

## SAP Managed 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              | <b>One-Time Setup:</b> Activities that are executed once (e.g., Installation of an initial system).                    |
| O              | <b>Ongoing:</b> Activities that occur on a recurring basis without having to be requested by users (e.g., monitoring). |
| R              | <b>As Requested:</b> Activities that must be requested by a Party.                                                     |
| A              | <b>As Needed:</b> Activities that are actioned as they are required (e.g., through a monitoring alert).                |
| M              | <b>Monthly:</b> Activities that occur on a monthly basis without having to be requested by a Party.                    |
| N              | <b>Not Applicable:</b> 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                  | <b>Rate Card Service:</b> 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                  | <b>Additional Service:</b> 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                  | <b>Excluded from Service:</b> Tasks and services that are the responsibility of Customer, or a Syntax offering that is not within the scope of this Service.                                                                                                                                                                                                                                                                                                                                     |
| [empty]             | <b>Column is empty/blank:</b> 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 |
|--------------|------------------------------------------------------------------|--------|----------|-------|----|-------|
| <b>1.0</b>   | <b>Database Installation and Setup Activities</b>                |        |          |       |    |       |
| <b>1.0.1</b> | Install database software                                        | R, A   |          | S     |    |       |
| <b>1.0.2</b> | Create standard technical users                                  | R, A   |          | S     |    |       |
| <b>1.0.3</b> | Schedule collectors for periodic updating of database statistics | R, A   |          | S     |    |       |
| <b>1.0.4</b> | Perform a database schema export                                 | R      | A        | R     | RC |       |
| <b>1.0.5</b> | Perform a database schema import                                 | R      | A        | R     | RC |       |

| Item  | Description                                                                                                   | Syntax | Customer | Freq. | SI | Notes |
|-------|---------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| 1.0.6 | Build a replication database instance by database-specific means                                              | R      | A        | R     | RC |       |
| 1.0.7 | Set up encryption for databases / database schemas                                                            | R      | A        | R     | AD |       |
| 2.0   | <b>Database Operational Tasks</b>                                                                             |        |          |       |    |       |
| 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   | <b>Database Maintenance and Optimization</b>                                                                  |        |          |       |    |       |
| 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     |    |       |
| 3.0.4 | Perform individual tablespace or index reorganizations (online)                                               | R      | A        | R     |    |       |
| 4.0   | <b>Database Backup and Recovery</b>                                                                           |        |          |       |    |       |
| 4.0.1 | Perform database backups (full and database log backups)                                                      | R, A   |          | O     |    |       |
| 4.0.2 | Recover and back up the database after problems caused at the infrastructure or database level                | R, A   | C        | O     |    |       |
| 4.0.3 | Restore and back up the database after problems caused at the application tier                                | R      | A        | R     | RC |       |
| 5.0   | <b>Database Patch and Release Management</b>                                                                  |        |          |       |    |       |
| 5.0.1 | Provide recommendations for database release management                                                       | R      | A        | R     |    |       |
| 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   | <b>Database Performance Management</b>                                                                        |        |          |       |    |       |
| 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     | N     | EX |       |
| 7.0   | <b>Installation and setup activities - SAP HANA DB</b>                                                        |        |          |       |    |       |
| 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     | RC |       |
| 7.0.5 | Set up SAP HANA DB Transport Management                                                                       | R      | A        | R     | RC |       |
| 7.0.6 | Establish a replication database instance based on HSR according to SAP best practices                        | R      | A        | R     | RC |       |
| 7.0.7 | Implement encryption in an existing HANA database                                                             | R      | A        | R     | RC |       |
| 8.0   | <b>Operational activities - SAP HANA DB</b>                                                                   |        |          |       |    |       |
| 8.0.1 | Configure SAP HANA properties according to the relevant SAP Notes                                             | R, A   |          | A     |    |       |
| 8.0.2 | Sanitize HANA 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     | RC |       |
| 8.0.6 | Operate encrypted HANA databases                                                                              | R      | A        | R     | RC |       |
| 8.0.7 | Maintain SMTP server configuration                                                                            | R, A   |          | R     |    |       |
| 8.0.8 | Maintain HTTP access to SAP HANA                                                                              | R, A   |          | R     |    |       |
| 9.0   | <b>Maintenance and optimization SAP HANA DB</b>                                                               |        |          |       |    |       |

| Item    | Description                                                                                                                                                                   | Syntax | Customer | Freq. | SI | Notes |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| 9.0.1   | Move SAP HANA Tenant Database                                                                                                                                                 | R      | A        | R     | RC |       |
| 9.0.2   | Redistribute database tables based on table placement rules                                                                                                                   | R      | A        | R     | RC |       |
| 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 database ID and instance number                                                                                                                           | R      | A        | R     | AD |       |
| 10.0    | <b>Patch and Release Management HANA Database</b>                                                                                                                             |        |          |       |    |       |
| 10.0.1  | Provide recommendations for database release management                                                                                                                       | R      | A        | R     |    |       |
| 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    | <b>User and Role Administration SAP HANA DB</b>                                                                                                                               |        |          |       |    |       |
| 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     |    |       |
| 11.0.2  | Create an SAP HANA DB user, role, and authorization management concept                                                                                                        |        | R, A     | N     | EX |       |
| 11.0.3  | Create and modify SAP HANA DB users, roles, or other authorizations for HANA DB modeling purposes                                                                             |        | R, A     | N     | EX |       |
| 11.0.4  | Conduct setup and maintenance for SAML providers                                                                                                                              | R, A   |          | R     |    |       |
| 12.0    | <b>Feature Enhancements SAP HANA DB</b>                                                                                                                                       |        |          |       |    |       |
| 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  | Set up technical SAP HANA: Smart Data Integration                                                                                                                             | R      | A        | R     | AD |       |
| 12.0.4  | Set up application-side SAP HANA: Smart Data Integration                                                                                                                      |        | R, A     | N     | 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     | N     | EX |       |
| 12.0.6  | Implement XSA for SAP HANA developments at Customer's site                                                                                                                    |        | R, A     | N     | EX |       |
| 12.0.7  | Configure the XS-CLI Tool for SAP HANA Developments                                                                                                                           |        | R, A     | N     | EX |       |
| 12.0.8  | Perform user management for SAP HANA developments                                                                                                                             |        | R, A     | N     | EX |       |
| 12.0.9  | Provide support for Customer-specific applications                                                                                                                            |        | R, A     | N     | EX |       |
| 12.0.10 | Provide availability monitoring for Customer-specific applications                                                                                                            |        | R, A     | N     | EX |       |
| 13.0    | <b>High Availability and Disaster Recovery</b>                                                                                                                                |        |          |       |    |       |
| 13.0.1  | Develop and document high availability and disaster recovery procedures                                                                                                       | R, A   |          | N     | AD |       |
| 14.0    | <b>High Availability Database</b>                                                                                                                                             |        |          |       |    |       |
| 14.0.1  | Operation of a replication database instance                                                                                                                                  | R      | A        | R     | RC |       |
| 14.0.2  | Perform a high availability test based on the operation of a replication database                                                                                             | R      | A        | R     | RC |       |
| 15.0    | <b>SAP HANA DB High Availability and Disaster Recovery</b>                                                                                                                    |        |          |       |    |       |
| 15.0.1  | Configure SAP HANA System Replication                                                                                                                                         | R, A   |          | N     | RC |       |
| 15.0.2  | Configure SAP HANA Storage Replication                                                                                                                                        | R, A   |          | N     | RC |       |
| 15.0.3  | Set up Active/Active - Read Enabled                                                                                                                                           | R, A   |          | N     | RC |       |
| 15.0.4  | Set up HANA DB HA Failover                                                                                                                                                    | R, A   |          | N     | AD |       |
| 16.0    | <b>SAP NetWeaver High Availability and Disaster Recovery</b>                                                                                                                  |        |          |       |    |       |
| 16.0.1  | Implement high availability and disaster recovery setup according to SLA                                                                                                      | R, A   |          | N     | AD |       |
| 16.0.2  | Execute failover during disaster recovery test                                                                                                                                | R, A   | C        | N     | AD |       |
| 16.0.3  | Execute productive failover in during an officially declared disaster by service provider                                                                                     | R, A   | C        | N     | AD |       |

| Item           | Description                                                                                                                              | Syntax | Customer | Freq. | SI | Notes |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| <b>17.0</b>    | <b>Additional SAP Components HA and DR</b>                                                                                               |        |          |       |    |       |
| <b>17.0.1</b>  | Configure SAP Cloud Connector High Availability                                                                                          | R, A   |          | R     | RC |       |
| <b>17.0.2</b>  | Configure SAP Web Dispatcher High Availability                                                                                           | R, A   |          | R     | RC |       |
| <b>17.0.3</b>  | Configure SAP Content Server High Availability                                                                                           | R, A   |          | R     | RC |       |
| <b>17.0.4</b>  | Configure SAP BOBJ BI High Availability                                                                                                  | R, A   |          | R     | RC |       |
| <b>17.0.5</b>  | Configure SAP BOBJ DS High Availability                                                                                                  | R, A   |          | R     | RC |       |
| <b>18.0</b>    | <b>SAP Landscape and Infrastructure</b>                                                                                                  |        |          |       |    |       |
| <b>18.0.1</b>  | Monitor database for available disk space                                                                                                | R, A   |          | O     |    |       |
| <b>18.0.2</b>  | Monitor disk space expansion parameters                                                                                                  | R, A   |          | O     |    |       |
| <b>18.0.3</b>  | Monitor database resource consumption (memory, CPU, data memory) to avoid problems in technical operation                                | R, A   |          | O     |    |       |
| <b>19.0</b>    | <b>Monitoring of the SAP HANA Landscape and Infrastructure</b>                                                                           |        |          |       |    |       |
| <b>19.0.1</b>  | Connect an SAP HANA DB to an SAP Focused Run System for monitoring purposes                                                              | R, A   |          | S     |    |       |
| <b>20.0</b>    | <b>Monitoring of SAP NetWeaver (ABAP and Java)</b>                                                                                       |        |          |       |    |       |
| <b>20.0.1</b>  | Activate technical monitoring of system components                                                                                       | R, A   |          | S     |    |       |
| <b>20.0.2</b>  | Monitor resource consumption of SAP system application servers (CPU, main memory, file systems) to avoid problems in technical operation | R, A   |          | O     |    |       |
| <b>20.0.3</b>  | Monitor the Dialog Process Utilization of the SAP System Application Servers                                                             | R, A   |          | O     |    |       |
| <b>20.0.4</b>  | Monitor the update processes of the SAP system to avoid update errors                                                                    | R, A   |          | O     |    |       |
| <b>21.0</b>    | <b>Monitoring Additional SAP Components</b>                                                                                              |        |          |       |    |       |
| <b>21.0.1</b>  | Monitor SAP Cloud Connector                                                                                                              | R, A   |          | O     |    |       |
| <b>21.0.2</b>  | Monitor SAP Web Dispatch                                                                                                                 | R, A   |          | O     |    |       |
| <b>21.0.3</b>  | Monitor SAP Router Availability                                                                                                          | R, A   |          | O     |    |       |
| <b>21.0.4</b>  | Monitor SAP Content Server Availability                                                                                                  | R, A   |          | O     |    |       |
| <b>21.0.5</b>  | Monitor SAP Business Objects BI Availability                                                                                             | R, A   |          | O     |    |       |
| <b>21.0.6</b>  | Monitor SAP Business Objects DS Availability                                                                                             | R, A   |          | O     |    |       |
| <b>22.0</b>    | <b>Installation and Setup Activities for SAP NetWeaver-based Systems</b>                                                                 |        |          |       |    |       |
| <b>22.0.1</b>  | Install SAP NetWeaver (NW) software                                                                                                      | R, A   |          | S     |    |       |
| <b>22.0.2</b>  | Conduct initial maintenance of SAP system profile parameters according to SAP best practices                                             | R, A   |          | S     |    |       |
| <b>22.0.3</b>  | Conduct Initial maintenance or testing of operating modes – NW ABAP-based systems only                                                   | R, A   | C        | S     |    |       |
| <b>22.0.4</b>  | Conduct initial maintenance of logon groups – NW ABAP-based systems only                                                                 | R, A   | C        | S     |    |       |
| <b>22.0.5</b>  | Conduct initial creation and maintenance of technical systems in SAP Support Portal                                                      | R, A   |          | S     |    |       |
| <b>22.0.6</b>  | Conduct initial installation of license keys in the SAP system                                                                           | R, A   |          | S     |    |       |
| <b>22.0.7</b>  | Integrate installed systems into the Syntax Enterprise Cloud operating environment                                                       | R, A   |          | S     |    |       |
| <b>22.0.8</b>  | Schedule jobs for proper technical operation (esp. Standard batch jobs and system backups)                                               | R, A   | C        | S     |    |       |
| <b>22.0.9</b>  | Conduct initial technical check of the installed SAP system                                                                              | R, A   | I        | S     |    |       |
| <b>22.0.10</b> | Provide to Customer the relevant information regarding installation and maintenance of SAP front-end components (SAP GUI, NWBC, etc.)    | R, C   | A        | R     |    |       |
| <b>22.0.11</b> | Perform language import into an empty SAP NetWeaver ABAP system                                                                          | R      | A        | R     |    |       |
| <b>22.0.12</b> | Install and configure SAP front-end components (SAP GUI, NWBC, etc.)                                                                     |        | R, A     | N     | EX |       |
| <b>22.0.13</b> | Define clients required for the application purpose of the system – NW ABAP-Based Systems only                                           | I      | R, A     | N     | EX |       |
| <b>22.0.14</b> | Create new client according to the specified copy profile                                                                                | R      | A        | R     |    |       |

| Item           | Description                                                                                                                                                       | Syntax | Customer | Freq. | SI | Notes |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| <b>22.0.15</b> | Customize the SAP system for the respective application purpose (application, configuration and maintenance, application support and application troubleshooting) |        | R, A     | N     | EX |       |
| <b>23.0</b>    | <b>Transport Management for SAP NW-based Systems</b>                                                                                                              |        |          |       |    |       |
| <b>23.0.1</b>  | Create and maintain Transport Domain in client 000 and Transport Directory                                                                                        | R, A   |          | S     |    |       |
| <b>23.0.2</b>  | Parameterize the SAP Transport Management System (TMS) according to SAP Best Practices and/or Customer specifications                                             | R      | A        | R     |    |       |
| <b>23.0.3</b>  | Conduct error analysis and troubleshooting regarding the technical functionality of the TMS                                                                       | R, A   |          | O     |    |       |
| <b>23.0.4</b>  | Provide advice on client-specific transport route or transport group configurations and other settings of the TMS                                                 | R      | A        | R     | AD |       |
| <b>23.0.5</b>  | Implement client-specific transport route or group configurations and other settings of the TMS according to Customer specifications                              | R      | A        | R     | AD |       |
| <b>23.0.6</b>  | Implement initial configuration of Transport-Based Correction Instructions (TCI) in client 000                                                                    | R, A   |          | S     |    |       |
| <b>23.0.7</b>  | Implement TCI for SAP Notes                                                                                                                                       |        | R, A     | N     | AD |       |
| <b>23.0.8</b>  | Implement initial configuration of CTS+                                                                                                                           | R      | A        | R     | AD |       |
| <b>23.0.9</b>  | Release and import Transport Requests                                                                                                                             |        | R, A     | N     | EX |       |
| <b>23.0.10</b> | Perform transports to move objects between SAP systems of different system landscapes                                                                             | R      | A        | R     | AD |       |
| <b>23.0.11</b> | Adjust Dictionary and Repository Objects as Part of SAP System Software Changes (SAP Notes, Support Packages, Support Package Stacks, etc.)                       |        | R, A     | N     | EX |       |
| <b>23.0.12</b> | Test and confirm changes of dictionary and repository objects                                                                                                     |        | R, A     | N     | EX |       |
| <b>23.0.13</b> | Set up and configure ChaRM in an SAP Solution Manager system                                                                                                      |        | R, A     | N     | EX |       |
| <b>23.0.14</b> | Configure technical connections of SAP systems to an SAP Solution Manager system as part of a ChaRM implementation                                                | R      | A        | R     | AD |       |
| <b>24.0</b>    | <b>Operational Activities for SAP NW-based Systems</b>                                                                                                            |        |          |       |    |       |
| <b>24.0.1</b>  | Analyze update errors to assess business impact and take appropriate action                                                                                       |        | R, A     | N     | EX |       |
| <b>24.0.2</b>  | Sanitize cancelled update transactions                                                                                                                            |        | R, A     | N     | EX |       |
| <b>24.0.3</b>  | Analyze lock entries of the SAP system and determine business impact and appropriate measures                                                                     | C      | R, A     | R     | EX |       |
| <b>24.0.4</b>  | Delete lock entries in the SAP system                                                                                                                             | C      | R, A     | R     |    |       |
| <b>24.0.5</b>  | Analyze the SAP system log to correct technical errors of the SAP system                                                                                          | R, A   |          | O     |    |       |
| <b>24.0.6</b>  | Conduct periodic analysis of SAP system ABAP shortdumps to correct technical errors of the SAP system                                                             | R, A   | C        | O     |    |       |
| <b>24.0.7</b>  | Conduct periodic analysis of SAP system ABAP shortdumps to correct application-side errors of the SAP system                                                      | C      | R, A     | N     | EX |       |
| <b>24.0.8</b>  | Analyze and resolve technical problems in the SAP NW ABAP System                                                                                                  | R, A   |          | O     |    |       |
| <b>24.0.9</b>  | Analyze Java application and system log to correct technical errors of the SAP System                                                                             | R, A   |          | O     |    |       |
| <b>24.0.10</b> | Perform maintenance of SAP system profile parameters according to SAP best practices or according to the respective technical requirements                        | R, A   | C        | O     |    |       |
| <b>24.0.11</b> | Perform maintenance of JVM SAP system parameters according to SAP best practices or according to the respective technical requirements                            | R, A   | C        | O     |    |       |

| Item           | Description                                                                                                                                 | Syntax | Customer | Freq. | SI | Notes |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| <b>24.0.12</b> | Implement temporary adjustment of the memory configuration of an ABAP SAP system based on the RSMEMORY report                               | R      | A        | R     |    |       |
| <b>24.0.13</b> | Analyze and resolve technical problems in the SAP NW Java system                                                                            | R, A   |          | O     |    |       |
| <b>24.0.14</b> | Configure and customize Java applications in the SAP NW Java System                                                                         |        | R, A     | N     | EX |       |
| <b>24.0.15</b> | Define system start and shutdown procedures                                                                                                 | R, A   | C        | N     |    |       |
| <b>24.0.16</b> | Start/stop the SAP NetWeaver application server                                                                                             | R      | A        | R     |    |       |
| <b>24.0.17</b> | Perform application job scheduling - administration, monitoring, alerting, reporting, and load balancing                                    |        | R, A     | N     | EX |       |
| <b>25.0</b>    | <b>System Performance Management</b>                                                                                                        |        |          |       |    |       |
| <b>25.0.1</b>  | Conduct initial assessment of system performance issues                                                                                     | R      | R, A     | R     |    |       |
| <b>25.0.2</b>  | Troubleshoot system performance issues within the hosting and managed services scope                                                        | R, A   |          | R     |    |       |
| <b>25.0.3</b>  | Execute performance tuning                                                                                                                  | C      | R, A     | R     | AD |       |
| <b>25.0.4</b>  | Assist development team in identifying poorly performing SQL statements                                                                     | C      | R, A     | R     | AD |       |
| <b>26.0</b>    | <b>Client Operations for SAP NW-based ABAP Systems</b>                                                                                      |        |          |       |    |       |
| <b>26.0.1</b>  | Create an empty client (transaction SCC4)                                                                                                   | R      | A        | R     |    |       |
| <b>26.0.2</b>  | Delete client                                                                                                                               | R      | A        | R     |    |       |
| <b>26.0.3</b>  | 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 |       |
| <b>26.0.4</b>  | 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 |       |
| <b>26.0.5</b>  | 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 |       |
| <b>26.0.6</b>  | Perform client copy with a size greater than or equal to 100 GB (local or remote)                                                           | R      | A        | R     | AD |       |
| <b>26.0.7</b>  | Perform export of a client (transaction SCC8)                                                                                               | R      | A        | R     |    |       |
| <b>26.0.8</b>  | Perform import of a client export                                                                                                           | R      | A        | R     |    |       |
| <b>26.0.9</b>  | Perform preparatory activities of a client copy (job planning, user blocks, saving table contents of the target system, etc.)               | R      | A, C     | R     |    |       |
| <b>26.0.10</b> | 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     |    |       |
| <b>26.0.11</b> | Analyze application-related problems during a client copy or a client export or import                                                      |        | R, A     | N     | EX |       |
| <b>27.0</b>    | <b>SAP System Copy</b>                                                                                                                      |        |          |       |    |       |
| <b>27.0.1</b>  | Define system copy steps and procedures                                                                                                     | C      | R, A     | N     | EX |       |
| <b>27.0.2</b>  | Perform customer-specific pre-processing copy steps                                                                                         | I      | R, A     | N     | EX |       |
| <b>27.0.3</b>  | Perform technical system copy from source to target                                                                                         | R, A   |          | R     | RC |       |
| <b>27.0.4</b>  | Perform customer-specific post-processing copy steps                                                                                        | I      | R, A     | N     | EX |       |
| <b>27.0.5</b>  | Perform testing and validation after system copy                                                                                            |        | R, A     | N     | EX |       |
| <b>28.0</b>    | <b>Security and Authorization</b>                                                                                                           |        |          |       |    |       |
| <b>28.0.1</b>  | Design Security and Authorization Concept on the infrastructure level                                                                       | R, A   |          | N     |    |       |
| <b>28.0.2</b>  | Maintain SAP-System standard users (including the DDIC, SAP*, and J2EE_ADMIN users) in client 000                                           | R, A   |          | N     |    |       |
| <b>28.0.3</b>  | Maintain personalized user accounts, which Syntax uses to manage Customer's SAP systems; encompasses only user accounts in client 000       | R, A   |          | N     |    |       |
| <b>28.0.4</b>  | Define, maintain, and audit roles, profiles, and permissions (Syntax uses these to manage Customer's SAP systems)                           | R, A   |          | N     |    |       |

| Item                                                        | Description                                                                                                                                                         | Syntax | Customer | Freq. | SI | Notes |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| <b>28.0.5</b>                                               | Manage users or roles, profiles, and permissions assigned, which Syntax does not use to manage Customer's SAP systems                                               |        | R, A     | R     |    |       |
| <b>28.0.7</b><br><i>(purposely omitted previous number)</i> | 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) | C      | R, A     | R     |    |       |
| <b>28.0.8</b>                                               | Implement SAP system profile parameters that are related to the security settings of the system                                                                     | R      | A        | M     |    |       |
| <b>28.0.9</b>                                               | 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     |    |       |
| <b>28.0.10</b>                                              | Analyze the SAP System Landscape and identify the relevant SAP Security Notes on the Application Level                                                              | R      | A        | R     | AD |       |
| <b>28.0.11</b>                                              | Implement relevant SAP Security Notes on the Application Level (Software Components other than BC)                                                                  | R      | A        | N     | AD |       |
| <b>28.0.12</b>                                              | Implement SAP Security Notes on the Application Level (Software Components other than BC) including manual activities                                               |        | R, A     | R     | EX |       |
| <b>28.0.13</b>                                              | Perform analysis of Customer's Security Audit Logs                                                                                                                  | R      | A        | R     | AD |       |
| <b>28.0.14</b>                                              | Provide Audit Log from an SAP system to Customer                                                                                                                    | R      | A        | N     |    |       |
| <b>28.0.15</b>                                              | Create System Personal Security Environment (PSE) for an SAP system                                                                                                 | R, A   |          | N     |    |       |
| <b>28.0.16</b>                                              | Maintain the Secure Storage of an AS ABAP system                                                                                                                    | R, A   |          | R     |    |       |
| <b>29.0</b>                                                 | <b>Output Management for SAP NW-based Systems</b>                                                                                                                   |        |          |       |    |       |
| <b>29.0.1</b>                                               | Define output management requirements                                                                                                                               | C      | R, A     | S     |    |       |
| <b>29.0.2</b>                                               | Analyze and correct technical errors during spooling and output/printing from the SAP system                                                                        | R, A   |          | S     |    |       |
| <b>29.0.3</b>                                               | Analyze incorrect output requests in the SAP system                                                                                                                 | R      | A        | R     |    |       |
| <b>29.0.4</b>                                               | Analyze and fix technical errors during spooling and output/printing on spool systems that are not administered by Syntax                                           |        | R, A     | N     | EX |       |
| <b>29.0.5</b>                                               | Define, change, or delete an output device in the SAP system                                                                                                        | R      | A        | R     |    |       |
| <b>29.0.6</b>                                               | Lock or unlock output devices in the SAP System                                                                                                                     | R      | A        | R     |    |       |
| <b>29.0.7</b>                                               | Conduct consistency check of tables relevant for spooling and output in the SAP system (Report RSPO1043)                                                            | R, A   |          | O     |    |       |
| <b>29.0.8</b>                                               | Reorganize the SAP Spool system to avoid error conditions in the SAP system                                                                                         | R, A   | C        | O     |    |       |
| <b>29.0.9</b>                                               | Install, operate, and maintain a local host spool system on the SAP system host                                                                                     | R      | A        | R     | AD |       |
| <b>29.0.10</b>                                              | Create, change, or delete an output device at OS level for local printing                                                                                           | R      | A        | R     | AD |       |
| <b>30.0</b>                                                 | <b>Interface Management of SAP NW-based Systems</b>                                                                                                                 |        |          |       |    |       |
| <b>30.0.1</b>                                               | Conduct initial configuration and parameterization of the RFC Gateway                                                                                               | R, A   |          | S     |    |       |
| <b>30.0.2</b>                                               | Define and implement the security parameters of the RFC gateway (SNC communication, ACL mode, reginfo and secinfo content)                                          | R      | A, C     | R     | AD |       |
| <b>30.0.3</b>                                               | Maintain the security parameters of the RFC gateway (SNC communication, ACL mode, reginfo and secinfo content)                                                      | R      | A, C     | R     | AD |       |
| <b>30.0.4</b>                                               | Implement initial configuration of the Internet Communication Manager (ICM) for communication with the SAP system via HTTP, HTTPS, or SMTP                          | R, A   |          | S     |    |       |
| <b>30.0.5</b>                                               | Create, maintain, and delete services in the Internet Communication Framework (ICF)                                                                                 | R      | A, C     | N     | AD |       |

| Item    | Description                                                                                                                                         | Syntax | Customer | Freq. | SI | Notes |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| 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 |       |
| 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 |       |
| 30.0.16 | Create, maintain, and delete remote HTTP(S) destinations in transaction SM59 for Customer-specific interface implementations                        | R      | A, C     | R     | AD |       |
| 30.0.17 | Set up, operate, maintain, and monitor data processing based on batch input                                                                         |        | R, A     | N     | EX |       |
| 30.0.18 | Set up, operate, maintain, and monitor Customer-specific interface processing based on (s)RFC communication via BAPIs                               |        | R, A     | N     | EX |       |
| 30.0.19 | Set up, operate, maintain, and monitor Customer-specific interface processing based on qRFC/tRFC/bgRFC communication                                |        | R, A     | N     | EX |       |
| 30.0.20 | Set up, operate, maintain, and monitor Customer-specific interface processing based on IDocs                                                        |        | R, A     | N     | EX |       |
| 30.0.21 | Set up, operate, maintain, and monitor Customer-specific interface processing based on Application Link Enabling (ALE)                              |        | R, A     | N     | EX |       |
| 30.0.22 | Set up, operate, maintain, and monitor Customer-specific interface processing based on HTTP(S)                                                      |        | R, A     | N     | EX |       |
| 30.0.23 | Set up, operate, maintain, and monitor Customer-specific interface processing based on the Advanced Adapter Engine (NW Java)                        |        | R, A     | N     | EX |       |
| 31.0    | <b>Certificate Management for SAP NW-based Systems</b>                                                                                              |        |          |       |    |       |
| 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   |          | N     |    |       |
| 31.0.3  | Send CSRs to the certification authority (CA)                                                                                                       |        | R, A     | N     | EX |       |
| 31.0.4  | Implement signed certificate on ICM, load balancer, Web Dispatcher, and Data Services                                                               | R, A   |          | N     |    |       |
| 31.0.5  | Add or renew an SSL certificate                                                                                                                     | R, A   |          | N     | AD |       |
| 31.0.6  | Monitor certificate lifetime                                                                                                                        | R      | A        | R     | AD |       |
| 31.0.7  | Renew expired certificates                                                                                                                          | R      | A        | R     | AD |       |
| 32.0    | <b>Patch and Release Management for SAP NW-based Systems</b>                                                                                        |        |          |       |    |       |
| 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     |    |       |

| Item    | Description                                                                                                                       | Syntax | Customer | Freq. | SI | Notes |
|---------|-----------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|----|-------|
| 32.0.2  | Implement SAP Notes for software component BC including manual activities that provide corrections for technical system operation | R, A   | C        | O     |    |       |
| 32.0.3  | Implement SAP Notes that are not of software component BC                                                                         |        | R, A     | N     | 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        | O     |    |       |
| 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   |          | O     |    |       |
| 32.0.9  | Update specific SAP NetWeaver Java component based on a Support Package (SP)                                                      | R, A   |          | O     |    |       |
| 32.0.10 | Update SAP NetWeaver ABAP system landscape based on a Support Package Stack (SPS)                                                 | R      | A        | R     |    |       |
| 32.0.11 | Update SAP NetWeaver Java system landscape based on a Support Package Stack (SPS)                                                 | R      | A        | R     |    |       |
| 32.0.12 | Update SAP System Landscape SAP NetWeaver ABAP based on an Enhancement Package (EhP)                                              | R      | A        | R     |    |       |
| 32.0.13 | Update SAP system landscape using the Software Update Manager (SUM) feature nZDM (near-Zero Downtime Maintenance)                 | R      | A        | R     |    |       |
| 32.0.14 | Perform major SAP Release upgrade                                                                                                 | R      | A        | N     | AD |       |
| 32.0.15 | Execute productive failover during an officially declared disaster by service provider                                            | R, A   | C        | N     | AD |       |
| 33.0    | <b>SAP System Management Process Orchestration (PO)</b>                                                                           |        |          |       |    |       |
| 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 |       |
| 33.0.3  | Create PSEs and SSL views                                                                                                         |        | R, A     | N     | EX |       |
| 33.0.4  | Perform SAP PO Operations                                                                                                         |        | R, A     | N     | EX |       |
| 34.0    | <b>SAP Cloud Connector</b>                                                                                                        |        |          |       |    |       |
| 34.0.1  | Install and perform initial configuration                                                                                         | R, A   |          | S     |    |       |
| 34.0.2  | Implement upgrades and patches                                                                                                    | R, A   |          | R     |    |       |
| 34.0.3  | Configure backups                                                                                                                 | R, A   |          | O     |    |       |
| 34.0.4  | Configure authentication, destination, and sub-accounts                                                                           |        | R, A     | N     | EX |       |
| 34.0.5  | Execute upgrade test                                                                                                              |        | R, A     | N     | EX |       |
| 35.0    | <b>SAP Analytics Cloud Agent</b>                                                                                                  |        |          |       |    |       |
| 35.0.1  | Install SAP Analytics Cloud Agent                                                                                                 | R, A   |          | S     |    |       |
| 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     | N     | EX |       |
| 36.0    | <b>SAP Web Dispatcher</b>                                                                                                         |        |          |       |    |       |
| 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     |    |       |
| 36.0.5  | Implement configuration changes                                                                                                   | R, A   |          | R     |    |       |
| 36.0.6  | Execute upgrade test                                                                                                              |        | R, A     | N     | EX |       |
| 37.0    | <b>SAP Router</b>                                                                                                                 |        |          |       |    |       |
| 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     |    |       |

| Item           | Description                                                     | Syntax | Customer | Freq. | SI | Notes |
|----------------|-----------------------------------------------------------------|--------|----------|-------|----|-------|
| <b>38.0</b>    | <b>SAP Content Server</b>                                       |        |          |       |    |       |
| <b>38.0.1</b>  | Install SAP Content Server (CS) and database (DB)               | R, A   |          | N     |    |       |
| <b>38.0.2</b>  | Patch CS and DB                                                 | R, A   |          | N     |    |       |
| <b>38.0.3</b>  | Generate initial SSL certificate                                | R, A   |          | N     |    |       |
| <b>38.0.4</b>  | Add server certificates to STRUST                               |        | R, A     | N     | EX |       |
| <b>38.0.5</b>  | Configure technical repository(ies) for CS                      |        | R, A     | N     | EX |       |
| <b>38.0.6</b>  | Test connectivity for repository(ies)                           |        | R, A     | N     | EX |       |
| <b>38.0.7</b>  | Perform technical upgrade of CS and DB                          | R, A   |          | N     |    |       |
| <b>38.0.8</b>  | Perform post-upgrade configuration changes for repository(ies)  |        | R, A     | N     | EX |       |
| <b>38.0.9</b>  | Perform technical post-checks of connection for repository(ies) |        | R, A     | N     | EX |       |
| <b>38.0.10</b> | Perform functional validation for repository(ies)               |        | R, A     | N     | EX |       |
| <b>39.0</b>    | <b>SAP Business Objects Business Intelligence</b>               |        |          |       |    |       |
| <b>39.0.1</b>  | Install and set up Business Intelligence                        | R, A   |          | N     |    |       |
| <b>39.0.2</b>  | Configure backups                                               | R, A   |          | N     |    |       |
| <b>39.0.3</b>  | Implement upgrades and patches                                  | R, A   |          | N     |    |       |
| <b>39.0.4</b>  | Manage authorization and users                                  |        | R, A     | N     | EX |       |
| <b>39.0.5</b>  | Promote BI objects between environments                         |        | R, A     | N     | EX |       |
| <b>39.0.6</b>  | Create and maintain universes                                   |        | R, A     | N     | EX |       |
| <b>39.0.7</b>  | Integrate with external systems                                 |        | R, A     | N     | EX |       |
| <b>39.0.8</b>  | Create and maintain BI objects                                  |        | R, A     | N     | EX |       |
| <b>40.0</b>    | <b>SAP Data Services</b>                                        |        |          |       |    |       |
| <b>40.0.1</b>  | Install Data Services and Repository Database                   | R, A   |          | N     |    |       |
| <b>40.0.2</b>  | Configure backups                                               | R, A   |          | N     |    |       |
| <b>40.0.3</b>  | Configure SMTP email settings                                   | R, A   |          | N     |    |       |
| <b>40.0.4</b>  | Implement upgrades and patches                                  | R, A   |          | N     |    |       |
| <b>40.0.5</b>  | Manage authorization and users                                  |        | R, A     | N     | EX |       |
| <b>40.0.6</b>  | Create and maintain Data Services Job                           |        | R, A     | N     | EX |       |
| <b>40.0.7</b>  | Configure database connections for Jobs                         |        | R, A     | N     | EX |       |
| <b>40.0.8</b>  | Monitor Jobs                                                    |        | R, A     | N     |    |       |
| <b>40.0.9</b>  | Configure Data Services object transports                       |        | R, A     | N     |    |       |