



# SMARTeCH

## MAXIMO / WORKDAY INTEGRATION

### OVERVIEW

Having one single view of your data is the only sane way to make business decisions and answer different business needs.

Over the last decade, **Smartech** has provided numerous organizations with Maximo Integrations. These integrations differed in size, employed technology and structure. An evidence of this is our range of integration projects: Maximo-Oracle, Maximo-MS Project, Maximo-SAP, and Maximo-Navision etc...

This document highlights the functional and technical specification for the integration between Maximo, the CMMS leading system, with Workday the leading provider of enterprise cloud applications for finance and human resources.

### TECHNICAL DETAILS

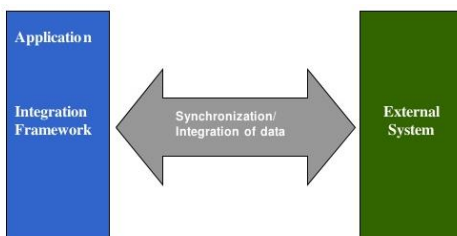
The main goal for a Maximo-Workday integration is to create a successful bi-directional connection while minimizing customizations in both systems. Therefore, the selection and outline of all technical details is crucial.

These are some of the technical choices made for this particular Maximo integration.

### USING THE MAXIMO INTEGRATION FRAMEWORK

Maximo Integration Framework (MIF) is an essential component of Maximo service-oriented architecture (SOA). Integration framework facilitates live synchronization or batch loading of data bi-directionally between MAXIMO and multiple external systems.

- Provides an XML interface for all Maximo business objects
- Provides support for bi-directional integration with external applications and middleware products
- Supports standard protocols such as HTTP/HTTPS, Web services, JMS, XML files, flat Files and database tables.
- Supports message exchange in a synchronous and asynchronous model.



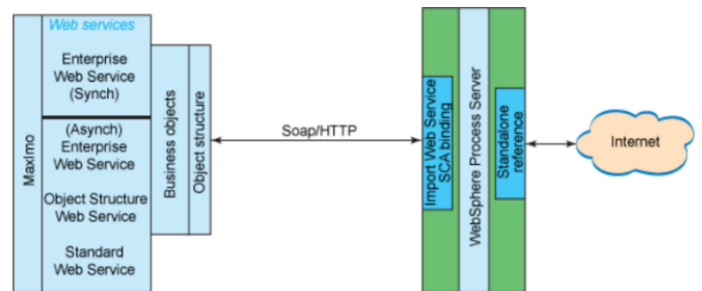
### USING WEB SERVICES

Web services are XML-based information exchange systems that use the Internet for direct application-to-application interaction. These systems can include programs, objects, messages, or documents.

Using XML eliminates any networking, operating system, or platform binding. Web Services based applications are highly interoperable application at their core level.

A web service enables communication among various applications by using open standards such as HTML, XML, WSDL, and SOAP. A web service takes the help of:

- XML to tag and format the data
- SOAP to transfer a message
- WSDL to describe the availability of service.



### CHOICE OF FRAMEWORK

The choice of the Framework can be narrowed down by identifying the integration capabilities of the application being integrated to Maximo, the integration processing manner (synchronous or asynchronous), the required and supported level of error management by the external application, data loading implementation support and other integration deployment requirements.

Large integration deployments could involve many systems and require different integration components to be used for different external applications.

**For the Maximo-Workday Integration project**, all interface integration will be done with **WEBSERVICE (SOAP)**. Integrating Maximo with external systems like Workday using web service technology enables open protocols communication and helps solving interoperability problems between applications.

## EXAMPLE: WORKDAY/MAXIMO INTEGRATION SCENARIO

### INTEGRATION POINTS

In this example, we specified the client business requirements and convert them thoroughly to a messaging architecture of inbound and/or outbound request flows.

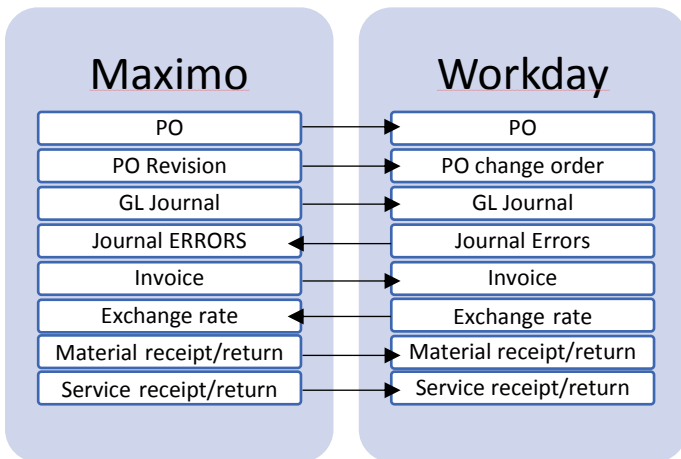
### BUSINESS REQUIREMENTS

Purchase Orders will be created in Maximo and then sent to Workday as report for further processing. Receiving will be done in Maximo and receipt transactions will be sent to Workday as Journal entries. The invoices will be created and approved in Maximo and sent to Workday. Inventory usage and adjustments transactions will be sent to Workday as Journal entries.

### TRANSFER DETAILS

Integration points required for Workday integration:

- Sending approved PO entry information to Workday;
- Sending PO revision entry information to Workday;
- Sending GL journals entry information to Workday;
- Receiving Journal Errors entry information from Workday;
- Sending paid invoice information to Workday;
- Receiving Exchange rate entry information from Workday;
- Sending Material Receipt/return information to Workday: Issues and returns will be done in Maximo and will be sent to Workday to adjust the inventory;
- Sending Service Receipt/return information to Workday: Service Receipts and returns will be sent to Workday on the after saving.



Creating a **field mapping file** is the next step of integration to pair a data source with its destination featuring each data transformation. This file controls which data is exchanged between systems, and which data is omitted.

Lastly, we are ready for an efficient implementing that will be followed by a testing process.

## EXAMPLE OF INTEGRATION CHALLENGES

### How to make sure that the transaction has not been sent to Workday if it errors out in Maximo.

If an error is raised, instantly an error message will be displayed on the screen and the transaction will not be sent to Workday. Maximo has default error messages and notifications as well as the possibility to add and custom according to each functional concept.

### How to synchronize PO Line numbers in Maximo after PO revision

In all of our Maximo-Workday integration projects, additional webservices are created to ensure data synchronization and integrity. In our example, Maximo receives back updated PO lines from Workday after each revision.

### How to be notified of the GL Journal errors raised in outbound queue

In this example, the GL Journal transaction is the only asynchronous transaction therefore the user will not be notified of the errors that can occur. The administrator can manually check for the errors or multiple solutions can be developed.

### How to determine the compatibility between Web services of Maximo and Workday

Conducting a feasibility study prior to the integration project is key to choose the right version of web service.

Contact us to discuss your Maximo integration needs.

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