

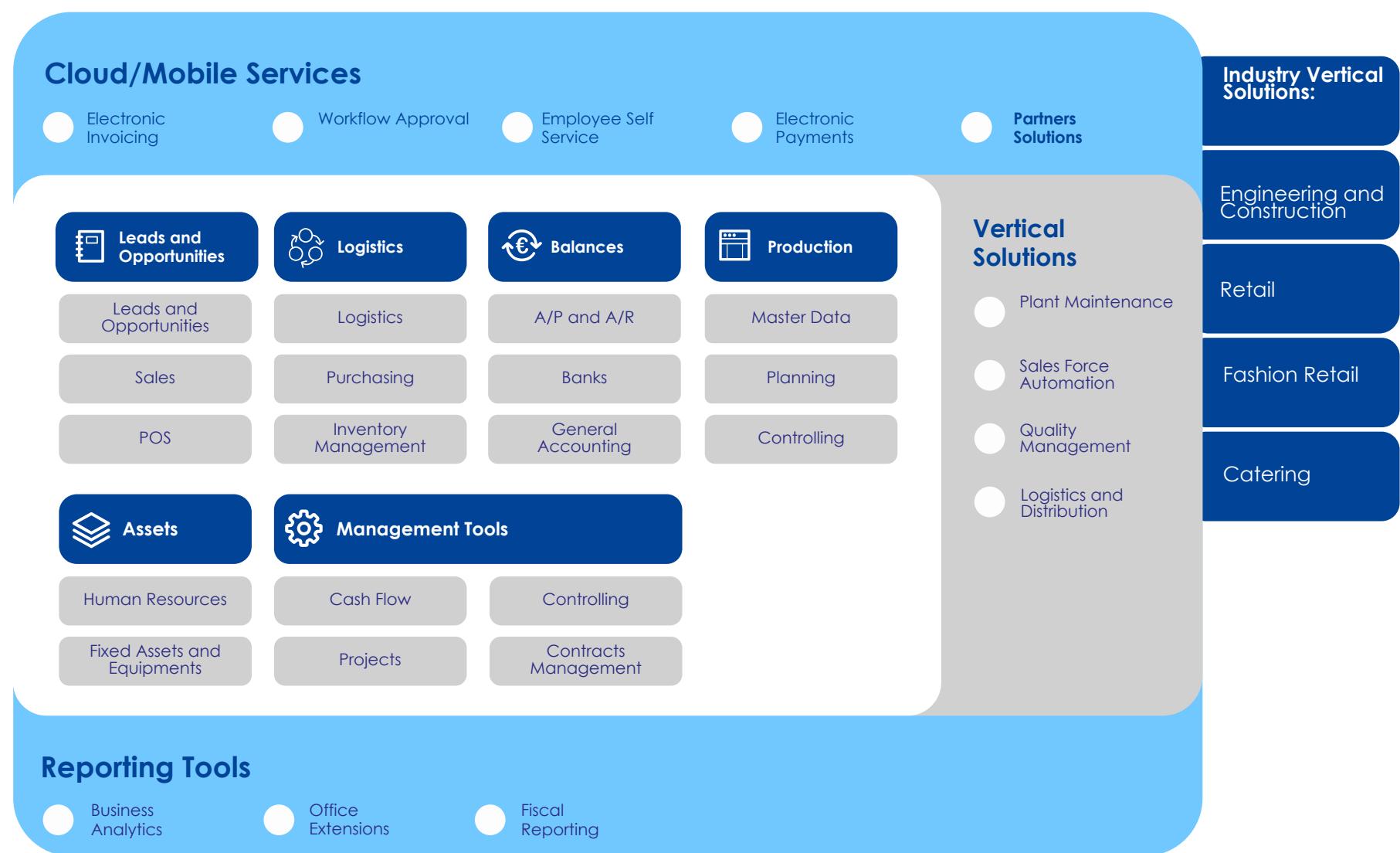
Sistemas de Informação *Information Systems*

Primavera Integration / WebAPI (V10)

Agenda

- Primavera Software
- Project Themes – Q&A
- VM – Initial Setup
- Primavera V10 WebAPI
 - How it Works
 - How to Use / Test / Consume
- Primavera DEMO

Primavera Solutions



Team Projects Themes

PID	P1
Project	Online/Web Store
Overview	Develop an Online store that allows to the customer, besides the usual shopping cart and purchase order registration, access the product catalog, inquire inventory by warehouse/store location, track the status of its order, and other functionalities.
ERP - Extensibility Objectives	Create an External Auth layer to create customer, stock inquire, create orders, get order status (table "cabecdocstatus" on ERP).
ERP - Basic Usage Objectives	<ul style="list-style-type: none">- Proper Master Data definition (Warehouses/Stores, Items, Item Categories, Customers, ...)- Understanding of the basic flow of sales- Understanding the stock management and pricing
Information/Funcionalities Reference Sources/Examples	<ul style="list-style-type: none">- Amazon.com- Fnac.pt- Farfetch.pt
Remarks	Primavera's ERP does not have document status for the Store purpose. "cabecdocstatus" linked tables must be used to inquire the order status. The suggested status should be interpreted as so.

Team Projects Themes

PID	P2
Project	Sales Order Picking
Overview	Create a Web App that allows the user to make a picking process of a sales order, generating a delivery note and manage the inventory
ERP - Extensibility Objectives	Create an External layer to authenticate the user, create a picking wave, suggest routes, read inventory, register exceptions on inventory, . . . Create ERP user tables to register the picking lists, . . .
ERP - Basic Usage Objectives	<ul style="list-style-type: none">- Proper Master Data definition (Warehouses/Stores, Items, Item Categories, Customers, . . .)- Get Sales Orders, Create and adjust inventory/stock- Create warehouses/locations, . . .
Information/Funcionalities Reference Sources/Examples	<ul style="list-style-type: none">- Microsoft Dynamics AX- SAP ERP- SAGE X3- EyePeak
Remarks	Primavera's ERP does not have WarehouseManagement capabilities as many other ones. The picking process can be complex. Picking Waves, Inventory Replenishment algorithms, Routes should be addressed.

Team Projects Themes

PID	P3
Project	360º Company Dashboard
Overview	Develop a Web app to provide to a complete information of the company status, regarding the information that is contained on the SAF-T (standard audit file for tax purposes) and information regarding sales orders, purchases, inventory, and accounts payable, using a dashboard to provide high level/graphical information with drill down functionalities
ERP - Extensibility Objectives	Create an External Authorization layer , generate SAF-T file from an external file.
ERP - Basic Usage Objectives	<ul style="list-style-type: none">- Proper use of master data, create customers, ...- Register Sales Orders, Delivery Notes, Invoices- Register basic accounting transactions- Register payments and costumer receipts- Understand the content of the SAF-T file
Information/Funcionalities Reference Sources/Examples	<ul style="list-style-type: none">- SAP Business Objects,- QlikView- Power BI
Remarks	Inspite of not having inbound ERP transactions and postings, the students must understand how the data that will be the source of the dashboard is generated in the ERP and its functional purpose. The proper usage of the ERP and a complete data insertion should be addressed.

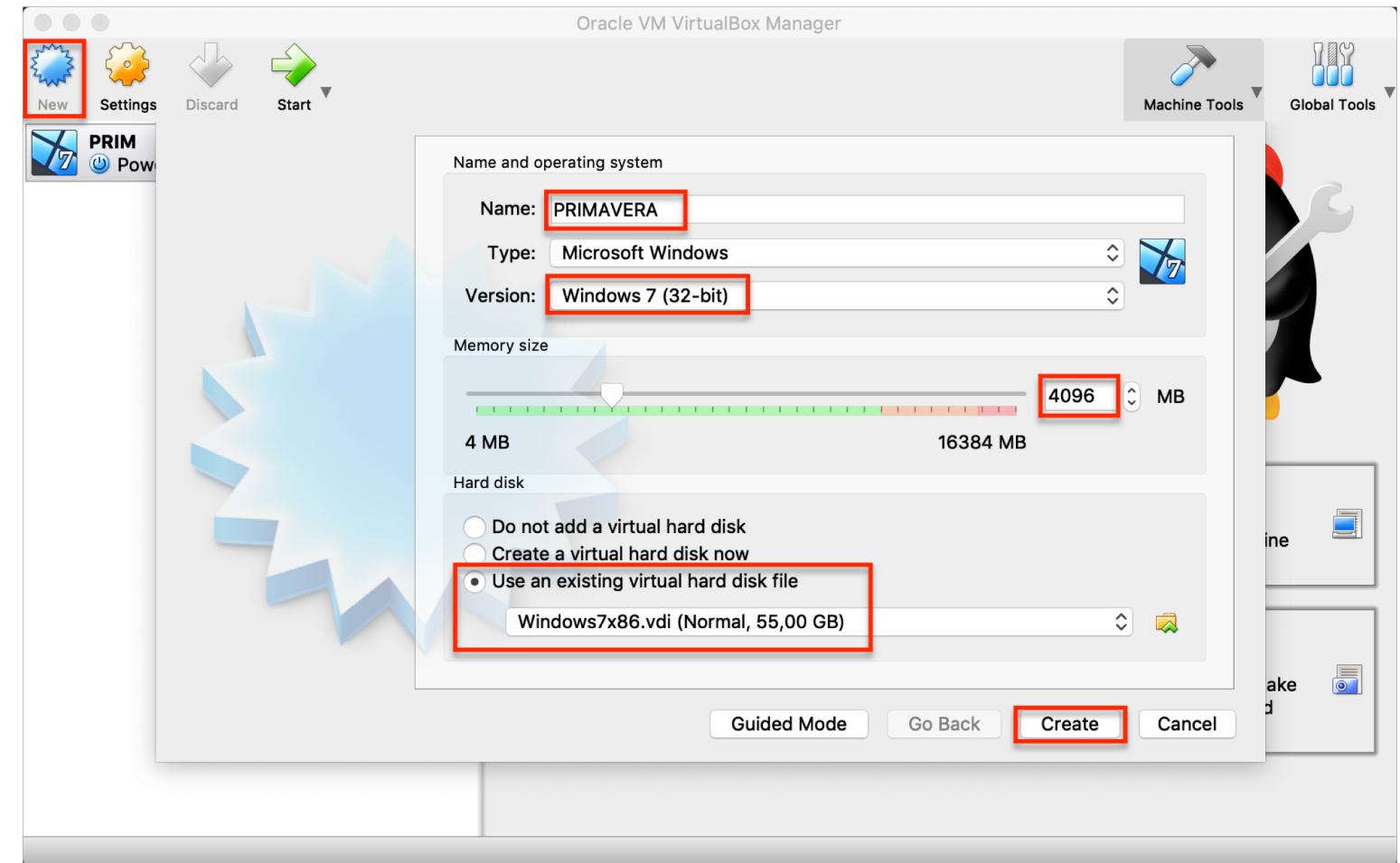
Team Projects Themes

PID	P4
Project	Sales Force Automation
Overview	Develop a Web App to manage the agenda of the sales representative, regarding target customers, register customer visits, register sales orders, customer profiles and status, ...
ERP - Extensibility Objectives	<ul style="list-style-type: none">- Create an External Authorization layer , create sales rep, create customer groups/targets, create visiting routes- Register Sales Orders, Create Leads/Prospects- Register summaries of customer visits and needs- Manage product catalogues, ...
ERP - Basic Usage Objectives	<ul style="list-style-type: none">- Proper Master Data definition (Wharehouses/Stores, Items, Item Categories, Customers, ...)- Get Sales Orders, Create and adjust inventory/stock- Reserve stock
Information/Funcionalities Reference Sources/Examples	<ul style="list-style-type: none">- SalesForce.com- SAP CRM- Microsoft Dynamics CRM- Vtiger
Remarks	This is also a very valuable project and market demanded. Mobile SFA is also an alternative (iOS, Android) for the Web App.

Virtual Machine – Initial Setup #1

1 – Download “Windows7x86.vdi” file (33GB)

2 – ORACLE Virtual Box -> New VM:



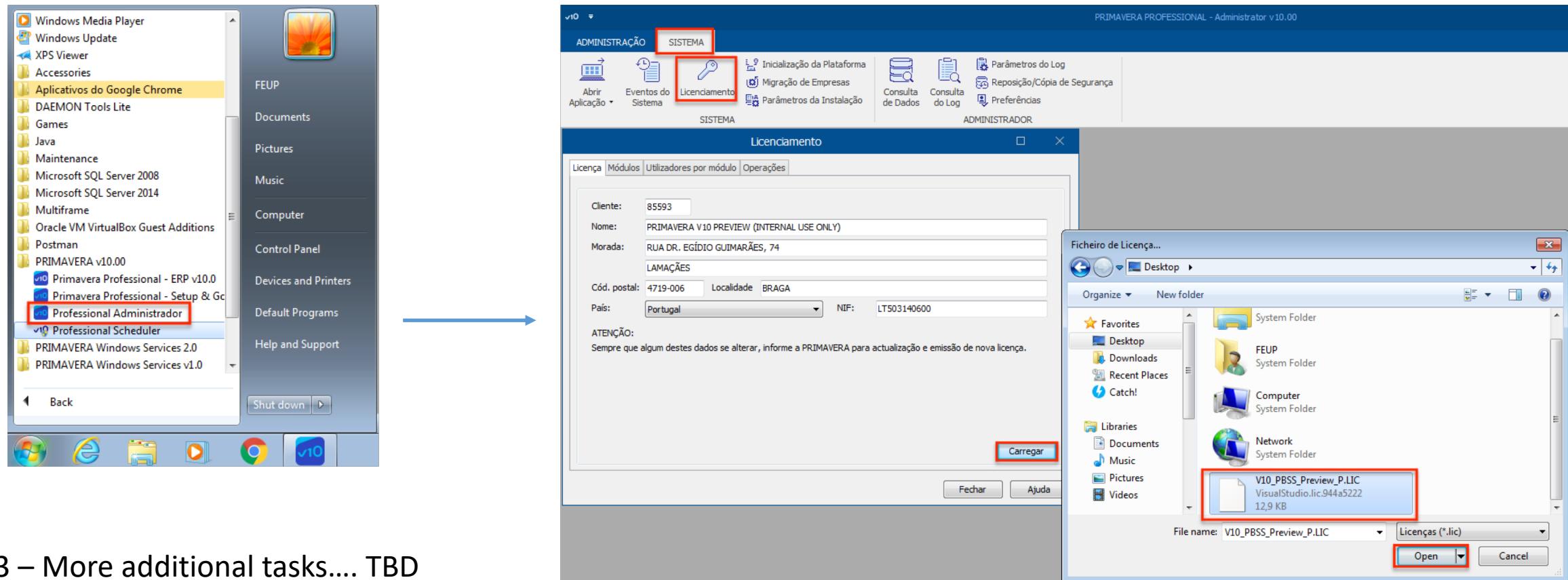
3 – Start the newly created VM

Virtual Machine – Initial Setup #2 /!

1 – Download Updated Primavera License File:

<https://we.tl/t-Cysm9zHNjo>

2 – Import new License to activate WebAPI V10:



3 – More additional tasks.... TBD

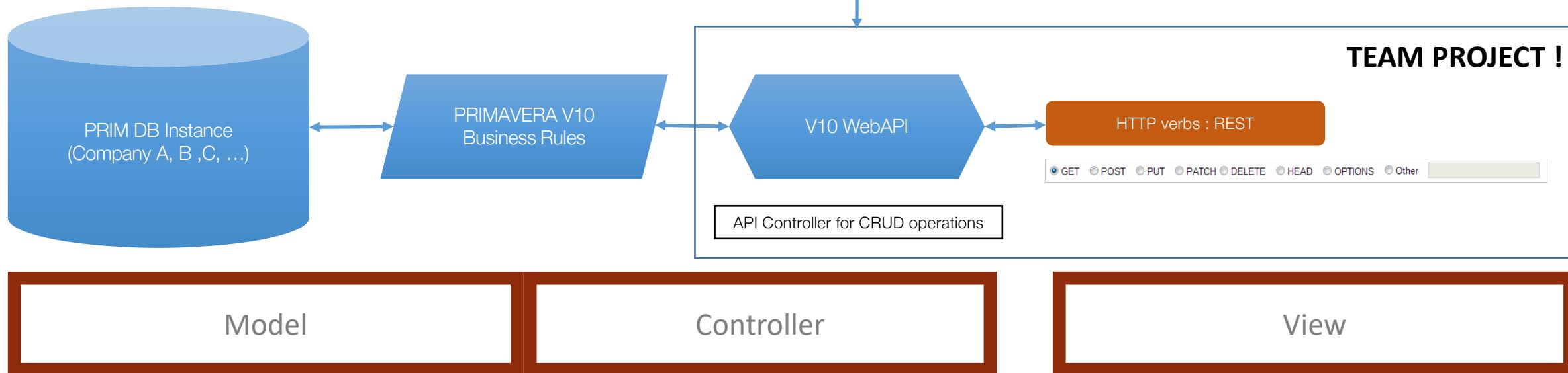
Primavera V10 WebAPI – How it Works

Microsoft IIS hosted - <http://localhost:2018/WebApi/>

<https://developers.primaverabss.com/v10/caracteristicas-da-web-api/>

WebAPI - Bearer Token Access Controlled (OAuth2)

- 1 - Create context for a specific company: Get a Token
- 2 - Operate within that company always using the generated Token



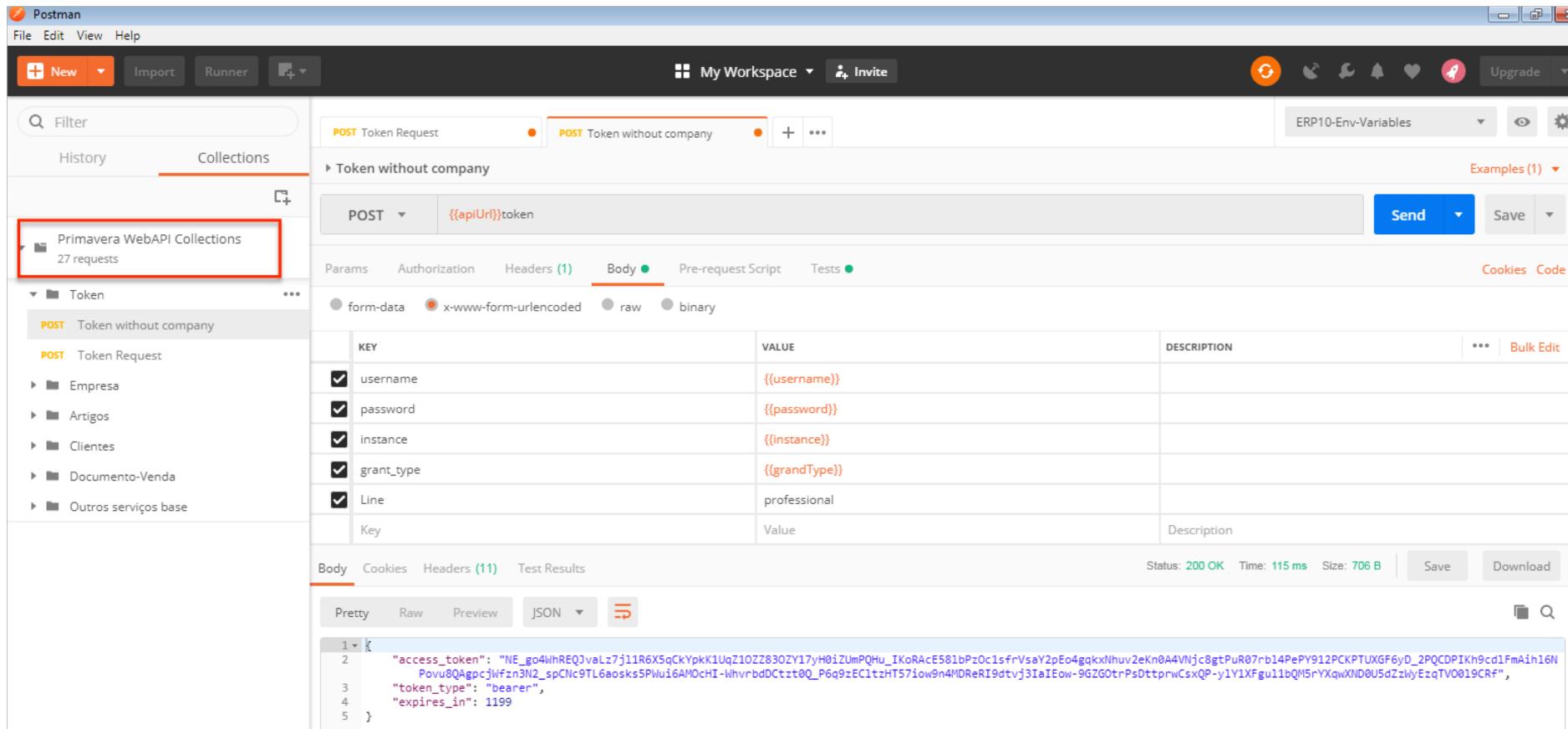
Primavera V10 WebAPI – How to use / Test



Postman tool for testing

<https://developers.primaverabss.com/v10/postman/>

Import Primavera Collection with examples



The screenshot shows the Postman application interface. On the left, there's a sidebar with a tree view of collections. A red box highlights the 'Primavera WebAPI Collections' folder, which contains 27 requests. Underneath it, there's a 'Token' collection with several sub-requests like 'Token Request', 'Empresa', 'Artigos', 'Clientes', 'Documento-Venda', and 'Outros serviços base'. The main workspace shows a 'POST Token Request' and a 'POST Token without company' request. The 'Token without company' request is selected. It has a 'Body' tab open, showing a form-data structure with fields: 'username' ({{username}}), 'password' ({{password}}), 'instance' ({{instance}}), 'grant_type' ({{grantType}}), and 'Line' (professional). Below the body, there's a 'Pretty' JSON preview of the response, which includes an 'access_token' field with a long string of characters.

```
1 <pre>
2   "access_token": "NE..._2PQCDPIKh9cdlFmAih16N
3   Povu8QAgpcjWfzn3N2_spCNC9TL6aosks5PWui6AMOcHI-WhvrbD Ctzt00_P6q9zEC1tzHT57iow9n4MDReI9dtv j3IaIEow-9GZG0trPsDttprwCsxQP-y1Y1XFgu1bQm5rYXqwND0U5dZzWyEzqTV019CRF",
4   "token_type": "bearer",
5   "expires_in": 1199
</pre>
```

Additional Information – Primavera + WebAPI

Primavera Contents – download – to explore the ERP

- Introduction to Primavera
- Logistics and Financial Module
- Documentation, examples and videos

<https://developers.primaverabss.com/?s=webapi>

- WebAPI documentation
- Sources and examples

<https://pt.stackoverflow.com>

- Q&A directly to Primavera BSS

Primavera v10 DEMO



Integrated
Purchase + Sales + Financial Processes