



Designing the Optimal Maximo User Experience

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Agenda

- Usable Designs: What are they?
 - Some useful definitions
- Use Cases: What problems have been solved in version 7
 - Simplified screen design
 - Conditional user interface
 - Helping users avoid making mistakes
 - Adding images to records
 - Switching Maximo skins
- Ensuring More Usable Designs in the Future: How can we work together to improve Maximo?
 - Themes for future releases
 - Getting involved in the Maximo design process



Usable Designs Defined

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Implementing Maximo

- Involves making the right functionality available to the right people
- Out-of-the-box applications demonstrate potential uses

But

- Using functionality without configuration may not result in the most usable designs for your users



Usability

- A usable product enables users to complete their tasks successfully
 - Must understand who the users are
 - Must understand the tasks those users want to perform
- One size does not fit all
- Lack of usability results in the need for more training, more documentation, and more help and support so that users can accomplish their tasks
- Failure to address usability can cause reduced user satisfaction and poor system utilization



To Design Is...

- To create, fashion, execute or construct according to plan
- To devise for a specific function or end

From <http://www.merriam-webster.com/>



What's Involved?

Design requires finding a problem-solution pairing that is temporarily sufficient

My paraphrase of Kees Dorst's definition from
[Understanding Design: 150 Reflections on Being a Designer](#)



Usability and Design

Goals:

- Create usable designs in Maximo for all users
- Provide tools so that administrative users can create (or configure) their own usable designs in Maximo
- User tasks drive design goals by establishing the problems we want to solve
 - End users want to do something and turn to their admins to make it happen
 - Maximo admins want to set up the product so that it works for their users while meeting business goals
 - IBM developers want the product to be configurable and maintainable



Recurring Themes from End Users

- Help me find what's important to me, even if I don't know what I'm looking for
- Help me get things done quickly (make me more efficient)
- Don't force me to learn Maximo conventions that don't apply anywhere else
- Don't scare me off
- Minimize the time I spend here
- Help me avoid errors (and don't cause me to make any!)



Usable Design in Maximo 7

- Every aspect of the product requires usable designs
- Specific usability improvements have been made to version 7 in areas like reporting, searching, and screen design
- Our specific focus today:
 - Simplified Screen Design: larger text and navigation tools for mobile devices and other simple implementations
 - Conditional UI: onscreen content and presentation changes depending on context
 - Error Avoidance: Help users avoid making mistakes
 - Flexible Content: Use images in addition to text
 - Changing the screen look: Different skins for different uses



Use Cases: Problems and Solutions

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Mobile Touchscreens

Give me access to the Maximo I use at my desk when I'm somewhere else

- Maximo Everyplace – limited release in September, 2009
- Initial support for iPhones only
- Small, touchscreens require bigger screen elements that react to fingers rather than a mouse pointer
- Less onscreen real estate requires a different layout for applications



Maximo Everyplace offers a look well suited to small touchscreens

The screenshot shows the Maximo Application Designer interface for a mobile device. The top navigation bar includes tabs for 'List', 'Asset', 'Spare Parts', 'Safety', 'Meters', and 'Specifications'. Below the tabs are search and query options, and a table with columns for Asset, Description, Location, Parent, and Rotating Item. The table has a single row with input fields and navigation arrows.

Asset	Description	Location	Parent	Rotating Item
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>





You can design for an iPhone, but still use that same screen on a regular monitor. Note the shorter banner, larger buttons and single-column layout.

LL Work Order Tracking Start Center Sign Out IBM

Find:

List **Work Order**

Work Order

Description

Location

Description

Asset

Description

Status

Priority

Work Type

GL Account

Failure Class

Problem Code

Owner

Supervisor



Conditional User Interface

Who the user is and the record she's viewing should affect how the screen is presented.

- Data Restrictions: Only certain records are relevant to a subset of users
- Control Security: Some controls should not be visible to certain users
- Conditional Option Access: Only certain users should be able to perform particular actions
- Conditional Properties: Controls should appear differently to different users
- Conditional Domain Values: Lookups should present different sets of choices under different circumstances



Data Restrictions

A certain group of users always works with a subset of data so only that data should be fetched for them

- Security Group driven
- Qualified data restriction – only fetches records that meet the condition
- Reusable condition library
- Different options
 - Object – limit what is fetched, mask records or make them read-only
 - Attribute – make an attribute read only, required or masked
- Optional settings
 - Global
 - App



Conditional Expression Manager

Select Action

All Conditions Filter 2 - 11 of 30 Download

Condition	Description	Type	Reference Count
BMX1000	Database Password property	EXPRESSION	3
BMX1002	Report run type	EXPRESSION	3
BMXAA1003	Condition to use for security restrictions by col	CLASS	0
BMXAAWMLINF	Is Linear Work Management	EXPRESSION	36
BMXAAWMLNLI	Is not a Linear Asset in Work Management	EXPRESSION	17
BMXPARENTTK	Parent Ticket for Activity	EXPRESSION	3
BMXPARENTWV	Parent Work Order for Activity	EXPRESSION	3
BMXTKTISGLBL	Relate Record for Global Ticket	EXPRESSION	21
BMXWOMOVE	Work Order Move Asset	EXPRESSION	35
ITASSET	Asset Type is IT	EXPRESSION	0

Details

Condition: ITASSET Asset Type is IT

Type: EXPRESSION

Expression: :assettype = 'IT'

Class:

Reference Count: 0

New Row

The Condition ID will be auto-generated but you can change it to something more meaningful

The two types of conditions are EXPRESSION and CLASS

The Expression Builder can help you build your expression

The same expression or class cannot be used more than once in the system.

The reference count will be incremented by 1 each time the condition is used in the system

The screenshot shows the 'Security Groups' application interface. At the top, there is a navigation bar with 'Buletins: (0)', 'Go To', 'Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below this is a toolbar with a search field and various icons. The main menu includes 'List', 'Group', 'Sites', 'Applications', 'Storerooms', 'Labor', 'GL Components', 'Limits and Tolerances', 'Data Restrictions', and 'Users'. The 'Data Restrictions' tab is active, showing a configuration for the 'ITUSER' group. The 'Object Restrictions' sub-tab is selected, displaying a table with columns for Object, Application, Type, and Condition. The table contains one row: Object: ASSET, Application: (empty), Type: QUALIFIED, Condition: ITASSET. Below the table is a 'Details' section for the selected row, showing fields for Object (ASSET), Application (The ASSET Table), Type (QUALIFIED), and a checked 'Reevaluate?' checkbox. The Condition field is set to 'ITASSET' with the description 'Asset Type is IT'. The Expression field contains ':assettype = IT'. A 'New Row' button is located at the bottom right of the details section.

You can create a Data Restriction that applies to only one application

Checking this box will set the system to re-evaluate the condition when a user tabs out of a field. If it is unchecked, the condition will be re-evaluated on save.

Select an existing condition or use the 'GOTO' to create one in Conditional Expression Manager



Control Security

The 'Safety' tab in the Assets application is irrelevant for IT assets so that tab is not needed by users that deal only with IT Assets.

- Security can be added to any control
 - Tab
 - Section
 - Field
- Can use an existing SIGOPTION record or create a new one



Associating a Sig Option with a Control

The screenshot shows the 'Application Designer' interface within a Microsoft Internet Explorer browser. The main window displays the 'ASSET' application with various tabs like 'List', 'Spare Parts', 'Safety', 'Meters', 'Specifications', 'Features', and 'Relationships'. A 'Section Properties' dialog box is open, showing fields for 'Control ID', 'Label', 'Show Border?', 'Collapsed?', 'Description', 'Data Source ID', 'Business Object', 'Parent Data Source ID', 'Input Mode', 'Listeners', 'Signature Option', and 'Sig Option Data Source ID'. The 'Sig Option Data Source ID' field is highlighted with a callout box that says 'Specify the SIGOPTION in this field'. The 'Signature Option' field is also visible, with an arrow pointing to it from the callout box.



Conditional Option Access

Certain users need to have access to all types of assets, but they should only be able to change status for IT assets.

- Conditions from library used
- Conditions can be associated with
 - Standard application options
 - New options to drive access to controls
- Need a record to evaluate the condition against so can't be used on the List tab or when inserting



Security Groups

Go To: Home | Start Center | Profile | Sign Out | IBM

Find: Select Action

List Group Sites Applications Storerooms Labor GL Components Limits and Tolerances Data Restrictions Users

Group: MAINTENANCE Maintenance Crew

Applications Filter 10 of 643

Grant Listed Applications Revoke Listed Applications

Description	Main Object/Table	Original Application (if copied)
Actions	Table to hold actions	
Activities and Tasks	The WDACTIVITY view.	
Actual Configuration Items	Actual O Table	
Adapter Conversion	Deployed Assets Adapter Conversion Targets	
Application Designer	The MAUAPPS Table	
Asset Link Results	Asset Link Result view.	
Asset Reconciliation Results	Asset Result of Link and/or Comparison	
Assets	The ASSET Table	
Assignment Manager	The ASSIGNMENT Table	
Bulletin Board	Table to store and maintain bulletin messages	

Options for Assets Filter 10 of 4

Grant Listed Options for This Application

Description	Grant Access?	Condition
Delete Asset	<input type="checkbox"/>	
New Asset	<input type="checkbox"/>	
Read access to Asset	<input type="checkbox"/>	
Save Asset	<input type="checkbox"/>	

Filter 11 of 47

Description	Grant Access?	Condition
Change Item Number	<input type="checkbox"/>	
Change Status	<input type="checkbox"/>	ITASSET
Create KPI	<input type="checkbox"/>	
Duplicate Asset	<input type="checkbox"/>	
Enter Meter History	<input type="checkbox"/>	
Enter Meter Readings	<input type="checkbox"/>	
Enter Most Recent Meter Reading	<input type="checkbox"/>	
Incident	<input type="checkbox"/>	
Issue Items from Storeroom	<input type="checkbox"/>	
Manage Asset Collections	<input type="checkbox"/>	

Details

Description: Change Status

Grant Access?

Condition: ITASSET Asset Type is IT

Type: EXPRESSION

Expression: assettype = IT

Condition Class:

The Change Status action will be available when the type of the asset is IT but it will be unavailable when the type is Production, for example



Conditional Properties

A control should have different property values, such as label, for different groups or in different conditions.

- Conditions from library used
- Can be different for groups
- Many, but not all, controls and properties supported

Click 'Configure Conditional Properties'

A security Group and Condition are required for configuration. Use the 'all user' group and an 'always true' condition like 1=1 for global type configurations.

A Sig Option is required on the control to configure conditional properties

You can specify different property values when the condition is true or false



Conditional Domain Values

Different values should be visible from the Usage lookup depending on the type of asset.

- Conditions from library used
- Can control synonyms
- Replaces 'Data Flow Control'



The screenshot displays the IBM Tivoli Asset Management console interface. It features three overlapping windows:

- Domains Window:** Shows a table of domains with columns for Domain and Description. The entries are: USAGE, SWUSAGE (Software Usage), and USAGE (Usage).
- ALN Domain Window:** Shows configuration for the ALN Domain. Fields include Domain (USAGE), Data Type (ALN), and Length (15). Below is a table of values with columns for Value, Description, Organization, and Site. Values include BaseWS (Low end workstation) and ProWS (Engineering workstation).
- View/Modify Conditions Window:** Shows a table of conditions for the USAGE domain. The table has columns for Value ID, Value Description, and Condition Number. One condition is shown for the value 'USAGE|BaseWS' (Low end workstation) with Condition Number 'ITASSET'. Below the table, the details for this condition are shown: Value ID (USAGE|BaseWS), Condition Number (ITASSET), Object Name (Asset Type is IT), Type (EXPRESSION), and Expression (assettype = 'IT').

Annotations with arrows point to specific elements:

- An arrow points from a text box to a small icon in the ALN Domain table, stating: "When there is a condition associated with a value this icon will display".
- Another arrow points from a text box to the condition details in the View/Modify Conditions window, stating: "More than one condition can be associated with a value. The value will show when any condition is true."



Important Considerations...

- Just because you can configure, doesn't mean you should...
 - Performance will be impacted by configurations
 - Data restrictions (least expensive)
 - Conditional option access
 - Control security
 - Conditional control properties (most expensive)
 - Adding complexity to the configurations adds complexity to troubleshooting
- Cloning is not a sin



Troubleshooting, part 1

- **Don't 'x' out of a browser – always sign out**
 - 'X'ing out of a browser can leave hanging sessions and impact the implementation of security changes that take effect on the next login
 - To view and manage these sessions, use the 'Manage Sessions' action in the Users application
 - There is an action to end sessions
- **Check the 'Profile' tab in the Users application to see what access a user has**
 - This will show you all of the applications and options that a user has per site, including very basic information on restrictions
 - Useful for troubleshooting when you are getting unexpected results



Troubleshooting, part 2

- **When you are testing a configuration and experiencing unexpected results, try it with one group and one user**
 - Create a user that is in just one group
 - Put all of the configurations that you are trying to test in that one group
- **When configuring conditional behavior, create an 'always true' condition**
 - Set the expression to $1=1$
 - This helps determine if your problem is with your condition syntax or another part of the configuration



Troubleshooting, part 3

- A report is available in the Security Groups application that will show you all of the options configured for a specific group or all of the groups a user belongs to. This can help troubleshoot unexpected behavior as well.

IBM

Security Group Access

Security Group: MAINTENANCE Description: Maintenance Dept

Independent? 0 Start Location: 2
Password Locks this Number of Days: 1
Days Before Password Expires to Warn User: 1

Application	Option	Restriction
Actual Configuration Items	Add to Bookmarks	
Actual Configuration Items	View Actual CI Change History	post.fare.app.launch.LaunchCICondition
Actual Configuration Items	Clear Changes	
Actual Configuration Items	Create Authorized Configuration Item	
Actual Configuration Items	Create Authorized Configuration Items	
Actual Configuration Items	Reset Actual CI	
Actual Configuration Items	Previous Actual CI	
Actual Configuration Items	Read Access to Actual CIs	
Actual Configuration Items	Run Reports	
Actual Configuration Items	Save Actual CI	
Actual Configuration Items	Bookmarks	
Actual Configuration Items	Show Search Fields	
Actual Configuration Items	Save Current Query	
Actual Configuration Items	View Search Tips	
Actual Configuration Items	View/Manage Queries	
Actual Configuration Items	Where Clause	
Actual Configuration Items	Application	post.fare.app.launch.LaunchCICondition
Actual Configuration Items	Business Application	post.fare.app.launch.LaunchCICondition
Actual Configuration Items	Physical	post.fare.app.launch.LaunchCICondition
Assets	Add Assets to Collections	
Assets	Change Item Number	
Assets	Apply Item Assembly Structure	
Assets	View Asset Move History	
Assets	Associate Folders	
Assets	Asset Details	
Assets	Associate Services	
Assets	Add to Bookmarks	
Assets	Clear Changes	
Assets	Change	
Assets	Incident	
Assets	Create API	
Assets	Print Item	
Assets	Release	
Assets	Service Request	
Assets	Work Order	
Assets	Delete Asset	

Organization	Label	Name
	LABORSELF	Their Own Labor

Organization	Currency	PR Limit	PD Limit	MR Limit	Expense Limit	Contract Limit
EAGLERA	USD	0	0	300	0	0

Organization	Currency	Type	Lower Amount	Upper Amount	Lower %	Upper %
EAGLERA	USD	Invoice	0	0	0	0
EAGLERA	USD	Service	0	0	0	0
EAGLERA	USD	Tax	0	0	0	0

User	Person	Name	User Status	User Type
GRANGER	GRANGER	Leo Granger	ACTIVE	TYPE 1
JOSHWANG	JOSHWANG	Josh Wang	ACTIVE	TYPE 1
MILLER	MILLER	Steve Miller	ACTIVE	TYPE 1
ROGERS	ROGERS	Fred Rogers	ACTIVE	TYPE 1
SCHAFFER	SCHAFFER	Leonard Schaffer	ACTIVE	TYPE 1
SMITH	SMITH	Richard Smith	ACTIVE	TYPE 1

User	Person	Name
MAJADIN	MAJADIN	MAJADIN
MYINTADM	MYINTADM	MYINTADM
WILSON	WILSON	Mike Wilson

September 20, 2007 12:22:24 PM EDT



Warning on the List Page

I've just performed a query and gotten my result set of Work Orders – there are a few hundred. Because the first record in the set is the one I'm interested in, I don't even need to go to the Main tab. I'll just change status right here on the List page.

- Common misconception because of row highlighting
- Changing status (or performing any action from the toolbar or Select Action menu) affects all the records in the result set
 - All of them, not just the ones on the first page
- Recovering from the error is extremely difficult and time consuming
- In Maximo 7.1, a warning alerts users to the potential danger, and lets them continue with the action if they want to



Row 1 is Highlighted, not Selected

Work Order Tracking

Bulletins: (1) Go To Reports Start Center Profile Sign Out Help

Find: Select Action

List Work Order Plans Related Records Actuals Safety Plan Log Failure Reporting Specifications

Advanced Search Save Query Bookmarks

Work Orders Filter 1 - 20 of 397 Download

Work Order	Description	Location	Asset	Status	Scheduled Start	Priority	Site
							=BEDFORD
1000	Relocate Guard Rails Around Compressor	BR300	11300	WAPPR		2	BEDFORD
1001	12 Month Service on Shipping Dept #1 Con	SHIPPING	12600	INPRG		5	BEDFORD
1002	Rebuild Feedwater Pump	BR450	11450	APPR		9	BEDFORD
1003	Check for Plumbing Problem	BOILER		APPR		5	BEDFORD
1004	Generator Overhaul	BR230	11230	INPRG		1	BEDFORD
1005	Electric Cart Tune-Up	SHIPPING	12300	APPR		7	BEDFORD
1006	Feedwater Pump Service	BR450	11450	APPR		7	BEDFORD
1007	Packaging Mach. Elevator & Drainpan Insp	BPM3100	13141	APPR		8	BEDFORD
1008	Repair Damaged Conduit Feeding Generator	BR230	11230	WAPPR		7	BEDFORD
1009	12 Month Service on Shipping Dept #2 Con	SHIPPING	12700	INPRG		8	BEDFORD
1013	Inspect and Repair Pump as Required	REPAIR	11470	APPR		5	BEDFORD
1018	Paint Guard Rail Around #1 Fan	BR210	11210	WAPPR		4	BEDFORD
1019	Conveyor Overhaul- Pkg. Dept.	BPM3100	13140	COMP		8	BEDFORD
1020	Generator Overhaul	BR230	11230	WSCH	4/22/02 9:51 AM	2	BEDFORD
1021	Conveyor Overhaul- Conveyor #2	SHIPPING	12700	WSCH		8	BEDFORD
1022	Electric Cart Tune-Up	SHIPPING	12300	WSCH		3	BEDFORD
1023	Conveyor Overhaul- Conveyor #1	SHIPPING	12600	WSCH		8	BEDFORD



New Warning on List Page

Work Order Tracking

Bulletins: (1) Go To Reports Start Center Profile Sign Out ? Help IBM

Find: Select Action

List Work Order Plans Related Records Actuals Safety Plan Log Failure Reporting Specifications

Advanced Search Save Query Bookmarks

Work Orders Filter 1 - 20 of 397 Download

Work Order Description

Work Order	Description	Priority	Site
1000	Relocate Guard Rails Around Compress	2	BEDFORD
1001	12 Month Service on Shipping Dept #1	5	BEDFORD
1002	Rebuild Feedwater Pump	9	BEDFORD
1003	Check for Plumbing Problem	5	BEDFORD
1004	Generator Overhaul	1	BEDFORD
1005	Electric Cart Tune-Up	7	BEDFORD
1006	Feedwater Pump Service	7	BEDFORD
1007	Packaging Mach. Elevator & Drainpan	8	BEDFORD
1008	Repair Damaged Conduit Feeding Gene	7	BEDFORD
1009	12 Month Service on Shipping Dept #2	8	BEDFORD
1013	Inspect and Repair Pump as Required	REPAIR	11470 APPR
1018	Paint Guard Rail Around #1 Fan	BR210	11210 WAPPR
1019	Conveyor Overhaul- Pkg. Dept.	BPM3100	13140 COMP
1020	Generator Overhaul	BR230	11230 WSCH 4/22/02 9:51 AM
1021	Conveyor Overhaul- Conveyor #2	SHIPPING	12700 WSCH
1022	Electric Cart Tune-Up	SHIPPING	12300 WSCH
1023	Conveyor Overhaul- Conveyor #1	SHIPPING	12600 WSCH

System Message

BMXAA2185E - This action affects all 397 records in this result set.

If you would like to select one or more records to apply this action to, click Cancel, then:
- select the desired records using check boxes on the List page
- select the action you would like to perform on them.

If you want to proceed with the action on the entire result set, click OK.

OK Cancel



Warning Appears Out of the Box

- For most actions that can affect an entire result set
- On the List page only
- Only when NOT in select records mode
- Only when there is more than one record in the result set

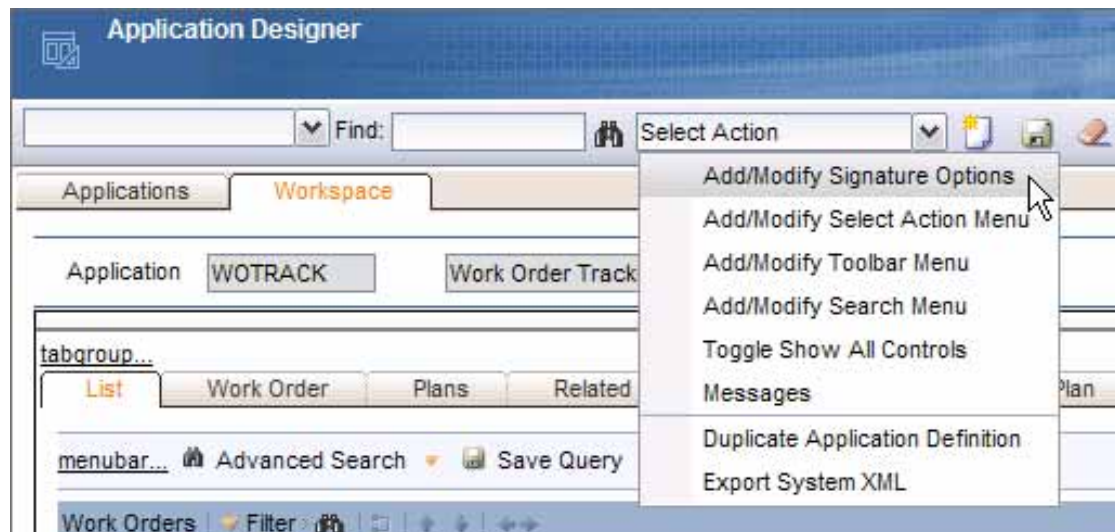
But:

- It can be disabled in places where it has been enabled out of the box
- It can be enabled for other actions



Working with the Flag

For the desired application, go to App Designer and choose Add/Modify Signature Options from the Select Action menu:





The Flag Is Set

Application Designer

Bulletins: (1) Go To Reports Start Center Profile Sign Out Help

Add/Modify Signature Options

Filter 1 - 1 of 1 Download

Option	Description
status	
STATUS	Change Status

New Row

Advanced Signature Options

- None
- Warning appears when this action is selected from List page where multiple records are shown and no particular record is selected
- This is an action that must be invoked by user in the UI
- Associate to launch entry to enable launch in context

Launch Entry Name

OK Cancel



Thumbnail Image on Records

I can't remember which of the three types of X I'm supposed to reorder, but I'd recognize it if I saw it.

- Sometimes, a picture provides more information than a textual description
- It takes many clicks to open an attachment; thumbnail images are always visible on record without clicking
- The same image can be placed on each tab, but there is only one image per record



New Control for Item Master

Item Master Bulletins: (1) Go To Reports Start Center Profile Sign Out Help IBM

Find: Select Action [Icons]

List **Item** Storerooms Vendors Specifications Item Assembly Structure

Item	<input type="text" value="0-0031"/>	<input type="text" value="Elbow, Street- 1-1/8 In X 90 Deg"/>	Attachments	<p>Click to see image in its actual size</p>
Item Set	<input type="text" value="SET1"/>		Status <input type="text" value="ACTIVE"/>	
Commodity Group	<input type="text" value="FITTINGS"/>	<input type="text" value="FITTINGS"/>	Rotating? <input type="checkbox"/>	
Commodity Code	<input type="text"/>		Condition Enabled? <input type="checkbox"/>	
Meter Group	<input type="text"/>		Kit? <input type="checkbox"/>	
Meter	<input type="text"/>		Outside? <input type="checkbox"/>	
Lot Type	<input type="text" value="NOLOT"/>		Capitalized? <input type="checkbox"/>	
Maximum Quantity Issued	<input type="text"/>		Inspect on Receipt? <input type="checkbox"/>	
Order Unit	<input type="text"/>		Add as Spare Part? <input type="checkbox"/>	
Issue Unit	<input type="text"/>		Attach to Parent Asset on Issue? <input type="checkbox"/>	
MSDS	<input type="text"/>			

Alternate Items Filter [Icons] Download ?

Item	Description	Commodity Group	Commodity Code	Rotating ?
...No rows to display...				

[New Row](#)

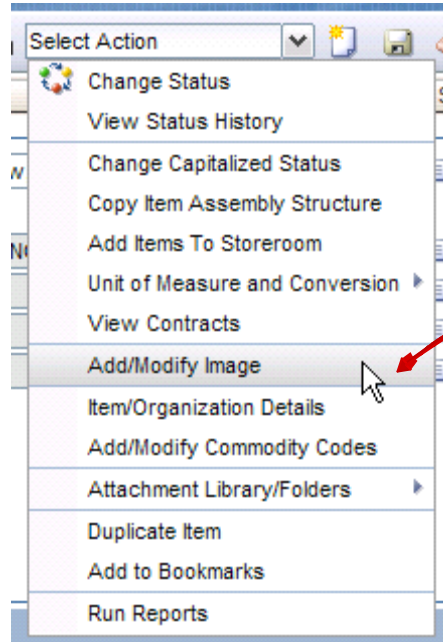
Condition Codes Filter [Icons] Download ?

Condition Code	Description	Condition Rate
...No rows to display...		

[New Row](#)



Putting an Image on a Record



Choose Add/Modify Image from Select Action menu

Find the jpg or gif image on the system

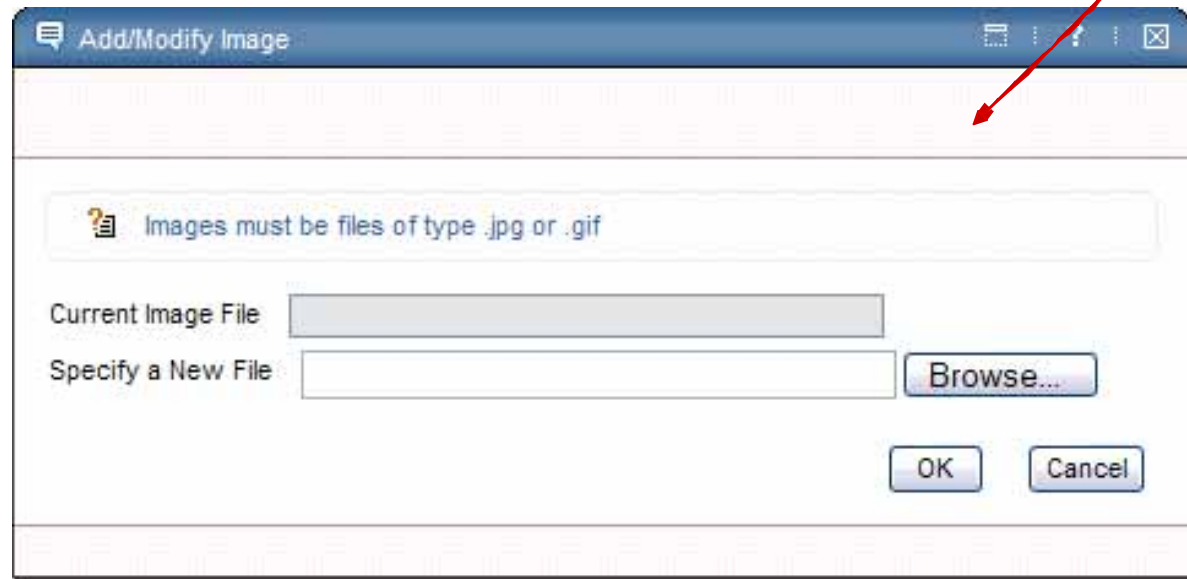




Image Can Be Removed Via Same Process

Item Master

Bulletins: (1) Go To Lit Reports Start Center Profile Sign Out Help IBM

Find: Select Action

List Item Storerooms Vendors Specifications Item Assembly Structure

Item: 0-0031 Elbow, Street- 1-1/8 In X 90 Deg

Item Set: SET1

Commodity Group: FITTINGS

Commodity Code: FITTINGS

Meter Group:

Meter:

Lot Type: NOLOT

Maximum Quantity Issued:

Order Unit:

Issue Unit:

MSDS:

Attachments:

Status: ACTIVE

Rotating ?

Condition Enabled ?

Kit ?

Outside ?


Capitalized ?

Inspect on Receipt ?

Add as Spare Part ?

Attach to Parent Asset on Issue ?

Click to see image in its actual size



Alternate Items

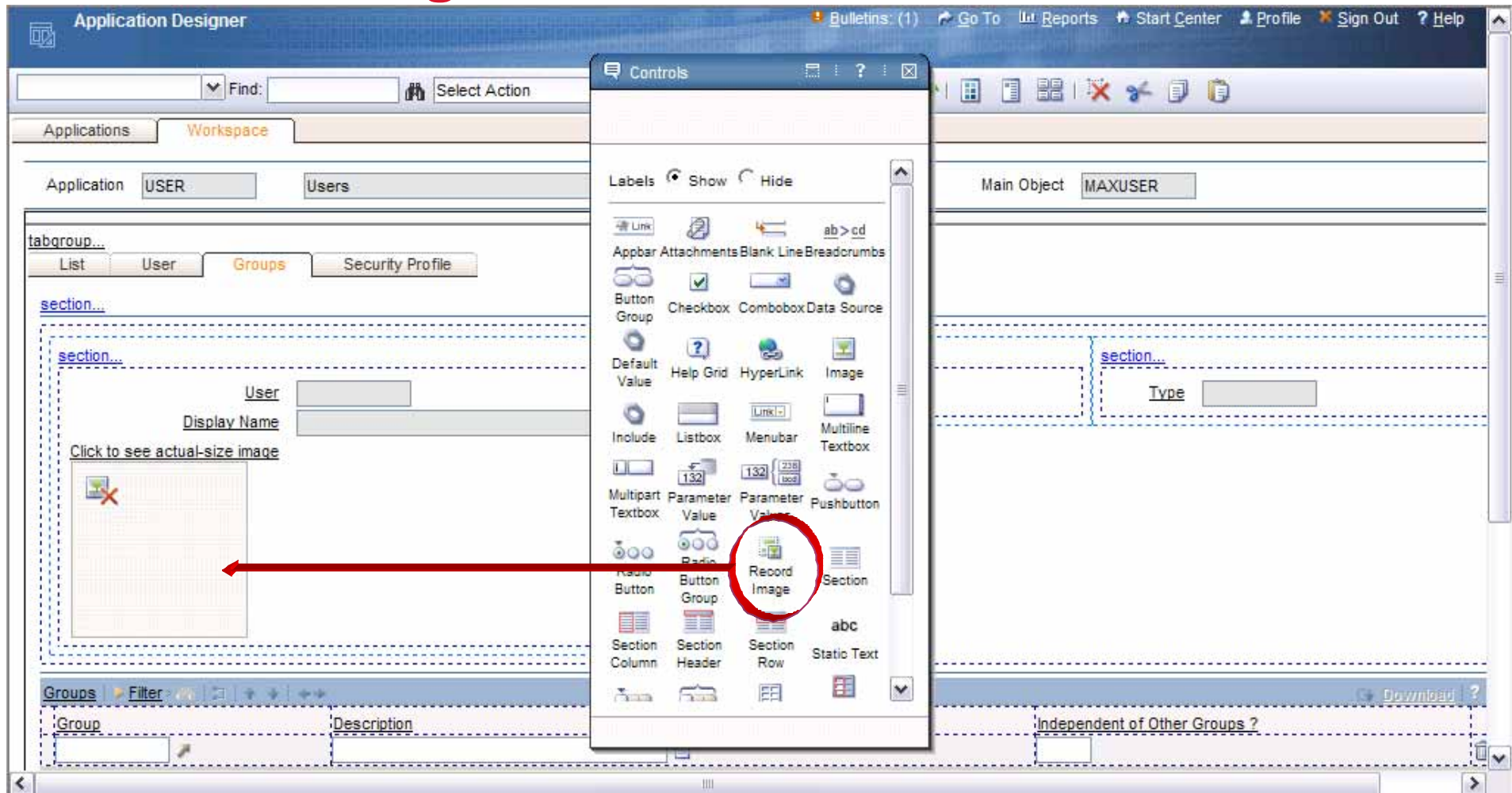
Item	Description	Commodity Group	Commodity Code	Rotating ?
...No rows to display...				

Condition Codes

Condition Code	Description	Condition Rate
...No rows to display...		

Clicking image opens a new Maximo dialog with the image shown in its original size

Add the Image Control



I'm adding the image control to the Users App, so I can insert a picture of each employee



Image Properties

Record Image Properties

Control ID: new_recordimage

CSS Class Name:

Height: 120

Width: 120

Data Source ID:

Is Thumbnail?

ALT Text on Image:

Label: Click to see actual-size image

Signature Option:

Sig Option Data Source ID:

Configure Conditional Properties

Image properties allow specification of size, label text, etc...



Adding to the Select Action Menu (1): Create ITEMIMAGE Sigoption

The screenshot shows a window titled "Add/Modify Signature Options". At the top, there is a toolbar with "Filter", "31 - 38 of 38", and "Download" buttons. Below the toolbar is a table with two columns: "Option" and "Description".

Option	Description
SECURITY	Security Controls
CHGPERSO	Change Person
SESSION	Manage Sessions
CREATEREPT	Create Report Button
DELETEREPT	Delete Report Button
ITEMIMAGE	Add/Modify Image

Below the table, the details for the selected "ITEMIMAGE" option are shown:

Option: ITEMIMAGE
Description: Add/Modify Image
Option Also Grants:
Option Also Revokes:
Prerequisite:
E-signature Enabled?
Visible?

At the bottom right, there are "OK" and "Cancel" buttons.

The sigoption for the dialog is ITEMIMAGE



Adding to the Select Action Menu (2): Create SHOWDELETE Sigoption

Option	Description
show	
SHOWDELETE	Show Delete Button

Option	SHOWDELETE
Description	Show Delete Button
Option Also Grants	
Option Also Revokes	
Prerequisite	

E-signature Enabled ?

Visible ?

New Row

Advanced Signature Options

OK Cancel

SHOWDELETE creates the delete button in the dialog when an image has already been added

Grant Group Access to the ITEMIMAGE Sigoption

The screenshot shows the IBM Security Groups web interface. The top navigation bar includes 'List', 'Group', 'Sites', 'Applications', 'Storerooms', 'Labor', 'GL Components', 'Limits and Tolerances', 'Data Restrictions', and 'Users'. The 'Applications' tab is selected, and the group 'MAXADMIN' is chosen. The interface displays two tables:

Applications Table:

Description	Main Object/Table	Original Application (if copied)
user		
User Self Registration	Add User virtual object for adding a new	
Users	Users of the system	

Options for Users Table:

Description	Grant Access ?	Condition
Delete User	<input checked="" type="checkbox"/>	
New User	<input checked="" type="checkbox"/>	
Read access to Users	<input checked="" type="checkbox"/>	
Save User	<input checked="" type="checkbox"/>	

Below this, another table shows options for the application:

Description	Grant Access ?	Condition
Add/Modify Image	<input checked="" type="checkbox"/>	
Authorize Group Reassignment	<input checked="" type="checkbox"/>	
Bookmarks	<input checked="" type="checkbox"/>	
Change Passwords	<input checked="" type="checkbox"/>	

Not everyone who sees the image should be allowed to add or delete the image

Grant Group Access to the SHOWDELETE Sigoption

The screenshot displays the IBM Security Groups application interface. The top navigation bar includes "Security Groups" and various utility links like "Bulletins: (1)", "Go To", "Reports", "Start Center", "Profile", "Sign Out", and "Help". Below the navigation bar, there are tabs for "List", "Group", "Sites", "Applications", "Storerooms", "Labor", "GL Components", "Limits and Tolerances", "Data Restrictions", and "Users". The "Applications" tab is active, showing a table of applications for the "MAXADMIN" group. The table has columns for "Description", "Main Object/Table", and "Original Application (if copied)". Below this, there is a section for "Options for Users" with a table showing "Grant Access ?" and "Condition" for various user actions. The "SHOWDELETE" sigoption is highlighted in the bottom section.

Description	Main Object/Table	Original Application (if copied)
user		
User Self Registration	Add User virtual object for adding a new	
Users	Users of the system	

Description	Grant Access ?	Condition
Delete User	<input checked="" type="checkbox"/>	
New User	<input checked="" type="checkbox"/>	
Read access to Users	<input checked="" type="checkbox"/>	
Save User	<input checked="" type="checkbox"/>	

Description	Grant Access ?	Condition
show		
Show Delete Button	<input checked="" type="checkbox"/>	

SHOWDELETE should be granted to all the same groups as ITEMIMAGE



Create a Relationship

Database Configuration

Object: MAXUSER * Users of the system

Relationship	Child Object	Where Clause	Remarks
imglib			
IMGLIB	IMGLIB	refobject = 'MAXUSER' and refobjectid = :maxu	'Relationship to the IMGLIB table, used to find th

Details

Relationship	IMGLIB	Child Object	IMGLIB
Where Clause	refobject = 'MAXUSER' and refobjectid = :maxuserid		Remarks
			Relationship to the IMGLIB table, used to find the image for a given item. (imglib.refobject="MAXUSER" and imglib.refobjectid=:maxuser\$MAXUSER.MAXUSERID). The resulting set will contain zero or one object.

New Row

Record images live in the IMGLIB table. Create a relationship between the object and IMGLIB.



Result: Employee Pix in the Users App

The screenshot shows the IBM Maximo Users App interface. At the top, there's a navigation bar with options like 'Bulletin: (1)', 'Go To', 'Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below this is a search bar and a 'Select Action' dropdown. The main content area is divided into tabs: 'List', 'User', 'Groups', and 'Security Profile'. The 'User' tab is active, showing details for user 'LIBERI' with a status of 'ACTIVE' and type 'TYPE 1'. The display name is 'Diane Liberi'. There is a placeholder for a profile picture with the text 'Click to see actual-size image' and a small thumbnail image of a woman. Below the user details is a 'Groups' section with a table listing various groups.

Group	Description	Independent of Other Groups ?
MGRAPPROVA	Manager Approvals	<input type="checkbox"/>
EVERYONE	All Maximo Users	<input type="checkbox"/>
ALLSITES	All Sites	<input type="checkbox"/>
FINANCE	Finance	<input checked="" type="checkbox"/>
PERSONALCON	Personal Configuration	<input type="checkbox"/>
PURCHASING	Purchasing	<input checked="" type="checkbox"/>
SRVREQ	Service Requestor	<input type="checkbox"/>
CONTRACTMGR	Contract Manager	<input checked="" type="checkbox"/>
STDSVCMGR	Standard Service Manager	<input type="checkbox"/>
TOOL MGR	Tool Manager	<input type="checkbox"/>



Summary: Adding a Picture to a Record

- In App Designer
 - Add image control
 - Add 2 sigoptions: ITEMIMAGE and SHOWDELETE
 - Add ITEMIMAGE option to Select Action Menu
- In Security Groups
 - Grant access to ITEMIMAGE and SHOWDELETE for groups that are allowed to add or delete specific images
- In Database Configuration
 - Create the relationship between the app's object and IMGLIB



Look and Feel

- They refer to different aspects of the product
- Look: Visual qualities that support the user and convey information about the product
- Feel: Interaction techniques that help users accomplish tasks

- We've been focusing on feel aspects, but look aspects play an important role in usable designs as well



Changing Skin

Maximo doesn't look friendly/easy/approachable/like the other applications my users are accustomed to

- Customers want flexibility in the look of the product.



Using the new skin gives different, often larger visual elements, as well as some features like shading every other row in table windows.

Work Order Tracking

Bulletins: (0) Go To Reports Start Center Profile Sign Out Help IBM

Find: [] Select Action []

List Work Order Plans Related Records Actuals Safety Plan Log Failure Reporting Specifications

Advanced Search Save Query Bookmarks

Work Orders Filter [] 1 - 11 of 11 [] Download []

Work Order	Description	Location	Asset	Status	Scheduled Start	Priority	Site
10						2	=BEDFORD
1000	Relocate Guard Rails Around Compressor	BR300	11300	WAPPR		2	BEDFORD
1020	Generator Overhaul	BR230	11230	WSCH	4/22/02 9:51 AM	2	BEDFORD
1045	Replace broken office window	OFF103		WMATL		2	BEDFORD
41023	ROUTINE MAINTENANCE	BR460	11460	APPR	3/11/01 3:45 PM	2	BEDFORD
41041	Inspection and Certification	BR400	11400	APPR	5/5/01 3:45 PM	2	BEDFORD
41061	Inspection	BR300	11340	APPR	7/4/01 3:45 PM	2	BEDFORD
41071	Inspection	BR300	11340	APPR	8/3/01 3:45 PM	2	BEDFORD
41081	Inspection	BR400	11400	APPR	8/28/01 3:45 PM	2	BEDFORD
41082	ROUTINE MAINTENANCE	BR460	11460	APPR	9/2/01 3:45 PM	2	BEDFORD
43010	11300 PM	BR300	11300	APPR	9/8/02 9:45 AM	2	BEDFORD
6010	12 Month Service on Shipping Dept #2 Conveyor	SHIPPING	12700	WAPPR	1/23/02 8:04 AM	2	BEDFORD

Select Records



Changing the Skin

- New skin (Tivoli09) is included starting at fixpack 7.1.1.5
- To change the skin for the entire product open `webclient.properties` and add `webclient.skin=tivoli09`
- To change the skin for a particular application, in the xml for that app, add `skin=tivoli09` to the presentation tag



Ensuring More Usable Designs in the Future

PulseANZ2010

Meet the people who can help
advance your infrastructure





To Get To a Usable Design

- Validate with appropriate users
 - Need to show the right functionality to realistic users: end users, administrators, executives, etc.
 - Need to get feedback on an ongoing basis
 - Need to pursue a range of data: site visits, prototype interactions, betas
- When you work with us:
 - You influence our direction
 - You make the product better
 - You discover features that you may not have known existed



Themes for the Maximo UI

- Focusing on priorities
- Easing data entry
- Supporting untrained users
- Supporting personalization
- Making configuration easier



Maximo UI Customer Council

- Let me know that you want to be involved:
 - Talk with me after this presentation and give me your business card
 - Email me: landesman@us.ibm.com
- I'll want to know
 - What kinds of users I can work with in your org
 - Some of the other Maximo-related products you're using
 - What version of Maximo you're on now



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