

7 TRM RulesManager Myths

Myth #1: IBM Maximo® 7.1 will have all the functionality of TRM RulesManager SE™.

While it's true that IBM continues to add features to the Maximo suite, the functionality of RulesManager still adds a level of value unavailable in the core product.

For example, complex business rules can be encoded into Maximo using RulesManager without ever having to write a java class. Additionally, conditional expressions can be more efficiently written in the context they will be executed instead of as a separate library.

In fact, in the published Q&A's from the IBM Tivoli and Maximo Asset Management Development Update and Maximo 7.1 Preview, one of the questions was: "Does conditional exp. Feature eliminate the need for rules management addons?" IBM's official answer is "The Conditional Expression Manager is a new capability introduced to support the enhancements to the Security Groups and Application Designer applications. It is not functionally equivalent to the RulesManager product provided by a third party." (Sept. 27, 2007) By the way, RulesManager is stamped Tivoli Approved and was fast-tracked through the process.

No loss of RulesManager Customizations when upgrading

When upgrading from Maximo 5 to any higher version (6 or 7.1) with RulesManager, all customizations and system tailoring done with RulesManager will carry forward. The RulesManager display experience will carry forward by virtue of carrying the rules forward. Other products which are more intimately intertwined with Maximo versions are subject to breakage when Maximo makes a major product upgrade. For example, JSP modifications (without RulesManager) going from version 5 to 6 were customizations that were completely lost. This is an important point to remember as IBM releases Maximo version 7.1 (a major upgrade to the product). RulesManager does not suffer from these problems.

Access to Maximo's core functionality

Maximo still does not give you any access to its rich core functions unless you write, compile and redeploy many Java classes. This type of development requires a rebuild/redeploy/restart of your instance for each change.

On the other hand, RulesManager gives you access to the complete Maximo core API in an intuitive, assisted JavaScript editor. Business rules modifications do not require rebuild/redeploy or even a restart of the web services. You simply save your rule and refresh the Maximo web page to test the new functionality directly in Maximo.

RulesManager's ability to access Maximo's MBOs extends to allow you to write standalone scripts which can manipulate/edit/create MBOs. This feature vastly accelerates data migration, imports and Maximo upgrades.

Furthermore, RulesManager has added features that allow for timed java scripts written in RulesManager (crontasks) to be scheduled like any other task.

Its native support of XML on all Maximo business objects, combined with the ability to reach out to a webservice in a rule, allows for real-time access to business web services at the user's point of entry.

Dynamic Content and Data Integrity

RulesManager gives your business rules direct access to the user's browser. This allows you to change colors, hide tabs, color table rows or even simulate user keyboard and mouse actions, all without the use of complicated CSS style sheets.

Myth #2: RulesManager will complicate upgrades.

Not only will RulesManager **not complicate** your upgrades, it can actually help. RulesManager stores the configurable XML files in a single location external to the Maximo system and allows system tailoring without changes to the base code of the Maximo. This means all rules will be completely portable with upgrades and the Maximo system will never be irretrievably altered.

To upgrade RulesManager, just install RulesManager on your upgraded Maximo system and move the XML rule files to the proper location. This greatly simplifies configuration, change and version control.

There are no meta data modifications made to Maximo. So, any upgrades to Maximo through IBM's upgrade process are always applied to a 100% IBM version of your Maximo instance. Your rules files can then be applied to the new system and we guarantee that any rule written today works going forward. Customers who have written rules as far back as Maximo 5.1 are today deploying the exact rules files in Maximo 6.2

TRM consultants regularly use the RulesManager scripting engine to migrate data for customers' upgrades when the upgrade requirements are not fully met by the IBM upgrade utility. For example, RulesManager SE comes packaged with simple document parsers like XML and CSV; and powerful connectors like JDBC, SOAP, http, and Maximo. This allows you to perform large data loads from a variety of data sources into Maximo. An integrated logging facility helps analyze and debug issues with your migration process. The Scripting Engine also integrates with the revision control system, which allows you to automate your configuration and change management.

Myth #3: RulesManager is expensive

Over the lifetime of your Maximo system, RulesManager actually pays for itself time and time again. It enables short deployment and change cycles. And, as many of you know, once Maximo is deployed

and your users start using it, you will be required to make adaptations that were not anticipated. RulesManager enables your system's business rules and logic to adapt to those changes.

The entire change request, change approve, change order, program, compile, vet, redeploy process is dramatically shortened. In fact one of the largest defense contractors and manufacturers claims "Things that would have taken weeks actually take us minutes with RulesManager." The change management associated with RulesManager is significantly less expensive than any other solution.

Also, RulesManger enables reduced number of support resources required for a large scale effort and virtually eliminates the need for cloned applications and database triggers – saving both programming time and server space.

Myth #4: RulesManager is difficult to learn

RulesManager comes with a very robust Integrated Development Environment (IDE) which allows for rules to be written quickly in a content-assist environment. The IDE also has a mode to help write stand-alone scripts which can be run outside of a Maximo environment.

Business rules are written in Server-Side, ECMA-compliant JavaScript language. We have pulled all the complexity of the Maximo software into an easy to understand and write language. Using JavaScript has given our customers an unprecedented level of control over how their Maximo functions.

We offer a standard 5-day course that introduces the RulesManager concepts and enables customers to start writing custom rules required by their organization. Part of our training for the product covers how to write the most efficient rules.

We also offer phone and online support to customers current with their maintenance and provide a customer support forum on our website for the RulesManager community to reach out to each other, post sample rules and discuss issues.

Myth #5: Internal programming using java is just as good as using RulesManager

While you can do anything in Maximo, the costs and complexity of hundreds of java-classes and the associated maintenance costs tend to add up.

In fact, a third-party consulting agency conducted a cost analysis of using RulesManager versus custom coding at a nuclear plant. They requested that two days of training be provided by TRM. They then polled the personnel that sat through the training individually to ask their opinion as to the savings in time and effort. The estimated savings they arrived at was 75%. They believed this estimate to be conservative over the lifecycle of Maximo, given new changes that would be required by the business as they continue to use Maximo.

Myth #6: There are other less expensive third-party Maximo add-ons for valuelists and field security as alternatives to RulesManager with all the same functionality

By assembling *all* of these third party packages to get control over the value lists, field control and learning each one's particular configuration peculiarities, you will still only achieve a small subset of the functionality that RM brings to Maximo.

We've found that most other third party add-ons compare unfavorably to RulesManager for these reasons:

- Offer limited functionality
- Change the Maximo base code
- Modify the XML presentation
- Offer no access to Maximo objects
- Cannot integrate externally with other systems
- Cannot dynamically change screens, fields or labels – only colors
- Cannot trigger multiple work orders

- Use SQL statements to perform – must know SQL to operate and hampers performance
- Are Maximo version-dependent
- Do not support multiple languages
- Force the developer to close out of the program to commit entries
- Must rebuild and redeploy EAR files
- Require a fair amount of time for debugging

Myth #7: RulesManager will affect the performance of Maximo

We have done performance testing on our largest RulesManager customer with more than 5,000 rules applied against dozens of locations across the world and there was less than 1% increase in transaction time in all tested transactions.

The majority of rules implemented through RulesManager tend to be “event-driven.” For example, conditional expressions are not evaluated until one of the components of the expression changes in value. In practice, we often find that performance issues are caused by badly written rules and tend to disappear when replaced with more efficient rules.

In fact, we have had customers that are both RulesManager and Maximo Field Control users that have abandoned Field Control for RulesManager. We've seen with some Field Control customer's that the more “rules” they implement using Field Control the slower their system becomes. Field Control also requires that on every change done (within their configuration app), they are required to stop the server, rebuild the ear files, and restart the application. This can be a time consuming process while developing a solution. Field Control in essence is an automatic way of extending the underlying business objects using Field Control classes. Because the Meta-Data contained within Maximo is modified, these customizations are more prone to “breakage”. This could be a problem during upgrades since objects are no longer using their out-of-the-box classes.