

User's Guide

Note

Before using this information and the product it supports, read the information in "Notices" on page Notices-1.

First Edition (November 2006)

This edition applies to Release 6.2 of IBM Maximo Adapter for Microsoft Project and to all subsequent releases and modifications until otherwise indicated in new editions.

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About This Guide

This section explains how this guide can help you to use the IBM® Maximo® Adapter for Microsoft® Project (Maximo for Project) to exchange information between Microsoft Project and Maximo, and how Maximo for Project enhances Microsoft Project. It also provides information about other IBM Corporation resources available to you, such as additional documentation and support.

Maximo for Project users must be familiar with Microsoft Project and Maximo.

Audience

This guide lets planners, forecasters, and other managers use Microsoft Project to plan and schedule Maximo data.

Related Documentation

For more information about the IBM Maximo Adapter for Microsoft Project, refer to the following documentation:

Document	Description
IBM Maximo Adapter for Microsoft Project Online Help	Provides step-by-step procedures for Maximo for Project.

Support

IBM Corporation users with a valid Annual Customer Support Plan (ACSP) can obtain product support online at Support Online: support.mro.com.

Support Online includes information about product releases, software patches, and documentation updates. To find the most current version of a document, refer to the Knowledge Base on this site.

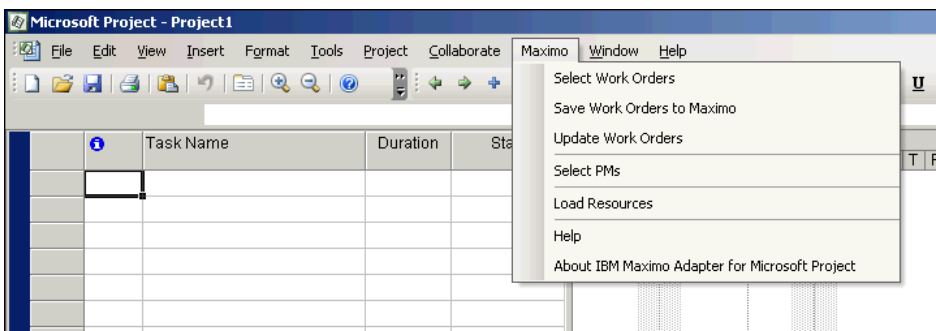
IBM Maximo Adapter for Microsoft Project Overview

1

The IBM Maximo Adapter for Microsoft Project adds a Maximo menu to the Microsoft Project menu bar, so you can:

- ▼ Map work order and PM data from the MAXIMO database to Microsoft Project.
- ▼ Create Maximo work orders from tasks that you created in Microsoft Project
- ▼ Filter work order, PM, and calendar data from the MAXIMO database.

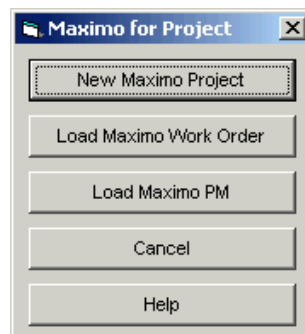
Maximo Menu



After filtering the Maximo data, you can perform project planning tasks with the Maximo work orders and save schedule data back to existing work orders in the MAXIMO database.

Starting Maximo for Project

When you open Maximo for Project, the Maximo for Project Startup dialog box opens.



Starting Maximo for Project

Select the type of project to work on in Microsoft Project:

Option	Description
New Maximo Project	Opens a new session in Microsoft Project that creates Maximo work orders when you select Maximo > Save WO to Maximo .
Load Maximo Work Order	Opens a Maximo project in Microsoft Project that displays work orders. The Select Work Orders dialog box opens so you can transfer work order data from Maximo into Microsoft Project.
Load Maximo PM	Opens a Maximo project in Microsoft Project that forecasts certain PMs. The Select PMs dialog box opens so you can transfer PM data from Maximo into Microsoft Project.
Cancel	Opens standard Microsoft Project, without Maximo for Project's functionality.

Using Maximo Data in Microsoft Project

These procedures show how to transfer work order or PM data from a MAXIMO database into Microsoft Project.

Process Overview

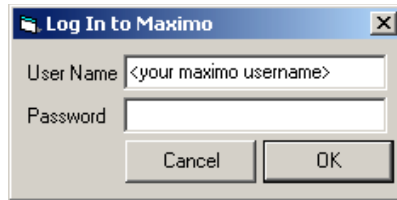
These steps summarize how to create a project in Microsoft Project using Maximo data:

- 1 Create and save a Maximo query.
- 2 Create a new project in Microsoft Project.
- 3 Log in to Maximo from Microsoft Project.
- 4 Select a Maximo work order or PM query.
- 5 Modify the project.
- 6 If you selected a work order query, return schedule data and insert new work orders into the MAXIMO database.

Creating a Project in Microsoft Project Using Maximo Data

- 1 In Maximo's Work Order Tracking or Preventive Maintenance application, create and save a query.
- 2 In Microsoft Project, open a new Maximo project.
- 3 In the Maximo for Project Startup dialog box, click **New Maximo Project**.

The Log In to Maximo dialog box opens.



- 4 Enter the user name and password for your MAXIMO database.

NOTE You can set default login values for the Log In to Maximo dialog box in the MaximoProject.ini file.

- 5 Click **OK**.
- 6 Select the type of data to transfer from Maximo to Microsoft Project:
 - ▼ To transfer work order data, select **Maximo > Select Work Orders**.
 - ▼ To forecast PMs in Microsoft Project, select **Maximo > Select PMs**.

The Select Work Orders or Select PMs dialog box opens.

- 7 Click the row containing the appropriate query. You see only public queries and queries you created.
 - ▼ To filter the results, click the Advanced tab.
 - ▼ To preview the results, click the Preview tab.
- 8 After selecting the appropriate query, click **OK** to transfer the work order or PM data, including assignments, craft and tool resources, and resource availability.

NOTE The results may differ when using the same query in Maximo and Maximo for Project.

- 9 Use Microsoft Project to perform project planning and management tasks.
- 10 Save the project in a Microsoft Project file (.MPP) so you can schedule or update it later.

11 (Optional) To save the data back to Maximo, select **Maximo > Save WO to Maximo**.

NOTE If the active project includes several subprojects, all work order data is saved to Maximo. However, if the active project includes PM subprojects and work order subprojects, only the work order data is saved.

12 (Optional) To update the saved project from Maximo, select **Maximo > Update Work Orders**.

Difference in Maximo and Maximo for Project Query Results

The results may differ when using the same query in Maximo and Maximo for Project.

Maximo	Maximo for Project
Displays only the selected work orders or PMs.	Displays the parent and its entire child hierarchy, providing a more comprehensive and accurate schedule.

Using the Maximo Menu

Maximo for Project adds Maximo menu options and dialog boxes to Microsoft Project.

Select Work Orders

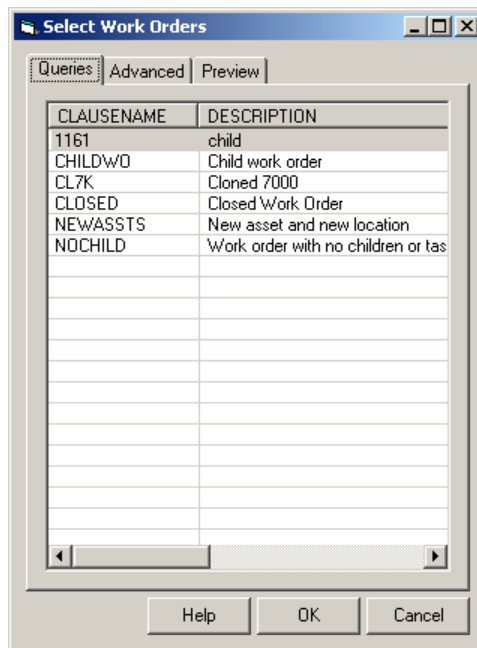
You use this dialog box:

- ▼ To display public queries and queries you saved in Maximo's Work Order Tracking application. The available queries depend on the sites you have access to.
- ▼ To preview the results of a query.

This dialog box contains these tabs:

Queries Tab

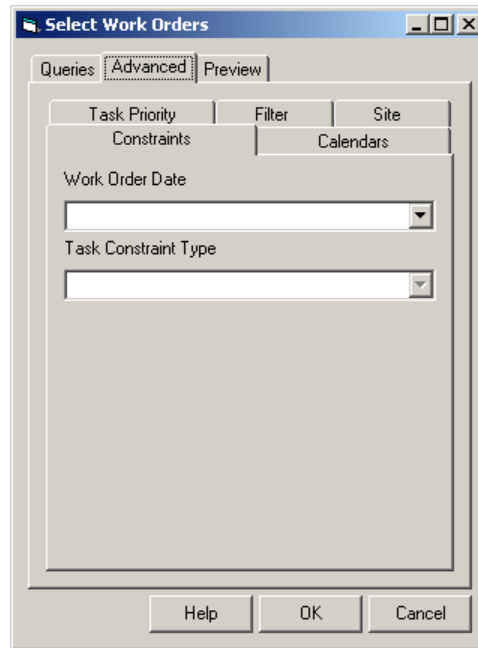
You use this tab to display public queries and queries you saved in Maximo's Work Order Tracking application.



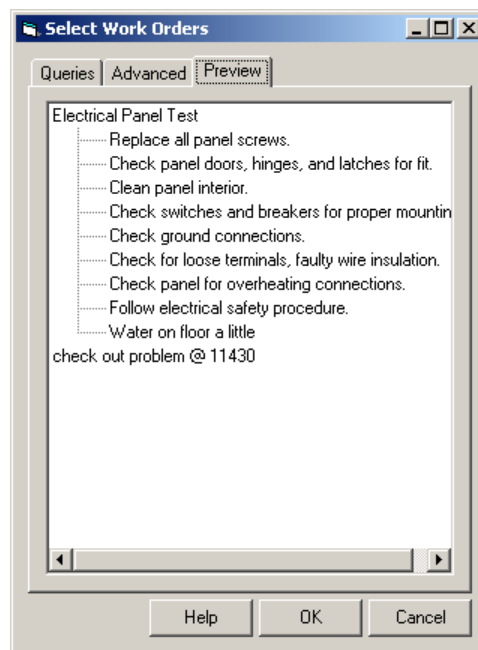
Advanced Tab

You use this tab:

- ▼ To filter the query results by site, task priority, work order status, and date.
- ▼ To determine whether to retrieve asset and labor calendars from Maximo.

**Preview Tab**

You use this tab to check the results of the selected query. The results may differ when using the same query in Maximo and Maximo for Project.



To select work orders:

- 1 In Microsoft Project, select **Maximo > Select Work Orders**.

The Select Work Orders dialog box opens, displaying the Queries tab.

- 2 Click the row containing the appropriate query. You see only public queries and queries you saved in Maximo.

- 3 Click the Advanced tab to filter the query results. Use these subtabs:

- ▼ **Constraints:** Select a scheduling constraint for your project. You may select only one constraint type.

NOTE Use this option to use Maximo’s Schedule or Target date to schedule the work order in Microsoft Project.

NOTE You can only constrain tasks that are not summaries of other tasks. Mixing child and parent constraints can violate Microsoft Project’s business rules and cause problems with work order transfers.

In practice, when you constrain work orders, Maximo for Project uses that constraint on all tasks at the lowest hierarchical level.

To manipulate groups of tasks, transfer the parent tasks from Maximo, then set the constraints in Microsoft Project.

Constraints	Procedure	Description
Work Order Date	Select a work order date: Scheduled Start, Scheduled Finish, Target Start, Target Finish . NOTE Leaving this field blank disables the Task Constraint Type field.	Constrains the task by scheduling or targeting the work order’s start and finish dates.
Task Constraint Type	Select a constraint type: Must Start On, Start No Earlier Than* , Start No Later Than, Must Finish On, Finish No Earlier Than* , or Finish No Later Than . *Recommended selections NOTE The available selections depend on the date in the Work Order Date field.	Constrains the task by starting or finishing it on specified dates.

- ▼ **Calendars:** Transfer Maximo asset and labor calendars to Microsoft Project. Enter specific dates within which to transfer the calendars.

NOTE Transferring calendar data can significantly impact performance; make the date range as small as possible.

NOTE When you transfer asset calendars into Microsoft Project, they are the inverse of what they are in Maximo.

Maximo's asset calendar displays when the asset is operating. Microsoft Project's asset calendar displays the asset's downtime (when it is available for preventive maintenance).

Upon receiving the asset calendar from Maximo, Maximo for Project names the calendar with the asset number, and makes the asset calendar an attribute of the work order being scheduled.

- ▼ **Task Priority:** Filter the query results by work order, calculated, or location/asset priority. When Maximo's work orders are copied to Microsoft Project, they become tasks and are assigned a priority based on Maximo's priority setting for the work order.

Select one setting (which uses the value from a column of the MAXIMO database's WORKORDER table):

Maximo Priority Field	Column	Description
Work Order	WOPRIORITY	(Default) This is the priority level of the work order assigned in the work order or by a job plan.
Calculated Priority	CALCPRIORITY	Maximo calculates this value using a formula combining the Work Order Priority and Location/Asset Priority values to produce the Work Priority value.
Location/Asset Priority	ASSETLOC PRIORITY	This is the priority level of the asset or location specified on a work order.

- ▼ **Filter:** Include only child work orders of the specified status(es) in your results set.

Select each status to include. To select all statuses, click **All**. To clear all statuses, click **None**.

- ▼ **Site:** Include child work orders for the specified sites in your results set.

Select each site to include. To select all sites, click **All**. To clear all sites, click **None**.

- 4 To preview the results, click the Preview tab.
- 5 After selecting the appropriate query, click **OK** to transfer the work order data, including assignments, craft and tool resources, and resource availability from Maximo to Microsoft Project.

Using the Maximo Menu

NOTE The results may differ when using the same query in Maximo and Maximo for Project.

Select Work Orders Dialog Box

This dialog box contains these elements:

Tab	Element	Description
Queries	Clause Name	Displays the names of public queries and the queries you created in Maximo's Work Order Tracking application.
	Description	Displays the descriptions of the queries.
Advanced: Constraints subtab	Work Order Date	<p>Displays these work order date selections:</p> <ul style="list-style-type: none"> ▼ Scheduled Start ▼ Scheduled Finish ▼ Target Start ▼ Target Finish <p>Select one of the preceding items. If a given work order has a value in the selected date field, that value becomes a constraint for the corresponding task.</p> <p>Leaving this field blank disables the Task Constraint Type field.</p>
	Task Constraint Type	<p>Lists these constraint types for your project, depending on the selection you made in the Work Order Date field:</p> <ul style="list-style-type: none"> ▼ Must Start/Finish On ▼ Start/Finish No Earlier Than ▼ Start/Finish No Later Than <p>Select one of the preceding items.</p> <p>You can only constrain tasks that are not summaries of other tasks. Mixing child and parent constraints can violate Microsoft Project's business rules and cause problems with work order transfers.</p> <p>In practice, when you constrain work orders, Maximo for Project uses that constraint on all tasks at the lowest hierarchical level.</p> <p>To manipulate groups of tasks, transfer the parent tasks from Maximo, then set the constraints in Microsoft Project, after transferring the work orders.</p>

Using the Maximo Menu

Advanced: Calendars subtab	Transfer Asset Calendars	Select this option to transfer the Maximo calendars associated with assets. The ASSETNUM field must be mapped in the [wofieldmap] section of the MaximoProject.ini for this to take effect.
	Transfer Labor Calendars	Select this option to transfer the Maximo calendars associated with labor.
	From To	Select start and end dates to transfer asset and location calendars.
Advanced: Task Priority subtab	▼ Work Order Priority Column: WOPRIORITY	(Default) This is the priority level of the work order assigned in the work order or by a job plan.
These elements use values from a column of the MAXIMO database's WORKORDER table.	▼ Calculated Priority Column: CALCPRIORITY	Maximo calculates this value using a formula combining the Work Order Priority and the Location/Asset Priority values to produce the Work Priority value.
	▼ Location/Asset Priority Column: ASSETLOCPRIORITY	The priority level of the asset or location is specified on a work order.
Advanced: Filter subtab	Value	Displays the work order's status list.
	Description	When you transfer work orders from Maximo to Microsoft Project, only child work orders with the selected statuses are transferred with their parent work order. Parent work orders are not restricted by filtering the child status.
	All	For example, if your query transfers a work order hierarchy into Microsoft Project, and the work is in progress, you can choose to transfer only open work orders in the work structure.
	None	Displays descriptions of the work order statuses.
	All	Selects all statuses. Clear any statuses you do not want to include in the work order data.
	None	Clears all selected statuses.
Advanced: Site subtab	Site ID	Displays the sites available to you. When you select a site, any child work orders for that site are transferred to Microsoft Project.
	Description	Shows site descriptions.
	All	Selects all sites.
	None	Clears all selected sites.
Preview	Tree View	Displays a list of selected work orders. To display or close sub-levels in the hierarchy, click + or – to the left of the current top-level work order.

All tabs	OK	Transfers the selected work order data, including assignments, craft, people, and tool resources, and their calendars to Microsoft Project. The results may differ when using the same query in Maximo and Maximo for Project. <ul style="list-style-type: none"> ▼ Maximo displays only the selected work orders or PMs. ▼ Maximo for Project displays the parent and its entire child hierarchy, providing a more comprehensive and accurate schedule.
	Cancel	Closes the dialog box.
	Help	Opens the help topic for the dialog box.

Update Work Orders

You use the Update Work Orders dialog box to periodically update a set of work orders displayed in a current Microsoft Project session with the latest Maximo data.

Maximo for Project matches the data from the incoming work orders to the existing work orders and updates Microsoft Project with the incoming Maximo data.

NOTE To make extensive changes to the structure of a project or transfer a new hierarchy from Maximo, create a new project instead.

This menu option works as follows:

- ▼ If a Maximo work order exists as a task in Microsoft Project, data from the Maximo work order updates the task in Microsoft Project.
- ▼ If a Maximo child work order is not a task in the current project, a new child work order is added to Microsoft Project as a subtask, placed after all the parent's existing children. No links are established for new child work orders.
- ▼ New top-level work orders in Maximo are not transferred to Microsoft Project.

To update work orders:

- 1 In Maximo's Work Order Tracking application, create and save a query.
- 2 In Microsoft Project, display the appropriate project.
- 3 Select **Maximo > Update Work Orders**. Maximo updates work order and task data in Microsoft Project. The updated data displays in the project.

Save Work Orders to Maximo

The **Save WO to Maximo** menu option is available only when the current project in Microsoft Project is a work order project.

You use this dialog box to return scheduling data to the MAXIMO database. Tasks that you created in Microsoft Project are inserted into the MAXIMO database as Maximo work orders.

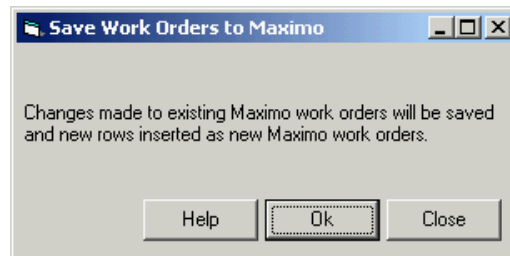
This data is updated in Maximo:

- ▼ A work order's scheduled dates (SCHEDSTART and SCHEDFINISH) from the corresponding task's start and finish dates.
- ▼ A work order's estimated duration (ESTDUR) from the corresponding task's Duration.
- ▼ Other data as specified in the [wofieldmap] section of the MaximoProject.ini file.

To save work orders to Maximo:

- 1 In Microsoft Project, display the project whose data you want to save back to Maximo.
- 2 Select **Maximo > Save WO to Maximo**.

The Save Work Orders to Maximo dialog box opens.



NOTE An error indicates any rejected work orders. Possible causes include:

- Work order status (if it is cancelled, completed, or closed).
- Date format (if the one in Microsoft Project or the client workstation's locale setting does not match the locale in the user's default profile in Maximo).

- 3 Click **OK**.

Maximo for Project updates the work order data in Maximo.

NOTE If the active project includes several subprojects, all work order data is saved to Maximo. However, if the active project includes PM subprojects and work order subprojects, only the work order data is saved. Maximo ignores the PM data.

Save Work Orders to Maximo Dialog Box

This dialog box contains these elements:

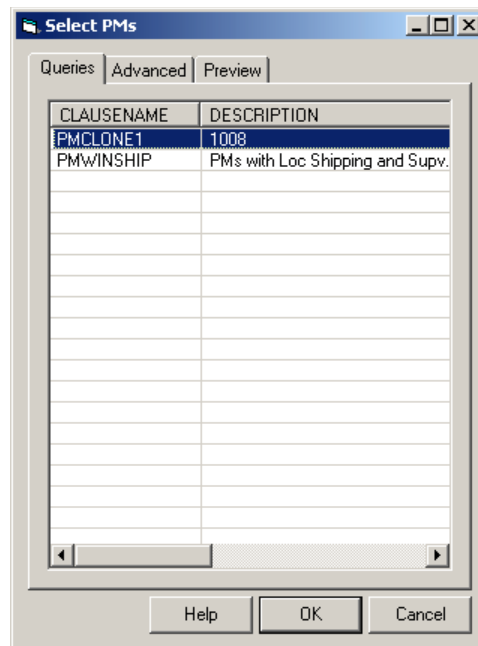
Element	Description
Help	Opens the help topic for the dialog box.
OK	<ul style="list-style-type: none"> ▼ Saves the work order data from Microsoft Project to the MAXIMO database. ▼ Inserts tasks that you created in Microsoft Project into the MAXIMO database as Maximo work orders.
Close	Does not save any data to Maximo.

Select PMs

You use this dialog box to select public queries and queries you saved in Maximo's Preventive Maintenance application.

Forecasting works only on top-level PMs, which forecast the complete hierarchical structure. Build your queries accordingly.

NOTE Work orders are not created in the MAXIMO database, only forecasted as tasks for analysis in Microsoft Project.



This dialog box contains these tabs:

Queries Tab

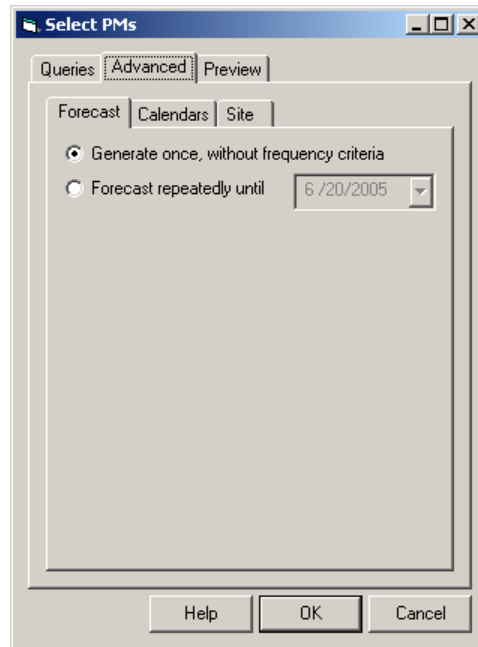
You use this tab to display public queries and queries you saved in Maximo's Preventive Maintenance application.

Using the Maximo Menu

Advanced Tab

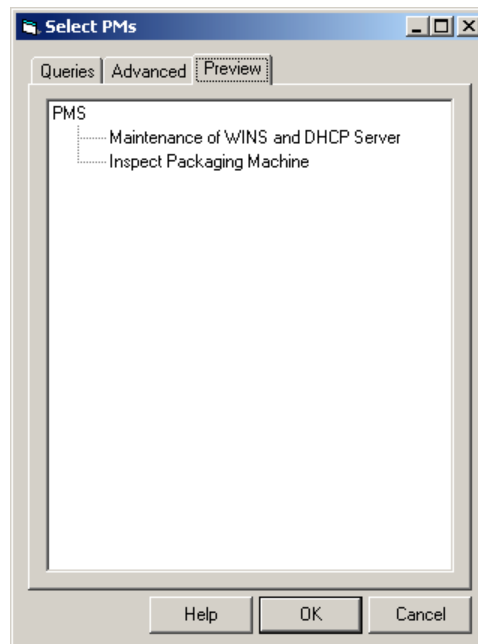
You use this tab:

- ▼ To determine the period for which Maximo for Project will forecast preventive maintenance records.
- ▼ To filter the results for child PMs by site.
- ▼ To determine whether to retrieve asset and labor calendars from Maximo.



Preview Tab

You use this tab to check the results of the selected query. The results may differ when using the same query in Maximo and Maximo for Project.



To select PMs:

- 1 In Microsoft Project, select **Maximo > Select PMs**.

The Select PMs dialog box opens, displaying the Queries tab.

- 2 Click the row containing the appropriate query.
- 3 To filter the results, click the Advanced tab.

Use these subtabs to filter your query.

Subtab	Description
Forecast	<p>Use this subtab to determine the period for which Maximo for Project will forecast PMs.</p> <p>Each option forecasts a set of PM work orders from the selected top-level PM hierarchy, then populates Microsoft Project with the work order data.</p> <ul style="list-style-type: none"> ▼ Generate Once, without frequency criteria: starts from today's date. ▼ Forecast repeatedly until: starts from today's date until the date you enter. <p>NOTE The number of sets of work orders forecasted depends on the controlling frequency of the hierarchy. Any PM in the hierarchy can trigger all PMs to be forecasted as a set.</p> <p>NOTE Maximo for Project only forecasts PMs with ACTIVE status in Maximo.</p>
Calendars	<p>Use this subtab to transfer Maximo asset and labor calendars to Microsoft Project. Enter specific dates within which to transfer the calendars.</p> <p>NOTE Transferring calendar data can significantly impact performance; make the date range as small as possible.</p> <p>NOTE When you transfer asset calendars into Microsoft Project, they are the inverse of what they are in Maximo.</p> <p>Maximo's asset calendar displays when the asset is operating. Microsoft Project's asset calendar displays the asset's downtime (when it is available for preventive maintenance).</p> <p>Upon receiving the asset calendar from Maximo, Maximo for Project names the calendar with the asset number, and makes the asset calendar an attribute of the work order being scheduled.</p>
Site	<p>Use this subtab to include child PMs for the specified sites in your results set.</p> <p>Check the box for each site to include. To select all sites, click All. To clear all sites, click None.</p>

- 4 To preview the results, click the Preview tab. The results may differ when using the same query in Maximo and Maximo for Project.
- 5 After selecting the appropriate query, click **OK** to transfer the PM data, including assignments, craft, people, and tool resources, and their calendars from Maximo to Microsoft Project.

Select PMs Dialog Box

This dialog box contains these elements:

Tab	Element	Description
Queries	Clause Name	Displays the names of public queries and the queries you created using Maximo's Preventive Maintenance application.
	Description	Displays the descriptions of the queries.
Advanced: Forecast subtab		Determines the period for which Maximo for Project will forecast PMs.
	Generate Once, without frequency criteria	Starts from today's date.
	Forecast repeatedly until	Starts from today's date until the date you enter.
		<p>NOTE The number of work order sets forecasted depends on the controlling frequency of the hierarchy. Any PM in the hierarchy can trigger all work orders to be forecasted as a set.</p> <p>NOTE If all the next due dates on the queried PMs are after the date you enter in the Forecast repeatedly until field, a message indicates that no work orders are forecasted.</p>
Advanced: Calendars subtab	Transfer Asset Calendars	Select this option to transfer the Maximo calendars associated with assets.
	Transfer Labor Calendars	Select this option to transfer the Maximo calendars associated with labor.
	From To	Select start and end dates from which to transfer asset and location calendars.
Advanced: Site subtab	Site ID	Displays your available sites. If you select a site, child PMs from that site are transferred from Maximo to Microsoft Project.
	Description	Displays site descriptions.
	All	Selects all sites.
	None	Clears all selected sites.
Preview	Tree View	Displays a list of selected PMs. To display or close sub-levels in the hierarchy, click + or – to the left of the current top-level PM.

All tabs	OK	Populates Microsoft Project with the selected PM data from the MAXIMO database. The results may differ when using the same query in Maximo and Maximo for Project. ▼ Maximo displays only the selected work orders or PMs. ▼ Maximo for Project displays the parent and its entire child hierarchy, providing a more comprehensive and accurate schedule.
	Cancel	Closes the dialog box.
	Help	Opens the help topic for the dialog box.

Load Resources

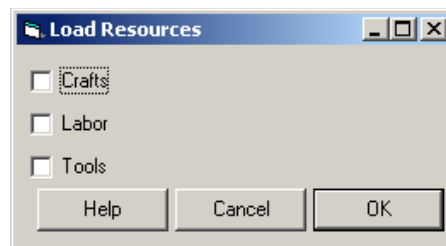
You use this dialog box to transfer crafts, tools, and labor from Maximo into Microsoft Project. The resources then display in Microsoft Project's Resource Information dialog box.

NOTE If you are an IBM Maximo for Utilities customer, you can also transfer crew and crew type data from Maximo.

To load resources:

- 1 In Microsoft Project, select **Maximo > Load Resources**.

The Load Resources dialog box opens.



NOTE IBM Maximo for Utilities customers will see two additional check boxes, one for **Crews**, and one for **Crew Types**.

- 2 Select the item(s) to transfer. You can transfer crafts, labor, tools, or any combination of the three.
- 3 Click **OK**.

Maximo for Project closes the dialog box and transfers the selected items from Maximo to Microsoft Project. The transferred data displays in Microsoft Project's Resource Information dialog box.

Load Resources Dialog Box

This dialog box contains these elements:

Element	Description
▼ Crafts	
▼ Labor	
▼ Tools	
▼ **Crew Types	Select the item(s) to transfer data from Maximo to Microsoft Project.
▼ **Crews	
OK	Transfers the selected resources from Maximo to Microsoft Project.
Cancel	Closes the dialog box without retrieving any data from Maximo.
Help	Opens the help topic for the dialog box.

** IBM Maximo for Utilities customers only

IBM Maximo Adapter for Microsoft Project Scenarios

2

Maximo for Project's additions to Microsoft Project let you apply resource leveling and specialized scheduling tasks to Maximo work order and PM data. After modifying the project, you can return schedule dates to existing Maximo work orders.

These examples use Maximo for Project to manage craft availability for work orders and PMs.

Planning Work for a Shutdown Period

Example 1: A Specific Location

Suppose several of your pending hierarchical work order projects must be done in specific locations. To schedule those projects eligible to be included in a shutdown period beginning December 10:

- 1 In Maximo's Work Order Tracking application, create a work order hierarchy containing all shutdown details. Assign the top-level work orders a Work Order Type of CP, for a capital project.
- 2 In the Work Order Tracking application, create and save a query. Select these values:

Field	Value
Work Order Type	CP
Scheduled Start	December 10, 2005

- 3 Log in to Microsoft Project.
- 4 Select **Maximo > Select Work Orders**. The Select Work Orders dialog box opens.
- 5 On the Queries tab, select the appropriate query.
- 6 To preview the work order set, click the Preview tab.

NOTE (Optional) To modify your query, return to Maximo.

- 7 To retrieve the Maximo data, click **OK**.

Planning Work for a Shutdown Period

- 8 Use Microsoft Project to resource level the project and adjust the work order dates.
- 9 In Microsoft Project, add another task to the Gantt chart, including a description and duration.
- 10 Select **Maximo > Save WO to Maximo**.

The schedule dates update the work orders in the MAXIMO database, for use by Work Order Tracking.

Tasks you created in Microsoft Project are inserted into Maximo as work orders.

Example 2: Using Customized Maximo Fields

Suppose your MAXIMO database is customized so the first set of extra work order fields is used to make a Yes or No selection field called **Shutdown Required**. You then can create a project in Microsoft Project and filter for a list of work orders that have this field set to Yes.

- 1 In Maximo's Work Order Tracking application, create a work order query to meet your criteria.
- 2 Log in to Microsoft Project.
- 3 Select **Maximo > Select Work Orders**.

The Select Work Orders dialog box opens.

- 4 On the Queries tab, select the appropriate query.
- 5 To preview the new work order set, click the Preview tab.

NOTE (Optional) To modify your query, return to Maximo.

- 6 To retrieve the Maximo data, click **OK**.
- 7 Use Microsoft Project to resource level the project and adjust the work order dates.
- 8 Work with the Shutdown Required work orders in Microsoft Project to create a schedule for the work that must be done during a defined shutdown period.
- 9 Select **Maximo > Save WO to Maximo**.

The schedule dates update the work orders in the MAXIMO database, for use by Work Order Tracking.

Tasks you created in Microsoft Project are inserted into Maximo as work orders.

Refreshing the Shutdown Project Data

You must refresh this project weekly to include new Maximo work orders in the Work Shutdown schedule. To run the update, select the same query used to create the original project.

- 10 In Microsoft Project, open the current project.
- 11 Select **Maximo > Update Work Orders**.
- 12 Repeat Steps 3-9 of this procedure. When you launch the query, the project updates with current Maximo data.

The task data in Microsoft Project will reflect changes to the original work orders and will insert new work orders that meet the query criteria.

Evaluating Schedule Dates of the Shutdown Project

In an ongoing project, you often want to compare the current schedule dates to those from the last scheduling session or to the original target dates.

Filtering, highlighting, or reporting on date variances in Microsoft Project helps you see which tasks are slipping behind schedule from one scheduling session to the next.

To compare dates:

- 1 In the MaximoProject.INI file, map the TARGSTARTDATE and SCHEDSTART fields in the MAXIMO WORKORDER table to the spare date fields in Microsoft Project (example: Date1 and Date2).
- 2 In Microsoft Project, create a filter to compare dates.
- 3 In your open session (showing the latest update from Maximo and the latest schedule calculation), select the new filter and click **Highlight**.

All tasks showing slippage are highlighted.

Scheduling a Work Order Backlog

With Maximo for Project, you can manage a pending work order backlog for a location. Suppose many corrective maintenance work orders are backlogged for the Shipping location.

You want to create a project schedule that includes only work orders that are approved, waiting for approval, or waiting to be scheduled.

- 1 In Maximo's Work Order Tracking application, create a work order query to filter for work orders meeting these criteria:
 - ▼ **Work Order Type** = CM
 - ▼ **Status** = APPR, WAPPR, and WSCHED

Holding the Schedule Dates from Session to Session

▼ **Location** = Shipping

2 Log in to Microsoft Project.

3 Select **Maximo > Select Work Orders**.

The Select Work Orders dialog box opens.

4 Select the appropriate query.

5 To preview the selected Maximo data, click the Preview tab.

6 Click **OK**.

Maximo for Project retrieves the work order data from Maximo and transfers it into Microsoft Project.

7 Use Microsoft Project to resource level the project.

8 Select **Maximo > Save WO to Maximo**.

The Save Work Orders to Maximo dialog box opens.

9 Click **OK** to save the schedule dates back to the work orders in the MAXIMO database, for use by Work Order Tracking.

Holding the Schedule Dates from Session to Session

You can hold the schedule dates for a set of work orders from session to session.

Suppose that you manually place the backlog tasks on the Microsoft Project Gantt chart where you want them to be done, but don't want the dates overridden by a Microsoft Project schedule calculation.

1 In the next Maximo for Project session, select **Maximo > Select Work Orders**.

The Select Work Orders dialog box opens.

2 Click the Advanced tab.

3 Click the Constraints subtab. Choose an appropriate combination of **Work Order Date** and **Task Constraint Type**.

NOTE Recommended selection: **Start No Earlier Than**.

4 Click **OK**.

Microsoft Project assigns the date constraints according to your specifications.

NOTE Only the lowest-level tasks in any hierarchy of the project receive constraints, which roll up the hierarchy. To constrain a branch of a hierarchy, constrain its first detailed subtask.

Creating a Preventive Maintenance Workload Forecast

You can use Microsoft Project to plan the human resources requirements for planned maintenance and for future preventive maintenance projects.

- 1 In Maximo's Preventive Maintenance application, create a PM query.
- 2 Log in to Microsoft Project.
- 3 Select **Maximo > Select PMs**.

The Select PMs dialog box opens.

- 4 On the Queries tab, select the appropriate query.
- 5 Click the Advanced tab. On the Forecast subtab, select **Forecast repeatedly until**. Select a date in the future until which you want to forecast PMs.

NOTE If all the next due dates on the queried PMs are after the date you specify in the **Forecast repeatedly until** field, no work orders will be forecasted, and a message will appear telling you so.

- 6 To preview the selected Maximo data, click the Preview tab.
- 7 Click **OK**.

Maximo for Project retrieves the PM data from Maximo and transfers it into Microsoft Project.

- 8 Use Microsoft Project to review your future workload and look for conflicts between craft availability and work.
- 9 Resource level future work projects to see what the realistic dates for the work orders are, making any manual adjustments to the work order dates. Decide how to fix schedule overruns, add or subtract crafts, assign dependencies, etc.
- 10 Save the resulting project file as reference data.

Creating a Resource Levelled Total Workload Schedule

Use Microsoft Project to combine multiple .mpp files containing work order and PM data from your MAXIMO database. You can save the resulting project file as reference data.

Example 1

To consolidate projects quickly, view them together.

- 1 Open both projects individually in Microsoft Project.
- 2 Select **Window > New Window**. The New Window dialog box opens.
- 3 Press **Shift + click** to select the projects. Both projects are highlighted.
- 4 Press **OK** to view them together in a new window.

Example 2

To establish more permanent relationships between projects, consolidate them.

- 1 Select a project to be the master project, and open it.
- 2 On the Gantt chart, click the row in which to insert the subproject.
- 3 Select **Project > Insert** and select the subproject(s) to insert.

For more information on the following, see the Microsoft Project documentation:

- ▼ Merging projects
- ▼ Inserting subprojects into a master project
- ▼ Combining project views
- ▼ Sharing resources

Creating a Resource Leveled Total Workload Schedule

Maximo and Microsoft Project Integration Points

3

This chapter describes the mapping between MAXIMO database tables and Microsoft Project fields.

Default Mapping

Maximo includes these default field mappings between data in its work order and PM tables and Microsoft Project's standard Gantt chart view.

Work Order Tracking Fields

This table describes how Work Order Tracking fields in Maximo are mapped to Microsoft Project.

Maximo Field	Microsoft Project Field
Work Order Number (WONUM)	Task Notes
Description	Task Name

Child Work Orders

Child work orders at the same level of any given work order hierarchy are linked together according to their Maximo work order sequence (WOSEQUENCE) numbers.

Maximo Field	Microsoft Project Field
Child WOs	Microsoft Project Sub tasks
Task Number Sequencing (WOSEQUENCE) determines...	Links Smaller sequence numbers become predecessors to larger sequence numbers. Maximo for Project creates finish to start links between numbered work orders.

PM Field Mapping

This table describes how PM fields in Maximo are mapped to Microsoft Project.

Maximo Field	Microsoft Project Field
PM Number (PMNUM)	Task Notes
Description	Task Name

Crafts, Tools, and People

If you assign the same resource multiple times to a task, Maximo for Project combines the entries by adding the units and taking the maximum hours.

For example, suppose a resource appears multiple times in a work plan, and is assigned multiple times to the same operation or to the work order itself. The entries are combined. The work plan contains these assignments:

Labor Code	Description	Quantity	Hours
ME1	Mechanic First Class	2	8:00
ME1	Mechanic First Class	1	6:00

Maximo for Project assigns three mechanics for eight hours to complete the task.

Crafts

This table describes how Maximo's Crafts fields are mapped to Microsoft Project.

Maximo Data	Microsoft Project Field
Crafts	Microsoft Project Resources
LABORCODE (non-IBM Maximo for Utilities customers)	Resource Name
CREW (Work Group Crew Type Crew) (IBM Maximo for Utilities customers)	Resource Name
Craft + Skill Level	Resource Name
DESCRIPTION (Craft)	Resource Notes
DISPLAYNAME (Labor)	Resource Notes
DISPLAYRATE	Standard Rate
"Work"	Resource Type
"Craft" (Craft)	Labor Type
"Person" (Labor)	Labor Type

Tools

This table describes how Maximo's Tools fields are mapped to Microsoft Project.

Maximo Data	Microsoft Project Field
Tools, from TOOL Table	Microsoft Project Resources
TOOLITEM.ITEMNUM	Resource Name
TOOLITEM.DESCRPTION	Resource Notes
"Work"	Resource Type

People

This table describes how Maximo's People fields are mapped to Microsoft Project.

Maximo Data	Microsoft Project Field
People, from PERSON Table	Microsoft Project Resources
LABORCODE	Resource Name
DISPLAYNAME	Resource Notes
DISPLAYRATE	Standard Rate
Calendar/Shift (optional)	Working Time
"Labor"	Resource Type
"Person"	Labor Type

Scheduling Constraints

To constrain schedules, use the **Advanced Options** dialog boxes:

1 Define a date constraint:

- ▼ Start: **Scheduled Start** or **Target Start**
- ▼ Finish: **Scheduled Finish** or **Target Finish**

2 Define a date constraint type:

- ▼ Start: **Must Start On**, **Start No Earlier Than**, or **Start No Later Than**
- ▼ Finish: **Must End On**, **End No Earlier Than**, or **End No Later Than**

NOTE You can only constrain tasks that are not summaries of other tasks. Mixing child and parent constraints can violate Microsoft Project's business rules and cause problems with work order transfers.

In practice, when you constrain work orders, Maximo for Project uses that constraint on all tasks at the lowest hierarchical level.

To manipulate groups of tasks, transfer the parent tasks from Maximo, then set the constraints in Microsoft Project, after transferring the work orders.

Maximo's start and finish date constraints correspond to this Microsoft Project task data.

Maximo Start Date Constraints	Microsoft Project Task Data
Scheduled Start (SCHEDSTART)	ConstraintDate
Target Start (TARGSTARTDATE)	ConstraintDate

Maximo Finish Date Constraints	Microsoft Project Task Data
Scheduled Finish (SCHEDFINISH)	ConstraintDate
Target Finish (TARGCOMPDATE)	ConstraintDate

Maximo Start Date Constraint Types	Microsoft Project Task Data
Must Start On	ConstraintType
Start No Earlier Than	ConstraintType
Start No Later Than	ConstraintType

Maximo Finish Date Constraint Types	Microsoft Project Task Data
Must End On	ConstraintType
End No Earlier Than	ConstraintType
End No Later Than	ConstraintType

Saved Schedule Date Mapping

After using Maximo for Project for planning activities, you can save work order scheduling dates to Maximo. Select **Maximo > Save WO to Maximo**.

Data is stored in both applications.

Microsoft Project Field	Maximo Field
Task Field is saved to...	Work Orders
Duration	ESTDUR
Start	SCHEDSTART
Finish	SCHEDFINISH

Conditional Mapping

This section describes conditional field mapping.

Progress Field Mapping

During data transfer, Maximo uses these conditions to determine the progress data to transfer to Microsoft Project.

- ▼ If the Maximo **Actual Start** (ACTSTART) field contains a value, Maximo transfers progress-related data to Microsoft Project.
- ▼ Otherwise, only the value in the **Estimated Duration** field is transferred.

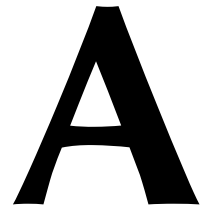
Maximo Field	Microsoft Project Field
Estimated Duration (ESTDUR)	Duration
Remaining Duration (REMDUR)	RemainingDuration
Actual Hours (ACTLABHRS)	ActualDuration
Actual Start (ACTSTART)	ActualStart
Actual Finish (ACTFINISH)	ActualFinish

Progress Logic Flow

This logic is used during data transfer.

Condition	Result
If there is no ACTSTART	ESTDUR → Duration
If there is an ACTSTART	ACTSTART → Actual Start
If there is an ACTFINISH	ACTFINISH → Actual Finish
If there is no ACTFINISH	<p>These conditions affect the transfer:</p> <ul style="list-style-type: none"> ▼ If there is a REMDUR, REMDUR → Remaining Duration ▼ If there is no REMDUR, ESTDUR → Duration ▼ If there are ACTLABHRS, ACTLABHRS → Actual Duration

Customizing the IBM Maximo Adapter for Microsoft Project



You can use the MaximoProject.ini file to customize how Maximo and Microsoft Project integrate.

Use a text editor to change settings in the MaximoProject.ini file, which is located in the MaxProjectClient directory of the computer where you installed Maximo for Project.

MaximoProject.ini Section	Function
[system]	(Optional) Sets the login default values and automatic login for the Log In to Maximo dialog box that connects to the Maximo Application Server.
[wofieldmap]	Lets you map additional field pairs between Microsoft Project and MAXIMO's work order database columns.
[pmfieldmap]	Lets you map additional field pairs between Microsoft Project and MAXIMO's PM database columns.

Sections of the MaximoProject.ini File

The MaximoProject.ini file contains the following sections:

- ▼ [system]
- ▼ [wofieldmap]
- ▼ [pmfieldmap]

The fields immediately following the [section name] are the values that define Maximo for Project's settings for that section.

Saving Login Settings: The [system] Section

The values in the [system] section define whether you log in to Maximo manually or automatically from Microsoft Project.

Sample entry:

```
[system]
LOGINMODE=Auto
USERNAME=wilson
PASSWORD=wilson
```

Notes for this section:

LOGINMODE

If the LOGINMODE=Auto line is uncommented (does not begin with a semi-colon ;), the login dialog box does not appear, and you are logged in automatically using the system values defined in the MaximoProject.ini file.

USERNAME and PASSWORD

You can assign defaults for each login field (**User Name** and **Password**). To change a default for a field, enter a default value to the right of the equal sign.

NOTE If no defaults are set, enter values for the **User Name** and **Password** fields when you log in to the Maximo Application Server.

Mapping Columns for Data Transfer from Maximo to Microsoft Project

The values in the [wofieldmap] and the [pmfieldmap] sections of the MaximoProject.ini define which work order or PM data is transferred to Microsoft Project. By mapping field pairs between Maximo and Microsoft Project, Maximo will transfer data from specified work order or PM columns to new fields in the corresponding task in Microsoft Project.

Each specified task field appears as a new column in the Gantt Chart table. Select **Maximo > Update Work Orders** to refresh data in Microsoft Project.

For both sections, each map line contains a key name and the values for these parameters:

- ▼ MAXIMO column name
- ▼ Microsoft Project task field name
- ▼ lookup status in Maximo for Project

NOTE You cannot change the key name.

Available Fields

You can use the following Microsoft Project task fields to map to Maximo fields:

- ▼ Date1-Date10
- ▼ Text1-Text27
- ▼ Cost1-Cost10
- ▼ Number1-Number20
- ▼ Flag1-Flag20

NOTE Select a data type for the Microsoft Project field that is compatible with the data type of the MAXIMO column. For example, if the Maximo field is alphanumeric (ALN), configure the Microsoft Project field as Text. For Yes or No (YORN) fields in Maximo, configure the Microsoft Project fields as FLAG fields.

CAUTION Do not reuse the same field in multiple sections.

[wofieldmap] Section

Use this section to transfer specific work order data in Maximo to Microsoft Project. Maximo for Project transfers the Maximo data to the current work order project, and displays it in the Gantt Chart table.

Sample entry:

```
[wofieldmap]
WOMAPROW1=location text1 TRUE
```

In the preceding entry, the map line contains:

Parameter	Value	Description
Key Name	WOMAPROW1	Key name
Maximo Column Name	location	MAXIMO column name value
Microsoft Project Task Field Name	text1	Microsoft Project task field name value
Lookup Status	TRUE	Lookup has been enabled in Maximo for Project

Notes for this section:

- Key Name** The key name always starts with WOMAPROW. You can map up to 99 rows (WOMAPROW1-WOMAPROW99) in this section.
- Work Order Column Name** The MAXIMO database column from which work order data is transferred to Microsoft Project and stored in the current project. The data from the MAXIMO column appears in the project’s Gantt Chart table.
- Microsoft Project Field** The Microsoft Project task field that holds the incoming Maximo work order column data. This field name is language dependent; it must match the field name in Microsoft Project.
 - NOTE** Select a data type for the Microsoft Project field that is compatible with the data type of the MAXIMO Work Order column. For example, if the Maximo work order field is ALN, or alphanumeric, the Microsoft Project field should be ALN also. You must spell MAXIMO column names and Microsoft Project fields correctly.
- Lookup Status** This setting determines if a Select Value list is enabled for the Maximo for Project field. If TRUE, the Select Value list is enabled in Maximo for Project. If FALSE, the Select Value list is disabled.

[pmfieldmap] Section

Use this section to transfer specific PM data in Maximo to Microsoft Project. Maximo for Project transfers the Maximo data to the current project, and displays it in the Gantt Chart table.

Sample entry:

```
[pmfieldmap]
PMMAPROW2=assetnum text2 TRUE
```

In the preceding entry, the map line contains:

Parameter	Value	Description
Key Name	PMMAPROW2	Key name
Maximo Column Name	assetnum	MAXIMO column name value
Microsoft Project Task Field Name	text2	Microsoft Project task field name value
Lookup Status	TRUE	Lookup has been enabled in Maximo for Project

Notes for this section:

Key Name	The key name always starts with PMMAPROW. You can map up to 99 rows (PMMAPROW1-PMAPROW99) in this section.
PM Column Name	The MAXIMO database column from which PM data is transferred to Microsoft Project and stored in the current project. The data from the MAXIMO column appears in the project's Gantt Chart table.
Microsoft Project Field	The Microsoft Project task field that holds the incoming Maximo PM column data. This field name is language dependent; it must match the field name in Microsoft Project.
NOTE	Select a data type for the Microsoft Project field that is compatible with the data type of the MAXIMO PM column. For example, if the Maximo PM field is ALN, or alphanumeric, the Microsoft Project field should be ALN also. You must spell MAXIMO column names and Microsoft Project fields correctly.
Lookup Status	This setting determines if a Select Value list is enabled for the Maximo for Project field. If TRUE, the Select Value list is enabled in Maximo for Project. If FALSE, the Select Value list is disabled.

Sample Copy of the MaximoProject.ini File

```
; MaximoProject.INI

; NOTE: When a Semicolon (;) is placed before a line of text that line of text
; will be ignored by the application. For the application to read a value, the semicolon
; (if one exists) must be removed.

; The [system] section allows you to customize parameter defaults
for the
; MAXIMO Login dialog box that connects this client to the MAXIMO MXServer.
; Semicolons (;) should not be placed in front of the SERVERIP,
; SERVERRMI, SERVERPORT, or SERVERNAME parameters and each of these must
; contain a valid value. In the case of SERVERRMI, the semicolon (;) should
; only be removed if the server has a non-standard entry (other than 1099)
; in the server's mxe.registry.port setting.

; You can set defaults for the USERNAME and PASSWORD parameters.
; If the LOGINMODE=Auto line is uncommented, the login dialog box will not
; appear and login will be automatic provided the parameters are valid.

[system]
SERVERIP=
;SERVERRMI=
SERVERPORT=
SERVERNAME=

;LOGINMODE=AUTO

USERNAME=
PASSWORD=

; If IGNORETASKS=TRUE is uncommented, the Work Order tasks will not be
; loaded into Maximo Project when a Work Order query is selected.

;IGNORETASKS=TRUE

; The [wofieldmap] section enables you to map additional MAXIMO work order
; fields to specified Microsoft Project task fields. IBM MAXIMO Adapter for Microsoft
Project
; uses these mapped field pairs to transfer data to or from MAXIMO to Microsoft
; Project. You can define up to 99 rows (field pairs) in this section. Each
; row starts with a numbered keyword (WOMAPROW1-WOMAPROW99). The parameters
; for each row include the work order field name, the Microsoft Project task
; field name, and whether lookup has been enabled on that column in Microsoft Project.
; To configure field lookups and enable field data to be SAVED BACK
; to Maximo, please read the comments following the [pmfieldmap] section.

; The title of the column header that displays in the Microsoft Project Gantt chart
; is the value from the TITLE field of the maxattribute table.

; Following are the Microsoft Project task fields that are available
; to map to Maximo fields. Note that the Microsoft Project data types
; should match the Maximo column data type as closely as possible.

; Datel-Datel0    configure with Maximo fieldslike DATE,DATETIME
; Text1-Text27    configure with Maximo fieldslike ALN, UPPER
; Cost1-Cost10    configure with Maximo fieldslike AMOUNT
; Number1-Number20 configure with Maximo fieldslike FLOAT,INTEGER, SMALLINT
; Flag1-Flag20    configure with Maximo fieldslike YORN
```



```

; Below is a sample [wofieldmap] section. Note that these fields would not be
; mapped (and no data would be transferred) unless the semicolons were removed
; from the beginning of each line.

[wofieldmap]
;WOMAPROW1=location text1 TRUE
;WOMAPROW2=assetnum text2 TRUE

; The [pmfieldmap] section enables you to map additional PM work order fields
; to specified Microsoft Project task fields. IBM MAXIMO Adapter for Microsoft Project
; uses these mapped field pairs to transfer data from MAXIMO to Microsoft Project. The
; format is the same as in the [wofieldmap] section above, except that it uses
; fields from the Maximo PM table.

[pmfieldmap]
;PMMAPROW1=location text1 TRUE
;PMMAPROW2=assetnum text2 TRUE

; To enable Work Order data to be SAVED BACK to Maximo from the [wofieldmap]
; section above, you must have a corresponding field section below, and must
; set editable=true. You should understand the data being transferred between Maximo
; and Microsoft Project before editing the fields below. Application errors may result
; if fields are not properly configured.

; [field-INSPECTOR]
;     lookuptype=false
;     editable=true

; To configure a field for a table lookup in Maximo Project,
; the following settings are required:
;     lookuptype= table (Valid settings are table or valuelist)
;     lookuptable= the Maximo database table
;     keyfield= primary key field
;     description= field value to be displayed

; example:
; [field-SUPERVISOR]
;     lookuptype=table
;     lookuptable=PERSON
;     keyfield=PERSONID
;     description=DISPLAYNAME
;     editable=true

; To configure a field for a valuelist lookup in Maximo Project,
; the following settings are required:
;     lookuptype= valuelist (Valid settings are table or valuelist)
;     lookuptable= valid settings are: SYNONYMDOMAIN, ALNDOMAIN or
; NUMERICDOMAIN
; for example:
; [field-STATUS]
;     lookuptype=valuelist
;     lookuptable=SYNONYMDOMAIN
;     keyfield=VALUE
;     description=description
;     editable=true

[field-WONUM]
lookuptype=false
editable=false

[field-PARENT]
lookuptype=false

```

Sample Copy of the MaximoProject.ini File

editable=false

```
[field-STATUS]
lookuptype=valuelist
lookuptable=SYNONYMDOMAIN
keyfield=MAXVALUE
description=description
editable=false
```

```
[field-STATUSDATE]
lookuptype=false
editable=false
```

```
[field-WORKTYPE]
lookuptype=valuelist
lookuptable=SYNONYMDOMAIN
keyfield=MAXVALUE
description=description
editable=true
```

```
[field-DESCRIPTION]
lookuptype=false
editable=true
```

```
[field-ASSETNUM]
lookuptype=table
lookuptable=ASSET
keyfield=ASSETNUM
description=description
editable=true
```

```
[field-LOCATION]
lookuptype=table
lookuptable=LOCATIONS
keyfield=LOCATION
description=description
editable=true
```

```
[field-JPNUM]
lookuptype=table
lookuptable=JOBPLAN
keyfield=JPNUM
description=description
editable=true
```

```
[field-FAILDATE]
lookuptype=false
editable=true
```

```
[field-CHANGEBY]
lookuptype=false
editable=true
```

```
[field-CHANGEDATE]
lookuptype=false
editable=true
```

```
[field-ESTDUR]
lookuptype=false
editable=true
```

```
[field-ESTLABHRS]
lookuptype=false
```

```
editable=true

[field-ESTMATCOST]
lookuptype=false
editable=true

[field-ESTLABCOST]
lookuptype=false
editable=true

[field-ESTTOOLCOST]
lookuptype=false
editable=true

[field-PMNUM]
lookuptype=false
editable=false

[field-ACTLABHRS]
lookuptype=false
editable=true

[field-ACTMATCOST]
lookuptype=false
editable=true

[field-ACTLABCOST]
lookuptype=false
editable=true

[field-ACTTOOLCOST]
lookuptype=false
editable=true

[field-HASCHILDREN]
lookuptype=false
editable=true

[field-OUTLABCOST]
lookuptype=false
editable=true

[field-OUTMATCOST]
lookuptype=false
editable=true

[field-OUTTOOLCOST]
lookuptype=false
editable=true

[field-HISTORYFLAG]
lookuptype=false
editable=true

[field-CONTRACT]
lookuptype=false
editable=false

[field-WOPRIORITY]
lookuptype=false
editable=true

[field-TARGCOMPDATE]
```

Sample Copy of the MaximoProject.ini File

```
lookuptype=false
editable=true

[field-TARGSTARTDATE]
lookuptype=false
editable=true

[field-WOEQ1]
lookuptype=false
editable=true

[field-WOEQ2]
lookuptype=false
editable=true

[field-WOEQ3]
lookuptype=false
editable=true

[field-WOEQ4]
lookuptype=false
editable=true

[field-WOEQ5]
lookuptype=false
editable=true

[field-WOEQ6]
lookuptype=false
editable=true

[field-WOEQ7]
lookuptype=false
editable=true

[field-WOEQ8]
lookuptype=false
editable=true

[field-WOEQ9]
lookuptype=false
editable=true

[field-WOEQ10]
lookuptype=false
editable=true

[field-WOEQ11]
lookuptype=false
editable=true

[field-WOEQ12]
lookuptype=false
editable=true

[field-REPORTEDBY]
lookuptype=table
lookuptable=PERSON
keyfield=PERSONID
description=DISPLAYNAME
editable=true

[field-REPORTDATE]
```

```
lookuptype=false  
editable=true
```

```
[field-PHONE]  
lookuptype=false  
editable=true
```

```
[field-PROBLEMCODE]  
lookuptype=false  
editable=false
```

```
[field-CALENDAR]  
lookuptype=table  
lookuptable=CALENDAR  
keyfield=CALNUM  
description=description  
editable=true
```

```
[field-DOWNTIME]  
lookuptype=false  
editable=true
```

```
[field-ACTSTART]  
lookuptype=false  
editable=true
```

```
[field-ACTFINISH]  
lookuptype=false  
editable=true
```

```
[field-SCHEDSTART]  
lookuptype=false  
editable=true
```

```
[field-SCHEDFINISH]  
lookuptype=false  
editable=true
```

```
[field-REMDUR]  
lookuptype=false  
editable=true
```

```
[field-CREWID]  
lookuptype=valuelist  
lookuptable=ALNDOMAIN  
keyfield=VALUE  
description=description  
editable=true
```

```
[field-SUPERVISOR]  
lookuptype=table  
lookuptable=PERSON  
keyfield=PERSONID  
description=DISPLAYNAME  
editable=true
```

```
[field-WOEQ13]  
lookuptype=false  
editable=true
```

```
[field-WOEQ14]  
lookuptype=false  
editable=true
```

Sample Copy of the MaximoProject.ini File

```
[field-WOJP1]
lookuptype=false
editable=true
```

```
[field-WOJP2]
lookuptype=false
editable=true
```

```
[field-WOJP3]
lookuptype=false
editable=true
```

```
[field-WOJP4]
lookuptype=false
editable=true
```

```
[field-WOJP5]
lookuptype=false
editable=true
```

```
[field-WOL1]
lookuptype=false
editable=true
```

```
[field-WOL2]
lookuptype=false
editable=true
```

```
[field-WOL3]
lookuptype=false
editable=true
```

```
[field-WOL4]
lookuptype=false
editable=true
```

```
[field-WOLABLNK]
lookuptype=false
editable=true
```

```
[field-RESPONDBY]
lookuptype=false
editable=true
```

```
[field-ASSETLOC PRIORITY]
lookuptype=false
editable=true
```

```
[field-CALCPRIORITY]
lookuptype=false
editable=true
```

```
[field-CHARGESTORE]
lookuptype=false
editable=true
```

```
[field-FAILURECODE]
lookuptype=table
lookuptable=FAILURECODE
keyfield=FAILURECODE
description=description
editable=true
```

```
[field-WOLO1]  
lookuptype=false  
editable=true
```

```
[field-WOLO2]  
lookuptype=false  
editable=true
```

```
[field-WOLO3]  
lookuptype=false  
editable=true
```

```
[field-WOLO4]  
lookuptype=false  
editable=true
```

```
[field-WOLO5]  
lookuptype=false  
editable=true
```

```
[field-WOLO6]  
lookuptype=false  
editable=true
```

```
[field-WOLO7]  
lookuptype=false  
editable=true
```

```
[field-WOLO8]  
lookuptype=false  
editable=true
```

```
[field-WOLO9]  
lookuptype=false  
editable=true
```

```
[field-WOLO10]  
lookuptype=false  
editable=true
```

```
[field-GLACCOUNT]  
lookuptype=false  
editable=true
```

```
[field-ESTSERVCOST]  
lookuptype=false  
editable=true
```

```
[field-ACTSERVCOST]  
lookuptype=false  
editable=true
```

```
[field-DISABLED]  
lookuptype=false  
editable=true
```

```
[field-ESTATAPPRLABHRS]  
lookuptype=false  
editable=true
```

```
[field-ESTATAPPRLABCOST]  
lookuptype=false
```

Sample Copy of the MaximoProject.ini File

```
editable=true

[field-ESTATAPPRMATCOST]
lookuptype=false
editable=true

[field-ESTATAPPRTOOLCOST]
lookuptype=false
editable=true

[field-ESTATAPPRSERVCOST]
lookuptype=false
editable=true

[field-WOSEQUENCE]
lookuptype=false
editable=true

[field-HASFOLLOWUPWORK]
lookuptype=false
editable=true

[field-WORTS1]
lookuptype=false
editable=true

[field-WORTS2]
lookuptype=false
editable=true

[field-WORTS3]
lookuptype=false
editable=true

[field-WORTS4]
lookuptype=false
editable=true

[field-WORTS5]
lookuptype=false
editable=true

[field-SOURCESYSID]
lookuptype=false
editable=true

[field-OWNERSYSID]
lookuptype=false
editable=true

[field-PMDUEDATE]
lookuptype=false
editable=true

[field-PMEXTDATE]
lookuptype=false
editable=true

[field-PMNEXTDUEDATE]
lookuptype=false
editable=true

[field-WORKLOCATION]
```



```
lookuptype=table  
lookuptable=LOCATIONS  
keyfield=LOCATION  
description=description  
editable=true
```

```
[field-EXTERNALREFID]  
lookuptype=false  
editable=true
```

```
[field-SENDERSYSID]  
lookuptype=false  
editable=true
```

```
[field-FINCNTRLID]  
lookuptype=false  
editable=true
```

```
[field-GENERATEDFORPO]  
lookuptype=false  
editable=true
```

```
[field-GENFORPOLINEID]  
lookuptype=false  
editable=true
```

```
[field-ORGID]  
lookuptype=false  
editable=false
```

```
[field-SITEID]  
lookuptype=false  
editable=false
```

```
[field-TASKID]  
lookuptype=false  
editable=true
```

```
[field-INSPECTOR]  
lookuptype=false  
editable=true
```

```
[field-MEASUREMENTVALUE]  
lookuptype=false  
editable=true
```

```
[field-MEASUREDATE]  
lookuptype=false  
editable=true
```

```
[field-OBSERVATION]  
lookuptype=false  
editable=true
```

```
[field-POINTNUM]  
lookuptype=false  
editable=true
```

```
[field-WOJO1]  
lookuptype=false  
editable=true
```

```
[field-WOJO2]
```

Sample Copy of the MaximoProject.ini File

lookuptype=false
editable=true

[field-WOJO3]
lookuptype=false
editable=true

[field-WOJO4]
lookuptype=false
editable=true

[field-WOJO5]
lookuptype=false
editable=true

[field-WOJO6]
lookuptype=false
editable=true

[field-WOJO7]
lookuptype=false
editable=true

[field-WOJO8]
lookuptype=false
editable=true

[field-ISTASK]
lookuptype=false
editable=false

[field-ESTTOTALCOST]
lookuptype=false
editable=true

[field-WOCLASS]
lookuptype=false
editable=true

[field-VENDOR]
lookuptype=false
editable=true

[field-ORIGRECORDCLASS]
lookuptype=false
editable=true

[field-ORIGRECORDID]
lookuptype=false
editable=true

[field-JUSTIFYPRIORITY]
lookuptype=false
editable=true

[field-RISK]
lookuptype=false
editable=true

[field-ENVIRONMENT]
lookuptype=false
editable=true

```
[field-BACKOUTPLAN]
lookuptype=false
editable=true

[field-BACKOUTPLAN_LONGDESCRIPTION]
lookuptype=false
editable=true

[field-MOVETOLOC]
lookuptype=false
editable=true

[field-MOVETOPARENT]
lookuptype=false
editable=true

[field-WOACCEPTSCHARGES]
lookuptype=false
editable=true

[field-OWNER]
lookuptype=false
editable=true

[field-CLASSSTRUCTUREID]
lookuptype=table
lookuptable=CLASSSTRUCTURE
keyfield=CLASSSTRUCTUREID
description=description
editable=true

[field-PARENTCHGSSTATUS]
lookuptype=false
editable=true

[field-OWNERGROUP]
lookuptype=table
lookuptable=PERSONGROUP
keyfield=PERSONGROUP
description=description
editable=true

[field-COMMODITYGROUP]
lookuptype=false
editable=true

[field-COMMODITY]
lookuptype=false
editable=true

[field-WORKORDERID]
lookuptype=false
editable=true

[field-WHOMISCHANGEFOR]
lookuptype=false
editable=true

[field-REASONFORCHANGE]
lookuptype=false
editable=true

[field-VERIFICATION]
```

Sample Copy of the MaximoProject.ini File

```
lookuptype=false  
editable=true
```

```
[field-PERSONGROUP]  
lookuptype=table  
lookuptable=PERSONGROUP  
keyfield=PERSONGROUP  
description=description  
editable=true
```

```
[field-LEAD]  
lookuptype=table  
lookuptable=PERSON  
keyfield=PERSONID  
description=DISPLAYNAME  
editable=true
```

```
[field-MOVETOBINNUM]  
lookuptype=false  
editable=true
```

```
[field-PERFORMMOVETO]  
lookuptype=false  
editable=true
```

```
[field-LANGCODE]  
lookuptype=false  
editable=true
```

```
[field-INTERRUPTIBLE]  
lookuptype=false  
editable=true
```

```
[field-WOGROUP]  
lookuptype=false  
editable=true
```

```
[field-ONBEHALFOFID]  
lookuptype=false  
editable=true
```

```
[field-HASLD]  
lookuptype=false  
editable=true
```

Multi-Language Set Up

B

If you are installing Maximo for Project in an environment where you have multiple languages enabled for Maximo, you will need to run the `importlang.bat` utility for Maximo for Project, the same way you did for Maximo. You will need to run the utility once for each additional language (besides your base language) that you have enabled.

About the `importlang.bat` Utility

`Importlang.bat` populates the corresponding multi language table of the MAXIMO database with data from the .XML file. The usage of the `importlang.bat` batch file is as follows:

```
-infile <path and filename of projectlang<langcode>.xml file>  
  
-propfile <path to maximo.properties file>  
  
-l <language code>
```

Example

The most common usage of the `importlang.bat` utility for Maximo for Project is as follows:

```
importlang.bat -infile  
C:\maximo\tools\maximo\<langcode>\project\  
projectlang<langcode>.xml -l FR
```

NOTE Your language code will differ, depending on what language you are importing. For example, FR means French.

Running the `importlang.bat` Utility

For each secondary language that you are enabling, you will need to do the following:

- 1 Install the Maximo Server portion of the installation program on your Maximo application server.
- 2 Run the `importlang.bat` file included in the installation program for that language.

Example

In your Maximo environment, you have English established as your base language, but also have users that access Maximo in French and Chinese.

You install Maximo for Project in English (both the server and client portions). You then insert the French Maximo for Project CD, install only the server portion, and run the importlang.bat file for French. Then, you insert the Chinese Maximo for Project Installation CD, install only the server portion, and run the importlang.bat file for Chinese.

CAUTION When you re-install the server portion of Maximo for Project, your projectlang<langcode>.xml file will be overwritten with the version on the CD. If you have made any customizations to the projectlang<langcode>.xml file that you do not want erased, select **No** when the installation program asks you if you want to overwrite the existing file.

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