PI_2.1.17	Set-up of PI / BPM / AEX housekeeping	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
648	TO_PI_2.1.28	Monitor housekeeping activities of PI / BPM / AEX	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
649	TO_PI_2.1.19	Adjust PO/PI /AEX parameterization and configuration	Standard Services	The configuration doesn't cover the realization of integration scenarios (content development).	n/a	n/a
650	TO_PI_2.1.21	Maintain the system landscape directory (SLD)	Packaged Services	Related to PI scenarios.	Application Operations, CAS for Cloud ERP private	A1,C1
651	TO_PI_2.1.21A	Configure bridge from delivered system landscape directory (SLD) to customer SLD	Standard Services	SLD data will be forwarded to the customer-defined SLD instance. No SLD data filtering is possible.	n/a	n/a
652	TO_PI_2.1.22	Apply SAP basic application content update to the Enterprise Service Repository (ESR)	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
653	TO_PI_2.1.23	Handle errors and analyze root cause for incorrect message processing in PI (AEX)	Excluded Tasks		n/a	n/a
654	TO_PI_2.1.24	Check PI / PO / AEX readiness after changes (upgrades, patches, notes)	Excluded Tasks		n/a	n/a
655	TO_PI_2.1.25	Configure the required system connections to partner systems	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
656	TO_PI_2.1.26	Transport management of PI objects	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
657		**X8 - Enterprise Portal**				
658		**Operations**				
659	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.	n/a	n/a
660	TO_EP_1.1.03	Maintain LDAP (Novell, ADS, iPlanet and others)	Excluded Tasks		n/a	n/a
661	TO_EP_1.1.04	Analyze Portal System logs and revise failures occurred	Standard Services	Provider to inform customer of required assistance.	n/a	n/a
662	TO_EP_1.1.05	System landscape maintenance, connection of external systems – e.g. SAP	Packaged Services	Port connection required.	Application Operations, CAS for Cloud ERP private	A1,C1
663	TO_EP_1.1.07	User mapping	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
664	TO_EP_1.1.08	Role/Channel/iPanel allocation	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
665	TO_EP_1.1.09	Content administration	Excluded Tasks		n/a	n/a

666	TO_EP_1.1.10	Set-up and maintain Portal user source data	Packaged Services		User Management	S2
667	TO_EP_1.1.11	Lock and delete portal user source data	Packaged Services		User Management	S2
668	TO_EP_1.1.12	Release locked portal users	Packaged Services		User Management	S2
669	TO_EP_1.1.13	Define and change Customer specific portal authorization profiles	Packaged Services		Roles and Authorizations	S10
670	TO_EP_1.1.14	Administer Content Repository	Excluded Tasks		n/a	n/a
671	TO_EP_1.1.20	Customize, upgrade POE including all components	Excluded Tasks	Set J2EE passwords, configure Java port, add service packs.	n/a	n/a
672	TO_EP_1.1.22	Upgrade of pages, roles, static html content	Excluded Tasks		n/a	n/a
673	TO_EP_1.1.23	Maintenance of Java services	Standard Services	Customer responsible to develop new Java services, and to customize existing java services.	n/a	n/a
674		**X9 - Sybase IQ (used as data persistency for NLS, ILM or 3rd party archiving solutions)**				
675		**Database Installation/Configuration**				
676	TO_SIQ_1.1.01	Check/prepare system requirements (BW Release, SAP Notes, Source/target set-up)	Excluded Tasks		n/a	n/a
677	TO_SIQ_1.1.03	Initial configuration / parameter settings	Standard Services		n/a	n/a
678	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.	n/a	n/a
679		**Database Operations**				
680	TO_SIQ_1.2.02	Database capacity management	Standard Services		n/a	n/a
681	TO_SIQ_1.2.04	Perform database consistency check (DBCC)	Standard Services		n/a	n/a
682	TO_SIQ_1.2.05	Troubleshoot technical database issues	Standard Services		n/a	n/a
683	TO_SIQ_1.2.06	Set-up backup	Standard Services		n/a	n/a
684	TO_SIQ_1.2.07	Restore backup	Standard Services		n/a	n/a
685	TO_SIQ_1.2.08	Monitor database connection	Standard Services	Customer must check connection from BW side.	n/a	n/a
686		**Application**				
687	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.	n/a	n/a
688		**SAP Information Lifecycle Management (ILM) for Sybase IQ**				
689	TO_SIQ_1.6.01	Check and prepare system requirements (Sizing, SAP Notes)	Excluded Tasks		n/a	n/a
690	TO_SIQ_1.6.02	Activate of ILM Store in NetWeaver	Standard Services		n/a	n/a
691	TO_SIQ_1.6.03	Set parameters in SAP IQ for ILM Store	Standard Services		n/a	n/a
692	TO_SIQ_1.6.09	Check ICM Parameters	Standard Services		n/a	n/a
693	TO_SIQ_1.6.14	License generation and deployment for Live Systems	Standard Services		n/a	n/a
694		**X11 - SAP Cloud Connector**				
695		**Installation and Configuration**				
696	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.: Ariba, LBN, AIN)	n/a	n/a

697	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)	Packaged Services	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, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
698	TO_SCC_1.1.11	SNC Setup for SAP Cloud Connector	Additional Service	Service Provider to perform operating system-level activities related to the setup. Customer to perform user interface (UI)-level activities as part of the configuration. The Customer can provide certificate properties if they do not provide a PSE file. In such cases the Service Provider will generate the CSR (Certificate Signing Request and share it with the Customer for signing. If the Customer provides a PSE file for use during the SNC setup, the Service Provider will utilize the provided PSE file during the configuration.	n/a	n/a
699		**X12 - SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) Integration - Data Services Agent (BTPI-DS) (Formerly HCI-DS)**				
700		**Installation and Configuration**				
701	TO_BTPIDS_1.1.01	Install SAP BTPI - Data Service agent	Standard Services	Installation requires existing or relevant subscription and/or inclusion as part of the contract.	n/a	n/a
702	TO_BTPIDS_1.1.02	Configuration - Enable outbound connection via LoadBalancer to connect with BTPI	Standard Services		n/a	n/a
703	TO_BTPIDS_1.1.03	Configuration - Establish connection to customer's cloud account	Standard Services	Need access to BTPI portal or service provider will request the configuration file from customer. Configuration performed at OS level. Provider will verify that agent status is green in BTPI portal.	n/a	n/a
704	TO_BTPIDS_1.1.04	Configuration - Business backend preparation steps for BTPI consumption	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
705		**Monitoring Set-up**				
706	TO_BTPIDS_1.2.01	Monitoring set-up for process level availability - Nagios	Standard Services		n/a	n/a
707		**Data Handling and Data Services**				
708	TO_BTPIDS_1.3.01	Migrate or replicate data between data stores	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
709		**X13 - SAP Fiori**				
710		**Installation and Configuration**				
711	TO_FIORI_1.1.01	Install application specific packages in respective SAP Systems	Standard Services	Initial set-up in managed system.	n/a	n/a
712	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.	n/a	n/a
713	TO_FIORI_1.1.10_AE	Configuration - Web Dispatcher Fiori App redirects - additional requests	Packaged Services	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, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
714	TO_FIORI_1.1.05	Configuration - HANA XS Engine Web Dispatcher	Packaged Services	SSL is a prerequisite for this task. Scope during Initial Provisioning includes all systems defined in the initial contract.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2

715	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 or SAP Global Trade Services for SAP S/4HANA (GTS E4G) 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.	n/a	n/a
716	TO_FIORI_1.1.06	Re-enable Fiori launchpad including all required connectivity set-up	Packaged Services	Covers re-enablement for SAP Enterprise Search, adjusting required connection configuration, and standard App activation.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
717	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.	n/a	n/a
718	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	Packaged Services	Includes example Fiori Catalog, example Fiori Group and example PFCG role.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
719	TO_FIORI_1.1.13	Activate standard Fiori Applications based on SAP business roles	Packaged Services	Covers the activation of standard SAP Fiori applications based on SAP standard business (template) roles, i.e. roles shipped by SAP that follow the naming convention SAP_BR_<...>. A maximum of four SAP standard business roles can be selected. A package can be defined for the activation. The activation is only applicable to trial/sandbox and development systems. Custom roles or custom applications are excluded from the activation. The activation of single apps is not possible.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
720		**X15 - Web Dispatcher**				
721		**Web Dispatcher Operations**				
722	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.	n/a	n/a
723	TO_WD_1.1.02	General memory management definition	Standard Services		n/a	n/a
724	TO_WD_1.1.03	General security parameter definition	Standard Services		n/a	n/a
725	TO_WD_1.1.04	General Configuration for Support SSL in Parameter File or PSE Maintenance Tool in Admintool (Handling HTTPS Requests)	Standard Services		n/a	n/a
726	TO_WD_1.1.05	Communication with the message server / application server using SSL	Standard Services		n/a	n/a
727	TO_WD_1.1.06	Modify HTTP requests	Standard Services		n/a	n/a
728	TO_WD_1.1.07	Set-up error handling	Standard Services		n/a	n/a
729	TO_WD_1.1.08	Maintain authentication File	Standard Services		n/a	n/a
730	TO_WD_1.1.09	Changes in client 000 of the backend systems related to Web Dispatcher (HTTPURLLOC)	Standard Services		n/a	n/a
731	TO_WD_1.1.10	Log and trace strategy	Standard Services		n/a	n/a
732	TO_WD_1.1.11	Encryption policy (protocols, ciphersuites, key length)	Standard Services		n/a	n/a
733	TO_WD_1.1.12	Connection counts	Standard Services		n/a	n/a
734	TO_WD_1.1.13	Metadata Exchange Using SSL	Standard Services		n/a	n/a
735	TO_WD_1.1.14	Define port ranges	Standard Services		n/a	n/a
736	TO_WD_1.1.15	LoadBalancer configuration for Web Dispatcher	Standard Services	Configuration details (routing rules, redirection information, backend system details etc.) must be provided by customer. Service provider will be update the Load Balancer and Web Dispatcher accordingly.	n/a	n/a
737	TO_WD_1.1.16	DNS Changes for Web Dispatcher Service	Excluded Tasks	There are no options to have personalized DNS.	n/a	n/a
738	TO_WD_1.1.17	Update Web Dispatcher version in K8s (Kubernetes)	Standard Services		n/a	n/a
739	TO_WD_1.1.18	Restart Web Dispatcher in K8s (Kubernetes)	Standard Services		n/a	n/a
740	TO_WD_1.1.19	Update Web Dispatcher time zone in K8s (Kubernetes)	Standard Services		n/a	n/a
741	TO_WD_1.1.20	Update T-shirt size (capacity) for Web Dispatcher in K8s (Kubernetes)	Optional Services		n/a	n/a
742	TO_WD_1.1.21	Add multiple backend servers for Web Dispatcher in K8s (Kubernetes)	Standard Services		n/a	n/a
743		**X16 - LoadBalancer**				
744		**LoadBalancer operation**				
745	TO_LRP_1.1.01	Set-up LoadBalancer instance	Standard Services	For existing LoadBalancers only. Does not include cost for additional LoadBalancers and/or additional infrastructure, if required. setup of additional LoadBalancers beyond the contracted volume is subject to a Change Request.	n/a	n/a

746	TO_LRP_1.1.02	Register/Remove Systems in LoadBalancer	Standard Services		n/a	n/a
747	TO_LRP_1.1.03	Configure load distribution to application servers	Standard Services		n/a	n/a
748	TO_LRP_1.1.04	Provide external IP for Internet facing scenarios	Standard Services		n/a	n/a
749	TO_LRP_1.1.05	Configure SSL offloading (Encryption)	Standard Services		n/a	n/a
750	TO_LRP_1.1.07	Perform DNS handling for customer own Domain	Excluded Tasks		n/a	n/a
751	TO_LRP_1.1.08	Provide X.509 certificate for customer domain to enable SSL	Excluded Tasks		n/a	n/a
752	TO_LRP_1.1.08A	Enable X.509 certificate for ALB in Amazon Web Services (AWS) with WebDispatcher and related backends	Additional Service	Available for Amazon Web Services (AWS) only. Mutual Transport Layer Security (mTLS) extends the TLS protocol used to secure network communications. TLS is commonly used to establish secure connections over the internet, ensuring authentication, data confidentiality, and integrity. However, in traditional TLS, the authentication is one-sided, where the server authenticates itself to the client, and the identity of the client is not verified.	n/a	n/a
753	TO_LRP_1.1.09	Provide X.509 certificate for SAP own URL like *.xxx.ondemand.com domain	Standard Services		n/a	n/a
754	TO_LRP_1.1.10	Install customer X.509 certificate	Standard Services		n/a	n/a
755	TO_LRP_1.1.11	Configure Web Application Firewall	Standard Services		n/a	n/a
756	TO_LRP_1.1.12	Configure persistence handling	Standard Services		n/a	n/a
757	TO_LRP_1.1.14	Configure health checks	Standard Services		n/a	n/a
758	TO_LRP_1.1.15	Configure URL/IP based blocklist and allowlist filtering	Standard Services		n/a	n/a
759	TO_LRP_1.1.16	Configure sorry page function	Standard Services		n/a	n/a
760	TO_LRP_1.1.17	Configure outgoing connections to Internet	Standard Services		n/a	n/a
761	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.	n/a	n/a
762		**X17 - OpenText Solutions**				
763		**SAP S/4HANA Common Tasks**				
764	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).	n/a	n/a
765	TO_OT_1.10.2	Activate/Maintain ICF nodes required for Apps to be enabled/updated	Standard Services		n/a	n/a
766	TO_OT_1.10.3	Activate/Maintain OData Services required for Apps to be enabled/updated	Standard Services		n/a	n/a
767		**Vendor Invoice Management for SAP Solutions (VIM)**				
768	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.	n/a	n/a
769		**Extended Enterprise Content Management for SAP Solutions (xECM)**				
770	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”.	n/a	n/a
771		**Archiving and Document Access for SAP Solutions (ADA)**				
772	TO_OT_1.13.1	Install OpenText Core Archive Connector and Document Pipelines	Standard Services	Application installation only.	n/a	n/a
773	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.	n/a	n/a
774	TO_OT_1.13.3	Add/Maintain SAP S/4HANA systems connection	Standard Services		n/a	n/a
775	TO_OT_1.13.7	Maintain Core Archive Connector setting	Standard Services	Activity includes replacing/generating certificate and private key.	n/a	n/a
776	TO_OT_1.13.8	User Administration	Packaged Services		Functional Application Management	F1
777		**Software Lifecycle Management**				
778	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)	Standard Services		n/a	n/a
779		**X17A - OpenText Extended Enterprise Content Management (OT xECM)**				
780		**Installation**				
781	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.	n/a	n/a
782	TO_OT_XECM_1.1.2	Install OT xECM NetWeaver ABAP Add-on(s)	Standard Services	Install OT xECM , OT ADA and OTA Fiori Add-on on S4HANA System.	n/a	n/a

783	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.	n/a	n/a
784		**Set-up and Configuration**				
785	TO_OT_XECM_1.2.1	Post install configuration	Standard Services		n/a	n/a
786	TO_OT_XECM_1.2.2	Monitoring	Standard Services		n/a	n/a
787	TO_OT_XECM_1.2.3	Application configuration	Standard Services		n/a	n/a
788	TO_OT_XECM_1.2.4	Data Archiving	Excluded Tasks		n/a	n/a
789	TO_OT_XECM_1.2.5	S4HANA integration and connectivity	Standard Services		n/a	n/a
790	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.	n/a	n/a
791		**X18 - SAP Information Steward**				
792		**Operations**				
793	TO_IS_1.1.02	Add additional IS job servers for load balancing on existing infrastructure	Standard Services	Adding additional server on existing infrastructure. A Change Request (CR) is required If additional infrastructure needs to be deployed.	n/a	n/a
794	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.	n/a	n/a
795	TO_IS_1.1.03	User and access management	Packaged Services		User Management,CAS for Cloud ERP private	S2,C1
796	TO_IS_1.1.08	IS repository and file system backup	Standard Services		n/a	n/a
797	TO_IS_1.1.09	IS job server and services monitoring	Standard Services		n/a	n/a
798		**X21 - SAP Identity Management IDM**				
799		**Configuration**				
800	TO_IDM_1.0.01	Assist customer with IDM related tasks that require access to operating system	Standard Services		n/a	n/a
801	TO_IDM_1.0.02	Install IDM dispatchers as part of the initial cloud environment installation	Standard Services		n/a	n/a
802	TO_IDM_1.0.03	Connect IDM UI to IDM system	Standard Services	SSL configuration is not covered by this task.	n/a	n/a
803		**X29 - SAP TREX**				
804		**TREX operations**				
805	TO_TREX_1.1.14	Post-Installation Configuration and Connection TREX with an Application (Java or ABAP)	Standard Services	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)	n/a	n/a
806	TO_TREX_1.1.15	Administer TREX indices	Excluded Tasks		n/a	n/a
807	TO_TREX_1.1.16	Administer Taxonomies	Excluded Tasks		n/a	n/a
808		**X31 - SAP Solution Manager**				
809		**Installation and Configuration**				
810	TO_SOLM_1.1.01	Set-up and configuration of ITSM in SAP Solution Manager	Packaged Services		Application Management,CAS for Cloud ERP private	F1,C1
811	BASIC_1.8.07	Set-up monitoring: Install Solution Manager Diagnostics (SMD) Agent and integrate it with Customer Solution Manager system for both Live and Build phase systems.	Standard Services	Integrate the newly installed Solution Manager Diagnostics (SMD) agent to a customer-owned SAP Solution Manager System that is operated in the cloud. Note: this is different from the central SAP Solution Manager system owned by the service provider.	n/a	n/a
812	BASIC_1.8.18	Set-up monitoring with Customer Solution Manager located in cloud: Configure monitoring within the customers SAP Solution Manager system	Packaged Services	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.	Customer Application Monitoring	M2

813	BASIC_1.8.26	Configure Solution Manager: Focused Insight standard dashboard	Packaged Services	No customer specific settings and adjustments included.	Application Operations, Customer Application Monitoring,CAS for Cloud ERP private	A1,M2,C1
814		**X33 - SAP Test Data Migration Server (TDMS)**				
815		**Installation and Configuration**				
816	TO_TDMS_1.1.01	Set-up of Control System (TDMS server) and set-up of receiver system (target server)	Standard Services		n/a	n/a
817	TO_TDMS_1.1.02	Patching of the sender systems (source system)	Standard Services		n/a	n/a
818	TO_TDMS_1.1.03	TDMS initial configuration, client creation, set-up RFC connections, set-up authorizations, Shell Creation	Standard Services		n/a	n/a
819	TO_TDMS_1.1.04	Set scrambling data, customize, using BPL modeler	Excluded Tasks		n/a	n/a
820		**X34 - SAP PowerDesigner**				
821		**Operational Set-up**				
822	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.	n/a	n/a
823	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.	n/a	n/a
824	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.	n/a	n/a
825	TO_PWR_1.1.04	SSL/TLS Configuration - Portal Set-up	Standard Services	Set-up secure communication through SSL/TLS configuration.	n/a	n/a
826	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.	n/a	n/a
827		**X36 - SAP Billing and Revenue Innovation Management**				
828		**General Operations**				
829	TO_BRIM_CC_1.0.01	Manage (unlock/reset) admin user	Standard Services	“Admin User” administration for SAP Convergent Charging and SAP Convergent Mediation by Digital Route applications.	n/a	n/a
830		**SAP Convergent Charging**				
831	TO_BRIM_CC_1.1.01	Install SAP Convergent Charging database	Standard Services		n/a	n/a
832	TO_BRIM_CC_1.1.02	Install SAP Convergent Charging core server	Standard Services		n/a	n/a
833	TO_BRIM_CC_1.1.03	Post Installation steps - Convergent Charging Cockpit and Core tool installation	Standard Services		n/a	n/a
834		**Operations**				
835	TO_BRIM_CC_1.2.01	Start/stop system	Standard Services		n/a	n/a
836	TO_BRIM_CC_1.2.02	Apply Updates	Standard Services		n/a	n/a

837	TO_BRIM_CC_1.2.03	Version upgrade	Standard Services		n/a	n/a
838	TO_BRIM_CC_1.2.04	Monitoring	Standard Services		n/a	n/a
839	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.	n/a	n/a
840	TO_BRIM_CC_1.2.06	Additional parameter settings	Standard Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
841	TO_BRIM_CC_1.2.07	Additional instance installation	Additional Service		n/a	n/a
842	TO_BRIM_CC_1.2.08	System refresh	Standard Services		n/a	n/a
843	TO_BRIM_CC_1.2.09	Configure Transports	Standard Services		n/a	n/a
844	TO_BRIM_CC_1.2.10	Enable SSL service	Standard Services		n/a	n/a
845	TO_BRIM_CC_1.2.11	Parameter update	Standard Services		n/a	n/a
846		**SAP Convergent Mediation by DigitalRoute**				
847	TO_BRIM_CM_1.1.01	Install SAP Convergent Mediation Database	Standard Services		n/a	n/a
848	TO_BRIM_CM_1.1.02	Install SAP Convergent Mediation Control Zone and Execution Zone set-up	Standard Services		n/a	n/a
849	TO_BRIM_CM_1.1.03	Post Installation steps	Standard Services		n/a	n/a
850	TO_BRIM_CM_1.1.04	Install SAP Convergent Mediation Execution Control Standalone (ECSA) set-up	Standard Services		n/a	n/a
851		**Operations**				
852	TO_BRIM_CM_1.2.01	Disaster Recovery procedures and testing for reprocessing of events	Excluded Tasks		n/a	n/a
853	TO_BRIM_CM_1.2.02	Deletion of collected files after checkpoint batch	Excluded Tasks		n/a	n/a

854	TO_BRIM_CM_1.2.03	Push Data Records from customer sFTP server to cloud environment sFTP server	Excluded Tasks		n/a	n/a
855	TO_BRIM_CM_1.2.04	Start/stop system	Standard Services		n/a	n/a
856	TO_BRIM_CM_1.2.05	Start/stop specific Pico instance	Standard Services		n/a	n/a
857	TO_BRIM_CM_1.2.06	Monitoring	Standard Services	Availability monitoring only.	n/a	n/a
858	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.	n/a	n/a
859	TO_BRIM_CM_1.2.08	Additional parameter settings	Standard Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
860	TO_BRIM_CM_1.2.09	Install, add, and upgrade Pico instances	Additional Service		n/a	n/a
861	TO_BRIM_CM_1.2.10	Import/Export Workflows configuration	Standard Services		n/a	n/a
862	TO_BRIM_CM_1.2.11	Maintain External Reference files	Standard Services		n/a	n/a
863	TO_BRIM_CM_1.2.12	Install license	Standard Services		n/a	n/a
864	TO_BRIM_CM_1.2.13	System refresh	Standard Services		n/a	n/a
865	TO_BRIM_CM_1.2.15	Install CA signed certificate on CM	Standard Services		n/a	n/a
866	TO_BRIM_CM_1.2.16	Configure OAuth2 Service	Standard Services		n/a	n/a
867		**X37 - SAP Manufacturing Integration and Intelligence**				
868		**Implementation and Configuration**				
869	TO_MII_1.1.01	Set-up Plant Connectivity (PCo) for SAP Overall Equipment Effectiveness (OEE) Functionality	Excluded Tasks		n/a	n/a
870	TO_MII_1.1.02	Set-up ALE user	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
871	TO_MII_1.1.03	Establish ALE connection to customer's ERP system	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1

872	TO_MII_1.1.04	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: SAP NetWeaver	Excluded Tasks		n/a	n/a
873	TO_MII_1.1.05	Execute CTC Template for SAP Overall Equipment Effectiveness (OEE) Management: Integration Interfaces	Excluded Tasks		n/a	n/a
874	TO_MII_1.1.06	Configure SAP Overall Equipment Effectiveness Management	Excluded Tasks		n/a	n/a
875	TO_MII_1.1.07	Create XMII Users and perform Roles Assignments	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
876		**X38 - SAP Manufacturing Execution**				
877		**Operational Set-up**				
878	TO_ME_1.1.01	Execute CTC Template for SAP NetWeaver Engine Configuration	Standard Services		n/a	n/a
879	TO_ME_1.1.02	Execute CTC Template for SAP Database Set-up	Standard Services		n/a	n/a
880	TO_ME_1.1.03	Execute CTC Template for SAP ME Configuration	Excluded Tasks		n/a	n/a
881	TO_ME_1.1.04	Execute SAP ME Scripts	Excluded Tasks		n/a	n/a
882	TO_ME_1.1.05	Perform SAP ME and ERP Integration	Excluded Tasks		n/a	n/a
883	TO_ME_1.1.06	Install Adobe Document Services	Optional Services		n/a	n/a
884		**X41 - SAP Analytics Cloud**				
885		**SAP Analytics Cloud Tenant**				
886	TO_SAC_1.1.01	Establish connection between SAP Analytics Cloud and managed system	Standard Services		n/a	n/a
887	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.	n/a	n/a
888	TO_SAC_1.1.03	Create or change user/roles or SAP as Identity Provider	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
889		**SAP Analytics Cloud Agent**				
890	TO_SAC_1.2.01	Install SAP Analytics Cloud Agent	Standard Services		n/a	n/a
891	TO_SAC_1.2.02	Configure SAP Analytics agent - Cloud Connector	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
892	TO_SAC_1.2.02A	Configure SAP Analytics - Java Connector	Standard Services		n/a	n/a
893	TO_SAC_1.2.03	Configure SAP Analytics Cloud with connections requiring SAP Analytics agent such as SAP S/4HANA, ERP	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
894		**SAP S/4HANA Tasks for SAP Analytics Cloud**				
895	TO_SAC_1.3.01	Configure STRUST for SSL settings	Standard Services		n/a	n/a
896	TO_SAC_1.3.03	Enable INA for Analytics Cloud	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2

897	TO_SAC_1.3.04	Enable CORS Analytics Cloud and edit allowlist	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
898		**X42 - SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)**				
899		**Global Account and Subaccount(s)**				
900	TO_BTP_1.1.02	Create or change entitlements in the Global Account	Packaged Services		Application Operations, SAP BTP Core Operations, CAS for Cloud ERP private,CAS for SAP Integration Suite	A1,A3,C1,C3
901	TO_BTP_1.1.06	Manage certificates (issue, import, export)	Packaged Services		Application Operations, SAP BTP Core Operations, CAS for Cloud ERP private,CAS for SAP Integration Suite	A1,A3,C1,C3
902	TO_BTP_1.1.07	Create or change custom application domains settings	Packaged Services		Application Operations, SAP BTP Core Operations, CAS for Cloud ERP private,CAS for SAP Integration Suite	A1,A3,C1,C3
903	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.	n/a	n/a
904	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.	n/a	n/a
905		**Identity Provider**				
906	TO_BTP_1.2.01	Configure local provider settings	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
907	TO_BTP_1.2.02	Configure Trust Relationships and Federation Settings for external Identity Providers (e.g. Microsoft, Okta)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
908	TO_BTP_1.2.03	Configure Trust Relationships and Federation Settings for SAP Identity Authentication Tenant	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
909	TO_BTP_1.2.04	Configure Principle Propagation Business Technology Platform, SAP Cloud Connector and SAP S/4HANA	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2

910	TO_BTP_1.2.05	Activate CERTRULE for the purpose of client based certificates	Packaged Services	If an existing SAP S/4HANA system is to be used for the integration.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
911	TO_BTP_1.2.06	User Migration to Business Technology Platform Identity Authentication Tenant	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
912		**SAP S/4HANA Tasks for SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)**				
913	TO_BTP_1.3.02	Activate ICF nodes required for sample Apps to be enabled	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
914	TO_BTP_1.3.03	Activate OData Services required for sample Apps to be enabled	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
915	TO_BTP_1.3.04	Enterprise Search Enablement (ESH)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
916	TO_BTP_1.3.05	Create authorization role in backend system for OData processing	Packaged Services	For relevant sample Apps.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
917	TO_BTP_1.3.06	Activate Embedded BW content for Analytical Fiori Apps	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
918	TO_BTP_1.3.07	Enable INA for Analytical SAP Fiori Apps	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
919		**Portal**				
920	TO_BTP_1.4.01	Create or change SAP Fiori Launchpad sites (site directory and site settings)	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
921	TO_BTP_1.4.02	Create or change roles	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
922	TO_BTP_1.4.03	Create or change groups including role assignment	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2

923	TO_BTP_1.4.04	Create or change catalogs including role assignment	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
924	TO_BTP_1.4.05	Enable SAP Fiori sample apps and perform required connectivity set-up	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
925		**Integration Suite**				
926	TO_BTP_1.5.01	Test execution for every update of SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) Integration	Packaged Services	Perform the automated execution of regression test scripts whenever an update of SAP Cloud Platform takes place.	Cloud Integration Testing,CAS for SAP Integration Suite	T2,C3
927	TO_BTP_1.5.02	Create test automation scripts for SAP Business Technology Platform - BTP (formerly SAP Cloud Platform)	Packaged Services	Create automated test scripts based on customer i-Flows with sample input & output messages.	Cloud Integration Testing,CAS for SAP Integration Suite	T2,C3
928	TO_BTP_1.5.03	Application of changes (Test automation script modification)	Packaged Services	Perform modification of test automation scripts.	Cloud Integration Testing,CAS for SAP Integration Suite	T2,C3
929		**SAP BTP Private Link for Azure**				
930	TO_BTP_1.6.01	Create Azure private link service and share the "ResourceID" with the customer	Standard Services		n/a	n/a
931	TO_BTP_1.6.02	Steps in BTP for setting up the BTP private link service	Excluded Tasks		n/a	n/a
932	TO_BTP_1.6.03	Connection Approval by SM on Azure Portal - within 24 hours	Standard Services		n/a	n/a
933		**X43 - SAP Forms by Adobe (Adobe Document Services/ADS)**	**SAP Cloud Connector and SAP Business Technology Platform - BTP (formerly SAP Cloud Platform) are prerequisites.**			
934		**Installation and Configuration**				
935	TO_ADS_1.1.02	Data Migration from on premise ADS to ADS on BTP - customer account	Packaged Services	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in an customer owned BTP account.	Application Operations, CAS for Cloud ERP private	A1,C1
936	TO_ADS_1.1.02A	Data Migration from on premise ADS to ADS on BTP - SAP account	Standard Services	Applicable for contracts signed before 15-July-2024. Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account	n/a	n/a
937	TO_ADS_1.1.03	Configure Fonts and Print Information using XDC and XCI Files - customer account	Packaged Services	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in an customer owned BTP account.	Application Operations, CAS for Cloud ERP private	A1,C1
938	TO_ADS_1.1.03A	Configure Fonts and Print Information using XDC and XCI Files - SAP account	Standard Services	Applicable for contracts signed before 15-July-2024. Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account	n/a	n/a
939	TO_ADS_1.1.04	Configure document security - customer account	Packaged Services	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in an customer owned BTP account.	Application Operations, CAS for Cloud ERP private	A1,C1
940	TO_ADS_1.1.04A	Configure document security - SAP account	Standard Services	Applicable for contracts signed before 15-July-2024. Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account	n/a	n/a

941	TO_ADS_1.1.05	Configure job profiles- customer account	Packaged Services	Applicable if SAP Forms by Adobe (Adobe Document Services/ADS) is configured in an customer owned BTP account.	Application Operations, CAS for Cloud ERP private	A1,C1
942	TO_ADS_1.1.05A	Configure job profiles - SAP account	Standard Services	Applicable for contracts signed before 15-July-2024. Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account	n/a	n/a
943	TO_ADS_1.1.06	End-to-end enablement of SAP BTP service SAP Forms by Adobe for S/4HANA systems - SAP managed BTP account only	Standard Services	Applicable for contracts signed before 15-July-2024. SAP Forms by Adobe (Adobe Document Services/ADS) enablement including all required sub steps and activities: 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. Only applicable when SAP Forms by Adobe (Adobe Document Services/ADS) is set up in SAP-owned global BTP account.	n/a	n/a
944	TO_ADS_1.1.07	End-to-end enablement of SAP BTP service SAP Forms by Adobe for NetWeaver based systems using customer-owned BTP global account	Packaged Services	SAP Forms by Adobe (Adobe Document Services/ADS) enablement including all required sub steps and activities: 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. Customer to provide credentials for BTP global / subaccount to be used.	Application Operations, CAS for Cloud ERP private	A1,C1
945		**X44 - SAP Enterprise Threat Detection (ETD)**				
946		**Build Phase**				
947	TO_ETD_1.1.01	Install ETD on SAP HANA XS	Standard Services	Create specific SAP HANA tenant for ETD. Import ETD delivery unit in HANA. Import ETD content package. Enable mandatory ETD background jobs.	n/a	n/a
948	TO_ETD_1.1.02	Install and configure ETD Streaming solution	Standard Services	Initialize ETD Launchpad; install and configure ETD Streaming applications including Apache Kafka and Zookeeper, initial configuration of ETD Streaming certificates.	n/a	n/a
949	TO_ETD_1.1.03	Configure provisioning logs from SAP NetWeaver ABAP/JAVA based source system	Packaged Services	Excludes prerequisite SAP Notes implementation.	Application Operations, CAS for Cloud ERP private	A1,C1
950	TO_ETD_1.1.04	Enable ETD SAP delivery supported non-NetWeaver based source systems - Build Phase	Standard Services	Intended for: SAP HANA (SAP delivery hosted); SAP Cloud Connector (SAP delivery hosted); BTP Accounts (NEO,CF); S/4HANA Public; SAP Commerce; SAP Sales Cloud, SAP Service Cloud and SAP Analytic Cloud. Customer to provide: URLs, technical users and credentials per source systems.	n/a	n/a
951	TO_ETD_1.1.06	Configure provisioning logs from other source systems including OS	Excluded Tasks		n/a	n/a
952	TO_ETD_1.1.07	Enable mandatory ETD background jobs	Standard Services		n/a	n/a
953	TO_ETD_1.1.08	Encrypt SSL connection between ETD source systems (ABAP/HANA/JAVA) and ETD Streaming	Standard Services		n/a	n/a
954	TO_ETD_1.1.09	Set the initially agreed retention times (Kafka, cold storage, HANA hot and warm storage) where applicable.	Standard Services		n/a	n/a
955	TO_ETD_1.1.10	Install and setup ETD LogCollector - stand alone	Standard Services	Used when ETD Streaming is hosted by SAP Business Transformation Platform and source systems are hosted in Enterprise Cloud Services.	n/a	n/a
956	TO_ETD_1.1.11	Configure SAP delivery NetWeaver based source systems to send logs to ETD LogCollector - stand alone	Packaged Services	Logs are forwarded to ETD Streaming on SAP Business Transformation Platform.	Application Operations, CAS for Cloud ERP private	A1,C1
957		**Run Phase**				
958	TO_ETD_1.2.01	Schedule/Adjust individual ETD HANA background jobs	Packaged Services	Enable optional ETD background jobs.	Application Operations, CAS for Cloud ERP private	A1,C1
959	TO_ETD_1.2.02	Adjust individual ABAP source system sending schedules jobs (frequency, type of logs)	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
960	TO_ETD_1.2.03	Import New ETD Content Packages	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
961	TO_ETD_1.2.04	Define ETD namespaces and locations	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1

962	TO_ETD_1.2.06	Security monitoring for alerts created in ETD	Packaged Services	Perform ETD security monitoring for the agreed patterns for the logs from customer system.	Enterprise Threat Detection,Enterprise Threat Detection	S9,S9
963	TO_ETD_1.2.07	Enhanced Analyses	Packaged Services	Execute proactive threat hunting and analyze specific suspicion.	Enterprise Threat Detection,Enterprise Threat Detection	S9,S9
964	TO_ETD_1.2.08	Content Adaption	Packaged Services	Create/update and implement new/updated and agreed pattern.	Enterprise Threat Detection,Enterprise Threat Detection	S9,S9
965	TO_ETD_1.2.09	Upgrade ETD on SAP HANA	Standard Services	Import new ETD delivery unit in HANA.	n/a	n/a
966	TO_ETD_1.2.10	Re-enable/re-connect ABAP/Java source system	Packaged Services	Reconnect ABAP/Java source systems after source system upgrades/migrations.	Application Operations, CAS for Cloud ERP private	A1,C1
967	TO_ETD_1.2.12	Upgrade ETD Streaming	Standard Services	Upgrade ETD streaming including Apache Kafka, Zookeeper.	n/a	n/a
968	TO_ETD_1.2.13	Monitor ETD HANA XS Mandatory background jobs	Standard Services		n/a	n/a
969	TO_ETD_1.2.14	Monitor ETD HANA XS optional and custom background jobs	Excluded Tasks		n/a	n/a
970	TO_ETD_1.2.15	Renew and monitor ETD streaming certificate when expired	Standard Services		n/a	n/a
971	TO_ETD_1.2.17	Renew expired certificates for the encrypted SSL connection between ETD source systems (ABAP/HANA/JAVA) and ETD Streaming	Standard Services		n/a	n/a
972	TO_ETD_1.2.19	Configure ETD SAP delivered non-Netweaver based source systems - Run Phase	Additional Service	Additional configurations are available as a billable service. Each service request is limited between One (1) to a total of Ten (10) source systems to be added or removed for any source type. Intended for: SAP HANA (SAP delivery hosted); SAP Cloud Connector (SAP delivery hosted); BTP Accounts (NEO,CF); S/4HANA Public; SAP Commerce; SAP Sales Cloud AND SAP Service Cloud. Customer to provide: URLs and technical users and credentials per source systems	n/a	n/a
973	TO_ETD_1.2.20	Change HANA hot (RAM) storage or warm (NSE) retention	Excluded Tasks	Note: changing retention directly impacts the size of HANA/NSE memory/storage and requires a change request (CR) to process.	n/a	n/a
974	TO_ETD_1.2.21	Upgrade ETD LogCollector - stand alone	Standard Services		n/a	n/a
975		**X45 - Zscaler ZPA Connector**				
976		**Implementation and Configuration**				
977	TO_ZPA_1.1.01	Install ZPA Connector and required OS packages	Optional Services		n/a	n/a
978	TO_ZPA_1.1.02	Configure ZPA Connector	Optional Services		n/a	n/a
979	TO_ZPA_1.1.03	Allowlist ZPA Connector IP addresses in LoadBalancer	Optional Services		n/a	n/a
980	TO_ZPA_1.1.04	Configure connector in ZPA Admin Console	Excluded Tasks		n/a	n/a
981	TO_ZPA_1.1.05	Provision ZPA Connector provisioning keys	Excluded Tasks		n/a	n/a
982	TO_ZPA_1.1.06	Install client software	Excluded Tasks		n/a	n/a
983	TO_ZPA_1.1.07	Client and end-user support	Excluded Tasks		n/a	n/a
984	TO_ZPA_1.1.08	Sizing of required number of connectors	Excluded Tasks		n/a	n/a
985	TO_ZPA_1.1.09	Integration with customer's IDP (SAML)	Excluded Tasks		n/a	n/a
986	TO_ZPA_1.1.10	Install provisioning keys	Optional Services		n/a	n/a
987		**X46 - SAP Omnichannel Banking (OCB)**				
988		**Implementation and Configuration**				
989	TO_OCB_1.1.01	Install Tomcat	Optional Services		n/a	n/a

990	TO_OCB_1.1.02	Install OCB software Retail Banking or Business Banking (Digital)	Standard Services		n/a	n/a
991	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	n/a	n/a
992	TO_OCB_1.1.04	Develop WAR files	Excluded Tasks		n/a	n/a
993		**X48 - Redwood RunMyJobs**				
994		**Installation and Configuration**				
995	TO_RMJ_1.1.01	Install Redwood platform agent and configure as Secure gateway	Standard Services	Installation and configuration of the secure-gateway agent on dedicated VM. Installation of Secure gateway agent on servers running managed systems is not allowed	n/a	n/a
996	TO_RMJ_1.1.01A	Install Redwood OS platform agent (excluding Secure Gateway functionality)	Additional Service	Installation and configuration of the OS platform agent on SAP application server VM. This agent is not supposed to be used as a Secure Gateway.	n/a	n/a
997	TO_RMJ_1.1.02	Monitor RunMyJobs platform agent	Standard Services		n/a	n/a
998	TO_RMJ_1.1.03	Restart RunMyJobs platform agent	Standard Services		n/a	n/a
999	TO_RMJ_1.1.04	Scheduling of jobs	Excluded Tasks		n/a	n/a
1000	TO_RMJ_1.1.05	Manual design and implementation of process definitions	Excluded Tasks		n/a	n/a
1001	TO_RMJ_1.1.06	Integrate SAP system to Redwood RunMyJobs Cloud	Packaged Services	Connect business client to the customer tenant. Technical user for communication needs to be provided by customer.	Advanced Job Management	M3
1002	TO_RMJ_1.1.07	Integrate SAP System to Redwood Solution	Packaged Services	Connect business client to the customer tenant. Technical user for communication needs to be provided by the customer.	Advanced Job Management	M3
1003	TO_RMJ_1.1.08	Import SAP objects into Redwood Solution	Packaged Services	E.g., execution of any predefined Process Definition starting with SAP_[BW_|MA_|PI_]Import*). Relevant source objects and storage location in Redwood need to be provided by customer.	Advanced Job Management,CAS for Business Data Cloud	M3,C2
1004	TO_RMJ_1.1.09	Align on jobs and KPIs to be monitored and threshold levels - includes monitoring configuration in Redwood Solution	Packaged Services	Jobs to be named by customer. Monitoring concept is developed by customer and service provider in a joint effort.	Advanced Job Management	M3
1005	TO_RMJ_1.1.10	Monitor of service availability and service connection to Redwood tenant	Packaged Services		Advanced Job Management	M3
1006	TO_RMJ_1.1.11	Operate job monitoring based on the designed monitoring concept	Packaged Services		Advanced Job Management	M3
1007	TO_RMJ_1.1.12	Technical Root Cause Analysis (RCA) in case of job errors and implement needed changes	Packaged Services		Advanced Job Management	M3
1008	TO_RMJ_1.1.13	User and Role Management within Redwood Solution	Packaged Services	Only applicable if access to Redwood tenant is provided by customer.	Advanced Job Management	M3
1009		**X49 - SMTP Relay to Office365**				
1010		**Installation and Configuration**				
1011	TO_SMTP_1.1.01	Install smtp relay and required OS packages	Standard Services		n/a	n/a
1012	TO_SMTP_1.1.02	Configure smtp relay servers and LoadBalancers	Standard Services		n/a	n/a
1013	TO_SMTP_1.1.03	Allowlist of smtp relay IP's/FQDN in LoadBalancer and NSG	Standard Services		n/a	n/a
1014	TO_SMTP_1.1.04	Provisioning of certificates for TLS and authentication	Excluded Tasks		n/a	n/a
1015	TO_SMTP_1.1.05	Configure systems to use smtp relay server	Packaged Services		Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
1016	TO_SMTP_1.1.06	Configure O365 connector in O365	Excluded Tasks		n/a	n/a
1017	TO_SMTP_1.1.07	Install certificates	Standard Services		n/a	n/a
1018	TO_SMTP_1.1.08	Restart after failure	Standard Services		n/a	n/a

1019	TO_SMTP_1.1.09	Monitor smtp relay service	Standard Services		n/a	n/a
1020		**X50 - SAP Data Custodian (SDC) - Integration Service**	**Subject to availability on a case-by-case basis. SDC provides a subset of components which are each ordered separately.**			
1021		**Transparency and Control Service (SAP S/4 HANA, ECC)**				
1022	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.	n/a	n/a
1023	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.	n/a	n/a
1024	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.	n/a	n/a
1025		**Transparency and Control Service for Infrastructure (Hyperscaler)**				
1026	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.	n/a	n/a
1027	TO_SDC_1.1.04	Onboarding activities including configuring tenant with principal masking, and assessments/questionnaires	Excluded Tasks	Performed by customer's SDC team.	n/a	n/a
1028	TO_SDC_1.1.05	Configure the tenant with the SAP S/4HANA system	Excluded Tasks		n/a	n/a
1029	TO_SDC_1.1.06	Configure application synchronization for Principal[User] attributes	Excluded Tasks		n/a	n/a
1030	TO_SDC_1.1.07	Maintain use case policies in the Data Custodian tenant	Excluded Tasks		n/a	n/a
1031	TO_SDC_1.1.08	Remediate incidents for unauthorized accesses in the tenant	Excluded Tasks		n/a	n/a
1032	TO_SDC_1.1.09	Generate access log and other reports	Excluded Tasks		n/a	n/a
1033		**External Key Management (KMS) Integration**				
1034	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.	n/a	n/a
1035		**Integration to Data Custodian**				
1036	TO_SDC_1.3.01	Integrate HANA to Data Custodian KMS	Additional Service	Customer should have subscription to Data Custodian KMS and completed their on-board. HANA LSS should be installed.	n/a	n/a
1037	TO_SDC_1.3.01A	Install HANA LSS and Key Migration and Integrate HANA to Data Custodian KMS	Additional Service	Requires HANA 2.0 SP06 or later and HANA encryption to be enabled. Customer should have subscription to Data Custodian KMS and completed on-boarding. HANA LSS should be installed.	n/a	n/a
1038		**Uninstall/Unlink/Reverse Integration**				
1039	TO_SDC_1.4.01A	Uninstall LSS and/or unlink/reverse KMS integration	Additional Service	Downtime required.	n/a	n/a
1040		**X51 - SAP Disclosure Management (DM)**				
1041		**Installation**				
1042	TO_SDM_1.1.01	Install DM components	Standard Services	IIS Web Server, DM Application Server, Task Engine, XBRL Service, and MS-SQL DB.	n/a	n/a
1043	TO_SDM_1.1.02	Install DM BW Connector	Standard Services		n/a	n/a
1044	TO_SDM_1.1.03	Install DM content packages	Standard Services	Scenario based.	n/a	n/a
1045		**Set-up and Configuration**				

1046	TO_SDM_1.2.01	Post-install configuration	Standard Services		n/a	n/a
1047	TO_SDM_1.2.03	Configure DM Application Server SSL/TLS Secure Communication	Standard Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
1048	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.	n/a	n/a
1049		**X52 - SAP 3D Visual Enterprise Generator (VEG)**				
1050		**Installation**				
1051	TO_VEG_1.1.01	Install VEG components	Standard Services	IIS Web Server, MSMQ Server, Application Server (Source) with Embedded MS-SQL Express DB.	n/a	n/a
1052	TO_VEG_1.1.02	Install additional VEG subordinate host	Standard Services		n/a	n/a
1053		**Set-up and Configuration**				
1054	TO_VEG_1.2.01	Post-install configuration	Standard Services		n/a	n/a
1055	TO_VEG_1.2.02	Configure VEG SSL/TLS Secure Communication	Standard Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
1056	TO_VEG_1.2.03	Integration with ERP/ECC/S4HANA	Standard Services	OS access required. Assistance can be requested via task BASIC_1.1.14.	n/a	n/a
1057	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.	n/a	n/a
1058		**X53 - SAP Content Server**				
1059		**Installation and Operation**				
1060	TO_SCS_1.1.01	Install Content Server	Standard Services		n/a	n/a
1061	TO_SCS_1.1.02	Install specific parameter definition	Standard Services		n/a	n/a
1062	TO_SCS_1.1.03	Content Server - System Copy	Standard Services	Up to Six (6) refreshes per SID, per contract year, are included. Additional refreshes are available on chargeable basis via TO_SCS_1.1.03A. Only available after initial build phase is complete. Note: Customer must provide additional information which will be aligned during request processing.	n/a	n/a
1063	TO_SCS_1.1.03A	Content Server - System Copy - Additional Requests	Additional Service	Additional refreshes beyond entitlement described in TO_SCS_1.1.03. Only available after initial build phase is complete. Note: Customer must provide additional information which will be aligned during request processing.	n/a	n/a
1064		**Configure Repositories**				
1065	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.	n/a	n/a
1066	TO_SCS_1.2.03	Technical configuration of repositories in OAC0	Packaged Services	Strategic/conceptual decisions to be made by customers/consulting.	Application Operations, CAS for Cloud ERP private,CAS for Business Data Cloud	A1,C1,C2
1067	TO_SCS_1.2.05	Set SAPR3 password in customer's backend system	Standard Services		n/a	n/a
1068		**Patch Update**				
1069	TO_SCS_1.3.01	SP update for content server version	Standard Services		n/a	n/a
1070	TO_SCS_1.3.02	SP update for MaxDB database	Standard Services		n/a	n/a
1071		**Version Upgrade**				
1072	TO_SCS_1.4.01	Pre-checks for repository connection	Standard Services	Connection test via RSCMST for all given repositories needs to be done.	n/a	n/a
1073	TO_SCS_1.4.02	Technical Upgrade procedure - for releases up to 7.53	Standard Services	For upgrades up to release 7.53.	n/a	n/a
1074	TO_SCS_1.4.02A	Technical Upgrade procedure	Standard Services	For upgrades from 7.53 to 7.54 and beyond.	n/a	n/a
1075	TO_SCS_1.4.03	Post-upgrade configuration changes for repositories - for releases up to 7.53	Standard Services	For upgrades up to release 7.53.	n/a	n/a
1076	TO_SCS_1.4.03A	Post-upgrade configuration changes for repositories	Standard Services	For upgrades from 7.53 to 7.54 and beyond.	n/a	n/a
1077	TO_SCS_1.4.04	Technical post-checks for repository connection	Standard Services	Connection test via RSCMST for all given repositories needs to be done.	n/a	n/a
1078	TO_SCS_1.4.05	Functional validation of repositories	Excluded Tasks		n/a	n/a
1079		**X55 - SAP Focus Run**				
1080		**Configuration**				

1081	TO_FRUN_1.1.07	Connect the first managed system(s) to customer FRUN	Standard Services	This task includes initial one-time preparations for FRUN connectivity including connection tests, exchange of certificate information, user provisioning, SLD data forwarding, etc. This task can be also used to change any existing connection details like certificate, user, hostname.	n/a	n/a
1082	TO_FRUN_1.1.08	Connect subsequent managed system(s) to customer FRUN	Standard Services	This task can be requested if at least one other managed host was already successfully connected to the FRUN with the preceding task ID.	n/a	n/a
1083	TO_FRUN_1.1.06	Configure SSI and monitoring in FRUN	Excluded Tasks		n/a	n/a
1084		**X56 - SAP S/4 HANA Integration Tasks**				
1085		**Configuration**				
1086	TO_S4H_1.1.01	Provision AI service instance on SAP Business Technology Platform (BTP)	Standard Services	SAP will provision SAP Business Technology Platform (BTP) AI service instance depending on the ISLM scenario specified. If Customer does not opt-in for credentials propagation SAP will share JSON with service key that can be manually copied to ISLM configuration step. Optional: Propagate credentials, set up and configure technical RFC connections.	n/a	n/a
1087	TO_S4H_1.1.02	Integration of users and standard business roles	Standard Services	Default integration tasks during provisioning only.	n/a	n/a
1088	TO_S4H_1.1.03	SSL configuration	Standard Services	Default integration tasks during provisioning only.	n/a	n/a
1089	TO_S4H_1.1.04	Webservices activation - SICF, OData, SOAMANAGER, RFC	Standard Services	Default integration tasks during provisioning only.	n/a	n/a
1090	TO_S4H_1.1.05	IMG/SPRO activities	Standard Services	Default integration tasks during provisioning only.	n/a	n/a
1091	TO_S4H_1.1.06	Fiori enablement tasks	Standard Services	Default integration tasks during provisioning only.	n/a	n/a
1092	TO_S4H_1.1.07	SLD configuration - RZ70 and Business system configuration	Standard Services	For Ariba Integration starter pack only. Default integration tasks during provisioning only.	n/a	n/a
1093		**SAP Managed BTP AI Service Setup for Customer Managed Integration Scenarios**	**This service provisions the respective SAP Business Technology Platform (BTP) Artificial Intelligence (AI) required for activating embedded AI features. Optionally, an automation can be executed to activate and configure prerequisites for the desired embedded Intelligent Scenario Lifecycle Management (ISLM) AI scenario. Prerequisite: AI Unit SKU and system on the supported release for requested ISLM scenario.**			
1094	TO_S4H_1.2.01	Configure Outbound internet proxy setting	Standard Services	Provision AI service instance on SAP Business Technology Platform (BTP) - Optional: Propagate credentials, set up and Configure technical RFC connections	n/a	n/a
1095	TO_S4H_1.2.02	Final activation of ISLM scenario	Excluded Tasks	Customer responsibility.	n/a	n/a
1096		**X57 - SAP Cloud Application Lifecycle Management (CALM)**				
1097		**Installation and Configuration**				
1098	TO_CALM_1.1.02	Basic setup	Packaged Services		Application Operations, CAS for Cloud ERP private	A1,C1
1099	TO_CALM_1.1.03	Set-up connectivity to CALM	Packaged Services	Provides validation of the automated SAP Cloud ALM provisioning. Includes: creation of up to Ten (10) users in IDM and CALM and assignment of roles; and adding services which are assigned to a different customer number than SAP Cloud ALM.	Application Operations, Core Operations for SAP Cloud ALM,CAS for Cloud ERP private	A1,O2,C1
1100	TO_CALM_1.1.04	Set-up connectivity to Cloud TMS	Packaged Services	Used to handle connectivity between CALM and ABAP systems. Connections to non-ABAP based systems can be requested via BASIC_1.15.04.	Application Operations, Core Operations for SAP Cloud ALM	A1,O2
1101	TO_CALM_1.1.06	Set-up test management	Packaged Services		Regression Testing	T1
1102		**X58 - SAP Teamcenter by Siemens**	**Tasks and services for SAP Teamcenter by Siemens are restricted to existing Customers and not currently available for new Customers.**			
1103		**Installation and Configuration**				
1104	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.	n/a	n/a
1105	TO_TC_1.1.04	Build client	Excluded Tasks	All 4-Tier client builds on customer desktops are excluded.	n/a	n/a
1106	TO_TC_1.1.05	BMIDE client	Excluded Tasks	Customer responsible for managing the BMIDE installation on their desktop.	n/a	n/a
1107	TO_TC_1.1.08	Restart Teamcenter infrastructure	Standard Services	As part of planned maintenance or issue resolution.	n/a	n/a
1108	TO_TC_1.1.09	Rebuild indexing service	Standard Services	If indexes need to be rebuilt or repaired for Teamcenter environment.	n/a	n/a
1109	TO_TC_1.1.12	Update / patch Teamcenter components - minor components only	Standard Services	Minor version/patch update of the Teamcenter application. (E.g.: X.2.1 to X.2.2, X.2.1 to X.3.2). Technical upgrade only.	n/a	n/a
1110	TO_TC_1.1.13	Major version upgrade of Teamcenter components - technical upgrade only	Additional Service	Major version upgrade of the Teamcenter application only (E.g.: Teamcenter 14.2 to 2312 or 2312 to 2406 etc.).	n/a	n/a
1111	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. Subject to assessment and approval by Service Provider.	n/a	n/a

1112	TO_TC_1.1.25A	Deploy BMIDE template - Cold Deployment	Standard Services	Following the configuration extension of Teamcenter, a BMIDE deployment package is created by the customer for cold deployment and requires OS level access to execute the deployment. Customer can request up to Twelve (12) BMIDE cold deployments per system, per calendar year. Additional requests are available as a billable service using TO_TC_1.1.25B. Customer is responsible for costs to restore a failed environment if the environment has failed due to customer error and/or customer package error.	n/a	n/a
1113	TO_TC_1.1.25B	Deploy BMIDE template - Cold Deployment - additional requests	Additional Service	Additional requests beyond entitlement described in TO_TC_1.1.25A.	n/a	n/a
1114	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.	n/a	n/a
1115	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).	n/a	n/a
1116	TO_TC_1.1.46	Deploy Pipelines - production environment	Standard Services	Move pipelines from development (DEV) environment to production (PRD) environment.	n/a	n/a
1117	TO_TC_1.1.47	Create/Design/Modify pipelines	Excluded Tasks	Support for designing/modifying/developing new pipelines.	n/a	n/a
1118	TO_TC_1.1.48	Monitor/Restart the AIG queue	Excluded Tasks	Monitoring and administration (start/stop) of AIG queue.	n/a	n/a
1119	TO_TC_1.1.49	Debug failed transfers - outbound/inbound	Excluded Tasks	Resolve unhandled issues with integration packages from Teamcenter.	n/a	n/a
1120	TO_TC_1.1.50	Client network based Module Service (dispatcher)	Excluded Tasks	Installing and managing client network based module services is not included. Customer is responsible for these activities.	n/a	n/a
1121	TO_TC_1.1.51	Build Teamcenter dispatcher, scheduler client, and module on new dispatcher server	Standard Services	Translation use case. Install ootb dispatcher scheduler, client, and module on dispatcher server for CAD translations.	n/a	n/a
1122	TO_TC_1.1.52	Run dispatcher admin utilities	Standard Services	Applicable for both CAD and non-CAD dispatcher. Run ootb dispatcher administration client utilities.	n/a	n/a
1123	TO_TC_1.1.53	Configure changes on dispatcher	Standard Services	Applicable for both CAD and non-CAD dispatcher. Configuration changes on scheduler, module, and client	n/a	n/a
1124	TO_TC_1.1.54	Troubleshoot failed translations	Excluded Tasks	Teamcenter Dispatcher related. Analyze and troubleshoot the failed or stuck translations in not in scope.	n/a	n/a
1125	TO_TC_1.1.55	System refresh of Teamcenter - Non-Production system from Production system	Additional Service	Non-Production Teamcenter hub system to be refreshed must have same architecture (e.g. DB size and volume size must be same). Non-Production Teamcenter system should be at same level as the Production with respect to custom configuration. If the Non-Production Teamcenter hub system to be refreshed is at lower release version compared to the Production system, then customer must provide the latest package to be deployed on the Non-Production system before the refresh activity to ensure custom config are same.	n/a	n/a
1126	TO_TC_1.1.56	Teamcenter (Single Sign On) SSO login configuration.	Additional Service	Only SAML based SSO configuration for Teamcenter is supported. Customer's SI partner must share SSO configuration document with clear steps to SAP delivery Teamcenter team. Customer is responsible to validate and troubleshoot the SSO login scenarios and issues observed, if any. Customer is responsible for the overall SSO configuration for Teamcenter. OS access required. Assistance can be requested via task BASIC_1.1.14. Customer is responsible to provide SAP delivery with the step by step instructions and/or documentation which is tested and verified by the customer.	n/a	n/a
1127		**X60 - SAProuter for Integration Scenarios**				
1128		**Installation and Configuration**				
1129	TO_SR_1.1.01	Install SAProuter	Standard Services		n/a	n/a
1130	TO_SR_1.1.02	Configure saprouttab file	Standard Services	Configure saprouttab entries based on integration scenarios: SAP SuccessFactors Employee Central Payroll or SAP GTS SEEBURGER Cloud Integration.	n/a	n/a
1131	TO_SR_1.1.03	SAProuter availability monitoring	Standard Services		n/a	n/a
1132	TO_SR_1.1.04	Non-SNC communication monitoring	Standard Services	Communication apart from integration scenarios: SAP SuccessFactors Employee Central Payroll or SAP GTS SEEBURGER Cloud Integration will generate alert.	n/a	n/a
1133		**X61 - SEEBURGER Cloud Integration for SAP Global Trade Services (GTS)**				
1134		**Installation and Configuration**				
1135	TO_SEE_1.1.01	SEEBURGER tenant creation	Excluded Tasks	Customer must make request to the SEEBURGER Team to create tenants in the SEEBURGER Cloud. This includes coordination with the SEEBURGER team to obtain necessary IPs to be allowlisted, SNC name, and certificates, etc.	n/a	n/a
1136	TO_SEE_1.1.02	Establish communication with backend	Standard Services	Post installation of SAProuter refer TO_SR_1.1.01 and TO_SR_1.1.02. Update the SNC name and SEEBURGER IPs in saprouttab file to allow communication with backend SAP GTS system.	n/a	n/a
1137	TO_SEE_1.1.03	Establish communication between load balancer and SAProuter	Standard Services	Add SAProuter in backend pool of LoadBalancers (Application LoadBalancer & Network LoadBalancer) and allowlist the SEEBURGER tenant IPs which is provided by customer to facilitate communication. To setup LB refer to TO_LRP_1.1.01	n/a	n/a

1138	TO_SEE_1.1.04	ABAP System tasks	Excluded Tasks	Customer will be enable SNC (with recommended parameters for security hardening), creating RFC in the backend SAP GTS system and maintaining partner profiles as per business need. Customer will also update the certificates on the ABAP side received from SEEBURGER end and allow SAProuter host to register program on gateway in gateway ACL files (secinfo and reginfo). SOAManager configuration will be done by Customer. Customer should exchange ABAP system certificate with SEEBURGER and share ABAP system SNC name for the configuration. SEEBURGER Team will provide required templates.	n/a	n/a
1139		**X62 - SAP SuccessFactors: Employee Central Payroll - Integration**				
1140		**Installation and Configuration**				
1141	TO_SF_1.1.01	SAProuter Registration at SuccessFactors	Standard Services	Post SAProuter installation, create a ticket under component XX-SER-NET-NEW to register managed SAProuter. Refer to "Setting Up an SNC-Based SAProuter Connection for Employee Central Payroll Systems" guide for the template.	n/a	n/a
1142	TO_SF_1.1.02	Allowlist SuccessFactors ECP IP	Standard Services	Refer to "Setting Up an SNC-Based SAProuter Connection for Employee Central Payroll Systems" guide to get the SuccessFactors ECP IP addresses based on regions.	n/a	n/a
1143	TO_SF_1.1.03	Import PSE to SAProuter	Standard Services	Download generated PSE from SAP For Me - saproutercertificate (formerly known as ONE Support Launchpad).	n/a	n/a
1144		**X63 - TrendMicro SAP NetWeaver Virus Scan Interface (NW-VSI)**				
1145		**Installation and Configuration**				
1146	TO_TMVSI_AV_1.1.01	Activate TrendMicro NW-VSI license	Additional Service	The SAP Virus Scan Interface (VSI) is the security component of the SAP NetWeaver platform. The VSI is used to secure all forms of customer content including documents, embedded images, and active content including JavaScript and scripts in PDF and Office documents.	n/a	n/a
1147	TO_TMVSI_AV_1.1.02	Configure application layer	Excluded Tasks		n/a	n/a
1148		**X64 - Microsoft SQL Server**				
1149		**Installation and Configuration**				
1150	TO_MSSQL_1.1.01	Install and/or Update MSSQL client	Standard Services		n/a	n/a
1151	TO_MSSQL_1.1.02	Implement MSSQL database encryption on MSSQL 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).	n/a	n/a
1152	TO_MSSQL_1.1.03	Implement MSSQL database encryption on MSSQL database already installed during Build	Standard Services	Encryption is enabled at system build only if it has been requested.	n/a	n/a
1153	TO_MSSQL_1.1.04A	Manage standby databases (MSSQL 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.	n/a	n/a
1154	TO_MSSQL_1.1.04B	Manage standby databases (MSSQL System Replication) for Disaster Recovery	Standard Services		n/a	n/a
1155		**X65 - SAP Signavio Process Intelligence On-Premise Extractor**				
1156		**Installation and Configuration**				
1157	TO_SGPIEX_1.1.01	Install and/or update	Standard Services	Applicable to only SAP ECC and S4/HANA landscapes as an integration agent. Agent is installed on a standard virtual machine. Includes implementation of technical prerequisites for SAP Signavio extractor. Available for all the hyperscalers.	n/a	n/a

Packaged Services Table Available at:
https://d.dam.sap.com/s/c/a/9QAybbF/SAP_RR_Service_Package_Detail.pdf
Packaged Services (Formerly: SAP Cloud Application Services ("CAS") available at additional charge. Needs to be performed by customer if applicable and if the SAP CAS Service is not used.)

Packaged Services: Include tasks/services that a customer can perform, but the customer may elect to have SAP or Service Provider elect to deliver. Needs to be performed by customer if applicable and if a Packaged Service is not used. Packaged Services are subject to additional service fees as agreed in a customer's contract.

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