

SAP Remote Basis Services

This document forms part of, and applies only to the extent incorporated into, an applicable Statement of Work ("SOW"). The RACI(s) herein describes the allocation of roles and responsibilities between Syntax and Customer for the activities expressly identified herein, but only to the extent such services and activities are expressly included in the Customer Specifications schedule to the applicable SOW or expressly included in a CO. Syntax may update this RACI(s) from time to time by updating the linked version of this document, and the then-current linked version will apply.

The first three tables define the abbreviations used in the RACI(s).

Responsibilities Abbreviations: Explanations for the abbreviations used in the "Syntax" and "Customer" columns in the RACI

Responsibility	Abbr.	Description
Responsible	R	The Party performing the activity.
Accountable	A	The Party who oversees and approves the activity.
Consulted	C	The Party whose opinions should be considered when performing the activity.
Informed	I	The Party who must be made aware that the activity is being performed.
Time & Materials	T&M	Any work that is not part of the standard scope of the Service; incurs additional fees.

Frequency Abbreviations: Explanations for the abbreviations used in the "Freq." column in the RACI

Responsibility	Description
S	One-Time Setup: Activities that are executed once (e.g., Installation of an initial system).
O	Ongoing: Activities that occur on a recurring basis without having to be requested by users (e.g., monitoring).
R	As Requested: Activities that must be requested by a Party.
A	As Needed: Activities that are actioned as they are required (e.g., through a monitoring alert).
M	Monthly: Activities that occur on a monthly basis without having to be requested by a Party.
N	Not Applicable: The activity is something that does not have a defined frequency.

Service Item Abbreviations: Explanations for the abbreviations used in the "SI" column in the RACI

Service Item ("SI")	Explanation
RC	Rate Card Service: As requested, supported tasks and activities but with an additional associated cost. Some of the Rate Card Services will be included as Service Catalog Item. Some Rate Card Services may be included as entitlements in Customer's contract and Customer will only be charged when exceeding what is included in the entitlement. An example would be one (1) production system copy per year is included, but a second system would be charged at a rate card price.
AD	Additional Service: As requested, services that require additional planning or a consulting component in order determine scope, effort, and costs. These services will be Time and Material based.
EX	Excluded from Service: Tasks and services that are the responsibility of Customer, or a Syntax offering that is not within the scope of this Service.
[empty]	Column is empty/blank: Tasks and services that are included as part of the standard Service (Customer will not be charged extra).

Note: The RACI(s) below are inclusive of the responsibilities and services that Syntax provides as part of the standard Service unless otherwise specified in the Notes column. Anything that is not specifically identified below may not be provided by Syntax and is assumed to be Customer's responsibility.

RACI

Item	Description	Syntax	Customer	Freq.	SI	Notes
1.0	Database Installation and Setup Activities					
1.0.1	Install database software	R, A		S		Customer must provide the necessary licenses
1.0.2	Create standard technical users	R, A		S		Third party interfaces and direct access to the database by the customer are excluded

Item	Description	Syntax	Customer	Freq.	SI	Notes
1.0.3	Schedule collectors for periodic updating of database statistics	R, A		S		
1.0.4	Perform a database schema export	R	A	R	RC	
1.0.5	Perform a database schema import	R	A	R	RC	
1.0.6	Build a replication database instance by database-specific means	R	A	R	AD	Supported database types; Oracle, Sybase ASE, Microsoft SQL, SAP MaxDB, IBM DB2
1.0.7	Set up encryption for databases / database schemas	R	A	R	AD	Supported database types; Oracle, Sybase ASE, Microsoft SQL, SAP MaxDB, IBM DB2
2.0	Database Operational Tasks					
2.0.1	Perform database consistency checks	R, A		O		
2.0.2	Plan and execute database / file container extensions through continuous database growth (as required)	R, A	I	O		
2.0.3	Analyze database log files for technical or infrastructural errors	R, A		O		
2.0.4	Analyze and resolve technical problems (e.g., database locks) or unavailability of the database	R, A		O		
3.0	Database Maintenance and Optimization					
3.0.1	Optimize the database and maintain database parameters	R, A		O		
3.0.2	Start / stop database	R	A	R		
3.0.3	Execute database reorganizations (complete database or indexes, offline)	R	A	R	RC	Supported database types; Oracle, Sybase ASE, Microsoft SQL, SAP MaxDB, IBM DB2
3.0.4	Perform individual tablespace or index reorganizations (online)	R	A	R	RC	Supported database types; Oracle, Sybase ASE, Microsoft SQL, SAP MaxDB, IBM DB2
4.0	Database Backup and Recovery					
4.0.1	Perform database backups (full and database log backups)		R, A		EX	
4.0.2	Recover and back up the database after problems caused at the infrastructure or database level	R	R, A		EX	
4.0.3	Restore and back up the database after problems caused at the application tier		R, A		EX	
5.0	Database Patch and Release Management					
5.0.1	Provide recommendations for database release management	R	A	R		Based on operational experience and information from SAP product development, syntax suggests recommendations for the database release to be used once a year
5.0.2	Apply security patches to the database	R, A		R		
5.0.3	Update database software within the same release	R	A	R		
5.0.4	Upgrade database software to a higher release	R	A	R	RC	
6.0	Database Performance Management					
6.0.1	Check and repair standard indexes	R, A		O		
6.0.2	Support of application support in the identification and optimization of SQL statements with poor performance	C	R, A	R	AD	
6.0.3	Create indexes for application tables	C	R, A		EX	

Item	Description	Syntax	Customer	Freq.	SI	Notes
7.0	Installation and setup activities - SAP HANA DB					
7.0.1	Design the SAP HANA database architecture	R, A		S		
7.0.2	Enable the Fast Restart Option of an SAP HANA DB	R, C	A	R		
7.0.3	Disable the Fast Restart Option of an SAP HANA DB	R, C	A	R		
7.0.4	Add another HANA node to increase SAP HANA DB capacity (vCPU, vRAM)	R	A	R	AD	
7.0.5	Set up SAP HANA DB Transport Management	R	A	S		
7.0.6	Establish a replication database instance based on HSR according to SAP best practices	R	A	S		
7.0.7	Implement encryption in an existing HANA DB	R	A	S		
8.0	Operational activities - SAP HANA DB					
8.0.1	Configure SAP HANA DB properties according to the relevant SAP Notes	R, A		A		
8.0.2	Sanitize SAP HANA DB log and trace files to free up file system capacities	R, A		O		
8.0.3	Import and maintain SAP HANA DB license keys	R, A		A		
8.0.4	Import and maintain certificates into the HANA DB to secure internal and external communication	R, A		A		
8.0.5	Operate replication database instance based on HSR	R	A	R		
8.0.6	Operate encrypted HANA databases	R	A	R		
8.0.7	Maintain SMTP server configuration	R, A		R		
8.0.8	Maintain HTTP access to SAP HANA	R, A		R		
9.0	Maintenance and optimization SAP HANA DB					
9.0.1	Move SAP HANA Tenant Database	R	A	R	AD	
9.0.2	Redistribute database tables based on table placement rules	R	A	R	AD	
9.0.3	Design a table partition strategy or architecture	R	A	R	AD	
9.0.4	Perform technical implementation of a table partitioning	R	A	R	AD	
9.0.5	Design row store/column store migration	R	A	R	AD	
9.0.6	Perform technical implementation of a row store/column store migration	R	A	R	AD	
9.0.7	Change the SAP HANA DB ID and instance number	R	A	R	AD	
10.0	Patch and Release Management HANA Database					
10.0.1	Provide recommendations for database release management	R	A	R		Based on operational experience and information from SAP product development, syntax suggests recommendations for the database release to be used once a year
10.0.2	Apply security patches to the database	R, A		R		
10.0.3	Update database software within the same release	R	A	R		
10.0.4	Upgrade database software to a higher version release	R	A	R	RC	
11.0	User and Role Administration SAP HANA DB					
11.0.1	Manage users, roles, and authorization for technical and administrative users for the purpose of exclusively operating an SAP HANA DB as the basis of an SAP NetWeaver system	R, A		O		

Item	Description	Syntax	Customer	Freq.	SI	Notes
11.0.2	Create an SAP HANA DB user, role, and authorization management concept		R, A		EX	
11.0.3	Create and modify SAP HANA DB users, roles, or other authorizations for HANA DB modeling purposes		R, A		EX	
11.0.4	Conduct setup and maintenance for SAML providers	R, A		R		
12.0	Feature Enhancements SAP HANA DB					
12.0.1	Configure and administer SAP HANA XS	R	A	R	AD	
12.0.2	Configure and administer SAP HANA XSA	R	A	R	AD	
12.0.3	Technical setup of SAP HANA Smart Data Integration	R	A	R	AD	
12.0.4	Set up application-side SAP HANA: Smart Data Integration		R, A		EX	
12.0.5	Install / update SAP HANA Studio or other end-user software on Customer's workstations or other end-user devices		R, A		EX	Installation and configuration of SAP Frontend Components is within the responsibility of the customer or the service provider commissioned by the customer.
12.0.6	Implement XSA for SAP HANA developments at Customer's site		R, A		EX	
12.0.7	Configure the XS-CLI Tool for SAP HANA Developments		R, A		EX	
12.0.8	Perform user management for SAP HANA developments		R, A		EX	
12.0.9	Provide support for Customer-specific applications		R, A		EX	
12.0.10	Provide availability monitoring for Customer-specific applications		R, A		EX	
13.0	High Availability and Disaster Recovery					
13.0.1	Develop and document high availability and disaster recovery procedures	R, A			AD	
14.0	High Availability Database					
14.0.1	Operation of a replication database instance	R	A	R		
14.0.2	Perform a high availability test based on the operation of a replication database	R	A	R		
15.0	SAP HANA DB High Availability and Disaster Recovery					
15.0.1	Configure SAP HANA System Replication	R, A		S		
15.0.2	Configure SAP HANA Storage Replication	R, A		S		
15.0.3	Set up Active/Active - Read Enabled	R, A		S		
15.0.4	Set up HANA DB HA Failover	R, A			AD	This may include both SAP based failover or third party HADR products
16.0	SAP NetWeaver High Availability and Disaster Recovery					
16.0.1	Implement high availability and disaster recovery setup according to SLA	R, A				
16.0.2	Execute failover during disaster recovery test	R, A	C		RC	
16.0.3	Execute productive failover in during an officially declared disaster by service provider	R, A	C			
17.0	Additional SAP Components HA and DR					
17.0.1	Configure SAP Cloud Connector High Availability	R, A		R	AD	
17.0.2	Configure SAP Web Dispatcher High Availability	R, A		R	AD	

Item	Description	Syntax	Customer	Freq.	SI	Notes
17.0.3	Configure SAP Content Server High Availability	R, A		R	AD	
17.0.4	Configure SAP BOBJ BI High Availability	R, A		R	AD	
17.0.5	Configure SAP BOBJ DS High Availability	R, A		R	AD	
18.0	Monitoring of SAP Landscape and Infrastructure					
18.0.1	Monitor database for available disk space	R, A		O		
18.0.2	Monitor disk space expansion parameters	R, A		O		
18.0.3	Monitor database resource consumption (memory, CPU, data memory) to avoid problems in technical operation	R, A		O		
19.0	Monitoring of the SAP HANA Landscape and Infrastructure					
19.0.1	Connect an SAP HANA DB to an SAP Focused Run System for monitoring purposes	R, A		S		
20.0	Monitoring of SAP NetWeaver (ABAP and Java)					
20.0.1	Activate technical monitoring of system components	R, A		S		This explicitly does not include any customer-specific business process, interface or application-side monitoring.
20.0.2	Monitor resource consumption of SAP system application servers (CPU, main memory, file systems) to avoid problems in technical operation	R, A		O		
20.0.3	Monitor the Dialog Process Utilization of the SAP System Application Servers	R, A		O		
20.0.4	Monitor the update processes of the SAP system to avoid update errors	R, A		O		
21.0	Monitoring Additional SAP Components					
21.0.1	Monitor SAP Cloud Connector Availability	R, A		O		This only includes technical availability of the software component
21.0.2	Monitor SAP Web Dispatcher Availability	R, A		O		This only includes technical availability of the software component
21.0.3	Monitor SAP Router Availability	R, A		O		This only includes technical availability of the software component
21.0.4	Monitor SAP Content Server Availability	R, A		O		This only includes technical availability of the software component
21.0.5	Monitor SAP Business Objects BI Availability	R, A		O		This only includes technical availability of the software component
21.0.6	Monitor SAP Business Objects DS Availability	R, A		O		This only includes technical availability of the software component
22.0	Installation and Setup Activities for SAP NetWeaver-based Systems					
22.0.1	Install SAP NetWeaver (NW) software	R, A		S		Customer has to provide the necessary licenses
22.0.2	Conduct initial maintenance of SAP system profile parameters according to SAP best practices	R, A		S		
22.0.3	Conduct Initial maintenance or testing of operating modes – NW ABAP-based systems only	R, A	C	S		SYNTAX configures the operating modes in coordination or according to customer specifications

Item	Description	Syntax	Customer	Freq.	SI	Notes
22.0.4	Conduct initial maintenance of logon groups – NW ABAP-based systems only	R, A	C	S		SYNTAX configures the logon groups in coordination or according to customer specifications
22.0.5	Conduct initial creation and maintenance of technical systems in SAP Support Portal	R, A		S		Customer must provide an S-User with appropriate authorizations for his customer number
22.0.6	Conduct initial installation of license keys in the SAP system	R, A		S		For license key generation customer needs to provide an S-User with appropriate authorizations for his customer number
22.0.7	Integrate installed systems into the Syntax Enterprise Cloud operating environment	R, A		S		
22.0.8	Schedule jobs for proper technical operation (esp. Standard batch jobs and system backups)	R, A	C	S		
22.0.9	Conduct initial technical check of the installed SAP system	R, A	I	S		The responsibility of the this service is limited to technical or infrastructural checks. Application checks are the responsibility of the customer or the SAP application management commissioned by the customer
22.0.10	Provide Customer guidance on the relevant information regarding installation and maintenance of SAP front-end components (SAP GUI, NWBC, etc.)	R, C	A	R		
22.0.11	Perform language import into an empty SAP NetWeaver ABAP system	R	A	R		
22.0.12	Install and configure SAP front-end components (SAP GUI, NWBC, etc.)		R, A		EX	Installation and configuration of SAP front-end components is subject to the customer or the service provider commissioned by the customer
22.0.13	Define clients required for the application purpose of the system – NW ABAP-Based Systems only	I	R, A		EX	Determination of which clients are to be created for which purpose in the system provided is subject to the customer or the service provider commissioned for the application-side commissioning.
22.0.14	Create new client according to the specified copy profile	R	A	R		
22.0.15	Customize the SAP system for the respective application purpose (application, configuration and maintenance, application support and application troubleshooting)		R, A		EX	Customizing and commissioning of the SAP system for the respective application purpose are subject to the customer or the service provider commissioned by him for this purpose
23.0	Transport Management for SAP NW-based Systems					
23.0.1	Create and maintain Transport Domain in client 000 and Transport Directory	R, A		S		Limitation to a standard setup. Customer-specific domains or configurations are not included in this service.

Item	Description	Syntax	Customer	Freq.	SI	Notes
23.0.2	Parameterize the SAP Transport Management System (TMS) according to SAP Best Practices and/or Customer specifications	R	A	R		
23.0.3	Conduct error analysis and troubleshooting regarding the technical functionality of the TMS	R, A		O		
23.0.4	Provide advice on client-specific transport route or transport group configurations and other settings of the TMS	R	A	R	AD	
23.0.5	Implement client-specific transport route or group configurations and other settings of the TMS according to Customer specifications	R	A	R	AD	
23.0.6	Implement initial configuration of Transport-Based Correction Instructions (TCI) in client 000	R, A		S		
23.0.7	Implement TCI for SAP Notes		R, A		AD	
23.0.8	Implement initial configuration of CTS+	R	A	R	AD	Implementation of TCIs is subject to the customer or the service provider commissioned for application support. Within the service MSAP, TCIs are implemented if they are the technical basis for the original service provision of the service MSAP
23.0.9	Release and import Transport Requests		R, A		EX	Release and import of application-specific transport orders is subject to the customer or the service provider commissioned for application support. Within the MSAP service, transport orders are only released and imported if this is the technical basis for the original service provision of the MSAP service
23.0.10	Perform transports to move objects between SAP systems of different system landscapes	R	A	R	AD	
23.0.11	Adjust Dictionary and Repository Objects as Part of SAP System Software Changes (SAP Notes, Support Packages, Support Package Stacks, etc.)		R, A		EX	Changes or modification synchronization of dictionary and repository objects (SPDD and SPAU) are subject to the customer or the service provider commissioned for application support
23.0.12	Test and confirm changes of dictionary and repository objects		R, A		EX	Testing and confirmation of test success for changes to dictionary or repository objects is the responsibility of the customer or .dem service provider commissioned for application support.
23.0.13	Set up and configure ChaRM in an SAP Solution Manager system		R, A		EX	Setup and configuration of SAP Solution Manager-based ChaRM is a customer-specific implementation project whose conception and provision is not part of the MSAP service.
23.0.14	Configure technical connections of SAP systems to an SAP Solution Manager system as part of a ChaRM implementation	R	A	R	AD	

Item	Description	Syntax	Customer	Freq.	SI	Notes
24.0	Operational Activities for SAP NW-based systems					
24.0.1	Analyze update errors to assess business impact and take appropriate action		R, A		EX	Evaluation of failed updates in the SAP system and the derivation of suitable measures is subject to the customer or the service provider commissioned for application support
24.0.2	Sanitize cancelled update transactions		R, A		EX	Cleansing of failed updates in the SAP system is subject to the customer or the service provider commissioned for application support
24.0.3	Analyze lock entries of the SAP system and determine business impact and appropriate measures	C	R, A	R	EX	
24.0.4	Delete lock entries in the SAP system	C	R, A	R		
24.0.5	Analyze the SAP system log to correct technical errors of the SAP system	R, A		O		
24.0.6	Conduct periodic analysis of SAP system ABAP shortdumps to correct technical errors of the SAP system	R, A	C	O		
24.0.7	Conduct periodic analysis of SAP system ABAP shortdumps to correct application-side errors of the SAP system	C	R, A		EX	Regular analysis of ABAP short dumps that indicate application-side errors is subject to the customer or the service provider commissioned for application support
24.0.8	Analyze and resolve technical problems in the SAP NW ABAP System	R, A		O		
24.0.9	Analyze Java application and system log to correct technical errors of the SAP System	R, A		O		
24.0.10	Perform maintenance of SAP system profile parameters according to SAP best practices or according to the respective technical requirements	R, A	C	O		
24.0.11	Perform maintenance of JVM SAP system parameters according to SAP best practices or according to the respective technical requirements	R, A	C	O		
24.0.12	Implement temporary adjustment of the memory configuration of an ABAP SAP system based on the RSMEMORY report	R	A	R		
24.0.13	Analyze and resolve technical problems in the SAP NW Java system	R, A		O		
24.0.14	Configure and customize Java applications in the SAP NW Java System		R, A		EX	Configuration and adaptation of the respective Java applications is subject to the customer or the service provider commissioned for application support.
24.0.15	Define system start and shutdown procedures	R, A	C			
24.0.16	Start/stop the SAP NetWeaver application server	R	A	R		
24.0.17	Perform application job scheduling - administration, monitoring, alerting, reporting, and load balancing		R, A		EX	
25.0	System Performance Management					
25.0.1	Conduct initial assessment of system performance issues	R	R, A	R		
25.0.2	Troubleshoot system performance issues within the hosting and managed services scope	R, A		R		

Item	Description	Syntax	Customer	Freq.	SI	Notes
25.0.3	Execute performance tuning	C	R, A	R	AD	Performance tuning may include items
25.0.4	Assist development team in identifying poorly performing SQL statements	C	R, A	R	AD	
26.0	Client Operations for SAP NW-based ABAP Systems					
26.0.1	Create an empty client (transaction SCC4)	R	A	R		
26.0.2	Delete client	R	A	R		
26.0.3	Copy (local or remote), export, or import or client based on profiles: SAP_USER, SAP_UONL, SAP_PROF, SAP_CUST, SAP_CUSV, SAP_UCUS, SAP_UCSV	R	A	R	RC	
26.0.4	Copy client within an SAP system (local copy) with a client size of less than or equal to 100 GB (transaction SCCL)	R	A	R	RC	For a data-consistent copy, it must be ensured that there's no activity in the source client.
26.0.5	Copy client between two SAP systems (remote copy) with a client size of less than or equal to 100 GB (transaction SCC9)	R	A, C	R	RC	The client copy between two SAP systems may be required. Adjustments to the dictionary or repository objects of the target system. These adjustments are subject to the customer or the service provider commissioned for application support. The analysis of the required change requirements is part of the service offered.
26.0.6	Perform client copy with a size greater than or equal to 100 GB (local or remote)	R	A	R	AD	The statements and recommendations from SAP Note 489690 "CC-INFO: Copying Large and Productive Clients" apply - in particular: "A client copy must - for the copy of a productive client - selectively access a very large amount of data. This inevitably leads to long running times. Normally, therefore, a database copy is preferable to a tenant copy." "The relocation of a productive client with the client copy always requires appropriate support from Data Management Services. If necessary, please contact the components CA-LT-SRV." "Before starting the copy, you must ensure that neither the source nor the target tenant is working."
26.0.7	Perform export of a client (transaction SCC8)	R	A	R		For a data-consistent export, it must be ensured that no work is carried out in the source client. This excludes all interactive processing as well as any background processing. The runtime of the export is directly dependent on the size of the client.

Item	Description	Syntax	Customer	Freq.	SI	Notes
26.0.8	Perform import of a client export	R	A	R		The runtime of the import is directly dependent on the size of the client to be imported.
26.0.9	Perform preparatory activities of a client copy (job planning, user blocks, saving table contents of the target system, etc.)	R	A, C	R		Execution of required preparatory activities of a client copy or a client export is subject to the customer or the service provider commissioned for application support. In explicit agreement, individual activities within the MSAP service can be commissioned by the customer.
26.0.10	Perform follow-up activities of a client copy (job scheduling, user unlocks, re-importing table contents of the source system, etc.)	R	A, C	R		Execution of required follow-up activities of a client copy or a client import is subject to the customer or the service provider commissioned for application support. In explicit agreement, individual activities within the MSAP service can be commissioned by the customer.
26.0.11	Analyze application-related problems during a client copy or a client export or import		R, A		EX	Analysis of application-related problems in the course of a client copy or a client import is subject to the customer or the service provider commissioned for application support.
27.0	SAP System Copy					
27.0.1	Define system copy steps and procedures	C	R, A		EX	
27.0.2	Perform customer-specific pre-processing copy steps	I	R, A		EX	
27.0.3	Perform technical system copy from source to target	R, A		R	RC	
27.0.4	Perform customer-specific post-processing copy steps	I	R, A		EX	
27.0.5	Perform testing and validation after system copy		R, A		EX	
28.0	Security and Authorization					
28.0.1	Design Security and Authorization Concept on the infrastructure level	R, A				
28.0.2	Maintain SAP-System standard users (including the DDIC, SAP*, and J2EE ADMIN users) in client 000	R, A				
28.0.3	Maintain personalized user accounts, which Syntax uses to manage Customer's SAP systems; encompasses only user accounts in client 000	R, A				
28.0.4	Define, maintain, and audit roles, profiles, and permissions (Syntax uses these to manage Customer's SAP systems)	R, A				
28.0.5	Manage users or roles, profiles, and permissions assigned, which Syntax does not use to manage Customer's SAP systems	C	R, A	R		
28.0.7	Define SAP system profile parameters that are related to the security settings of the system (e.g., profile parameters regarding the password policy of the system)	R	A	R		
28.0.8	Implement SAP system profile parameters that are related to the security settings of the system	R, A		M		On customer's request, SAP security notes will only be

Item	Description	Syntax	Customer	Freq.	SI	Notes
						implemented in the development system (ABAP). Importing these notes into the quality assurance system and/or the production system and corresponding tests are subject to the customer or the service provider commissioned for SAP application support
28.0.9	Implement SAP security notes with priority "Hot News" of software component BC (Basis Component) or other SAP Basis/ABAP-related SAP Security Notes	R	A	M	AD	
28.0.10	Analyze the SAP System Landscape and identify the relevant SAP Security Notes on the Application Level	R	A	R	AD	On customer's request, SAP security notes will only be implemented in the development system (ABAP). Importing these notes into the quality assurance system and/or the production system and corresponding tests are subject to the customer or the service provider commissioned for SAP application support
28.0.11	Implement relevant SAP Security Notes on the Application Level (Software Components other than BC)		R, A		EX	The implementation of application-related security instructions that are associated with manual activities in the system is the responsibility of the customer or the service provider commissioned for application support
28.0.12	Implement SAP Security Notes on the Application Level (Software Components other than BC) including manual activities	R	A	R	AD	
28.0.13	Perform analysis of Customer's Security Audit Logs	R	A	R		
28.0.14	Provide Audit Log from an SAP system to Customer	R, A				
28.0.15	Create System Personal Security Environment (PSE) for an SAP system	R, A				
28.0.16	Maintain the Secure Storage of an AS ABAP system	R	A	R	AD	
29.0	Output Management for SAP NW-based Systems					
29.0.1	Define output management requirements	C	R, A	S		
29.0.2	Analyze and correct technical errors during spooling and output/printing from the SAP system	R, A		S		
29.0.3	Analyze incorrect output requests in the SAP system	R	A	R		
29.0.4	Analyze and fix technical errors during spooling and output/printing on spool systems that are not administered by Syntax		R, A		EX	The analysis and correction of errors regarding the spooling and output of output requests on spool systems that are not administered by Syntax is subject to the customer or the service provider commissioned for this purpose.
29.0.5	Define, change, or delete an output device in the SAP system	R	A	R		The request to create or change the output device must name at least the following parameters: - Pairing type (local or remote)

Item	Description	Syntax	Customer	Freq.	SI	Notes
						- Device type of the printer if the pairing type is not remote - IP address or FQDN of the spool server for remote pairing type
29.0.6	Lock or unlock output devices in the SAP System	R	A	R		
29.0.7	Conduct consistency check of tables relevant for spooling and output in the SAP system (Report RSPO1043)	R, A		O		
29.0.8	Reorganize the SAP Spool system to avoid error conditions in the SAP system	R, A	C	O		
29.0.9	Install, operate, and maintain a local host spool system on the SAP system host	R	A	R	AD	
29.0.10	Create, change, or delete an output device at OS level for local printing	R	A	R	AD	
30.0	Interface Management of SAP NW-based Systems					
30.0.1	Conduct initial configuration and parameterization of the RFC Gateway	R, A		S		
30.0.2	Define and implement the security parameters of the RFC gateway (SNC communication, ACL mode, reginfo and secinfo content)	R	A, C	R	AD	The definition and configuration of the security parameters of the RFC gateway is not included in the , but must be explicitly ordered by the customer in the form of a request. The customer is subject to obligations to cooperate in the definition and implementation (esp. Testing obligations and coordination with third-party providers)
30.0.3	Maintain the security parameters of the RFC gateway (SNC communication, ACL mode, reginfo and secinfo content)	R	A, C	R	AD	Changes to the RFC gateway parameterization (for example, changes to the content of reginfo or secinfo) must be explicitly requested by the customer
30.0.4	Implement initial configuration of the Internet Communication Manager (ICM) for communication with the SAP system via HTTP, HTTPS, or SMTP	R, A		S		
30.0.5	Create, maintain, and delete services in the Internet Communication Framework (ICF)	R	A, C		AD	
30.0.6	Create and maintain an SNC PSE for secure communication via Secure Network Communication to encrypt SAP RFC and DIAG protocol communication	R, C	A	S	AD	
30.0.7	Create and maintain an SSL server PSE for secure communication with the SAP system via HTTPS based on SSL (Secure Socket Library)	R, C	A	R	AD	
30.0.8	Create and maintain an SSL client PSE for secure authentication of the SAP system as a client based on SSL (Secure Socket Library)	R, C	A	R	AD	
30.0.9	Create and maintain a WebService Security PSE	R, C	A	R	AD	
30.0.10	Create and maintain an SSF application PSE	R, C	A	R	AD	
30.0.11	Create a certificate signing request for signing by a Certificate Authority (CA) and import of the signed request	R, C	A	R	AD	
30.0.12	Configure the system parameterization for Asynchronous RFC Communication	R	A, C	R	AD	
30.0.13	Configure the system parameterization for bgRFC Communication	R	A, C	R	AD	

Item	Description	Syntax	Customer	Freq.	SI	Notes
30.0.14	Create, maintain, and delete RFC and HTTP(S) destinations in transaction SM59 for technical system operation	R, A		O		
30.0.15	Create, maintain, and delete remote RFC destinations in transaction SM59 for Customer-specific interface implementations	R	A, C	R	AD	The request to create or change the remote RFC destination must name at least the following parameters: - Connection Type (ABAP, Internal, TCP/IP, ABAP Driver, etc) - Targethost - Instance number on the target host
30.0.16	Create, maintain, and delete remote HTTP(S) destinations in transaction SM59 for Customer-specific interface implementations	R	A, C	R	AD	The request to create or change the remote HTTP destination must specify at least the following parameters: - Destination host - Destination port ("Service No.") - Path Prefix
30.0.17	Set up, operate, maintain, and monitor data processing based on batch input		R, A		EX	Support of data processing on the basis of batch input is subject to maintenance by Customer or the service provider commissioned for this purpose
30.0.18	Set up, operate, maintain, and monitor Customer-specific interface processing based on (s)RFC communication via BAPIs		R, A		EX	Support of Customer-specific interface processing on the basis of (s)RFC communications via BAPI is subject to maintenance by Customer or the service provider commissioned for this purpose
30.0.19	Set up, operate, maintain, and monitor Customer-specific interface processing based on qRFC/tRFC/bgRFC communication		R, A		EX	Support of Customer-specific interface processing on the basis of RFC communications is subject to maintenance by Customer or the service provider commissioned for this purpose
30.0.20	Set up, operate, maintain, and monitor Customer-specific interface processing based on IDocs		R, A		EX	Support of Customer-specific interface processing based on IDocs is subject to maintenance by Customer or the service provider commissioned for this purpose
30.0.21	Set up, operate, maintain, and monitor Customer-specific interface processing based on Application Link Enabling (ALE)		R, A		EX	Support of Customer-specific interface processing on the basis of ALE is subject to maintenance by Customer or the service provider commissioned for this purpose
30.0.22	Set up, operate, maintain, and monitor Customer-specific interface processing based on HTTP(S)		R, A		EX	Support of Customer-specific interface processing based on HTTP(S) is subject to maintenance by Customer or the service provider commissioned for this purpose
30.0.23	Set up, operate, maintain, and monitor Customer-specific interface processing based on the Advanced Adapter Engine (NW Java)		R, A		EX	Support of Customer-specific interface processing based on the Advanced Adapter Engine is subject to maintenance by

Item	Description	Syntax	Customer	Freq.	SI	Notes
						Customer or the service provider commissioned for this purpose
31.0	Certificate Management for SAP NW-based Systems					
31.0.1	Generate certificate signing requests (CSRs)	R	A	R		
31.0.2	Generate and maintain CSRs for ICM, load balancer, Web Dispatcher, and Data Services	R, A		R		
31.0.3	Send CSRs to the certification authority (CA)		R, A	R	EX	
31.0.4	Implement signed certificate on ICM, load balancer, Web Dispatcher, and Data Services	R, A		R		
31.0.5	Add SSL certificates	R, A		R	AD	
31.0.6	Monitor certificate lifetime	R	A	O		
31.0.7	Renew expired certificates	R	A	O		Includes the generation of the CSR and add of the renewed certificate. Customer is responsible for generating the certificate provided based on the CSR renewal provided.
31.0.8		I	R, A		EX	
32.0	Patch and Release Management for SAP NW-based Systems					
32.0.1	Implement SAP Notes for software component "Basis Component" (BC) without manual activities that provide corrections for technical system operation	R, A		O		
32.0.2	Implement SAP Notes for software component BC including manual activities that provide corrections for technical system operation	R, A	C	O		When implementing SAP Notes that require manual activities, Customer or the service provider commissioned for application support is obliged to cooperate. Implementations of this type represent modifications to the system that require a developer key
32.0.3	Implement SAP Notes that are not of software component BC		R, A		EX	
32.0.4	Install additional software in SAP NW ABAP systems (e.g., add-ons)	R	A	R	AD	
32.0.5	Import languages and other content into SAP NetWeaver ABAP system	R	A	R	AD	
32.0.6	Update software components of SAP system at OS level (SAP kernel, host agent, diagnostic agent, etc.)	R, A	I	R		
32.0.7	Update software components of Support Tools for ABAP Systems (ST-PI and ST-A/PI)	R, A		O		
32.0.8	Update specific SAP NetWeaver ABAP component based on a Support Package (SP)	R, A		R	RC	
32.0.9	Update specific SAP NetWeaver Java component based on a Support Package (SP)	R, A		R	RC	
32.0.10	Update SAP NetWeaver ABAP system landscape based on a Support Package Stack (SPS)	R	A	R	RC	The update usually refers to the entire system landscape, since the individual system receives a different release level from the other systems with regard to transport management

Item	Description	Syntax	Customer	Freq.	SI	Notes
32.0.11	Update SAP NetWeaver Java system landscape based on a Support Package Stack (SPS)	R	A	R	RC	The update usually applies to the entire system landscape, as the individual system receives a different release status than the other systems with regard to the deployment of Java software components
32.0.12	Update SAP System Landscape SAP NetWeaver ABAP based on an Enhancement Package (EhP)	R	A	R	AD	The update usually refers to the entire system landscape, since the individual system receives a different release level from the other systems with regard to the deployment of ABAP software components
32.0.13	Update SAP system landscape using the Software Update Manager (SUM) feature nZDM (near-Zero Downtime Maintenance)	R	A	R	AD	
32.0.14	Perform major SAP Release upgrade or S/4HANA conversions	R	A	R	AD	
32.0.15	Execute productive failover during an officially declared disaster by service provider	R, A	C	R		
33.0	SAP System Management Process Orchestration (PO)					
33.0.1	Install SAP-provided adapters and software components	R	A	R	RC	
33.0.2	Configure required system connections to partner systems (technical only)	R	A, C	R	RC	The request for creating the system connection must specify at least the following parameters: Connection Protocol Target Host Destination As a rule, further connection-specific parameters must also be named.
33.0.3	Create PSEs and SSL views		R, A		EX	
33.0.4	Perform SAP PO Operations		R, A		EX	The application-side operation, including configuration and monitoring of the PI/PO system, is the responsibility of Customer or service providers commissioned for application support This includes, among other things, the following specific activities: Monitor application-specific PO/PI functions, such as messaging, queuing, message processing, communication channels, queues, BMP processes, etc. Configuration of application-specific PO/PI functions, such as messaging, queuing, message processing, communication channels, queues, BMP processes,

Item	Description	Syntax	Customer	Freq.	SI	Notes
						etc. Fault analysis of application-specific PO/PI functions, e.g. messaging, queuing, message processing, communication channels, queues, BMP processes, etc.
34.0	SAP Cloud Connector					
34.0.1	Install and perform initial configuration	R, A		S		Installation and baseline setup, network access to BTP, and Customer administrator user
34.0.2	Implement upgrades and patches	R, A		R		Upgrade to requested version, Does not include application/tunnel validation/testing
34.0.3	Configure backups	R, A		O		Done via configuration exports or VM backup
34.0.4	Configure authentication, destination, and sub-accounts		R, A		EX	Setup of authentication between backend systems with mutual HTTP/RFC setup, LDAP, IDP, Principal Propagation, etc. Connection and management to sub-accounts, destination, access control, service channels, and other configurations
34.0.5	Execute upgrade test		R, A		EX	Testing applications and tunnels
35.0	SAP Analytics Cloud Agent					
35.0.1	Install SAP Analytics Cloud Agent	R, A		S		Installation is based on existing Cloud Connector
35.0.2	Implement upgrades and patches	R, A		R		
35.0.3	Configure SAP Analytics Agent Java Connector	R, A		R		
35.0.4	Configure SAP Analytics Agent and Connectivity		R, A		EX	Configuration and connectivity between SAP Analytics Cloud and systems requiring analytics agent are done via the cloud connector
36.0	SAP Web Dispatcher					
36.0.1	Install and perform initial configuration	R, A		S		
36.0.2	Implement upgrades and patches	R, A		R		
36.0.3	Configure backups	R, A		O		
36.0.4	Provide support for SSL in parameter file and PSE tools	R, A		R		Supports the creation of the signing requests, importing Customer certificates, and certificate maintenance within the standard Web Dispatcher tools
36.0.5	Implement configuration changes	R, A		R		Configuration including set up of communication to backend systems, encryption policies, redirects, rules for the modification of HTTP requests, authentication file, Web Dispatcher related changes in backend client 000 (HTTPURLLOC), error handling

Item	Description	Syntax	Customer	Freq.	SI	Notes
36.0.6	Execute upgrade test		R, A		EX	
37.0	SAP Router					
37.0.1	Install and perform initial configuration	R, A		S		
37.0.2	Implement upgrades and patches	R, A		R		
37.0.3	Configure backups	R, A		O		
37.0.4	Implement configuration changes	R, A		R		Setup and maintenance of the SNC connectivity, PSE, and the routing table
37.0.5	SAPRouter license renewal	R, A		O		
38.0	SAP Content Server					
38.0.1	Install SAP Content Server (CS) and database (DB)	R, A				
38.0.2	Patch CS and DB	R, A				
38.0.3	Generate initial SSL certificate	R, A				
38.0.4	Add server certificates to STRUST		R, A		EX	
38.0.5	Configure technical repository(ies) for CS		R, A		EX	
38.0.6	Test connectivity for repository(ies)		R, A		EX	
38.0.7	Perform technical upgrade of CS and DB	R, A				
38.0.8	Perform post-upgrade configuration changes for repository(ies)		R, A		EX	
38.0.9	Perform technical post-checks of connection for repository(ies)		R, A		EX	
38.0.10	Perform functional validation for repository(ies)		R, A		EX	
39.0	SAP Business Objects Business Intelligence					
39.0.1	Install and set up Business Intelligence	R, A				
39.0.2	Configure backups	R, A				
39.0.3	Implement upgrades and patches	R, A				
39.0.4	Manage authorization and users		R, A		EX	
39.0.5	Promote BI objects between environments		R, A		EX	
39.0.6	Create and maintain universes		R, A		EX	
39.0.7	Integrate with external systems		R, A		EX	
39.0.8	Create and maintain BI objects		R, A		EX	
40.0	SAP Data Services					
40.0.1	Install Data Services and Repository Database	R, A				
40.0.2	Configure backups	R, A				
40.0.3	Configure SMTP email settings	R, A				
40.0.4	Implement upgrades and patches	R, A				
40.0.5	Manage authorization and users		R, A		EX	
40.0.6	Create and maintain Data Services Job		R, A		EX	
40.0.7	Configure database connections for Jobs		R, A		EX	
40.0.8	Monitor Jobs		R, A		EX	
40.0.9	Configure Data Services object transports		R, A		EX	
41.0	SAP Business Connector					
41.0.1	Install and perform initial configuration	R, A		S		

Item	Description	Syntax	Customer	Freq.	SI	Notes
41.0.2	Implement upgrades and patches	R, A	I	O		
41.0.3	Configure the SAP Business Connector server settings	R, A		O		
41.0.4	Administer User and Groups	R, A		O		
41.0.5	Allow and Deny Inbound Connections to the server	R, A		O		
41.0.6	Analyze the Business Connector application logs in case of errors	R, A	C	R		
41.0.7	Maintain the SAP Business connector server license key	R, A		O		
41.0.8	Maintain the ELSTER-Package for SAP Business Connector	R, A	I	O		
41.0.9	Maintain customer specific packages		R, A		EX	
41.0.10	Provide a valid certificate including PIN for ELSTER access		R, A	R		
41.0.11	Setup and configure the connection in the respective SAP system client		R, A		EX	Setting up and configuring the ELSTER connection within Customer's SAP-system client is subject to maintenance by Customer or the service provider commissioned for this purpose
41.0.12	Running the functional tests and verifying functionality of the ELSTER interface	C	R, A	R		
42.0	SAP Proactive Service Management					
42.0.1	Early Watch Review	R	A	Q		Syntax is responsible for the delivery of the review and Customer is accountable to approve any changes recommended
42.0.2	Application Lifecycle Management Review	R	A	Q		Syntax is responsible for the delivery of the review and Customer is accountable to approve any changes recommended
42.0.3	Security HotNews Review	R	A	M		Syntax is responsible for the delivery of the review and Customer is accountable to approve any changes recommended