

SAP ERP & Hybris eCommerce Integrations: -

- **Q: SAP ERP ECC (Enterprise Central Component)?**

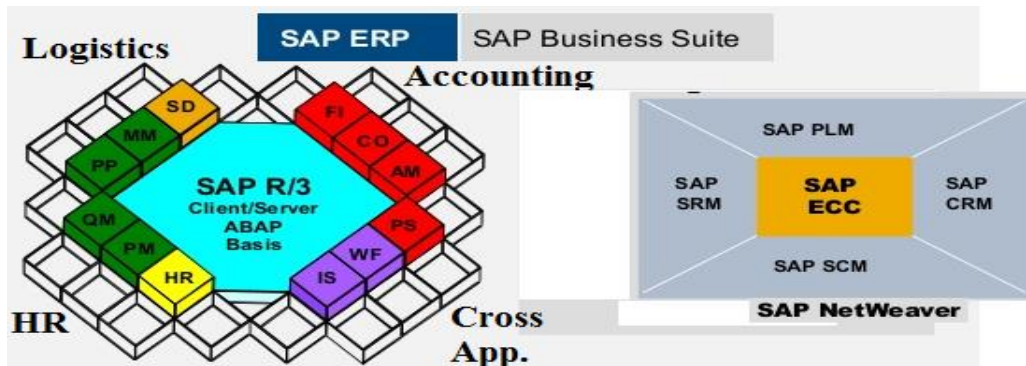
Recognized assets that SAP owns.

It is ERP software which consists of several modules.

ERP incorporates the key business functions / processes of the Org (SD, MM, PP, Logistics, QM, ...)

SAP Business Suite Applications = SAP ERP + SAP CRM + SAP SRM + SAP SCM + SAP PLM

SAP ERP = SAP ECC + SAP BW + SAP EP + SAP PI + SAP NW MDM + SAP XSS



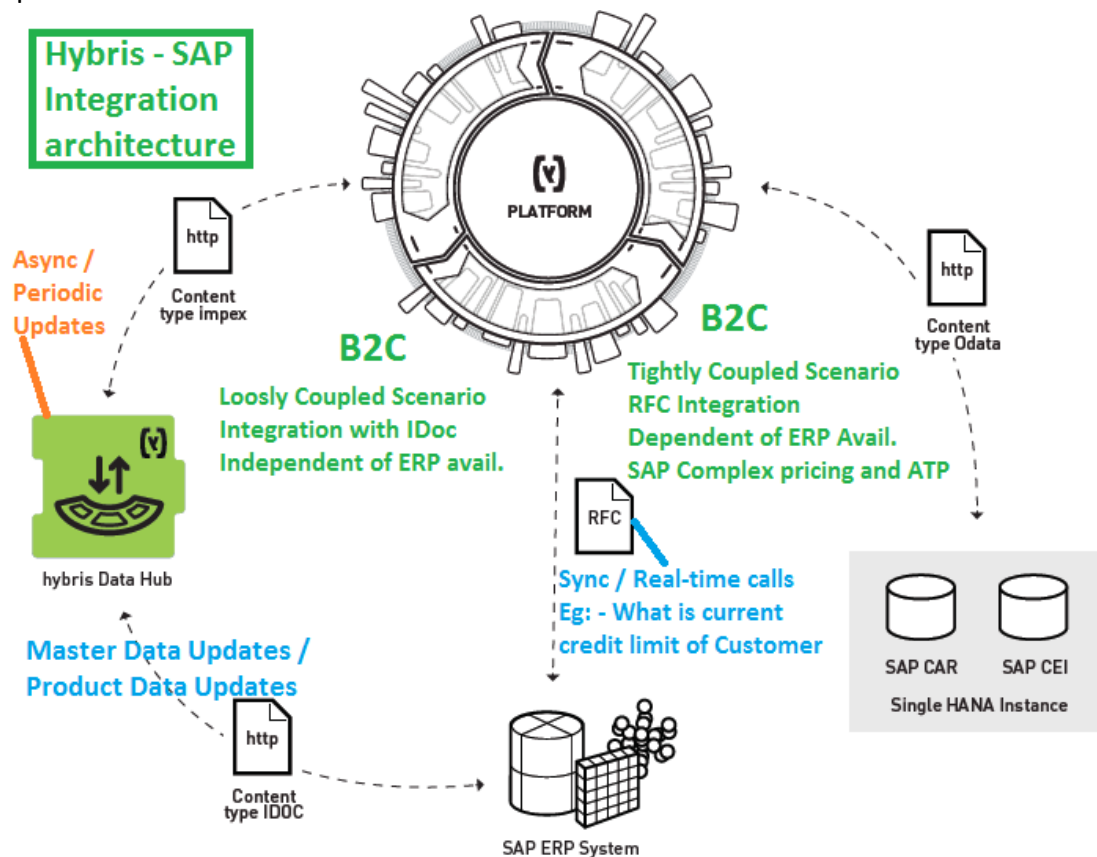
- **Q: Technically speaking, what are the different ways to share the information between ERP & Hybris?**

1) Asynchronous / Periodic Updates / Loosely couple Scenario = Use **Data Hub**

Example: - Master Data updates / Product Data updates / ...

2) Synchronous / Real-time calls / Tightly couple Scenario = RFC for regular calls

Example: - What is the current credit limit for the customer.

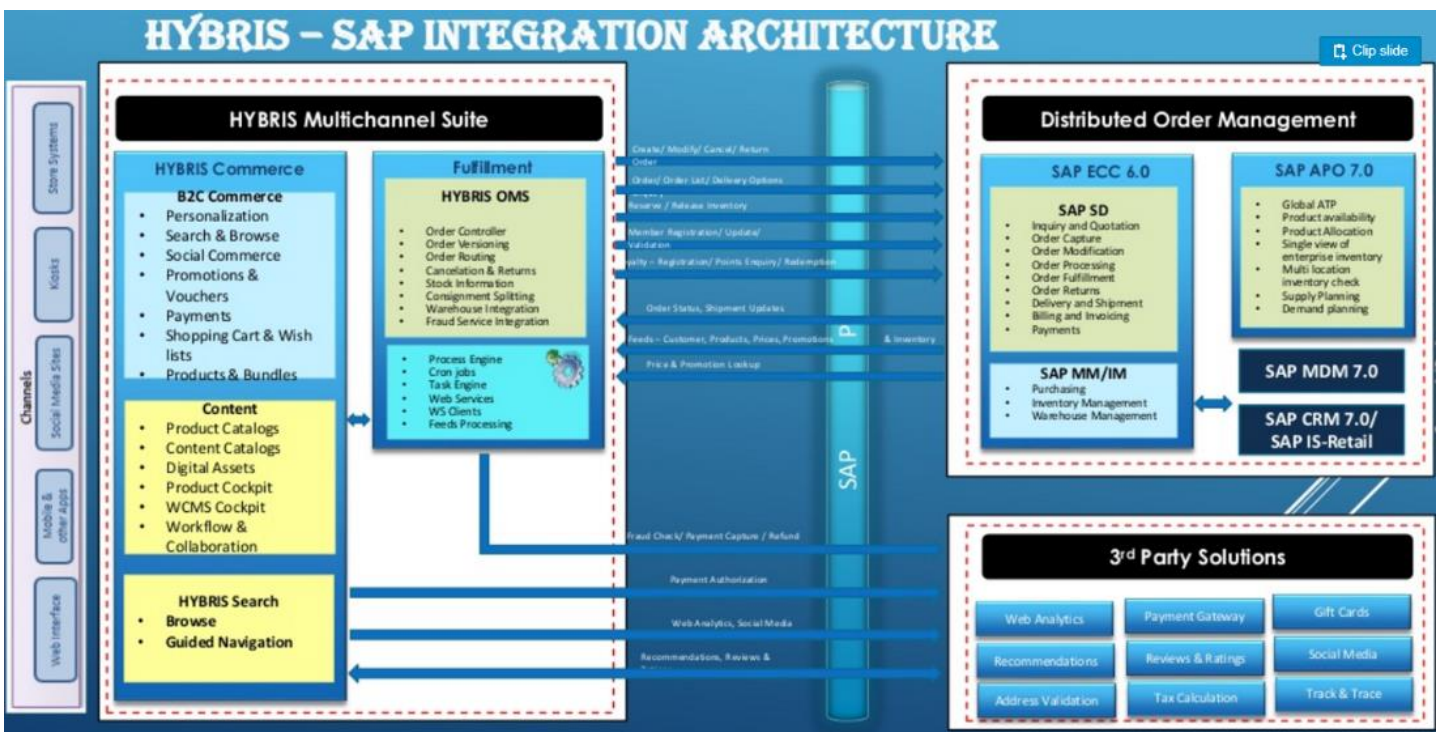


- **Q: Generally speaking**, what are the possible ways of Integration Scenarios?
 - **(1) Loosely Couple Scenario** = Also called as “Asynchronous Integration (Periodic) = B2C / Simple B2B
 - Asynchronous communication through **IDocs**.
 - Based on certain frequency the job is set up to update the data, this types is used for datatypes that don’t often change like customer data, product data.
 - Less backend SAP Interactions
 - **Ad:** - Flexible, Best possible response time & High volume **B2C**.
 - **Dis:** - Can’t handle if more complex business logic in ERP
 - **Async** order management integration, **recommended** for B2C & simple B2B projects.
 - **Steps:** -
 - Step 1 = Master Data (Product, Pricing, Stock Level....) upload happens from ERP → Hybris with DH
After done, there will no communication between ERP & Hybris (Hybris is Independent).
 - Step 2 = Customer Buying Experience = Purely happens in Hybris
 - Step 3 = Order Creation = Also happens in Hybris
 - Step 4 = Sales Order processing in ERP = Order replicated to ERP
Invoicing, Delivery... are happens in ERP.
 - **(2) Tightly Coupled Scenario** = Also called as “Synchronous Integration (Real-Time Integration) = B2B Tightly Integrated
 - Synchronous communication through **RFC**.
 - Real time calls specially for datatypes like pricing, inventory and order status where the most up to date information should be displayed
 - Hybris regularly interacts with SAP (Real-Time Integration Scenario)
 - **Ad:** - Handle more B2B with complex logic in ERP
 - **Dis:** - Not flexible & **Not** really suitable for high volume B2C.
 - **Steps:** -
 - Step 1 = Master Data (Product, Pricing....) upload happens from ERP → Hybris with DH
After done, there will no communication between ERP & Hybris (Hybris is Independent).
 - Step 2 = Customer Buying Experience = Purely happens in Hybris
 - Step 3 = Regular calls to ERP for Complex logic (Availability Check, Customer Specific Prices, Credit checks ...)
 - Step 4 = Order Creation = Happens in ERP (Not at Hybris)
Invoicing, Delivery... are happens in ERP.



- **(3) Hybrid Scenario** = B2B Asynchronous, Partly Synchronous
Choice of Sync & Async Steps.
Combines full Strength of SAP & Hybris.
Most common approach used in most of the Implementations.

	Asynchronous	Synchronous	Hybrid
Creates the Order	Hybris	ERP	Hybris (Likely Async)
ERP calls during Customer Buying Experience	No	Yes (For Price, Availability, Credit Check)	Some calls to ERP (For Price Check ...)
High Volume Sale Env	Yes (Like B2C)	Low Volume business	Yes
Best suitable	If No complex ERP logic	If Complex Logic in ERP	If ERP Logic Complex



Contact us for more information → chennareddytraining@gmail.com (Java–Salesforce–SAP Portal–UI5/Fiori–Hybris)

- **Q: What are different ways to connect external systems (ERP / CRM / PLM / ..)**
 - SOAP / RESTful Web Services (Sync Integration)
 - Spring Integrations (Async Integration)
 - Java Message Services (Async Integration)

- **Q: Explain Hybris - SAP Integration within Hybris Commerce Suite**

Hybris - SAP Integration is delivered as part of Hybris Commerce Suite.

It does not come as a separate module.

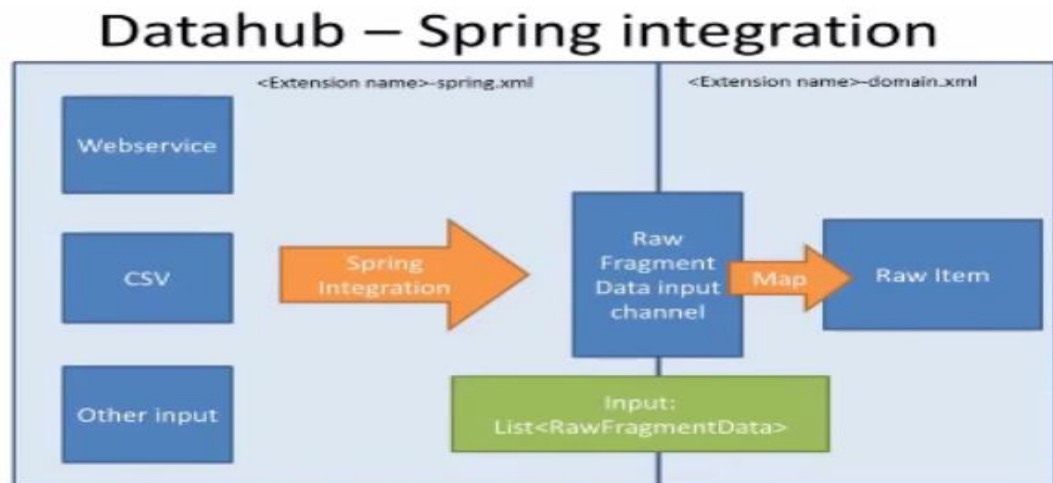
It fully complies with the Hybris Architecture by using the following: -

- Hybris Extension Concept
- Spring as Programming model
- Hybris DH for Async Scenarios
- hMC / Backoffice for Configuration tasks

You activate basic scenarios & additional functionality by installing Extensions & Configuring the functionality in hMC / Backoffice.

- **Q: Explain Spring Integration role in Datahub?**

- DH uses Spring Integration to handle a variety of formats through input / output mechanism.
- In Spring you can identify the input of your data. **Example:** - File / message.
- Configure a processor for that input, that “understands & reads” data input. **Eg:** - Message parser.
- You can also configure the output of the data. **Example:** - XML output format.
- Finally, output data from Spring Integration is input to Datahub **Raw items** (Like Item types).



- **Q: What are the main item types Datahub contains?**

- **Raw Item** = Maps closely to source. Map to product structure that comes from source system. SAP Data (Product) comes in IDOC format. Spring Integration converts into XML format & creates Raw Items. **Example:** - Product coming from SAP have Material ID & name then Raw Item also contains Material ID & name.
- **Target Item** = Maps closely to your Target. It will have the actual names of the Hybris. **Eg:** - Instead of Material ID they have UID and Material Name they have just Name.
- **Canonical Item** = Maps the Raw to Target. It's intermediate item type.

Eg: - Raw Item have Material ID & Target system have UID. Then Canonical translate Material ID to UID. It uses Impex as the mechanism to send data to Hybris.

SAP Hybris (v) Data Hub

