Indirect Access White Paper July 2017



This White Paper is for informational purposes only and does not modify or supplement a customer's agreement. Should a customer have questions, they should engage their SAP Account Executive. Though the changes to the pricing policy provide a consistent, globally-applied filter to the licensing discussion, situations may be unique, and must be evaluated in conjunction with a customer's specific SAP contract. SAP reserves the right to revise its policies from time to time.



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EXECUTIVE SUMMARY

This white paper is intended to communicate the Indirect Access on premise pricing policy changes made in Q2'17, as well as outline the future direction with respect to the licensing of Indirect Access.

The technology landscape has changed dramatically over the years and so has the way customers consume and use SAP software. Unlike the past when most use of SAP ERP involved employees of our customers logging into the SAP ERP system directly, there are now a multitude of scenarios related to ERP usage as shown in Figure 1.

- Populations using SAP ERP: In addition to employees, there are business partners, consumers, devices, automated systems, bots, etc. that now use SAP ERP.
- Access to SAP ERP: Direct access by users logging into the system, as well as access via other SAP and 3rd-party applications, platforms, multiple layers, etc.

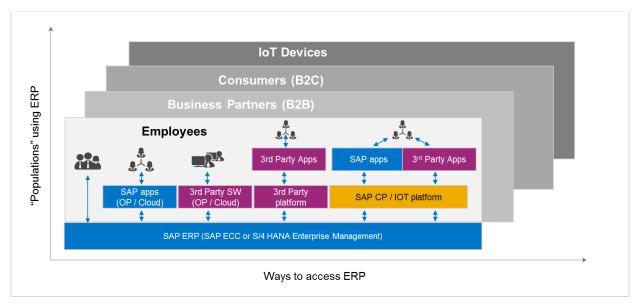


Figure 1. ERP Use Scenarios

While SAP maintains its position that any use of SAP Software needs to be properly licensed, we are embarking on a journey to modernize our licensing policy. Policy changes discussed herein are designed to focus on outcomes related to SAP customers' use of our software based on the value delivered. This outcome-focused approach will eliminate the need to count individual users or other parties indirectly accessing SAP ERP in certain scenarios. This approach will ensure greater pricing transparency, predictability and consistency.

In order to modernize SAP's licensing policies, we started a project in 2016 and have been working with user groups, customers, industry analysts and other stakeholders to understand and address the concerns related to indirect access. We identified the three most common indirect access scenarios: (1) order-to-cash, (2) procure-to-pay, and (3) indirect static read. These common scenarios cover the majority of indirect access scenarios we have observed over the years. The pricing changes for these common scenarios is our first step in the longer journey of modernizing our licensing policy. We will continue this journey by working with the relevant stakeholders in order to comprehensively address all indirect access scenarios.

We encourage customers to engage with us. We are committed to working with customers who are underlicensed or interested in reconfiguring their licenses per the new policy. SAP assures customers who proactively engage with us in good faith to resolve such under-licensing, that we will not pursue back maintenance payments for SAP Software for such under licensing.

BACKGROUND INFORMATION

"Use" is defined in SAP's current contractual documents as: "to activate the processing capabilities of the Software, load, execute, access, employ the Software, or display information resulting from such capabilities." Additionally, "Use 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." Use is defined broadly to cover both direct and indirect access scenarios and any use of the SAP Software requires an appropriate license.

"Indirect Use / Indirect Access" are a commonly used terms throughout SAP and our ecosystem that describe the same thing. Indirect access is *use* which occurs by way of a non-SAP frontend or non-SAP intermediary software. The picture below shows the difference between use via direct access and use via *indirect access*.

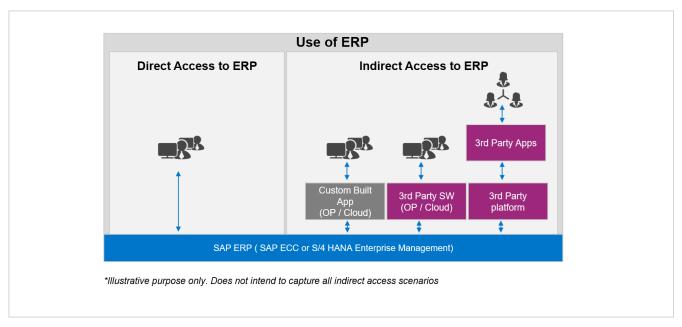


Figure 2. Direct Access vs. Indirect Access

All *use* of SAP software requires a license. This includes *use* which occurs directly (direct access) by way of a user interface delivered with or as a part of the Software or indirectly (indirect access) through a non-SAP frontend or non-SAP intermediary software.

- Direct access to ERP is licensed based on users.
- Indirect access to ERP historically has also been primarily licensed based on users. However, as mentinoned
 earlier, we have embarked on a journey to move away from user-based licensing to a more transparent and
 predictable licensing model focused on outcomes related to our customers' use of the SAP ERP system.

NEW ON PREMISE LICENSING POLICY FOR COMMON INDIRECT USE SCENARIOS

Order-to-Cash Scenario

In an order-to-cash scenario different classes of individuals (e.g., employees of licensee, employees of business partners of the licensee and/or consumers), devices, automated systems, etc. use SAP software to participate in the licensee's order-to-cash process.

Order-to-cash process is defined as:

- Create and change sales and services documents, such as sales quotations, sales and service orders, contracts, delivery documents, returns and billing documents, service notifications, service orders and service confirmations.
- Look-up and view related information, such as customer information, ordered material/product, ordered
 quantities, material availability, delivery schedule, delivered quantities, and price information for proceeding
 the sales and services documents.
- Process sales and service documents, such as issue sales and service orders, process shipping/delivery notices, manage returns and process invoices.
- Provide support in relation to the sales documents.

In the past:

- Every employee of the licensee, and every employee of a business partner of the licensee who used the SAP software directly or indirectly was required to be licensed as a Named User in order to participate in the licensee's order-to-cash process
- Any consumer participating in the licensee's order-to-cash process was licensed based on the number of sales or service orders placed by the consumers. Note: both "Business Partners" and "Consumers" are terms which are defined in each licensee's software contracts.

New Policy for SAP ECC Customers

Instead of requiring the licensing of users, this new policy allows certain indirect order-to-cash scenarios to be licensed via "orders", as outlined below.

"Orders" in an order-to-cash scenario is defined as the number of sales and service orders processed by the system annually; a metric that is more transparent and predictable compared to Named Users.

Going forward

- Any employee of the licensee who uses the SAP ECC software indirectly (through a non-SAP front-end or non-SAP intermediary software) to participate in the licensee's order-to-cash process will continue to be licensed as a Named User.
- Any employee of a business partner of the licensee who uses the SAP ECC software indirectly (through a non-SAP front-end or non-SAP intermediary software) to participate in the licensee's order-to-cash process does NOT need to be licensed as a Named User for such use. Instead, the Use of the software would be licensed based on the number of Orders as defined above.
- Any Use of the software by consumers participating in the licensee's order-to-cash process would continue to be licensed based on Orders.
- Any Use of the software by devices, robots, or automated systems participating in the licensee's order-tocash process would also be licensed based on Orders.

New Policy for SAP S/4HANA Enterprise Management Customers

- Unlike in SAP ECC, any employee of the licensee who uses the SAP S/4HANA Enterprise Management software (S4) indirectly (through a non-SAP front-end or non-SAP intermediary software) to participate in the licensee's order-to-cash process does NOT need to be licensed as a Named User. Instead, such indirect access by these individuals would be licensed based on Orders.
- For employees of a business partner of the licensee, consumers, and devices, the new pricing approach is the same as described under SAP ECC.

Orders are licensed via a a traditional perpetual license model, similar to how we license other on premise products today. The pricing is tiered, meaning that the price per order decreases as the volume of orders increases. The pricing is also differentiated for business to business (B2B) vs business to consumer (B2C) scenarios, taking into account different order volumes and values.

The new policy is schematically shown in Figure 3.

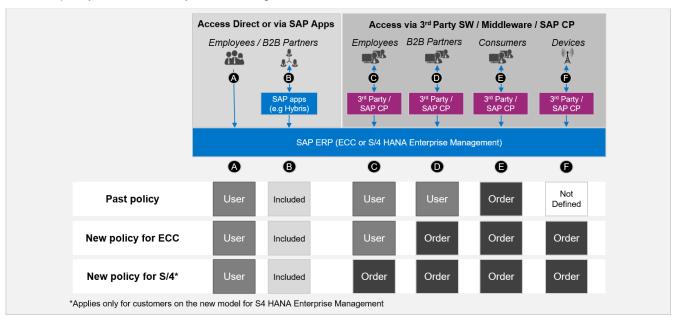


Figure 3. Order-to-Cash Polify Schematics

Example of new approach for licensing Order-to-Cash Scenario: Company X is a licensee of SAP ERP and processes 100,000 total sales orders per year. 20,000 of these sales orders are initiated by X's consumers and 30,000 of these orders are initiated by a combination of devices and business partners (e.g., distributors) . The remaining 50,000 orders are processed by 100 of Acme's own employees, who log directly onto SAP ERP.

How would X license the various use cases described above?

Class of user	Method of access	License Requirement
Consumers	Indirectly via third-party solution	20,000 Orders
Devices or Employees of Business Partners	Indirectly via custom solution	30,000 Orders
Employees of X	Directly logging onto SAP ERP	100 Users

Procure-to-Pay Scenario

In a procure-to-pay scenario, different classes of individuals (e.g., employees of licensee and/or employees of business partners of the licensee), devices, automated systems, etc. use SAP software to participate in the licensee's procure-to-pay process.

Procure-to-pay process is defined as:

- Create and change purchase orders, purchase requisitions, purchasing contracts, scheduling agreements in the licensee's system for purchases of products/services.
- Look-up and view related information, such as supplier information, ordered material, ordered quantities, delivery schedule delivered quantities, net price, and conditions for purchase orders, purchase requisitions, purchasing contracts, scheduling agreements for products/services of licensee and/or licensee affiliate.
- Process purchase orders, purchase requisitions, purchasing contracts, scheduling agreements (issue purchase orders to business partners, manage revisions, process shipping/delivery notices as well as notices confirming product receipt/service delivery, and process invoices for purchase orders).
- Provide support in relation to the above purchase order, purchase requisition, purchasing contract, scheduling agreement related functions

In the past:

 Every employee of the licensee, and every employee of a business partner of the licensee who used the SAP ECC software directly or indirectly was required to be licensed as a Named User in order to participate in the licensee's procure-to-pay process.

New Policy for SAP ECC Customers

Instead of requiring the licensing of users, this new policy allows certain indirect procure-to-pay scenarios to be licensed via "Orders", as outlined below.

"Orders" in a procure-to-pay scenario means the number of purchase orders processed by the system annually; a metric that is more transparent and predictable compared to "Named Users."

Going forward:

- Any employee of the licensee who uses the SAP ECC software indirectly (through a non-SAP front-end or non-SAP intermediary software) to participate in the licensee's procure-to-pay process will continue to be licensed as a Named User.
- Any employee of a business partner of the licensee who uses the SAP ECC software indirectly (through a non-SAP front-end or non-SAP intermediary software) to participate in the licensee's procure-to-pay process does NOT need to be licensed as a Named User for such use. Instead, the Use of the software would be licensed based on the number of Orders, as defined above.
- Any Use of the software by devices, robots, or automated systems participating in the licensee's procure-topay process would also be licensed based on Orders.

New Policy for SAP S/4HANA Enterprise Management Customers

- Unlike in SAP ECC, any employee of the licensee who uses the SAP S/4 HANA Enterprise Management software indirectly (through a non-SAP front-end or non-SAP intermediary software) to participate in the licensee's procure-to-pay process does NOT need to be licensed as a Named User. Instead, such indirect Access by these individuals would be licensed based on Orders.
- For employees of a business partner of the licensee and devices, the new pricing approach for SAP S/4
 HANA Enterprise Management is the same as described earlier for SAP ECC customers.

The new policy is schematically shown in Figure 4.

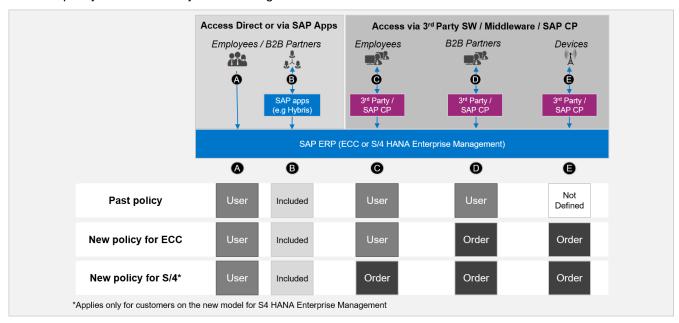


Figure 4. Procure to Pay New Policy Schematics

Indirect Static Read Scenario

Indirect static read is a scenario in which information has been exported from an SAP system (other than SAP Analytics Packages) to a non-SAP system pursuant to a predefined query that meets the following criteria:

- was created by an individual licensed to use the SAP system from which the information is being exported
- runs automatically on a scheduled basis, <u>and</u>

the use of such exported information by the non-SAP systems and/or their users does NOT result in any updates to and/or trigger any processing capabilities of the SAP System

SAP's new policy is that the use of such exported data in 3rd-party non-SAP systems does not need to be licensed, as long as all of the above criteria for indirect static read are met.

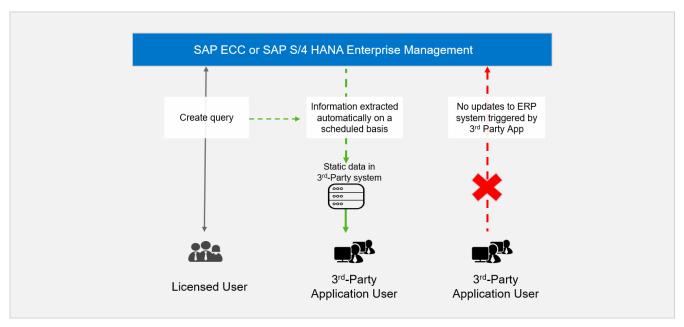


Figure 5. Indirect Static Read Scenario

Indirect static read scenarios are applicable in the context of data exported out of the SAP ERP system or any non-analytics package from SAP. SAP Analytics packages that are excluded from this policy are: SAP BusinessObjects Enterprise; SAP BusinessObjects Lumira; SAP BusinessObjects Predictive Analytics; SAP Business Warehouse.

Examples of Indirect Static Read and non-Indirect Static Read scenarios

Scenario	Indirect Static Read?
An employee of SAP's customer views reports (e.g. financial statements, forecasts, etc.) in a non -SAP system where such data was transmitted from an SAP system prior to employee accessing the non-SAP system	Yes*
A licensed employee of SAP's customer downloads information from SAP ERP to a 3rd party software system so that others can view that information in the 3rd party software	Yes*
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.	No
Customers of SAP's customer view a product catalog on a portal built on and operating on the SAP Cloud Platform, where product and pricing info originating from an SAP ERP and/or SAP S/4HANA system was transmitted to the portal prior to the individual accessing the portal.	Yes*
An employee of SAP's customer views his customer's master data in a table within 3 rd party application where such information originated in SAP ERP and was downloaded to 3 rd party application prior to the employee accessing it.	Yes*
An employee of SAP's customer views his customer's order status in 3 rd party application, where such information originated in SAP ERP and was loaded from SAP in direct response to the customer's inquiry	No
A sales associate of SAP's customer checks inventory status of several products 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	No
An employee of SAP's customer accesses a 3rd-party data analysis tool to sort, filter and analyze data that was transmitted from an SAP application prior to the employee accessing the 3rd-party tool	Yes*
An employee of SAP's customer accesses a 3rd-party application to sort data that was transferred from an SAP application prior to the employee accessing the 3rd -party tool and this employee subsequently initiates a transaction within the 3rd -party application which in turn triggers the updating of information in an SAP Application	No
Customers of SAP's customer or a sales associate of SAP's customer, accesses a custom portal which is built on and is operating on the SAP Cloud Platform, where information such as product inventory or customer data which originated in an SAP ECC and/or SAP S/4HANA system was transmitted from SAP in direct response to the inquiry from such individual	No
An employee of SAP's customer accesses a 3rd-party application to view a report which has been downloaded from SAP Business Warehouse	No
Data stored in the SAP system is transferred to a 3rd-party planning and consolidation application prior to an employee viewing and processing the data in the 3rd-party application	Yes*
Data is aggregated and calculated in the SAP ERP system (e.g. creation of a P&L, summary records per account), transferred to a 3rd-party planning and consolidation application prior to an employee viewing and processing the data in the 3rd-party application	Yes*
Data stored in the SAP ERP is transferred to a 3rd-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 (e.g. planning results are entered, correction postings based on consolidation are booked)	No

^{*}Note: Scenario is Indirect Static Read as long as all of the conditions outlined above are met.

Frequently Asked Questions

Order-to-Cash (O2C) and Procure-to-Pay (P2P)

- If the customer is properly licensed for these scenarios today, does he / she need to do anything? No, customers properly licensed today do not need to do anything.
- Can existing customers purchase more of the same if they have previously licensed Orders to cover consumer scenarios and envision increase in order volumes? There is no change to SAP's practice of allowing existing customers to license "more of the same".
- What pricing model is used to license Orders? Is it 'pay as you go'? No, as of today, the pricing is based on a standard perpetual license model with the "Order" metric.
- How will the Orders be counted towards the metric? An order is counted only once; changes or edits to that order are not counted.
- How is indirect Use addressed when SAP cloud applications are used in conjunction with SAP on premise ERP (ECC or S/4 HANA) systems? Properly licensed individuals using an SAP cloud application (e.g. SAP SuccessFactors, SAP Ariba, etc.) connected to a properly licensed SAP ERP system, can generally access such ERP system to the extent necessary to operationalize the SAP cloud application without any additional ERP licenses.
- How are indirect access scenarios that utilize EDI for receiving orders licensed? Going forward, such scenarios will be licensed via orders triggered through EDI. However, if a different approach was used in the past, SAP will not require customers to change the approach or re-open this discussion.
- How are indirect access scenarios that utilize SAP Exchange Infrastructure (XI), SAP Process
 Integration (PI), or SAP Process Orchestration (PO) licensed? The license for XI, PI, or PO covers the
 various integration scenarios and not the underlying value provided by ERP. Indirect access of ERP via XI,
 PI, or PO, if it occurs, still needs to be licensed.

Indirect Static Read

- Must a current contract be amended for a customer to take advantage of Indirect Static Read use rights? SAP intends to apply its Indirect Static Read policy to customers even if the contract does not include Indirect Static Read language.
- If a customer has previously licensed Named Users for what is now defined as Indirect Static Read scenario, what are his / her options going forward? If such Named Users are not needed for other scenarios, customers can leverage SAP's existing extension policies to replace the associated maintenance payments with either (1) a cloud solution purchase or (2) an on-premise solution purchase.
- Above you note that Indirect Static Read scenarios are applicable in the context of data exported out of ERP or any non-analytics package from SAP. Does this imply that anyone viewing data in a 3rd-party application that was exported from an SAP Analytics package requires an SAP license? Indirect Static Read requires appropriate analytics package licenses, if the data is exported out of SAP Analytics package (e.g BOBJ) given the value add of organizing data in an intelligent and easy-to-consume manner, which is provided by such analytics solutions. However, the individuals participating in such scenarios do not need to be additionally licensed to use SAP ERP.

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IMPACT OF THE NEW POLICIES ON EXISTING CUSTOMERS

SAP has no intent to mandate changes to perpetual license terms and conditions customers have in place.

- No change to the "Use" definition has been made. "Use" is defined in SAP's current contractual documents as: "to activate the processing capabilities of the Software, load, execute, access, employ the Software, or display information resulting from such capabilities" additionally, "Use may occur by way of an interface delivered with or as a part of the Software, a Licensee or 3rd-party interface, or another intermediary system".
- Existing SAP customers compliant with their license agreement do not need to contact SAP or make any changes to the perpetual license agreements;
- There is no change to SAP's practice of allowing existing customers to license "more of the same". If a
 customer is partially licensed today and proactively engages with SAP to resolve such under-licensing, then
 SAP commits to not pursuing back maintenance for such under-licensing of SAP software, and gives the
 customer a choice:
 - customers can continue to buy additional licenses of users, products and metrics under the old policy
 - convert to the new policy/products described in this document, whereby SAP will offer a license credit (in accordance with SAP conversion policies), which can be applied towards the new products.

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