This document is for existing SAP® ERP (SAP ECC) and SAP S/4HANA® customers with contracts based on SAP pricing policies prior to April 10, 2018.

On April 10, 2018, SAP introduced new outcome-based ERP pricing for the digital age. This new pricing model accounts for all forms of indirect and digital access, including access from IoT devices and bots.

For additional information, please refer to the “SAP ERP Pricing for the Digital Age” white paper or contact your SAP account executive.

This document is for informational purposes only and it does not modify or supplement a customer’s agreement in any way. Should a customer have questions, they should engage the SAP Global License Audit and Compliance organization. SAP reserves the right to revise its audit practices and policies from time to time. Further, the contents of this document and any inferred, proposed, or referenced commitments of any kind shall have no effect and are not binding upon SAP. SAP assumes no responsibility for errors or omissions in this document.
OVERVIEW
SAP is committed to our customers’ long-term success and is empathetic to our customers’ experiences and the challenges they face. When it comes to the consumption and proper licensing of SAP® products, our global audit and license compliance process is intended to responsibly protect SAP’s core business assets and also ensure that our customers can manage their SAP assets effectively, that we provide transparency to license compliance, and that we enable customers to reduce the overconsumption of software.

While we believe that SAP should be fairly compensated for the use of its products, it is important for SAP to collaborate with our customers and partners to ensure a fair, transparent, and consistent license audit experience.

SAP license audits are to be conducted in the spirit of trust and customer empathy. After listening to customer feedback, SAP is taking action to clarify essential rules of engagement and to promote consistency across its license auditing and compliance practices.

CLEAR SEPARATION OF LICENSE AUDIT AND SALES
Nomination of Audits
SAP license audits are scheduled centrally and independently of the sales organization. All license audits will be initiated according to one of the following criteria:

• **Analytics criteria:** For example, time elapsed since the last audit or consumption (cloud) of licenses since the last audit
• **Proactive initiation:** For example, campaigns focused on specific industries or based on merger and acquisition activity
• **Reactive initiation:** For example, conversion to a new license model or cloud extensions
• **Random spot checks**

Ad hoc audits will be permitted only with the approval of the license compliance organization and only in exceptional situations, such as customer consultation or risk of overuse.

Just as sales cannot initiate an audit, sales cannot cancel an audit. Once an audit begins, only the SAP Global License Audit and Compliance organization can close it.
Dedicated Audit Delivery Personnel
License audits are performed by dedicated license auditors from the SAP Global License Audit and Compliance organization. Audits and any systematic license compliance verification may not be conducted by sales personnel or sales designees.

Commercial Resolution of Overuse
The assigned SAP account or sales executive is the primary owner of the commercial relationship with our customer. In cases of a customer’s license overuse, the account or sales executive is responsible for resolving that customer’s license compliance matter, and a commercial resolution is always the preferred outcome. SAP Global License Audit and Compliance team members will not be responsible for sales matters and will be limited to providing license management expertise to the customer and the account/sales team.

ESTABLISH CONSISTENT AND TRANSPARENT AUDIT PROCEDURES
Ensure Consistency in License Auditing
As described above, there will be only one organization within SAP authorized to perform license audits. This team will harmonize the end-to-end audit processes globally, from nomination to delivery of the license audit report. In each case, a customer will be informed of the scope, process, and results of the audit.

License Audit Scope
Audits will be comprehensively outlined and communicated in advance to customers. In general, SAP performs basic audits and enhanced audits.

Basic audits cover most SAP customers on an annual basis and are based on customer self-declarations and automatic measurements that customers perform. As such, their scope is limited to the information the customer provides, and most often they do not cover all licensed SAP products. Should the audit begin as a basic audit, SAP will adhere to the defined scope of information provided by the customer. However, SAP retains the right to request additional information or to expand the audit when specific indicators have been discovered within the defined scope.

For license compliance audits in which SAP believes findings show a significant issue, SAP may engage one of its auditors from another region to verify audit results. This would occur before the report is issued to the customer and would improve the consistency and quality of the audit results.

Enhanced audits start with a clear statement of scope. On-site audits begin with a kick-off meeting, during which the audit’s scope is communicated.

License Audit Report and Completion of the Audit
There will be a clear notice of the audit’s closure. The SAP Global License Audit and Compliance team will create a report for every license audit performed, and the license compliance team will be responsible for informing the customer of the report’s availability.
In some cases, a license overuse may be identified without the performance of a license audit if required information verifying license compliance is publicly available. An example is product use based on the number of employees disclosed in a company’s publicly available annual report. If the SAP Global License Audit and Compliance organization is involved in such a case, a report will be issued, shared, and discussed with the customer.

**SIMPLIFY LICENSE SELF-MEASUREMENT AND MONITORING BY CUSTOMERS**

A license audit is typically a better experience for a customer if it does not result in unexpected overuse of licenses. To reduce the risk of an unexpected license gap, SAP wants to make it easier for customers to monitor their license compliance themselves.

**Availability of License Audit Tools**

Certain tools that SAP license auditors use already are available to customers. One example is the license audit workbench tool used for basic audits. It is available to customers as part of their traditional SAP ERP application. Customers may use these tools internally at any time to monitor their license consumption. SAP plans to further enhance these measurement tools and improve their availability.

**License Compliance Advisory Services**

SAP offers advisory services from the SAP Global License Audit and Compliance organization. This service focuses on knowledge transfer and enablement. The verification of the status of license compliance is included solely at a customer’s request.
INDIRECT ACCESS AUDIT PRACTICE

While SAP maintains the position that any use of SAP software needs to be properly licensed, this document is intended to provide additional clarity on SAP’s license audit practices. SAP has various types of customers and corresponding licensing models. These include traditional SAP ERP (SAP ERP Central Component or SAP ECC) customers with the named user licensing model, SAP S/4HANA® customers without a named user model, and customers with both traditional SAP ERP and SAP S/4HANA, both under a named user licensing model. The indirect access audit practice and approach described here and in the following sections specifically address indirect access of the core SAP ERP for traditional SAP ERP (SAP ECC) customers that have not licensed the “SAP digital access software engine.” Individual contracts may include special agreements that deviate from the standard approach. In such cases, the process described by the decision tree below would not apply. To determine whether indirect access of the core SAP ERP software is within the customer’s SAP ERP license level, SAP license auditors will normally follow the decision tree shown Figure 1.

Figure 1: Decision Tree for License Auditors to Verify Indirect Access Scenarios

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Is there any “use” of SAP® ERP software?

- Yes

  Is the access occurring directly by individuals?

    - No

      Is the indirect access of core SAP ERP software caused by other SAP applications?

        - No

          Is the specific indirect access covered by specific SAP engines?

            - No

              Is the indirect access limited to nontransactional data in core SAP ERP?

                - No

                  Is the indirect access limited to indirect static read?

                    - No

                      This type of use of core SAP ERP software typically requires a dedicated license.

                    - Yes

                      Other than for the SAP Business Warehouse application, indirect static read does not require a separate license.

                - Yes

                  Indirect access resulting in other than reading, creating, modifying, or deleting transactional data in core SAP ERP will not be counted as use against the SAP ERP metric levels under audit practice.

          - Yes

            Certain indirect use of core SAP ERP is covered by SAP engine licenses such as SSOE or POE.

    - Yes

      Use of SAP ERP is typically covered by license for those applications and/or user license.

- No

  Is the specific indirect access covered by specific SAP engines?

    - No

      Is the indirect access limited to nontransactional data in core SAP ERP?

        - No

          Is the indirect access limited to indirect static read?

            - Yes

              Named user, application, and/or engine licenses are required for direct use.

            - No

              Use of SAP ERP is typically covered by license for those applications and/or user license.

        - Yes

          Certain indirect use of core SAP ERP is covered by SAP engine licenses such as SSOE or POE.

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Is There Use of SAP Software?
A license auditor will first determine if SAP software is “used,” as any use of the SAP software requires an appropriate license. “Use” is defined in SAP’s current standard contractual documents as: “to activate the processing capabilities of the software, load, execute, access, employ the software, or display information resulting from such capabilities.” SAP’s current standard contractual documents state that use also may occur by way of an interface delivered with, or as a part of, the software, a licensee or third-party interface, or another intermediary system.

Licensing Misconceptions
There are many misconceptions regarding licensing required for indirect access of SAP ERP. Clarification of the most common misconceptions are listed below:

• **One-way or two-way:** Regardless of whether a user performs read-only, write-only, or read-and-write transactions, all such transactions are considered use, and the user must be licensed as a named user.

• **Synchronous or asynchronous:** Real-time or batch transactions that activate processing in the SAP ERP system is use and must be licensed.

• **More than one intermediate system:** Users who access the SAP ERP system through one or more intermediary systems must be licensed.

• **Access through another technical interface:** Use of the SAP ERP system is independent of the technical setup (for example, SAP enterprise services, SAP Web services, BAPI® programming interfaces, RFC, IDocs, ABAP® programming language code, user exits, database link, file interface). No matter which interface is used to activate processes in SAP ERP, the user needs to be properly licensed.

• **Access through a non-SAP application:** If a user is accessing SAP ERP through a third-party application (for example, Salesforce or Workday) or through a custom front-end application that triggers SAP ERP processing, the user must be properly licensed.

Indirect static read is an exception to many of the above examples.

Upon the determination of “use” of SAP software, the auditor will verify the following decision node:

Is the use occurring directly (direct use by individuals)?

The above definition of use from SAP’s standard contractual documents covers both direct and indirect access. As this document concerns verification of indirect activities, it will focus on indirect use of SAP ERP (indirect access is a type of indirect use). Indirect access of SAP ERP typically occurs by way of a non-SAP front end, by non-SAP intermediary software, or through Internet of Things (IoT) devices. **Table 1** provides examples of direct use and indirect access.
Use of SAP ERP through direct access by an individual does require a named user license. If such use occurred by indirect access, the auditor will verify the next decision node:

Is the indirect access of SAP ERP initiated by other SAP applications?

Depending on the customer’s license model, when indirect access of SAP ERP occurs from other SAP applications, such use of SAP ERP may be included in the SAP application license, regardless of whether the application is in the cloud or on premise. Examples of using SAP ERP through other SAP applications are:

- Purchase orders generated in SAP ERP by an SAP Ariba® solution
- Sales orders in SAP ERP modified through the SAP Customer Relationship Management application

When this type of indirect access of SAP ERP is covered by the license of the SAP applications, it does not count against the license level for SAP ERP. However, if the indirect access is not caused by such other SAP applications, the auditor will verify the next decision node:

Is the indirect access right covered by specific SAP software engines?

Some SAP software engines are designed for simplified licensing of specific indirect access, especially in business-to-business (B2B) and business-to-consumer (B2C) activities. Examples of such engines are:

- SAP Sales and Service Order Execution solution for use in B2B and B2C activities
- SAP Purchase Order Execution solution

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<table>
<thead>
<tr>
<th>Access type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct human access</td>
<td>• Customers’ employees logging directly into the digital core</td>
</tr>
<tr>
<td></td>
<td>• Customers’ business partners logging directly into the digital core</td>
</tr>
<tr>
<td>Indirect/digital access</td>
<td>• RPA bots directly logging into the digital core</td>
</tr>
<tr>
<td></td>
<td>• End consumers accessing the digital core through a third-party e-commerce Web site</td>
</tr>
<tr>
<td></td>
<td>• IoT devices accessing the digital core through a custom solution built on top of SAP® Cloud Platform or the SAP IoT Application Enablement toolkit</td>
</tr>
<tr>
<td>SAP application access</td>
<td>• Customers’ business partners accessing the digital core through an SAP Ariba® solution</td>
</tr>
<tr>
<td></td>
<td>• IoT devices accessing the digital core through the SAP Predictive Maintenance and Service solution</td>
</tr>
<tr>
<td></td>
<td>• Customer’s employees accessing the digital core through SAP Solution Extensions</td>
</tr>
</tbody>
</table>

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Table 1: Examples of Types of Use of the Digital Core

Access type | Examples
---|---
Direct human access | • Customers’ employees logging directly into the digital core  
| | • Customers’ business partners logging directly into the digital core
Indirect/digital access | • RPA bots directly logging into the digital core  
| | • End consumers accessing the digital core through a third-party e-commerce Web site  
| | • IoT devices accessing the digital core through a custom solution built on top of SAP® Cloud Platform or the SAP IoT Application Enablement toolkit
SAP application access | • Customers’ business partners accessing the digital core through an SAP Ariba® solution  
| | • IoT devices accessing the digital core through the SAP Predictive Maintenance and Service solution  
| | • Customer’s employees accessing the digital core through SAP Solution Extensions
Note: Some engines, such as the SAP Budgeting and Planning for Public Sector application and the SAP Tax, Benefits, and Payment Processing for Public Sector solution for SAP CRM, do not require named users. If the indirect access is not covered by another engine, the auditor will verify the next decision node as follows:

Is the indirect access limited to nontransactional data? SAP’s contractual use definition does not differentiate between data types. However, for core SAP ERP, the license auditor will follow a more limiting practice: Auditors review only cases of indirect access that result in the reading, creation, modification, or deletion of transactional data in core SAP ERP. Indirect access that does not result in the reading, creation, modification, or deletion of transactional data in SAP ERP will not be counted against the license metric for SAP ERP.

As a guiding principle, transactional data is:
• Business process centric
• Rapidly changing and event driven

Table 2 lists typical examples for transactional data in core SAP ERP.
<table>
<thead>
<tr>
<th>Document Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales orders</td>
<td>Creation of business documents for the sales of goods and services within SAP® software. These can be created, changed, or viewed through electronic data interchange (EDI), external non-SAP applications, and other means. Such documents may include sales quotations, sales and service contracts, sales orders, and returns.</td>
</tr>
<tr>
<td>Customer or supplier invoice</td>
<td>Invoices are documents that indicate the material and/or service being billed, including, but not limited to, reading (automated import) supplier invoices into SAP software, or creating and sending invoices to customers from SAP software.</td>
</tr>
<tr>
<td>Purchase order</td>
<td>Creation of procurement documents for goods or services that are loaded into an SAP software system. Such documents can be created, changed, and viewed through various interfaces and can include purchase requisitions, purchase orders, purchasing contracts, and confirmations.</td>
</tr>
<tr>
<td>Service order or maintenance order</td>
<td>Service and maintenance documents created within SAP software for the management of work to be performed. These can be created approved, adjusted, or viewed through external non-SAP applications by the service team.</td>
</tr>
<tr>
<td>Production order</td>
<td>Creation within the SAP software of production documents that indicate production-related details associated with the manufacturing of a material (for example, type, quantity, and color of a material to produce and when to produce it). These can be created, changed, or viewed through, for example, EDI or external non-SAP applications.</td>
</tr>
<tr>
<td>Quality notification</td>
<td>Creation of quality-related documents for machines and tools that are loaded into an SAP software system. A quality notification can include the details of a nonconformance (for example, an independent defect). These can be created, changed, viewed, approved, or rejected through third-party applications or other non-SAP products.</td>
</tr>
<tr>
<td>Material documents (goods movement)</td>
<td>Creation of material documents for the movement of goods. The documents usually indicate specific material received, issued, or transferred to, from, or within a storage location or plant.</td>
</tr>
<tr>
<td>Travel expense claim</td>
<td>Creation of travel expense claim for reimbursement of accrued expenses that are loaded into an SAP software system. Such documents can be created, changed, approved, and viewed through various interfaces.</td>
</tr>
</tbody>
</table>
### Table 2: List of Transactional Data Records

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacation request</td>
<td>Creation and approval of vacation requests within the SAP software for the processing of off-time and payroll. Such documents can be created, changed, and viewed through various interfaces.</td>
</tr>
<tr>
<td>Invoice creation</td>
<td>Invoices created by SAP software. These can be created, adjusted, and viewed through external non-SAP applications.</td>
</tr>
<tr>
<td>Payment</td>
<td>Creation of payment files through an SAP automatic payment program in formats such as SWIFT and ISO. Such documents can be created, changed, approved, and viewed through various interfaces.</td>
</tr>
</tbody>
</table>
Note: The audit practice for differing treatments of indirect access to various types of data, as specifically described in this document, is not and will not be reflected in customer contracts, as it is only a practice. SAP has a transactional data-based approach for indirect access, which may be reflected in a customer’s contract if the customer licenses a new SAP digital access software engine. The SAP digital access software engine differs from the transactional data audit practice described in this document and likely would be preferred by most customers.

If the indirect access results in the creation, modification, or deletion of transactional data in SAP ERP, the auditor will verify the next decision node:

Is the use limited to indirect static read?
Indirect static read is a scenario in which information has been exported from an SAP system (excluding the SAP Business Warehouse application or any third-party runtime database) to a non-SAP system pursuant to a predefined query that meets the criteria listed below. SAP’s policy is that the use of such exported data in third-party non-SAP systems does not need to be licensed, as long as all of the criteria listed below for indirect static read are met:

• The data was created by an individual licensed to use the SAP ERP system from which the information is being exported.
• It runs automatically on a scheduled basis.
• The use of such exported information by the non-SAP systems and their users does not result in any updates to or trigger any processing capabilities of the SAP ERP system.

This is the final node of the decision tree. It occurs after the auditor has verified all previous decision nodes. If the case in point is not limited to static read, the auditor will usually determine that the verified indirect access scenario requires a dedicated license.
Examples of Indirect Static Read and Non-Indirect Static Read Scenarios in Legacy Pricing Model

<table>
<thead>
<tr>
<th>Licensee Scenarios</th>
<th>Indirect Static Read?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An employee of SAP’s customer views reports (for example, financial statements, forecasts) in a non-SAP system, where such data was retrieved and transmitted from the SAP ERP system before the employee accessed it.</td>
<td>Yes*</td>
</tr>
<tr>
<td>2. A licensed employee of SAP’s customer downloads information from SAP ERP to a third-party software system, so others can view this information in the third-party software.</td>
<td>Yes*</td>
</tr>
<tr>
<td>3. An individual (not licensed to access SAP ERP) adds information to a predefined query, specifying a particular attribute to be included in such query, which was created by an individual licensed to access SAP ERP, which was set up to run on an automated, regular basis.</td>
<td>No</td>
</tr>
<tr>
<td>4. Customers of SAP’s customer view a product catalog on a portal built on and operating on SAP Cloud Platform, where product and pricing information originating from an SAP ERP or SAP S/4HANA system was transmitted to the portal prior to the individuals accessing the portal.</td>
<td>Yes*</td>
</tr>
<tr>
<td>5. An employee of SAP’s customer views his customer's master data in a table within a third-party application, where such information originated in SAP ERP and was downloaded to a third-party application prior to the employee accessing it.</td>
<td>Yes*</td>
</tr>
<tr>
<td>6. An employee of SAP’s customer views his customer’s order status through a third-party application, where such information originated in SAP ERP and was loaded from SAP in direct response to the employee’s inquiry.</td>
<td>No</td>
</tr>
<tr>
<td>7. A sales associate of SAP’s customer checks inventory status in a custom-built inventory system, where such information originated in SAP ERP and was downloaded from SAP ERP in direct response to the inquiry.</td>
<td>No</td>
</tr>
<tr>
<td>8. An employee of SAP’s customer accesses a third-party data analysis tool to sort, filter, and analyze data that was transmitted from an SAP application prior to the employee accessing the third-party tool.</td>
<td>Yes*</td>
</tr>
</tbody>
</table>

*Note: Scenario is indirect static read as long as all of the conditions outlined above are met.
<table>
<thead>
<tr>
<th>Licensee Scenarios</th>
<th>Indirect Static Read?</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. An employee of SAP’s customer accesses a third-party application to sort data that was transferred from an SAP application prior to the employee accessing the third-party tool, and this employee subsequently initiates a transaction within the third-party application, which in turn triggers the updating of information in an SAP application.</td>
<td>No</td>
</tr>
<tr>
<td>10. A customer of SAP’s customer or a sales associate of SAP’s customer accesses a custom portal that is built on and operating on SAP Cloud Platform, where information such as product inventory or customer data, which originated in an SAP ERP system, was transmitted from SAP in direct response to the inquiry from such individual.</td>
<td>No</td>
</tr>
<tr>
<td>11. An employee of SAP’s customer accesses a third-party application to view a report that has been downloaded from SAP Business Warehouse.</td>
<td>No</td>
</tr>
<tr>
<td>12. Data stored in the SAP system is transferred to a third-party planning and consolidation application prior to an employee viewing and processing the data in the third-party application.</td>
<td>Yes*</td>
</tr>
<tr>
<td>13. Data is aggregated and calculated in the SAP ERP system (for example, creation of a P&amp;L, summary records per account) and transferred to a third-party planning and consolidation application prior to an employee viewing and processing the data in the third-party application.</td>
<td>Yes*</td>
</tr>
<tr>
<td>14. Data stored in SAP ERP is transferred to a third-party planning and consolidation application, then it is viewed and processed in that application by employees. Subsequently, the results are transferred back to the SAP application (for example, planning results are entered or correction postings based on consolidation are booked).</td>
<td>No</td>
</tr>
</tbody>
</table>

*Note: Scenario is indirect static read as long as all of the conditions outlined above are met.