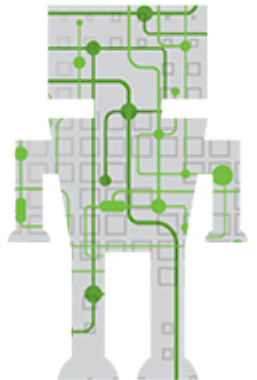


Kofax Kapow 10.3 Training and Certification

Module 10 – Advanced Repeat/Next Loops

Looping through pages with no Next button

**Kofax
Kapow™**



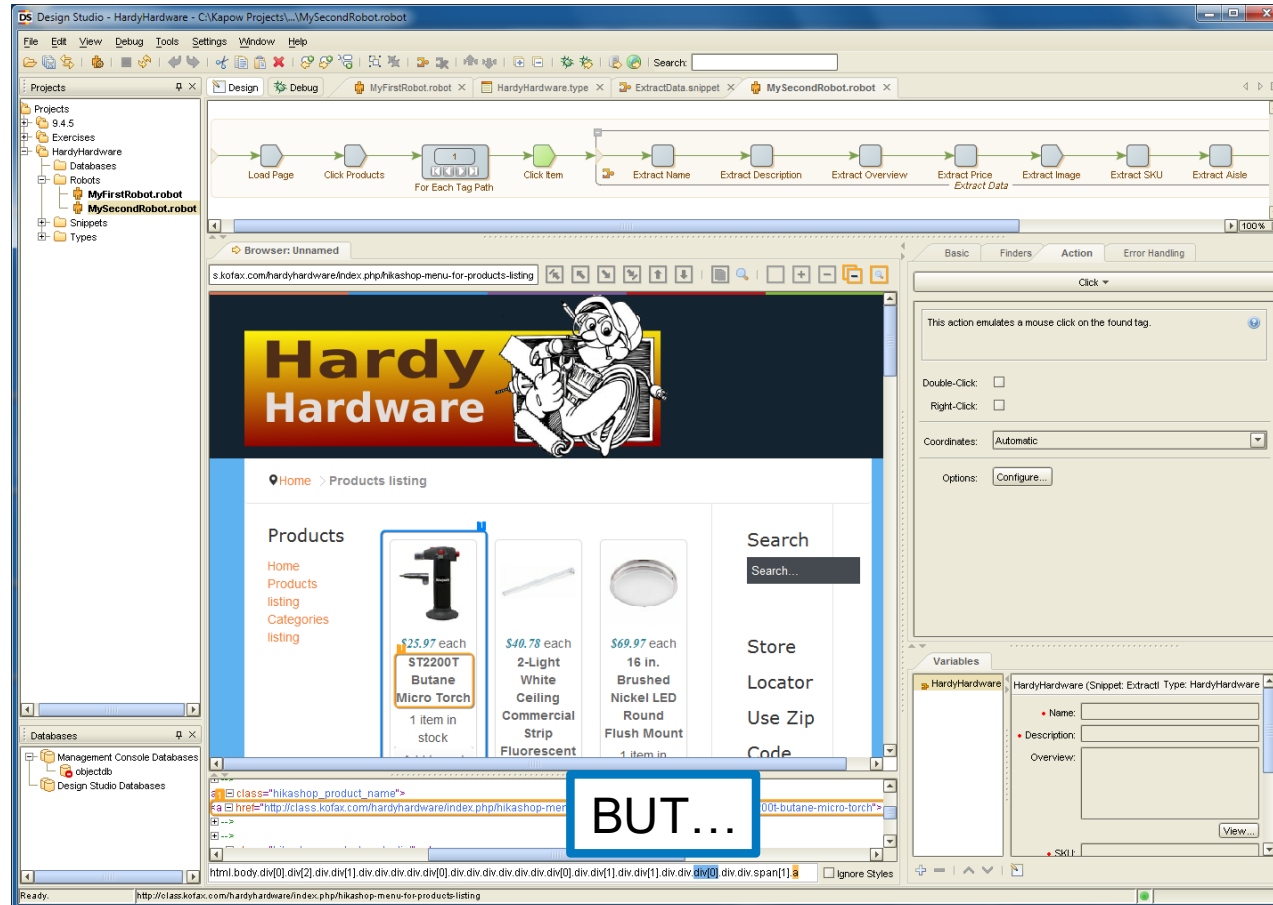
Module Overview

- ◆ More Advanced Repeat/Next Loops
- ◆ More Branching
- ◆ Simple Variables
- ◆ Assign Variable Step
- ◆ Extracting Attributes
- ◆ Extracting from a Table
- ◆ Named Tags



Extracting Data from Multiple Pages

- So far, we've set up a Robot that will loop through multiple items on multiple pages and return the data for those items.



There are Multiple Pages

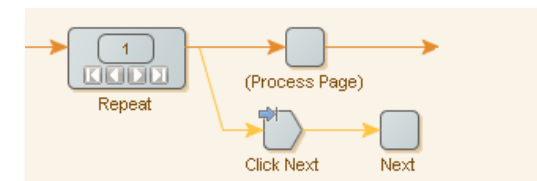
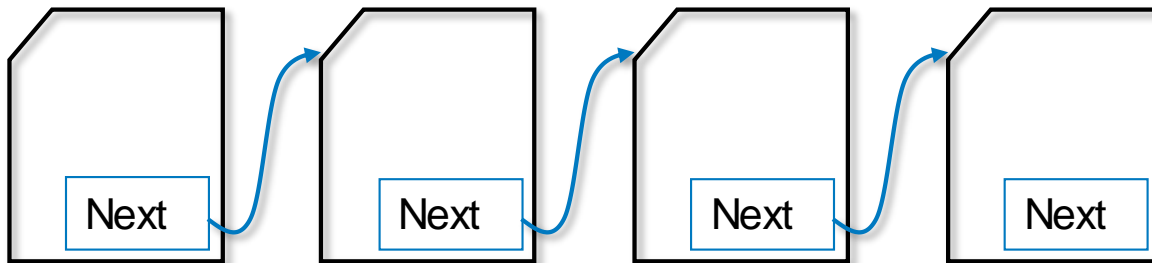
- ◆ If we go to the bottom of this page, you can see that is followed by page after page after page. Suppose we want ALL products listed. And notice, on this page, there is no convenient [Next] button!



- ◆ The answer is to have our robot loop through all pages. Once again, we will use a Repeat/Next Loop.

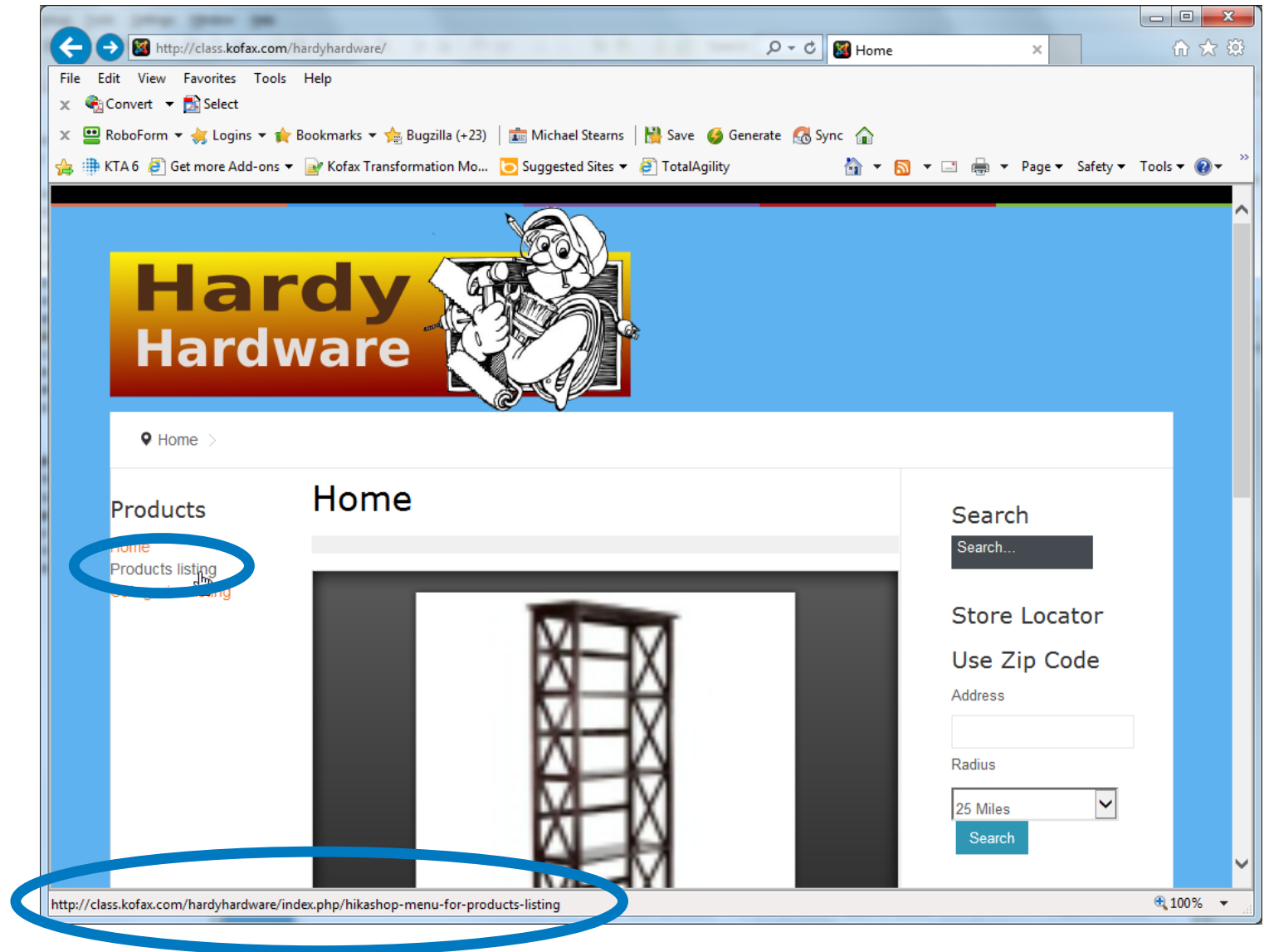
A Quick Review - Repeat Loops

- ◆ A Review: Repeat/Next Loops...
 - ◆ This action creates a repeat loop together with the [Next](#) action.
 - ◆ The Repeat action marks the start of the repeat loop. In a subsequent step, another iteration of the loop can be requested using a Next action.
 - ◆ The windows, pages, etc. at the Next step will be sent back to the Repeat step and will become the output from the Repeat step in the next iteration. If no Next step is executed in a given iteration, that iteration will be the last one, and the repeat loop will end. But first...let's build our Robot.

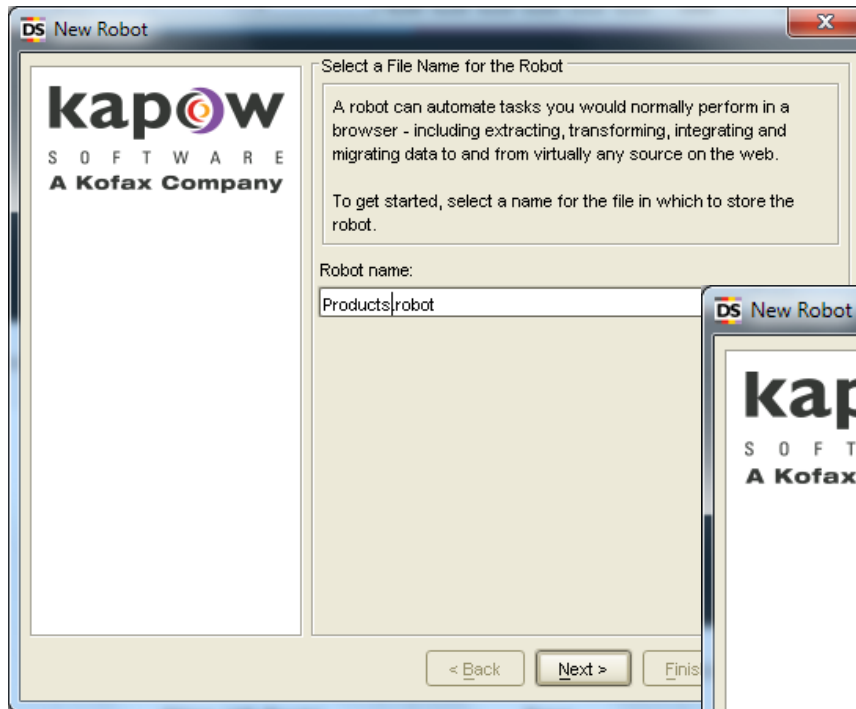


We Can Load the Products Page Directly

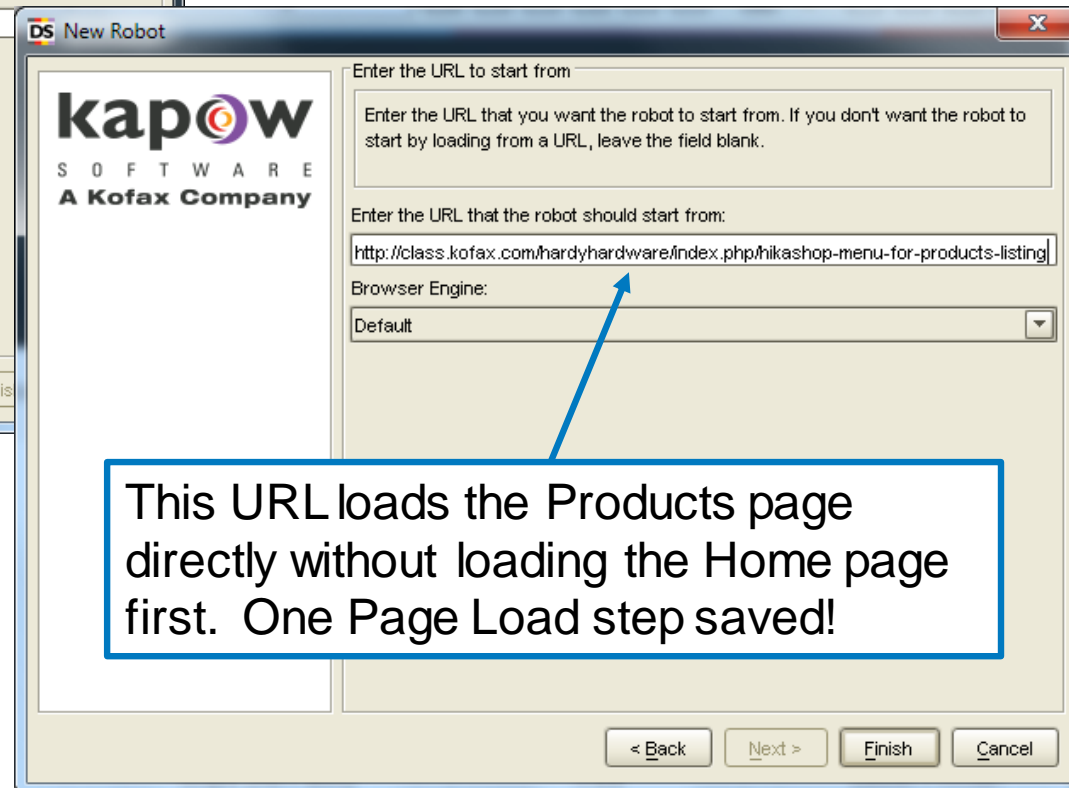
- ◆ Instead of loading the home page and then clicking on Products, we can make this Robot less "expensive" in terms of KCUs by loading the Products page directly. The URL is shown on the status bar of the browser.



Create a New Robot



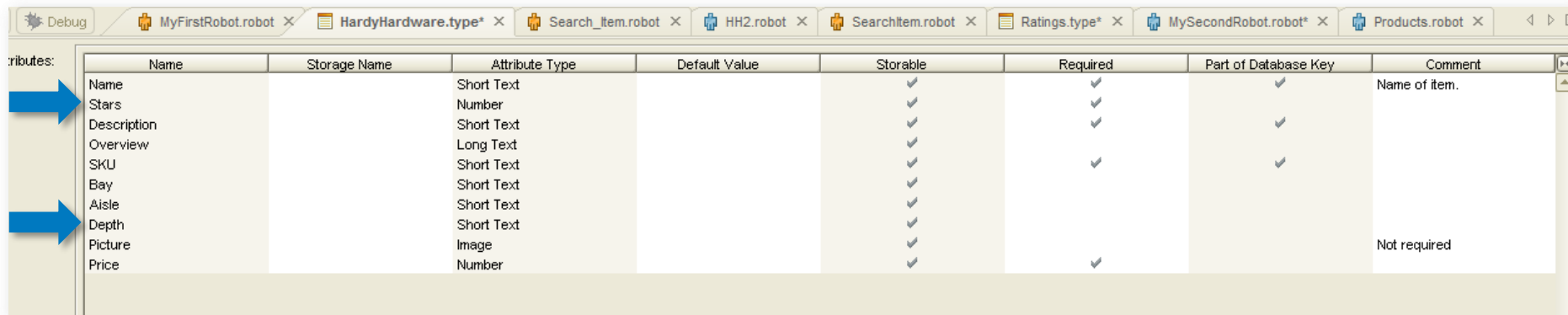
We'll create a new Robot to perform extracting data for all products available from HardyHardware.



This URL loads the Products page directly without loading the Home page first. One Page Load step saved!

Add Attributes to Type

- ◆ Let's imagine we also want to extract the rating (number of stars) ★★★★★ for each product.
- ◆ We'll also extract the depth measurement of each product (we'll do this because it's a little more challenging, and after all, this is a training class).
- ◆ First, we have to add two new attributes to our HardyHardware.Type



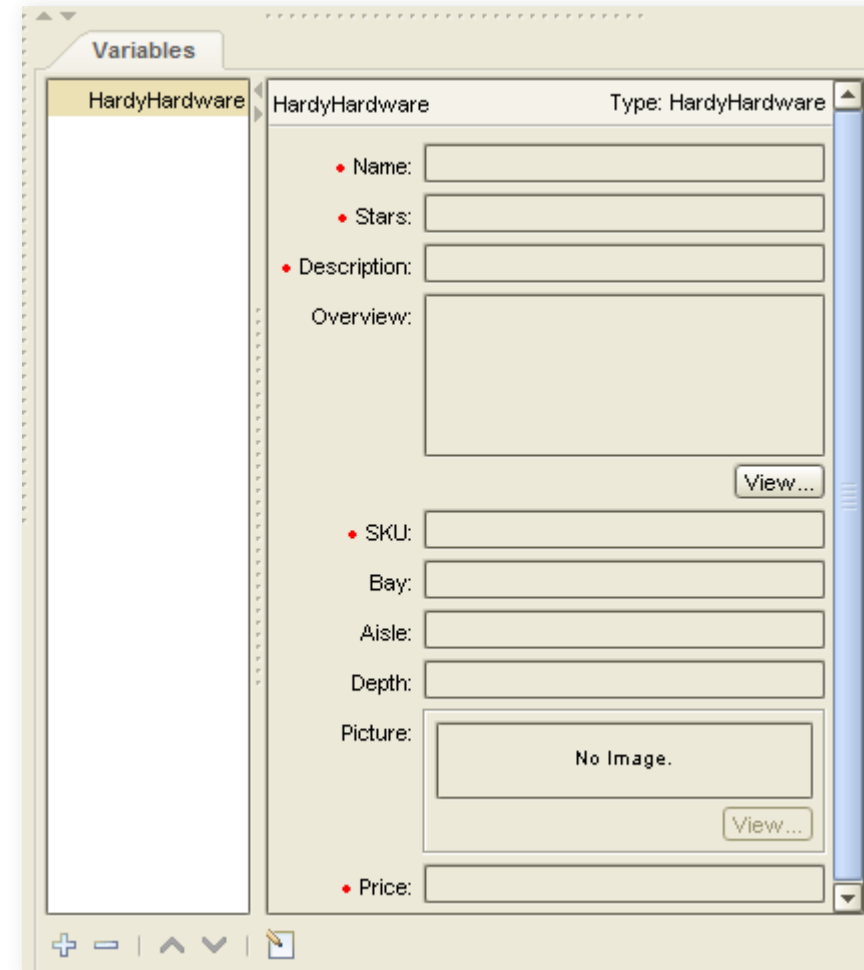
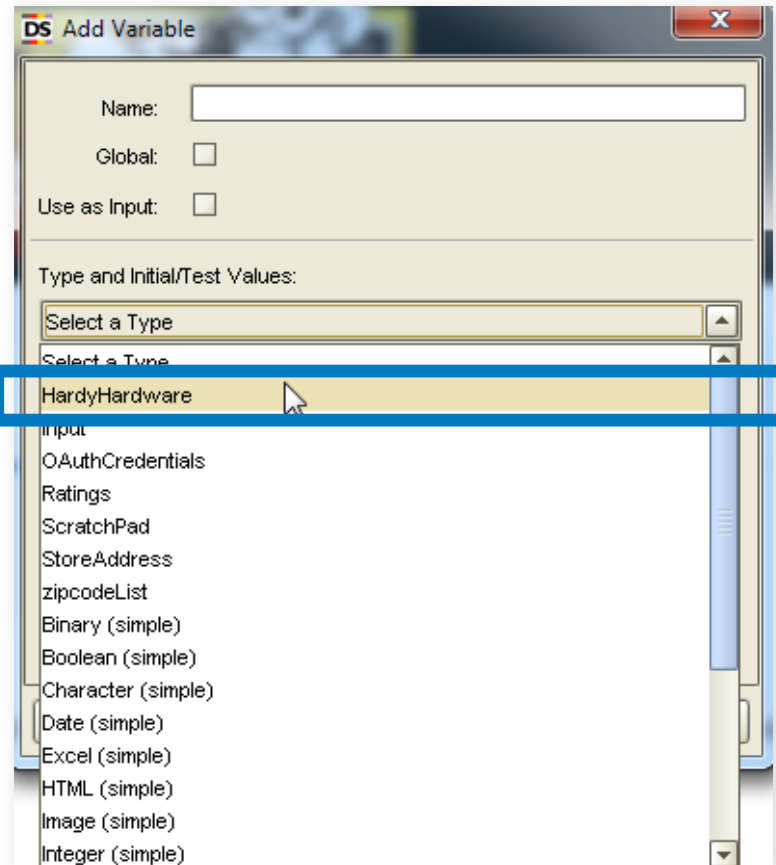
The screenshot shows the 'Attributes' table in the Kofax software. The table has columns: Name, Storage Name, Attribute Type, Default Value, Storable, Required, Part of Database Key, and Comment. The 'Name' column lists attributes: Name, Stars, Description, Overview, SKU, Bay, Aisle, Depth, Picture, and Price. The 'Attribute Type' column lists corresponding types: Short Text, Number, Short Text, Long Text, Short Text, Short Text, Short Text, Short Text, Image, and Number. The 'Storable' column has checkmarks for all attributes. The 'Required' column has checkmarks for Stars, Overview, SKU, Bay, and Price. The 'Part of Database Key' column has checkmarks for Name, Description, Overview, and SKU. The 'Comment' column contains 'Name of item.' for the first four attributes and 'Not required' for the last five. Two blue arrows point to the 'Stars' and 'Depth' attributes.

Name	Storage Name	Attribute Type	Default Value	Storable	Required	Part of Database Key	Comment
Name		Short Text		✓	✓	✓	Name of item.
Stars		Number		✓	✓	✓	
Description		Short Text		✓	✓	✓	
Overview		Long Text		✓	✓	✓	
SKU		Short Text		✓	✓	✓	
Bay		Short Text		✓	✓		
Aisle		Short Text		✓			
Depth		Short Text		✓			
Picture		Image		✓			Not required
Price		Number		✓	✓		



Remember how to add Attributes?

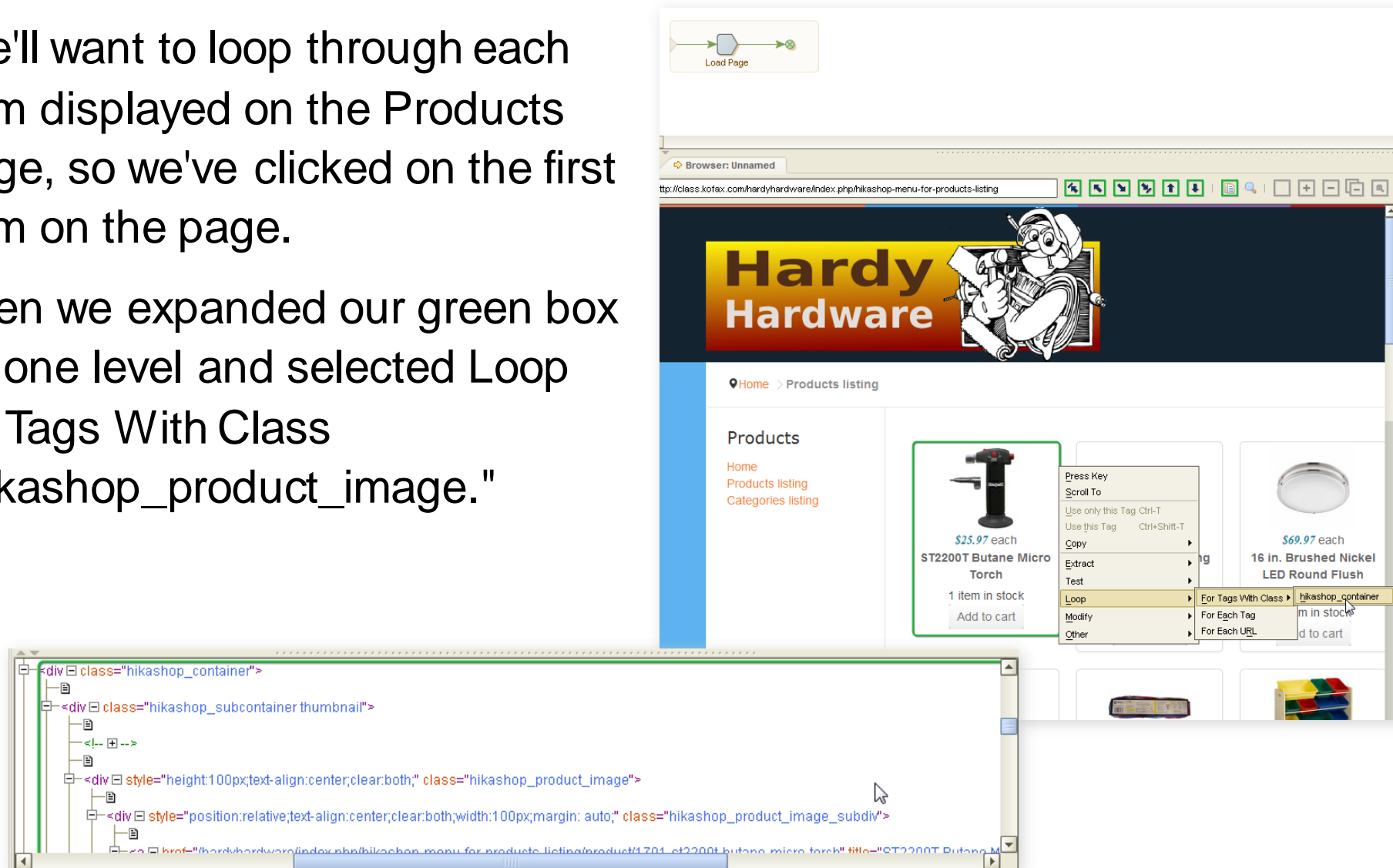
Add Variable



Now we'll go back to our new Robot and add a Variable to contain the data that will be extracted.

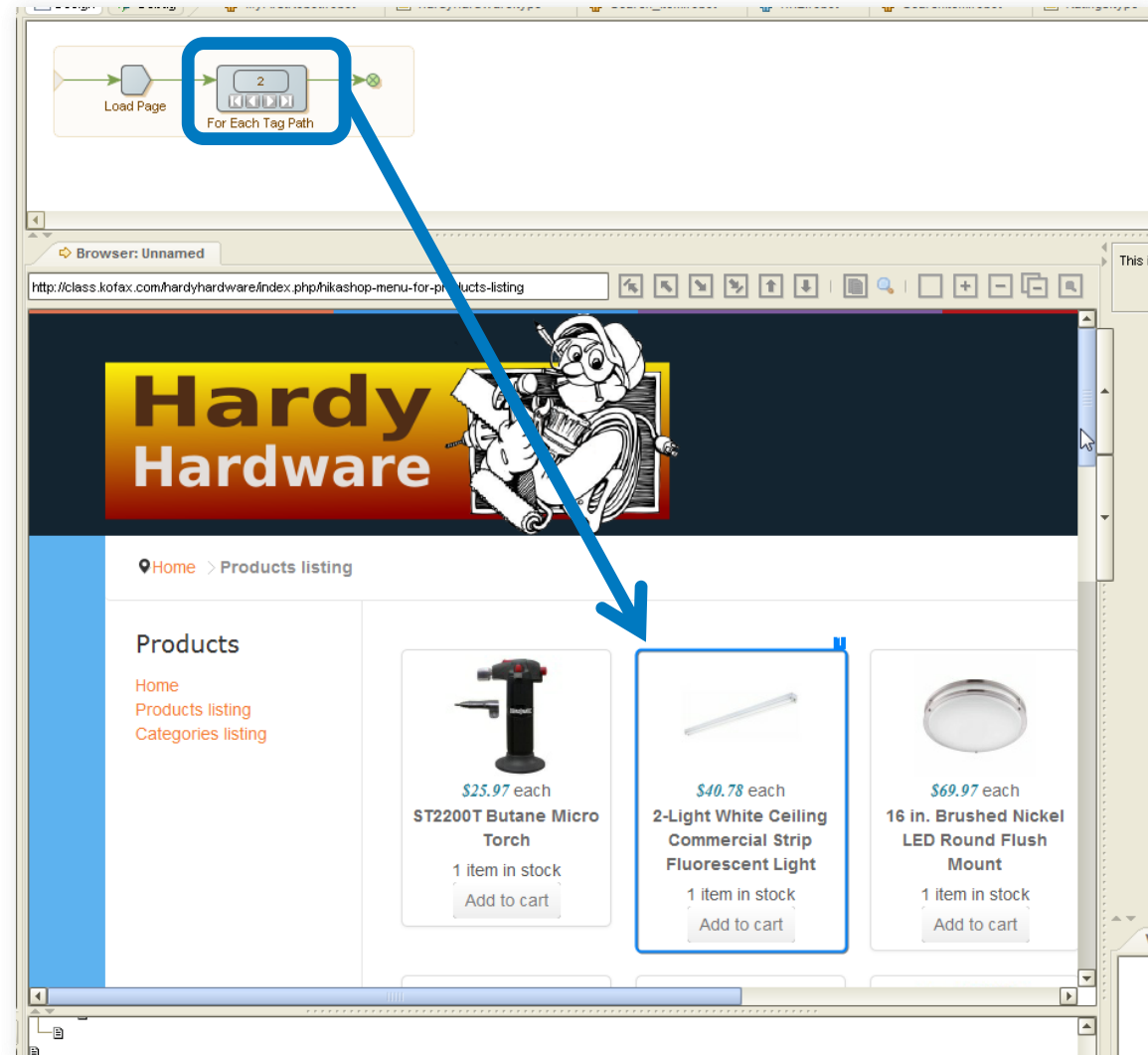
Loop Through Each Item on a Page

- ◆ We'll want to loop through each item displayed on the Products page, so we've clicked on the first item on the page.
- ◆ Then we expanded our green box up one level and selected Loop for Tags With Class "hikashop_product_image."



Test Loop

- ◆ With the end step selected, you can use the forward arrow in your loop step to test that the loop works.
- ◆ Here, we've selected the second iteration of the loop.



Add Click Step to Load Item Details

Home > Products listing

Products

Home
Products listing
Categories listing

Then you need to click on the item to display its details.

\$25.97 each
ST2200T Butane Micro Torch
1 item in stock
Add to cart

\$40.78 each
2-Light White Ceiling Commercial Strip Light
Add to cart

\$69.97 each
16 in. Brushed Nickel LED Round Flush Mount
1 item in stock
Add to cart

Press Key
Click
Scroll To
Use only this Tag Ctrl-T
Use this Tag Ctrl+Shift-T
Copy
Extract
Test
Loop
Modify
Other

`<!-- + -->`
``
`<a href="/hardyhardware/index.php/hikashop-menu-for-products-listing/pro`
`ro-torch">ST2200T Butane Micro Torch `
`<!-- + -->`

Extract Rating (Stars)

We want to return the number of stars for the item. Extracting this rating is a little trickier. Notice, selecting the row in the browser panel containing the stars selects the entire block you see below.

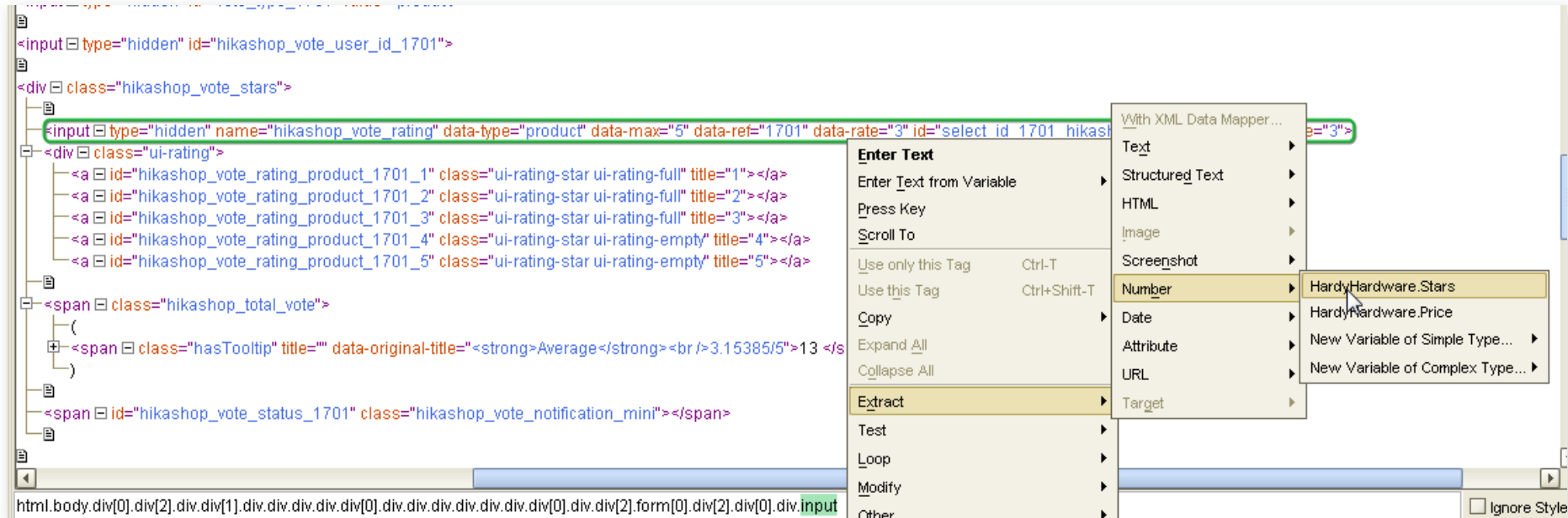
The screenshot shows a web browser window displaying a product page for a "ST2200T Butane Micro Torch". The product has a 3-star rating (13 reviews). The browser's developer tools are open, showing the HTML structure. A green box highlights the rating-related code, and a blue arrow points to the "value=3" attribute in the "hikashop_vote_rating" input field.

```
<input type="hidden" id="hikashop_vote_ref_id" value="1701">
<input type="hidden" id="hikashop_vote_ok_1701" value="0">
<input type="hidden" id="vote_type_1701" value="product">
<input type="hidden" id="hikashop_vote_user_id_1701">
<div class="hikashop_vote_stars">
  <input type="hidden" name="hikashop_vote_rating" data-type="product" data-max="5" data-ref="1701" data-rate="3" id="select_id_1701_hikashop_main_div_name" value="3">
  <div class="ui-rating">
    <a id="hikashop_vote_rating_product_1701_1" class="ui-rating-star ui-rating-full" title="1"></a>
    <a id="hikashop_vote_rating_product_1701_2" class="ui-rating-star ui-rating-full" title="2"></a>
    <a id="hikashop_vote_rating_product_1701_3" class="ui-rating-star ui-rating-full" title="3"></a>
    <a id="hikashop_vote_rating_product_1701_4" class="ui-rating-star ui-rating-empty" title="4"></a>
    <a id="hikashop_vote_rating_product_1701_5" class="ui-rating-star ui-rating-empty" title="5"></a>
  </div>
  <span class="hikashop_total_vote">
    <span class="hasTooltip" title="" data-original-title="Average"><br/>3.15385/5</span>
  </span>
  <span id="hikashop_vote_status_1701" class="hikashop_vote_notification_min"></span>
</div>
```

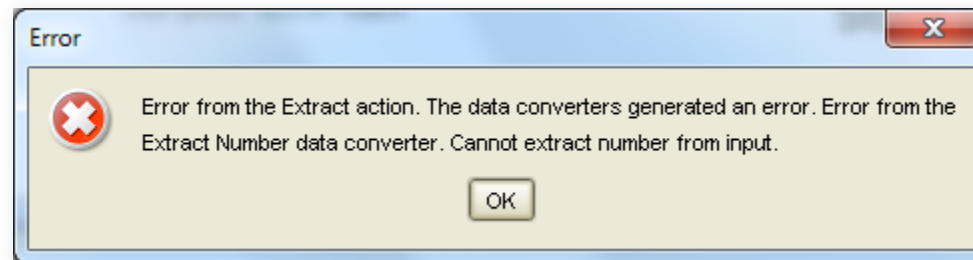
What you want is the number 3. Notice it has a tag attribute of "value." (Remember this).

Select From the Source Code Instead

- ◆ Select the input tag shown here (which will return all the content on that line).



The Data Converter used to extract a number will generate an error. We'll fix that in the next step.



Change Extract Step to Extract Tag Attribute

The image shows a screenshot of the Kofax Robot Studio interface with three panels and three callout boxes explaining the steps to change an Extract step to Extract Tag Attribute.

Panel 1 (Left): The 'Action' tab is selected. The 'Extract' step is highlighted in the list. A dropdown menu is open, showing various extraction options. The 'Extract Tag Attribute' option is selected.

Panel 2 (Middle): The 'Extract Tag Attribute' configuration window is shown. The 'Tag Attribute Name' field is set to 'value'. The 'Converters' field is empty. The 'Variable' field is set to 'HardyHardware.Stars'.

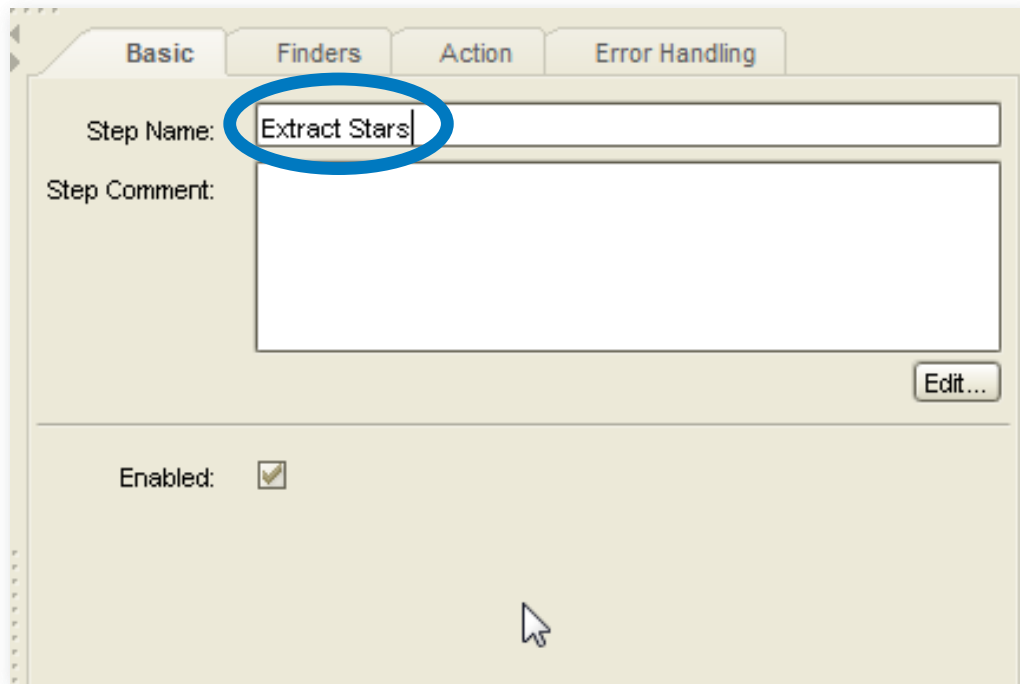
Panel 3 (Bottom Right): The 'Variables' panel is shown. It displays the 'HardyHardware' variable with the following values:

Variable	Value
Name	
Stars	3
Description	
Overview	

Callout Boxes:

- Enter "value" as the tag attribute name
- Re-select the variable from the dropdown
- Select the end step in the Robot view and ensure the correct value is returned in the Variables panel

And Change the Name of the Step to Make More Sense



Basic Finders Action Error Handling

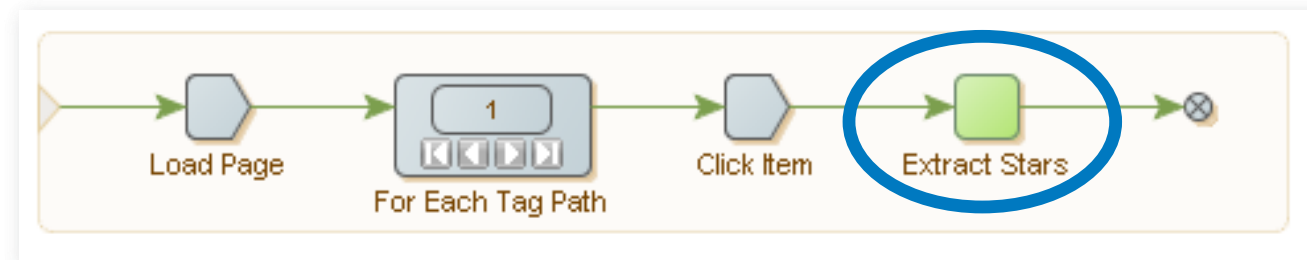
Step Name: Extract Stars

Step Comment:

Enabled: ☒

Edit...

Remember, the name of the step in your Robot is available on the Basic tab of that step's properties.



Extract Depth Measurement

The screenshot shows a web browser window with the URL `...x.php/hikashop-menu-for-products-listing/product/1701-st2200t-butane-micro-torch`. The page displays a product specification table. The first row, 'Assembled Depth (in.) 3.0 in', is highlighted with a blue box. Below the browser window, the DOM tree is visible, showing the HTML structure of the table. The `<table class="speclist">` tag is expanded, showing the `<tbody>` and a `<tr class="evenrow" style="background-color: lightgrey;">` tag. Within this row, the `<td>Assembled Depth (in.)</td>` and `<td>3.0 in</td>` tags are highlighted with blue boxes.

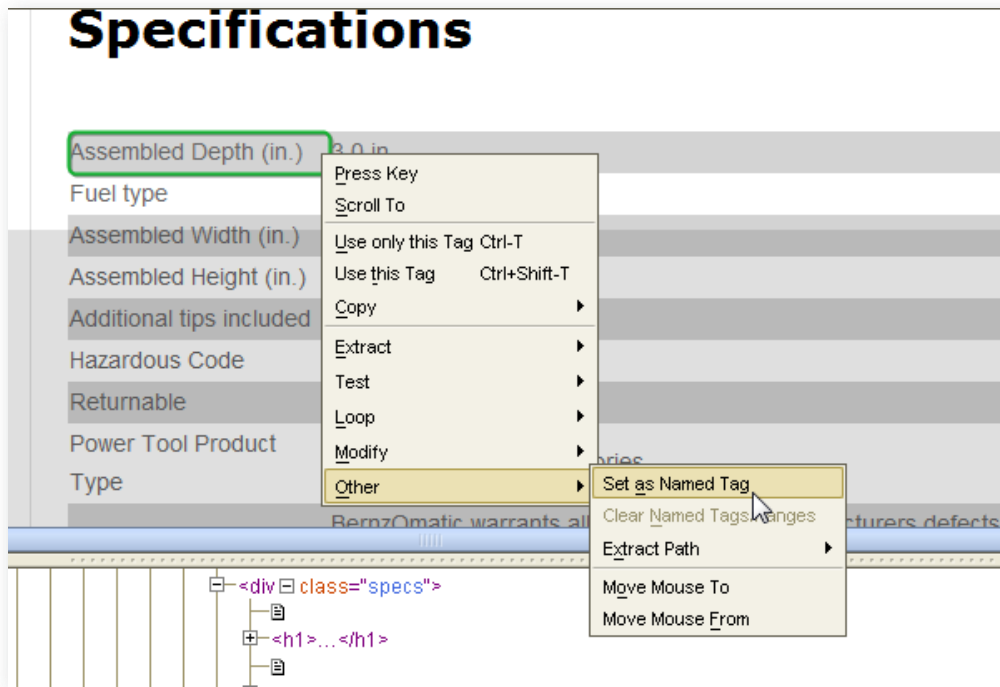
Specification	Value
Assembled Depth (in.)	3.0 in
Fuel type	Butane
Assembled Width (in.)	5.8 in
Assembled Height (in.)	10 in
Additional tips included	No
Hazardous Code	Cannot Ship Air.
Returnable	90-Day
Power Tool Product Type	Soldering Irons & Accessories

DOM Tree Structure:

```
<table class="speclist">
  <tbody>
    <tr class="evenrow" style="background-color: lightgrey;">
      <td>Assembled Depth (in.)</td>
      <td>3.0 in</td>
    </tr>
    ...
  </tbody>
</table>
```

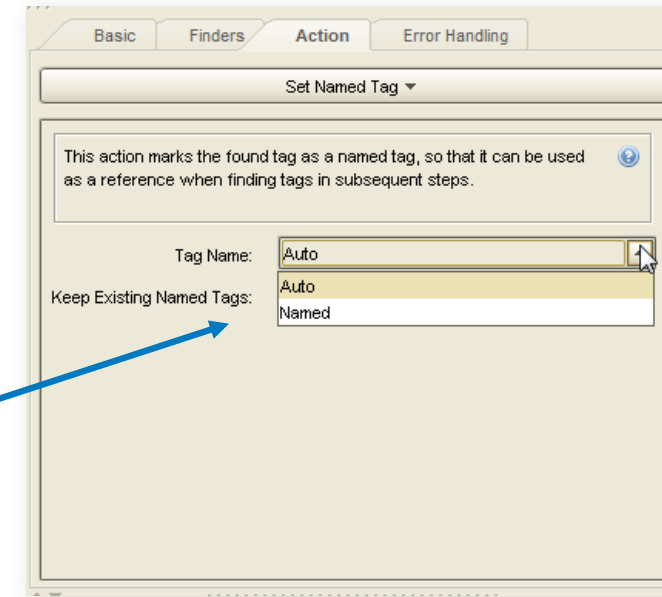
The next thing we want to do is extract the depth of the product. Notice it is part of a table and might have its location change within the table. It has a `<td>` tag...but so does every other cell in the table. Notice too, it is in the same row as the label, "Assembled Depth (in.)"

We Can Find the Depth We Want Using a Named Tag

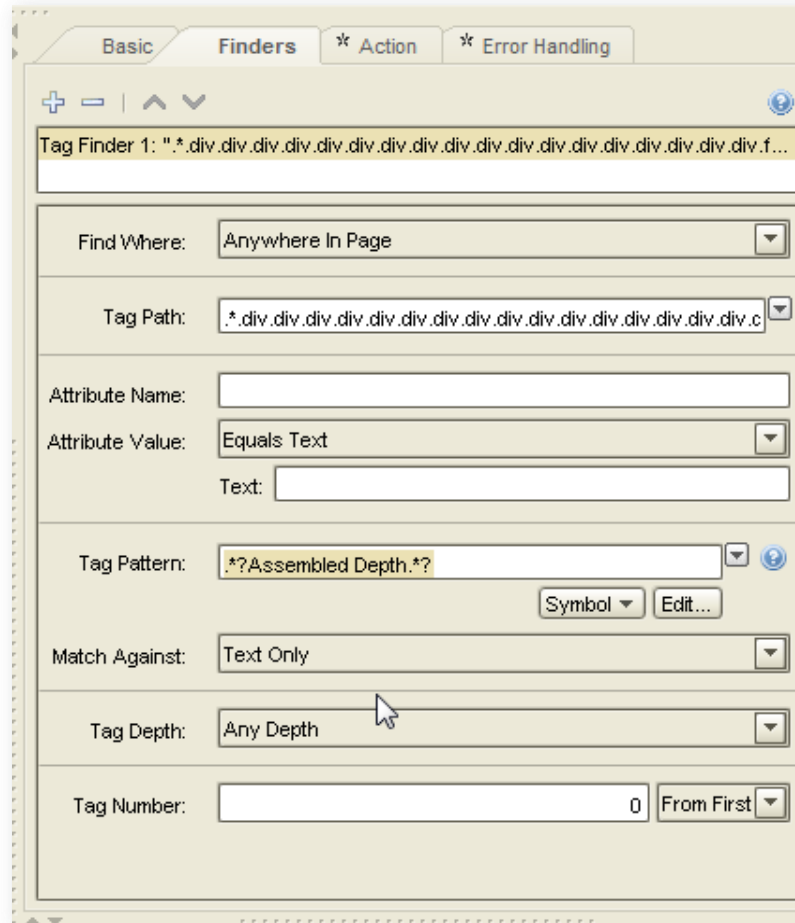


Named Tags can be used to find other tags.

Auto gives the tag a name (which is number). The first Auto-numbered tag will have number 1, the next number 2 etc. **Named** gives the tag a fixed and explicitly stated name and can make it more obvious what it is finding. We'll name ours "Assembled Depth." We'll give the step the same name as well.



Specify a Tag Pattern to Find



The screenshot shows the 'Finders' tab of a software interface. It contains several input fields and dropdown menus for configuring a search. The 'Tag Pattern' field is highlighted with a yellow background and contains the text '*?Assembled Depth.*?'. A mouse cursor is pointing at the 'Tag Depth' dropdown, which is set to 'Any Depth'. Other fields include 'Find Where' (Anywhere In Page), 'Tag Path' (a long path of divs), 'Attribute Name' (empty), 'Attribute Value' (Equals Text), 'Text' (empty), 'Match Against' (Text Only), and 'Tag Number' (0 From First).

Basic Finders * Action * Error Handling

Tag Finder 1: ".*.div.div.div.div.div.div.div.div.div.div.div.div.div.div.div.div.div.f..."

Find Where: Anywhere In Page

Tag Path: *.div.div.div.div.div.div.div.div.div.div.div.div.div.div.div.c

Attribute Name:

Attribute Value: Equals Text

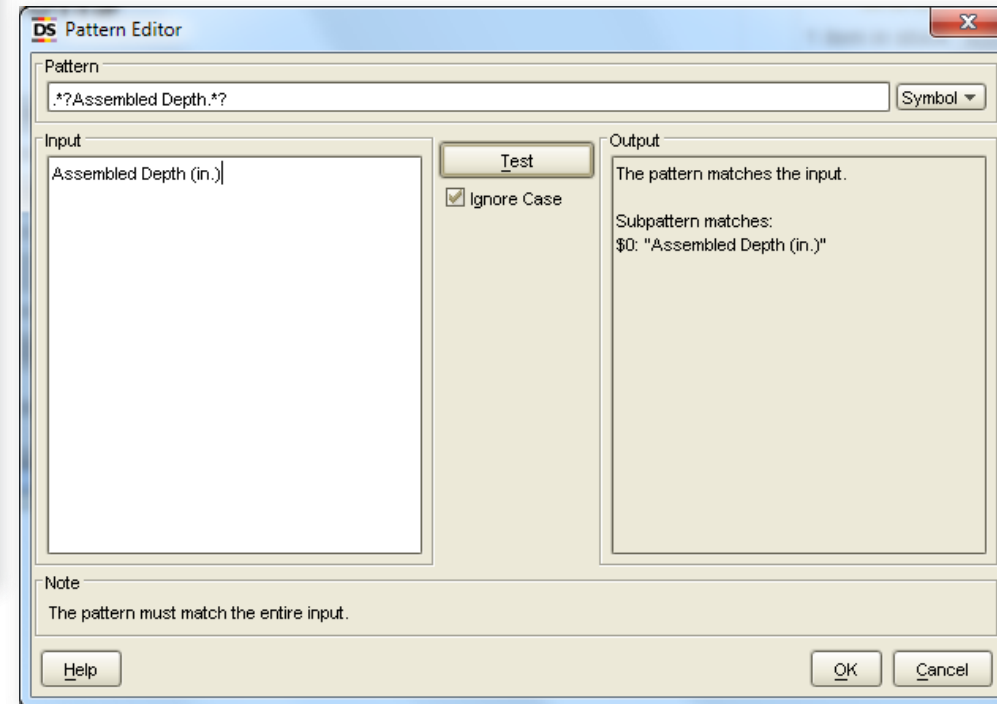
Text:

Tag Pattern: *?Assembled Depth.*? Symbol Edit...

Match Against: Text Only

Tag Depth: Any Depth

Tag Number: 0 From First



The screenshot shows the 'DS Pattern Editor' dialog box. It has a 'Pattern' field containing '*?Assembled Depth.*?' and a 'Symbol' dropdown. The 'Input' field contains 'Assembled Depth (in.)'. The 'Test' button is highlighted, and the 'Ignore Case' checkbox is checked. The 'Output' field shows 'The pattern matches the input.' and 'Subpattern matches: \$0: "Assembled Depth (in.)"'. A 'Note' at the bottom states 'The pattern must match the entire input.' There are 'Help', 'OK', and 'Cancel' buttons at the bottom.

DS Pattern Editor

Pattern: *?Assembled Depth.*? Symbol

Input: Assembled Depth (in.)

Test

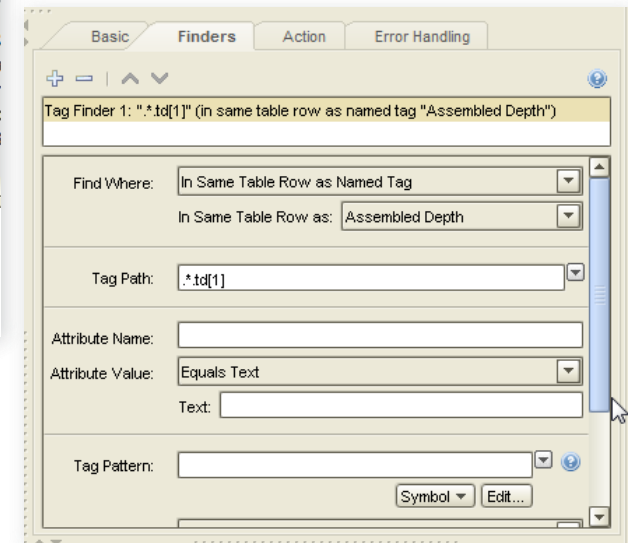
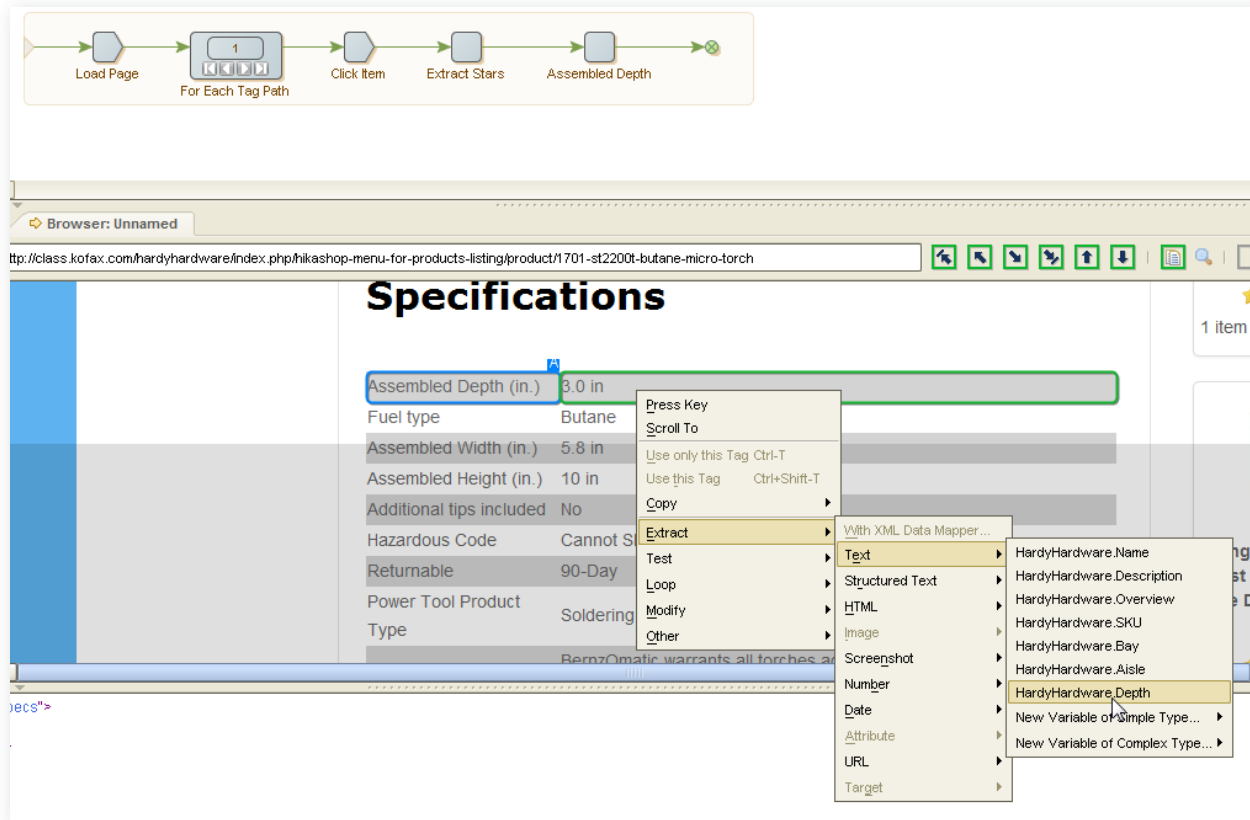
☒ Ignore Case

Output: The pattern matches the input.
Subpattern matches:
\$0: "Assembled Depth (in.)"

Note: The pattern must match the entire input.

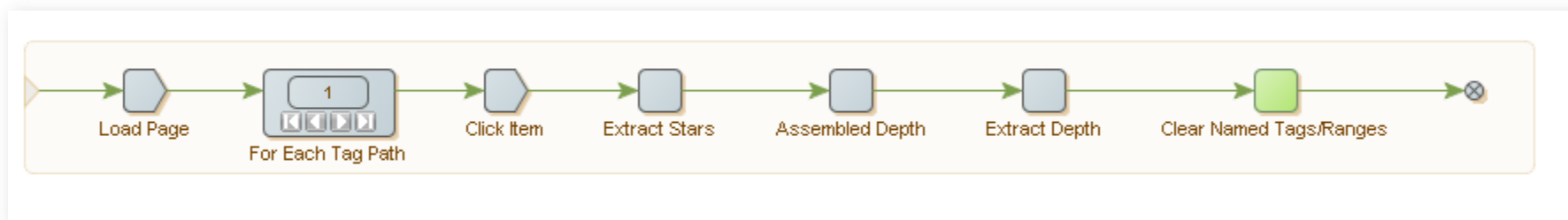
Help OK Cancel

Extract Depth



Now We Need to Clear the Named Tag

- ◆ This action unmarks a selected named tag or range, or all named tags and ranges, so that these will no longer be named in the subsequent steps.

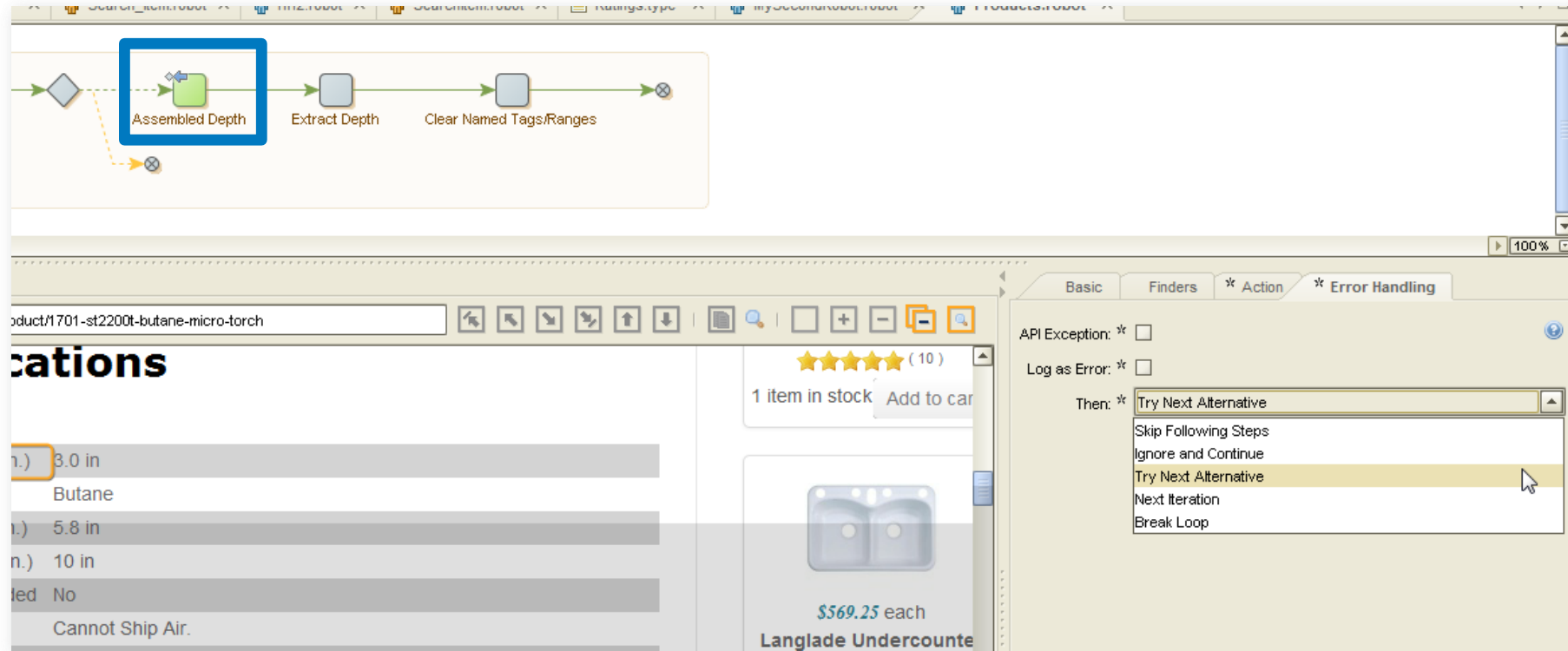


But What if "Assembled Depth" Doesn't Exist

The screenshot displays a Kofax workflow editor. At the top, a workflow sequence is shown: Load Page → For Each Tag Path (containing a step labeled '1') → Click Item → Extract Stars → Assembled Depth. Below the workflow, a browser window titled 'Browser: Unnamed' shows a product specification page with the URL <http://class.kofax.com/hardyhardware/index.php/hikashop-menu-for-products-listing/product/1701>. The page content includes a table with specifications: Assembled Depth (in.) 3.0, Fuel type But, Assembled Width (in.) 5.8, Assembled Height (in.) 10, Additional tips included No, Hazardous Code Ca, Returnable 90, Power Tool Product Type Sol, and defects for the. A context menu is open over the 'Assembled Depth' step in the workflow. The menu includes options like Select, Configure Step..., Disable Step, Cut, Copy, Paste Before, Paste After, Paste as Branches, Delete, Previous Iteration, Next Iteration, First Iteration, Last Iteration, Set Iteration..., Insert Step Before, Insert Step After, Add Branch, Group, Ungroup, Move Up, Move Down, Expand Groups, Collapse Groups, Toggle Breakpoint, and Remove Breakpoints on Selected Step(s). The 'Insert Step Before' option is expanded, showing a sub-menu with 'Action Step', 'Try Step', and 'Snippet Step'. The 'Try Step' option is highlighted by the mouse cursor.

Let's add a Try Step before the "Assembled Depth" find named tag step.

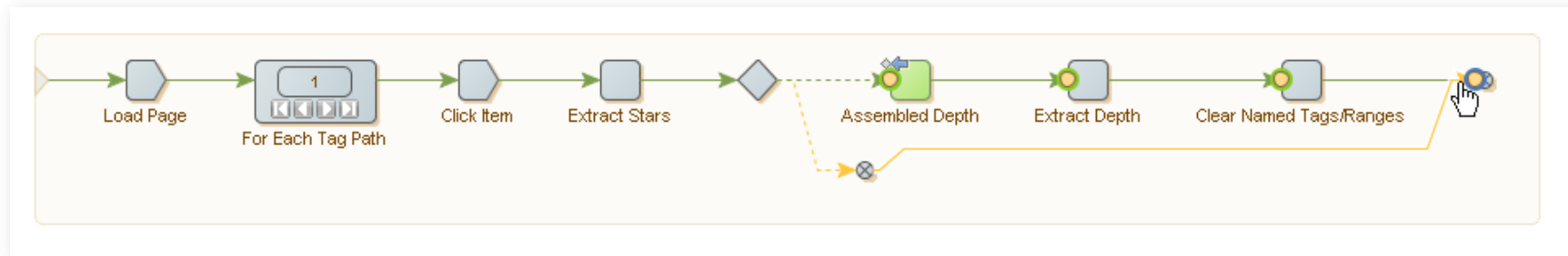
And Change "Assembled Depth" Error Handling



So if the Assembled Depth tag finder finds nothing, the step will go to the next alternative branch and end. But we want to do some other extraction after trying to extract depth...so....

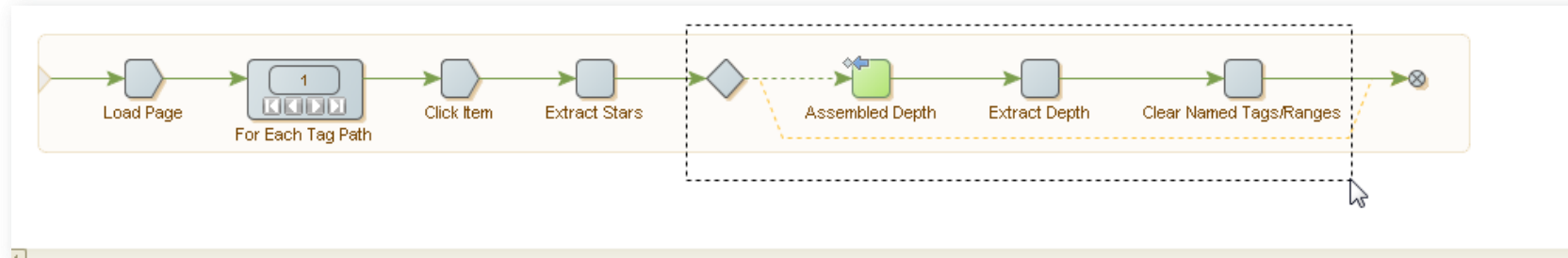
Join Try Step Branch to Skip Extraction of Depth

- Simply drag the end step of the branch to the end step above as shown. If no "depth" is found, the extraction steps for depth are skipped, and the Robot goes directly to the main end step. But we'll set up our other extraction in front of it as show on the next slide.

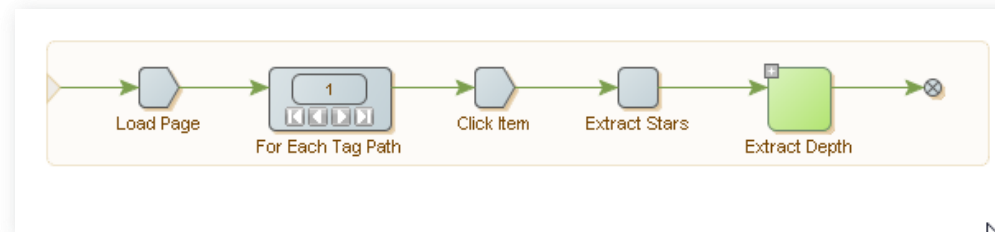


Create Group to Simplify Robot

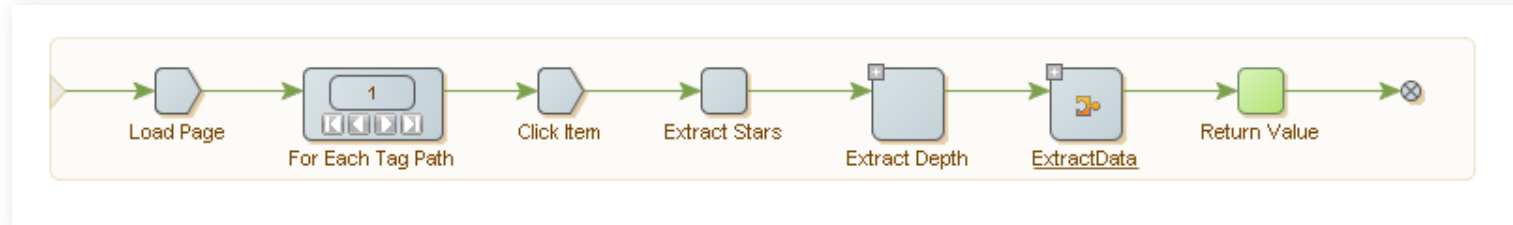
- ◆ Before we add the other extraction, let's create a Group for the steps we just created to extract the assembled depth of the item.



- ◆ Collapsed, this makes our Robot simpler to view.




Let's Add Our Extract Data Snippet to Get the Other Data



We'll insert the Snippet we created in another Robot along with a Return Value Action Step (for testing) as shown above.

Notice that all the data we wanted to extract is shown for the first item on our first page in the Variables panel.

Variables	HardyHardware	Type: HardyHardware
Name:	ST2200T Butane Micro Torch	
Stars:	3	
Description:	Bernzomatic ST2200T Butane Micro Torch	
Overview:	Bernzomatic Butane Micro Torch Kit is for precision light soldering, poly foam cutting and heating, craft and hobby projects, electronic repairs and small household projects. It is refillable and	
SKU:	836093355	
Bay:	018	
Aisle:	13	
Depth:	3.0 in	
Picture:		
Price:	25.97	

And Test in Debug Mode (One Page Only...for Now)

Design Studio - HardyHardware - C:\Kopow Projects\HardyHardware\Products.robot

File Debug View Breakpoints Tools Settings Window Help

Design Debug MyFirstRobot.robot HardyHardware.type SearchItem.robot HH2.robot SearchItem.robot Ratings.type MySecondRobot.robot Products.robot

Load Page For Each Tag Path Click Item Extract Stars Extract Depth ExtractData Return Value

Input/Output API Exceptions Log State

Output (Returned Values)

HardyHardw...

#	Name	Stars	Description	Overview	SKU	Bay	Aisle	Depth	Picture	Price
1	ST2200T Butane Micro Torch	3	Bernzomatic ST2200T Butane Micro To...	BernzOmatic Butane Micro Torch Kit is for precision light soldering, poly foam cutting and h...	836093355	018	13	3.0 in		25.97
2	2-Light White Ceiling Comm...	4	Lithonia Lighting 2-Light White Ceiling C...	The Lithonia Lighting 2-Light 8 ft. Fluorescent Strip Light can be chain suspended or surfac...	684996337	NA	NA	96.0 in		40.78
3	16 in. Brushed Nickel LED R...	5	Hampton Bay 16 in. Brushed Nickel LED...	The Hampton Bay 16 in. Round Flush Mount Brushed Nickel LED Light is designed to blend i...	807870513	NA	NA	16.00 in		69.97
4	ShelfTrack 16 in. D Bracket	0	ClosetMaid ShelfTrack 16 in. D Bracket	The ClosetMaid 16 in. ShelfTrack Bracket is exclusively designed for the ShelfTrack hang tr...	749465962	006	35	16 in		7.76
5	Electronic Fluorescent Rapi...	0	GE Electronic Fluorescent Rapid Start B...	The GE Electronic Fluorescent Rapid Start Ballast handles multiple-voltages from 120 - 277 ...	237309210	016	BW	9.50 in		29.97
6	34 in. x 35.625 in. Natural 1...	0	HDX 34 in. x 35.625 in. Natural 12 Toy ...	The HDX Kids Toy Bin Organizer is a wonderful storage solution for your nursery and playr...	248823684	005	SL	11 in		39.98
7	6 in. D x 8 in. H Black Celtic...	4	Rubbermaid 6 in. D x 8 in. H Black Celtic...	Rubbermaid's decorative metal brackets make it easy to display your photos and collectible...	12260505	003	35	6 in		6.97
8	3/4 in. Brass FPT Full-Port T...	3	Mueller Global 3/4 in. Brass FPT Full-Po...	Featuring an FPT connection, the Mueller Global 3/4 in. Brass FPT Full-Port Threaded Ball Va...	930591167	017	11			12.96
9	2-Handle Full-Size Clamp Tool	5	SharkBite 2-Handle Full-Size Clamp Tool	The versatile SharkBite 2-Handle Full-Size Clamp Tool effectively crimps 3/8 in., 1/2 in., 3/4 i...	796546340	019	11	11 in		62.56
10	StayLock Perforated Black ...	0	Greatmats StayLock Perforated Black 1...	StayLock Perforated Outdoor Black floor tile 12 in. x 12 in. x 0.56 in. is durable, PVC plastic...	927674515	NA	NA	12 in		3.59
11	18 in. LED Soft White Under...	0	Commercial Electric 18 in. LED Soft Whi...	This Commercial Electric Plug in under Cabinet Lighting is very light weight and easy to insta...	711743362	015	BW	18.00 in		24.97
12	Olivet 4-Light Chrome Bath ...	4	Hampton Bay Olivet 4-Light Chrome Bat...	Patterned cast clear glass discs are stacked with magnificent results in the Lenza collectio...	710559538	NA	NA	4.50 in		99.96
13	15 in. x 63 in. Cedar Exterior...	0	Pincroft exterior cedar wood shutters w...	Pincroft exterior cedar wood shutters will do wonders for the curb appeal of your home. ...	716066824	NA	NA	1.12 in		280
14	2.6 cu. ft. Mini Refrigerator i...	5	Magic Chef 2.6 cu. ft. Mini Refrigerator i...	Whether you're college-bound or simply want a little extra refrigerator space in your home, ...	52676465	004	97	19.3 in		119

• Name: 34 in. x 35.625 in. Natural 12 Toy Bin Organizer

• Stars: 0

• Description: HDX 34 in. x 35.625 in. Natural 12 Toy Bin Organizer

Overview: The HDX Kids Toy Bin Organizer is a wonderful storage solution for your nursery and playroom. The colorful bins make organizing both fun and easy for your children. Best of all, the bins have a stain-resistant surface and are removable for fast and efficient cleanup. * Includes 12 heavy-duty plastic bins * Removable containers for quick clean-up * Easy assembly * Durable, stain-resistant surfaces * Kids Storage Bin

View...

• SKU: 248823684

Bay: 005

Aisle: SL

Depth: 11 in

Picture:

View...

• Price: 39.98

Goto

Summary

Returned Values: 22

Error Reports: 0

HTTP Requests: 72

Received (KB): 5420

Sent (KB): 34

KCU-Point Usage: 262263

Execution Time (s): 47.58

Stop When

☐ Values are Returned or Stored

☒ API Exceptions are Reported

☒ Breakpoints are Reached

Steps to Skip

☐ Store in Database

☐ Delete from Database

☐ Execute SQL

☐ Execute Command Line

☐ Send Email

Show desktop

Execution completed successfully.

Remember to Save!

Repeat/Next Loops – A Little More Advanced This Time

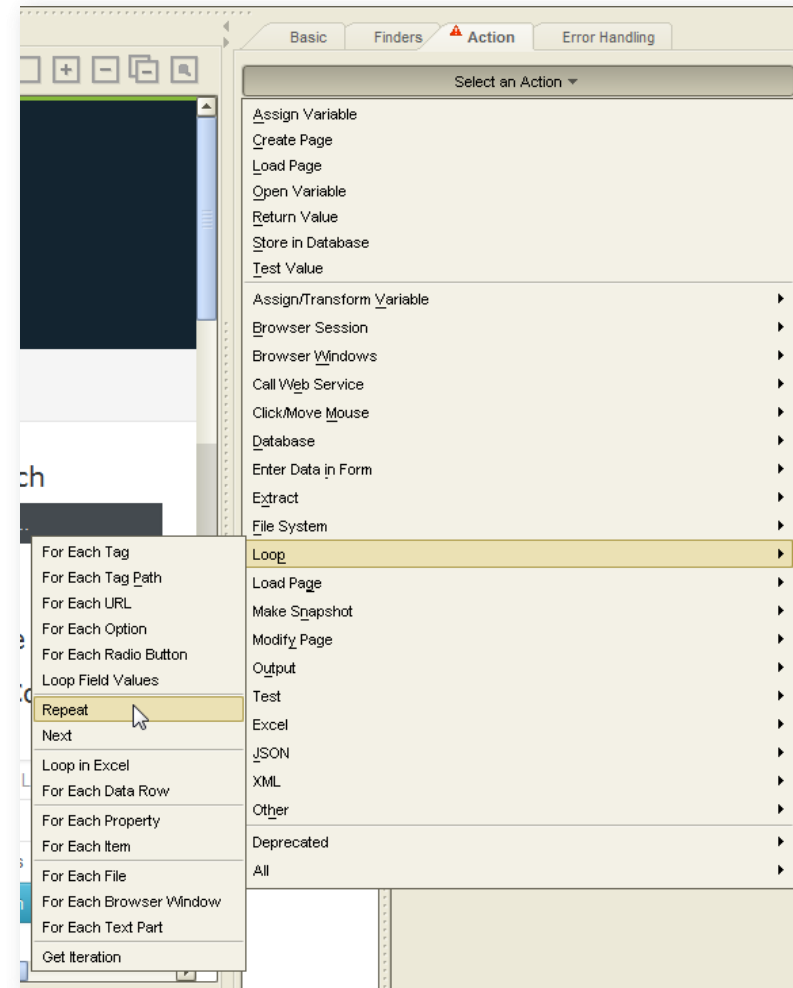
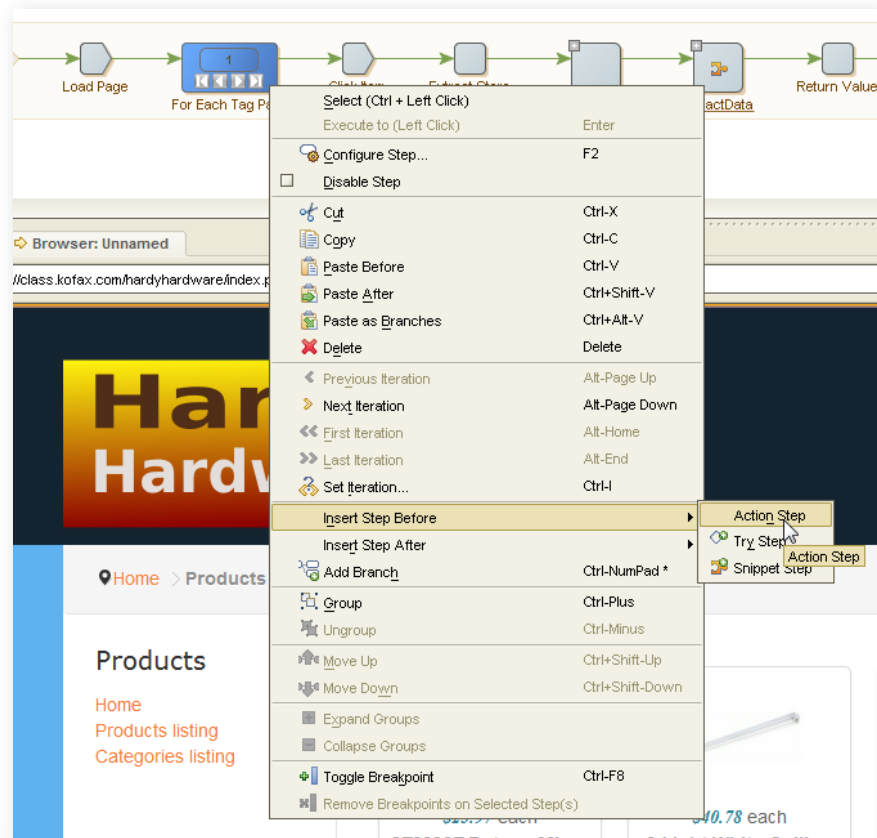
Now we want to go back and insert a Repeat/Next Loop to iterate through the 68 pages of products on this web site. You already know how to do that if there is a [Next] button. But none exists on the "Products" pages.



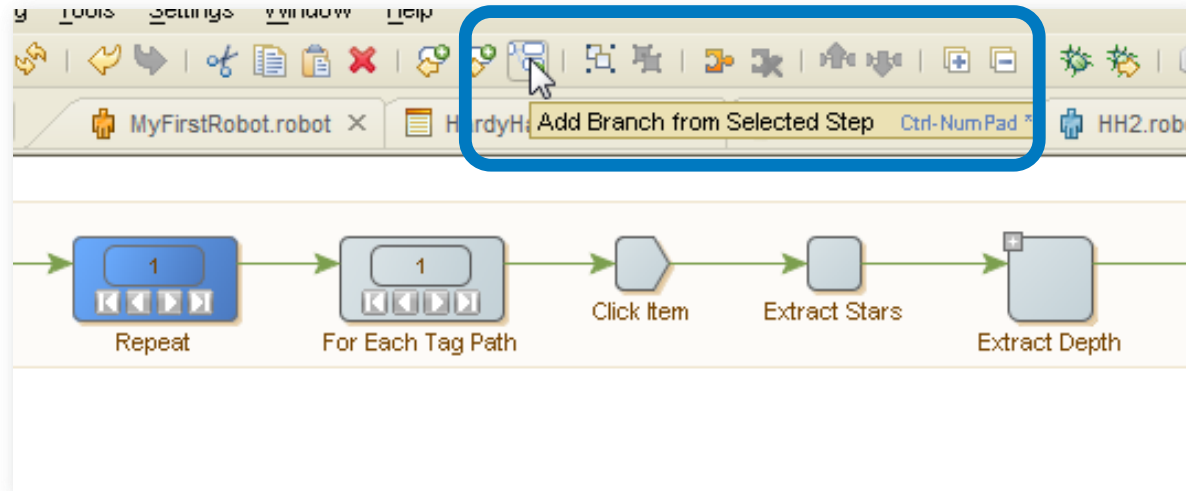
Here's how we're going to do it. After adding our Repeat Loop step...

1. Create a new simple Variable that will contain the page number. It will only be used for internal processing and will never be output. Remember, Simple Variables can never be used for input or output.
2. Create a new "Assign Variable" step that will increment the page number by one for every iteration of our Repeat/Next loop step.
3. Create a "Click" step to click on the number of the page. Set error handling to break the loop if nothing is left to click on.
4. Create a Next step to go back to the Repeat step.

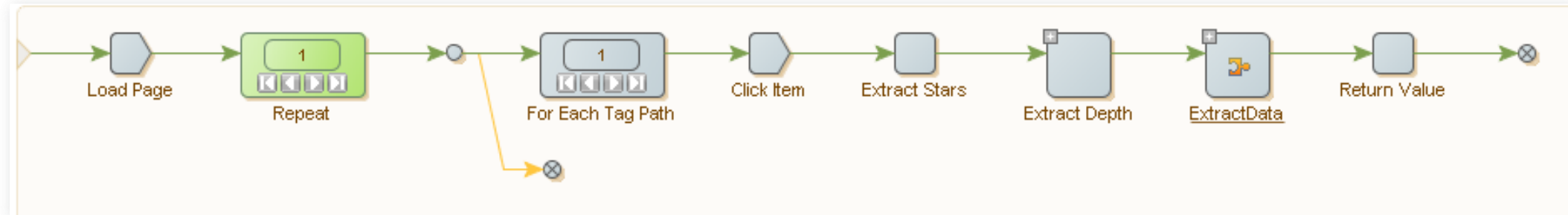
Add "Repeat" Step Before "For Each Tag Path" Step



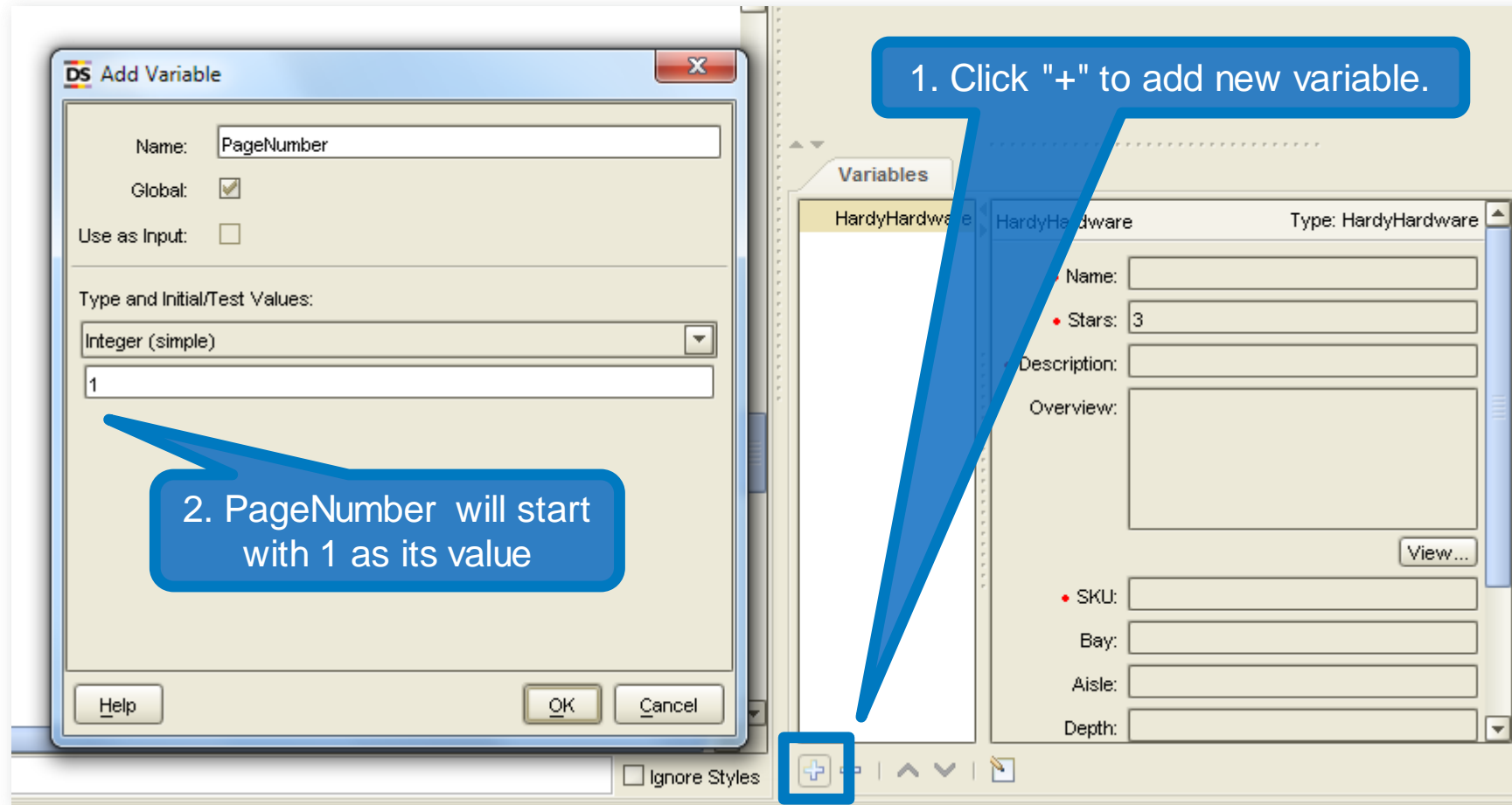
Add Branch from Current Step



Branch has been created. This is where we will add the balance of our steps.

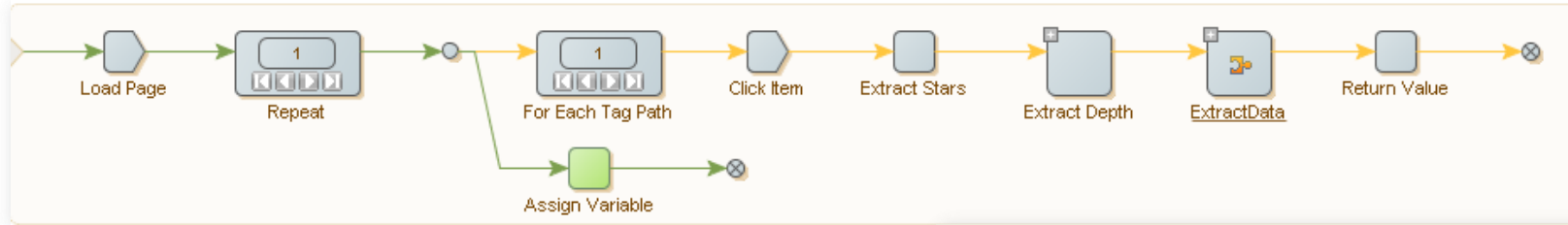


Add a New Variable



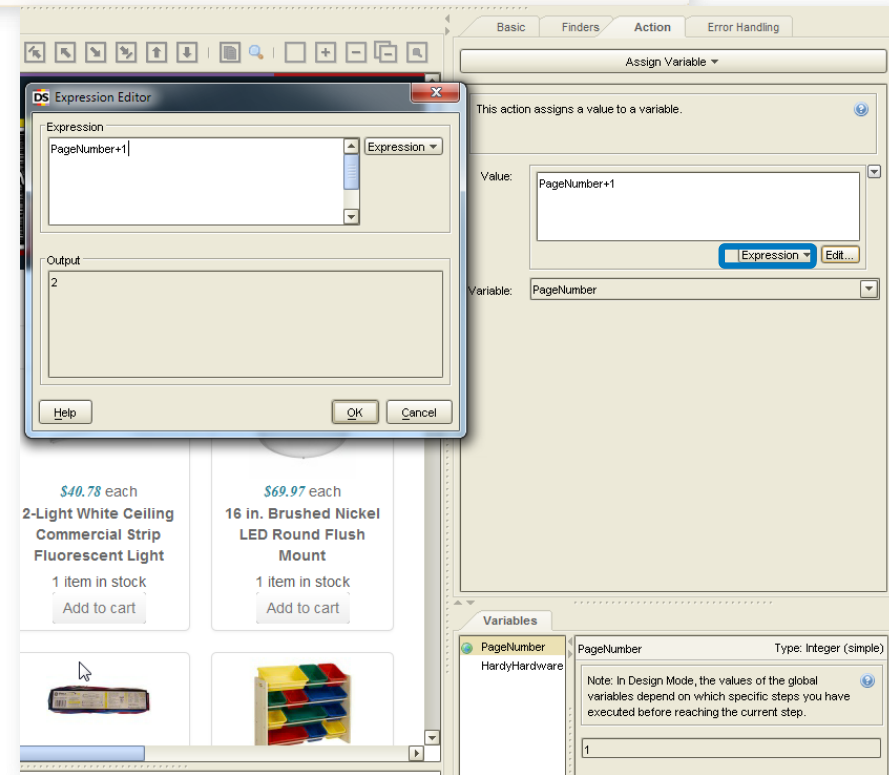
Add Assign Variable Step

- ◆ Add a new "Assign Variable" step on the branch.



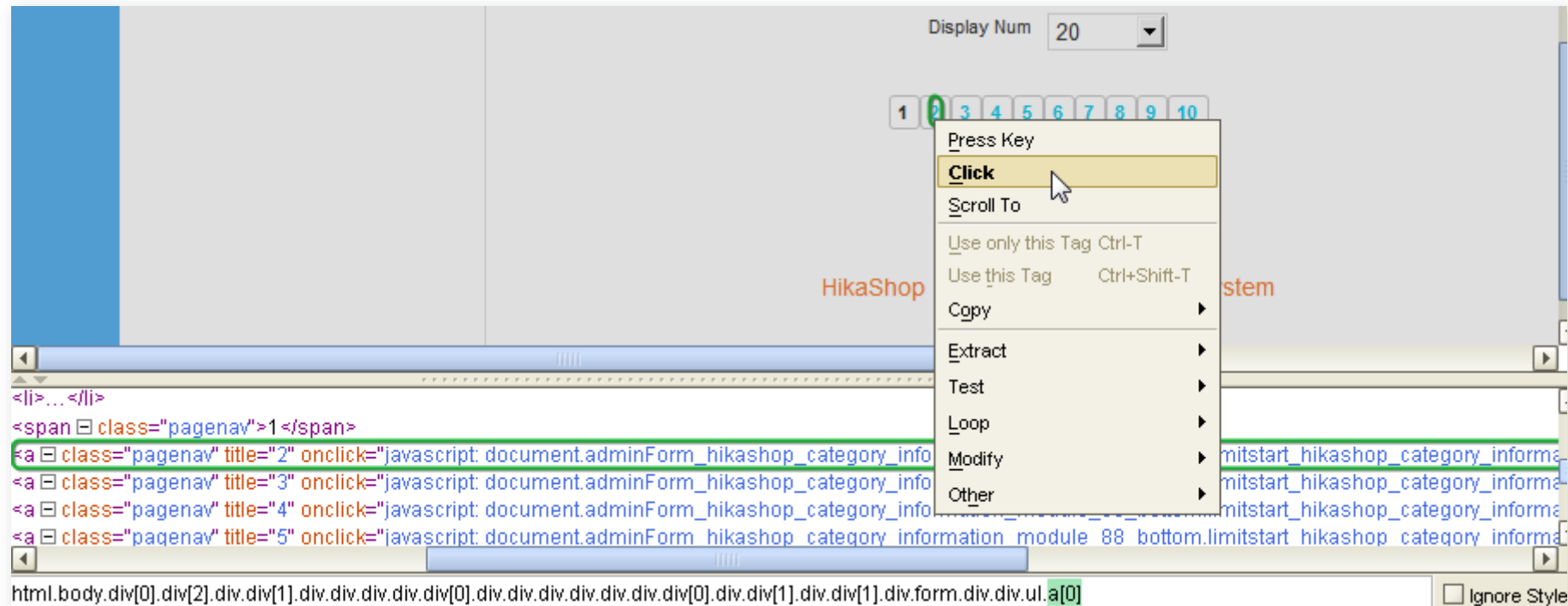
Set the Action properties for the step to use an expression that will take the value stored in the PageNumber variable and increment it by 1.

You do that by creating a simple expression as shown here.



Add Click Step

- Then we will want to add a "Click" step to click on the number.



Configure Finders for Click Step

```
<span class="pagenav">1</span>  
<a class="pagenav" title="2" onclick="javascript: document.adminForm_hikashop_category_information_module_88_botto  
<a class="pagenav" title="3" onclick="javascript: document.adminForm_hikashop_category_information_module_88_botto
```

We need to include an expression that includes the updated PageNumber as a Tag Pattern.

Because expressions must contain the *entire* pattern represented, we can represent it this way:

>>.*?<< + PageNumber + >>.*?<<

>> << is a constant containing anything. Here, we used **.*** meaning any combination of characters or numbers, zero or one time.

That is concatenated with the value of our **PageNumber** variable, which is then concatenated by everything that follows until the next tag.

Basic Finders Action * Error Handling

Tag Finder 1: .*div.div.div.div.div.div.div.div.div.div.div.div.div.div.div.c...

Find Where: Anywhere In Page

Tag Path: .*div.div.div.div.div.div.div.div.div.div.div.div.div.div.div.c

Attribute Name: class

Attribute Value: Equals Text

Text: pagenav

Tag Pattern: >>.*?<< +PageNumber + >>.*?<< Expression Edit...

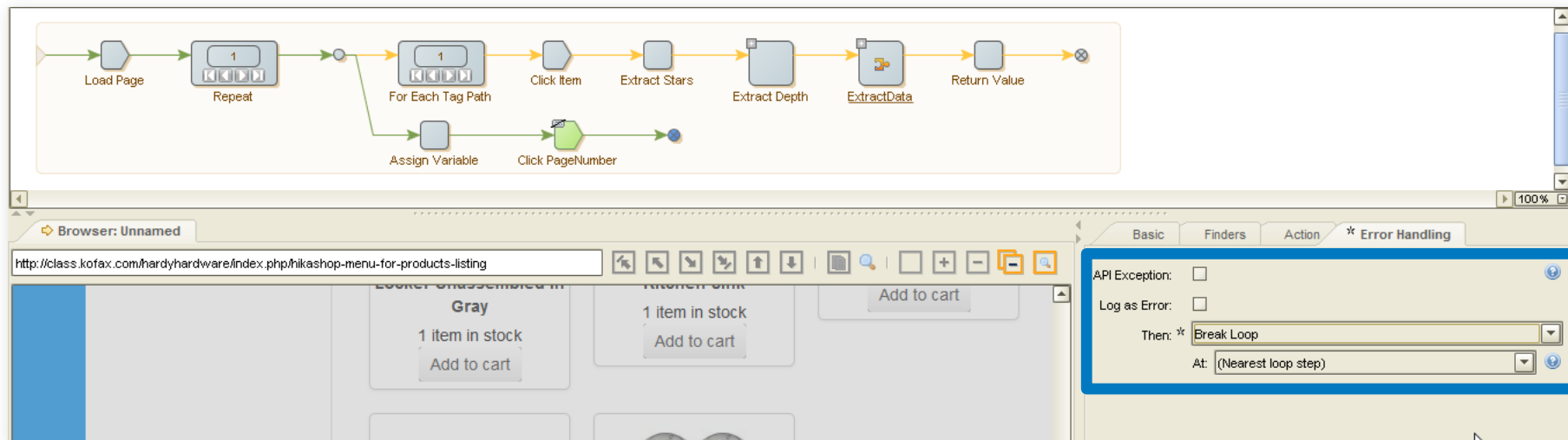
Match Against: Text Only

Tag Depth: Any Depth

Tag Number: 0 From First

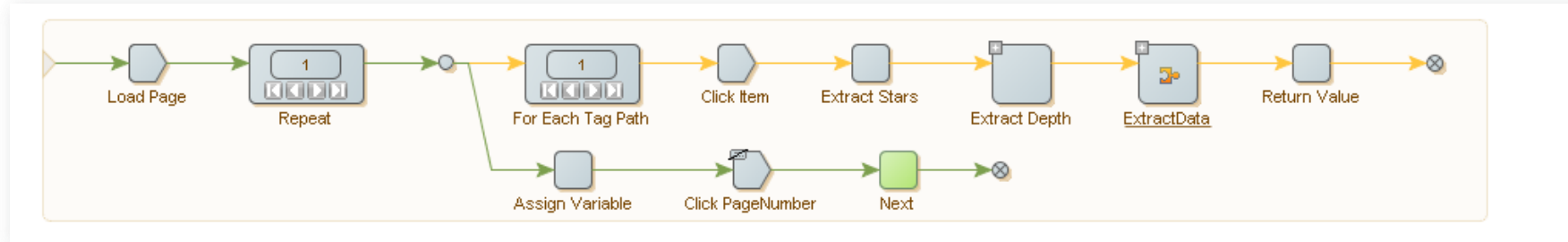
Set Error Handling for Click Step

- And we want to set the click step to break the loop if no number matching the value of "PageNumber+1" is found...like after the last page has been returned by our Robot. We do not want our Robot to return an error if this occurs, so we've unchecked "API Exception" and "Log as Error."



Add Next Step

- ◆ And finally, add a "Next" step to return to the "Repeat."



- ◆ Let's review: Our robot directly loads the Products page and then loops through each item extracting the rating, the assembled depth and other information we want.
- ◆ When data for the last item on a page has been extracted, our robot automatically goes to the next alternative (branch) where it increments the page number by 1, clicks on the page number and bounces back to the repeat step where the extraction loop for that page is executed.
- ◆ This process continues until there are no more pages, and then the loop is broken.

Testing in Debug Mode

- Testing in Debug mode reveals our Robot is doing everything we designed it to do!

Design Debug Ratings.type HardyHardware.type MySecondRobot.robot Products.robot HH2.robot MyFirstRobot.robot SearchItem.robot Search_Item.robot

Load Page Repeat For Each Tag Path Click Item Extract Stars Extract Depth ExtractData Return Value

Assign Variable Click PageNumber Next

Input/Output API Exceptions Log State

Output (Returned Values)

HardyHardw...

#	Name	Stars	Description	Overview	SKU	Bay	Aisle	Depth	Pict.	Price
89	ST2200T Butane Micr...	3	Bernzomatic ST2200T Butane ...	Bernzomatic Butane Micro Torch Kit is for precision light soldering, pol...	836093355	018	NA	22.81		300.00
90	2-Light White Ceiling ...	4	Lithonia Lighting 2-Light White ...	The Lithonia Lighting 2-Light 8 ft. Fluorescent Strip Light can be chain ...	684996337	NA	NA	96.0 in		40.78
91	16 in. Brushed Nickel...	5	Hampton Bay 16 in. Brushed N...	The Hampton Bay 16 in. Round Flush Mount Brushed Nickel LED Light i...	807870513	NA	NA	16.00 in		69.97
92	ShelfTrack 16 in. D B...	0	ClosetMaid ShelfTrack 16 in. D...	The ClosetMaid 16 in. ShelfTrack Bracket is exclusively designed for t...	749465982	006	35	16 in		7.76
93	Electronic Fluoresce...	0	GE Electronic Fluorescent Rap...	The GE Electronic Fluorescent Rapid Start Ballast handles multiple-volt...	237309210	016	BW	9.50 in		29.97
94	34 in. x 35.625 in. Na...	0	HDX 34 in. x 35.625 in. Natur...	The HDX Kids Toy Bin Organizer is a wonderful storage solution for y...	248823684	005	SL	11 in		39.88
95	6 in. D x 8 in. H Black...	4	Rubbermaid 6 in. D x 8 in. H Bl...	Rubbermaid's decorative metal brackets make it easy to display your p...	12280505	003	35	6 in		6.97
96	3/4 in. Brass FPT Full...	3	Mueller Global 3/4 in. Brass FP...	Featuring an FPT connection, the Mueller Global 3/4 in. Brass FPT Full...	930591167	017	11			12.96
97	2-Handle Full-Size Cl...	5	SharkBite 2-Handle Full-Size C...	The versatile SharkBite 2-Handle Full-Size Clamp Tool effectively crimp...	796546340	019	11	11 in		62.56
98	StayLock Perforated ...	0	Greatmats StayLock Perforate...	StayLock Perforated Outdoor Black floor tile 12 in. x 12 in. x 0.56 in. is ...	927874515	NA	NA	12 in		3.59
99	18 in. LED Soft White...	0	Commercial Electric 18 in. LED ...	This Commercial Electric Plug in under Cabinet Lighting is very light wel...	711743362	015	B/W	18.00 in		24.97
100	Olivet 4-Light Chrome...	4	Hampton Bay Olivet 4-Light Ch...	Patterned cast clear glass discs are stacked with magnificent results i...	710559538	NA	NA	4.50 in		99.96
101	15 in. x 63 in. Cedar ...	0	15 in. x 63 in. Cedar Exterior L...	Pinecroft exterior cedar wood shutters will do wonders for the curb a...	716066824	NA	NA	1.12 in		280
102	2.6 cu. ft. Mini Refrig...	5	Magic Chef 2.6 cu. ft. Mini Ref...	Whether you're college-bound or simply want a little extra refrigerator ...	52676465	004	97	19.3 in		119
103	5 in. Wood Base Cabine...	4	Rev-A-Shelf 5 in. Wood Base ...	Make better use of narrow cabinet spaces with the Rev-a-Shelf 5 in. ...	401319029	NA	NA	22.47 in		114
104	65000 Series 36 in. ...	0	Salsbury Industries 65000 Ser...	Salsbury 65000 Series Five Tier Box Style Standard Metal Lockers are ...	10201512	NA	NA	15.00 in		430
105	All-in-One Undermoun...	0	KRAUS All-in-One Undermoun...	Add an elegant touch to your kitchen with a unique and versatile unde...	608912238	NA	NA	20.63 in		276
106	20 sq. ft. 120 Volt Ra...	0	SunTouch Floor Warming 20 s...	This floor warming kit makes radiant floor heating installation quick, ea...	512561754	NA	NA	13.75 in		163
107	4-9/16 in. x 39 in. Wh...	5	SureSill 4-9/16 in. x 39 in. Whit...	The SureSill 4-9/16 in. x 39 in. White PVC Sloped Sill Pan for Door and ...	308926320	NA	NA	4.84 in		19.98
108	5 LED Disc Light (3-P...	0	Rite Lite 5 LED Disc Light (3-P...	These Rite Lite 5 LED White Puck Lights (3-pack) combine the energy ...	252752111	006	41	3.5 in		17.97
109	2-Light Brushed Nick...	5	Commercial Electric 2-Light Br...	The Commercial Electric twin pack Flush Mount is a great look at a gre...	574296735	006	37	13 in		22.97
110	Langlade Undercount...	5	KOHLER Langlade Undercount...	Bridging the gap between form and function, and proving that sometim...	507273912	NA	NA	22 in		589.25

Name: 5 in. Wood Base Cabinet Organizer

Stars: 4

Description: Rev-A-Shelf 5 in. Wood Base Cabinet Organizer

Overview: Make better use of narrow cabinet spaces with the Rev-a-Shelf 5 in. Wood Base Cabinet Organizer. 3 adjustable shelves with chrome rails help keep everything in its place. The organizer glides on patented tri-slides which minimize side-to-side motion and provide complete stability when pulled out of the cabinet. The door mount brackets are flexible to accommodate any door style. * Dimensions: 25.48 in. H x 5 in. W x 22.47 in. D * Fits into existing cabinet * Full-height cabinet required * Patented ball-bearing tri-slide system and door mounting hardware * 3 adjustable wood shelves * Limited lifetime warranty

SKU: 401319029

Bay: NA

Aisle: NA

Depth: 22.47 in

Picture:

Summary

Returned Values: 132

Error Reports: 0

HTTP Requests: 297

Received (KB): 28479

Sent (KB): 133

KCU-Point Usage: 1523596

Execution Time (s): 274.49

Stop When

☐ Values are Returned or Stored

☒ API Exceptions are Reported

☒ Breakpoints are Reached

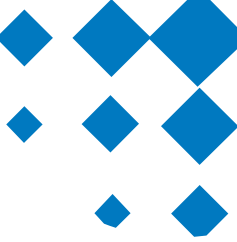
Steps to Skip

☐ Store in Database

☐ Delete from Database

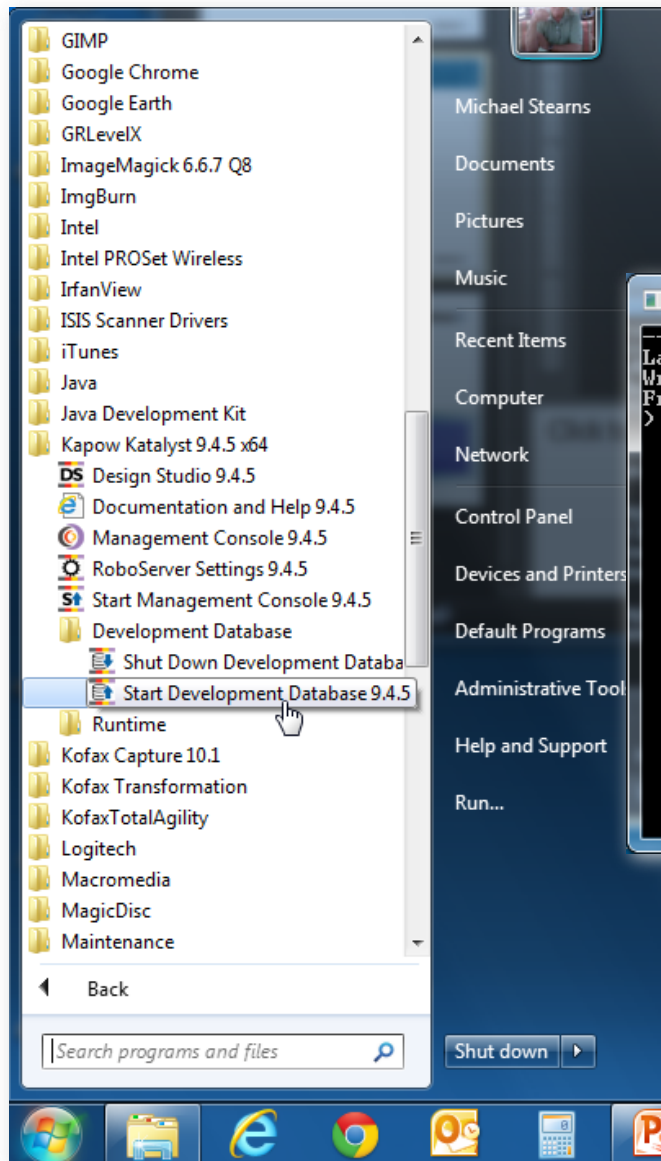
☐ Execute SQL

The Development Database – A Quick Review

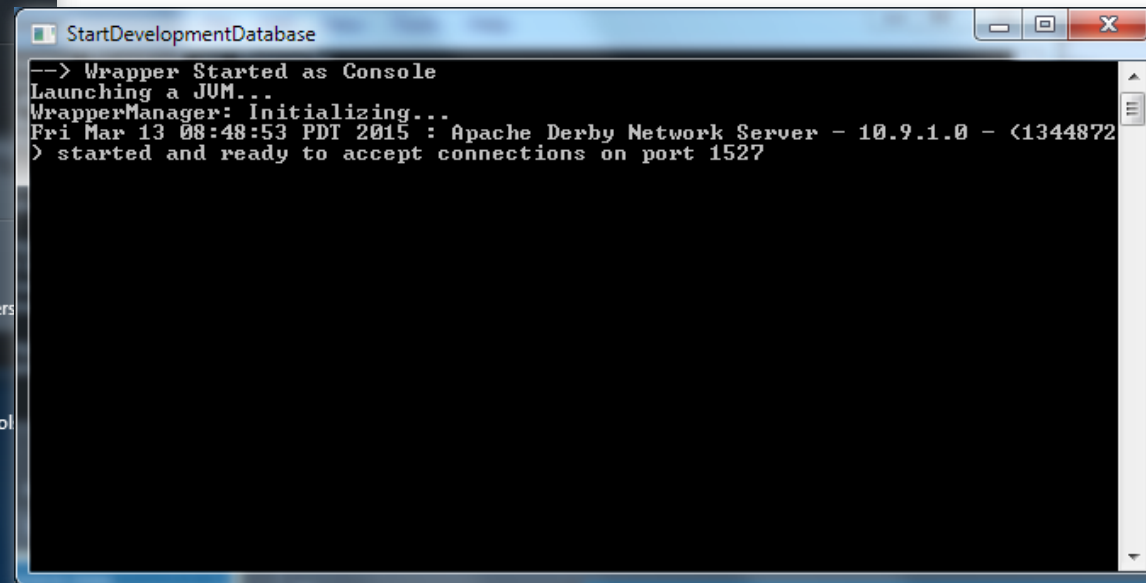


- ◆ Kofax Kapow includes an Apache Derby development database.
- ◆ This database is included for learning and testing purposes only and should not be used in live production.
- ◆ Tables and columns must be created in the database to interact with your Robots. Fortunately, Design Studio makes this very easy to do.
- ◆ To make the database available, it must be started first. This can be done from the Kofax Kapow Program Group or from a command line.

Starting the Development Database



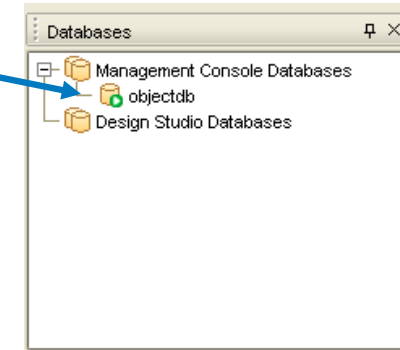
Start the Development Development Database from the Kofax Kapow program group.



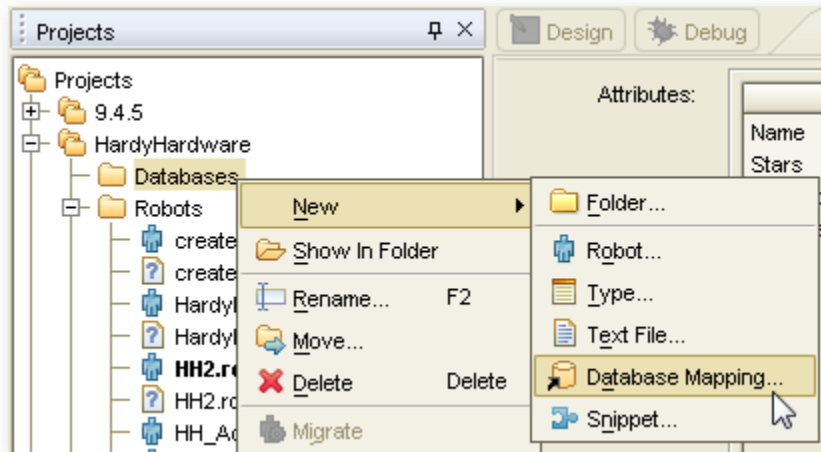
IMPORTANT: Do not close the command window or you will stop the development database service. Minimize the screen instead.

Creating Database Table

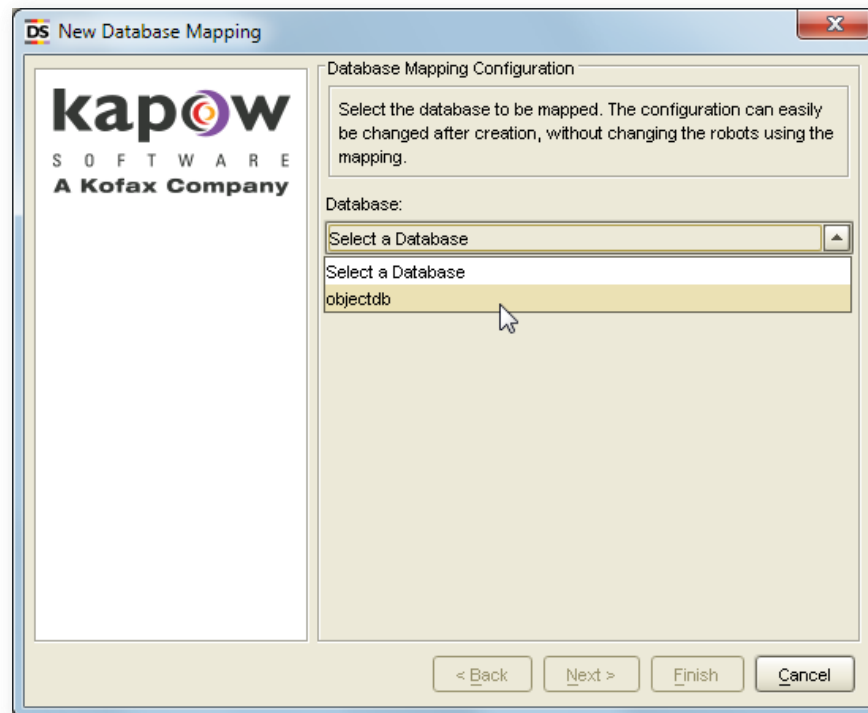
Once the database is available, the icon turns green.



1. Create new database mapping

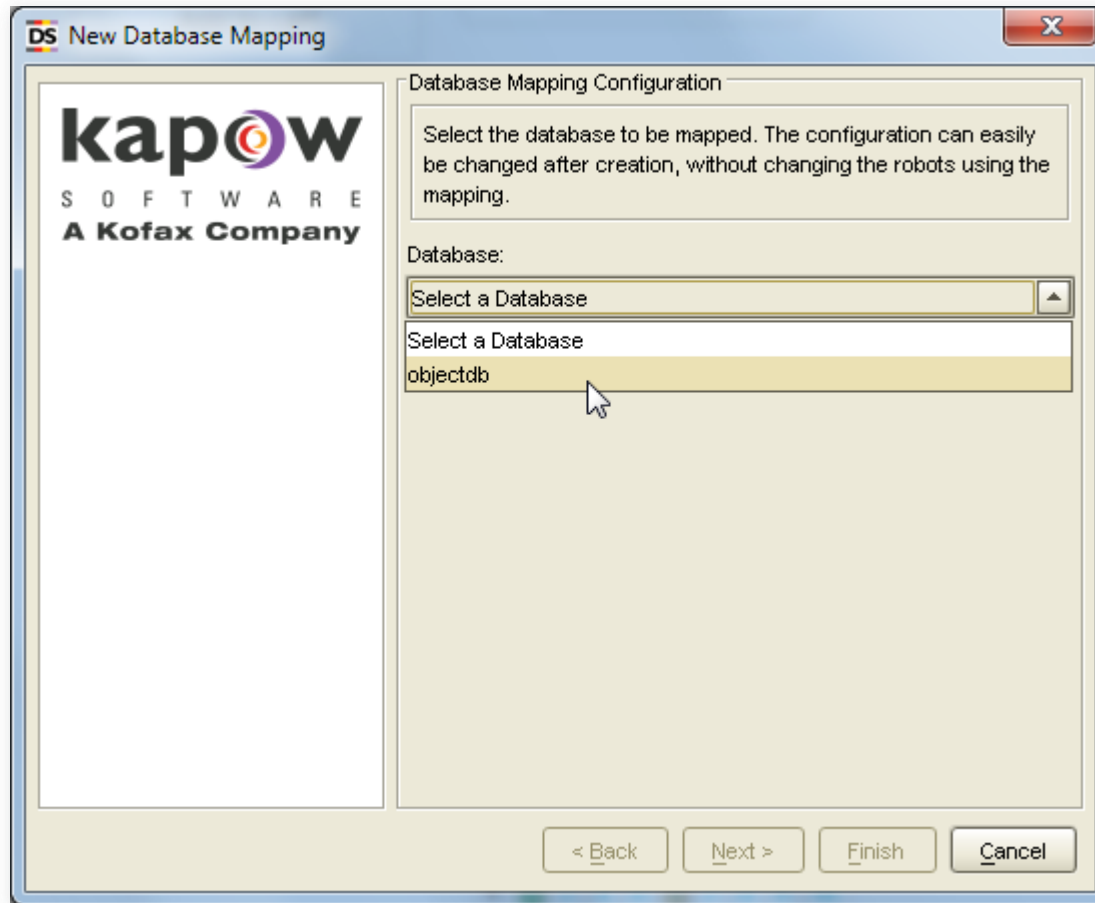


2. Select database

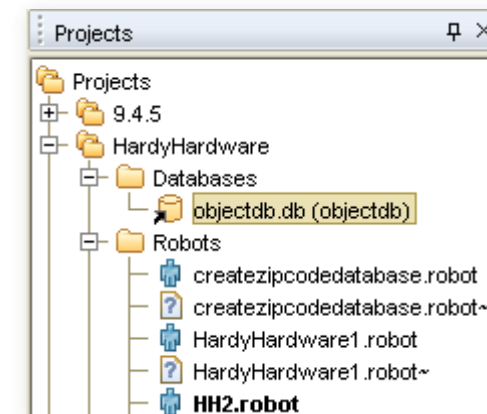


Creating a Database Table (cont.)

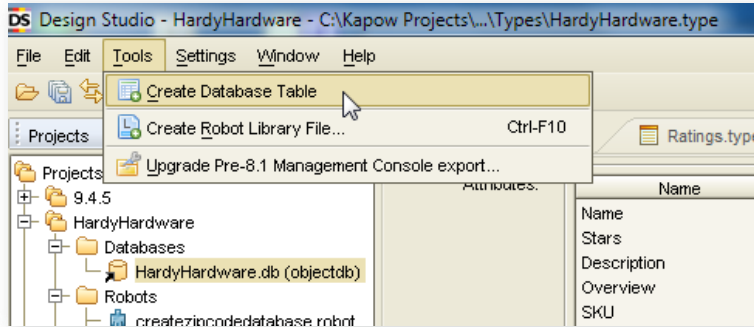
3. Select a Name for the Database Mapping



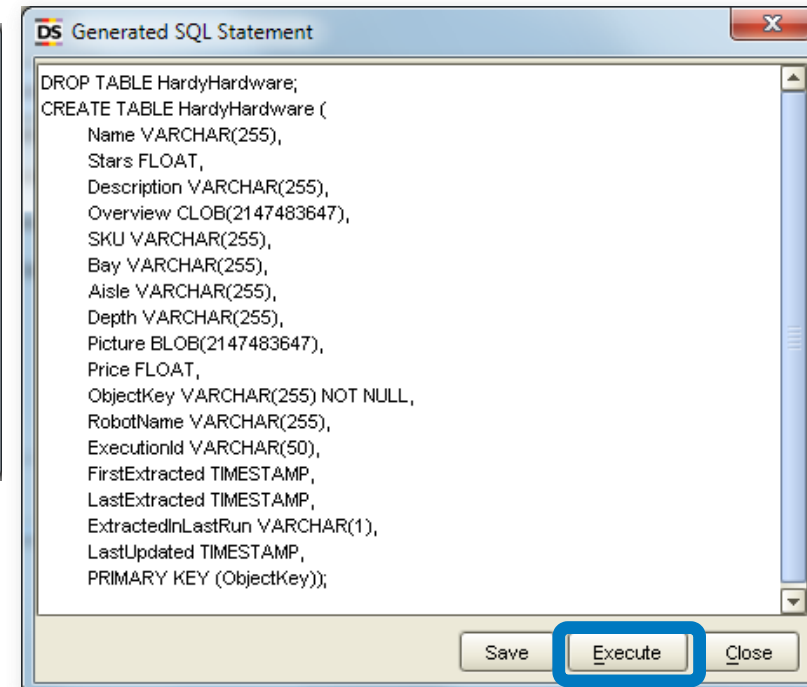
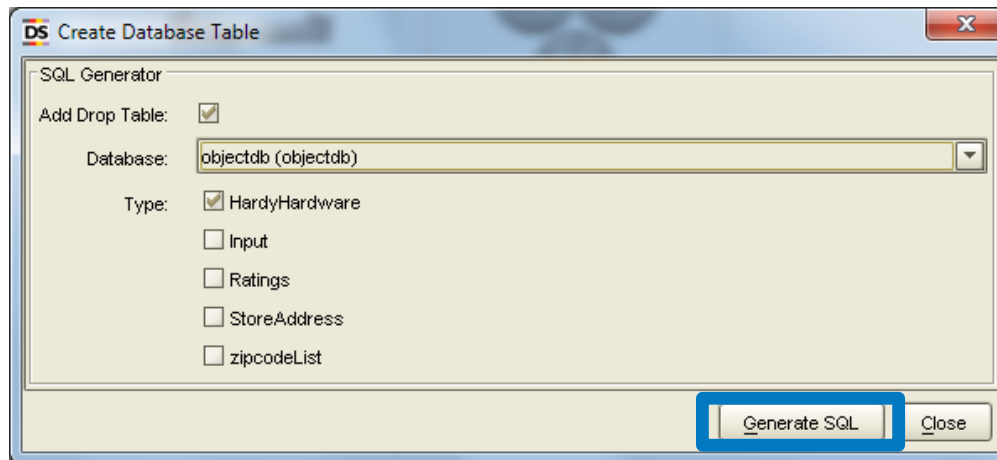
4. Database has been added



Creating Columns in your Database Table



The "Tools" menu in Design Studio has the ability to create a SQL statement that will generate a table with all required columns, SQL data types, etc.



Adding an Store in Database Step

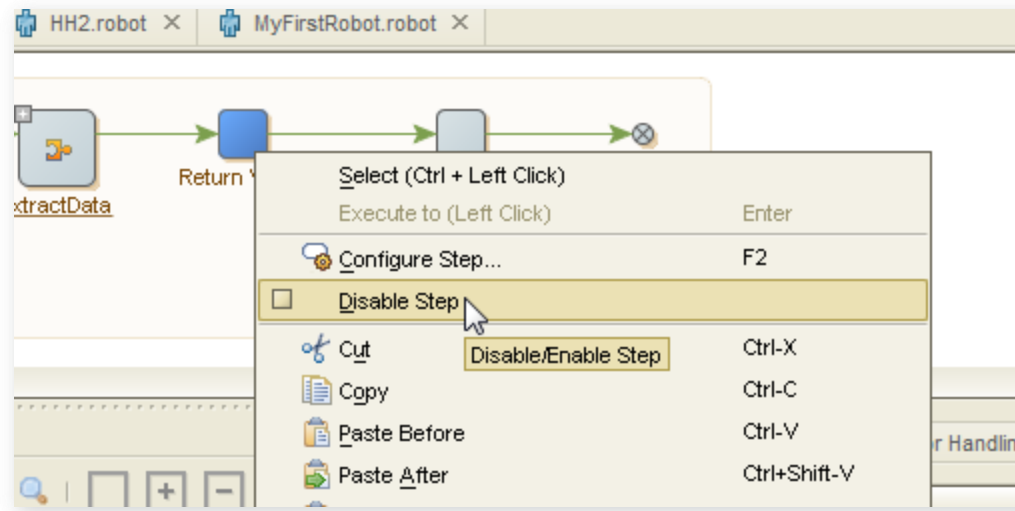
The screenshot displays the Kofax Robot Studio interface. At the top, a workflow diagram shows a sequence of steps: Click Item, Extract Stars, Extract Depth, ExtractData, Return Value, and Store in Database. Below this, another sequence shows Click PageNumber and Next. The 'Store in Database' step is highlighted. The right-hand pane shows the configuration for the 'Store in Database' action. The configuration includes a description, a Database dropdown set to 'objectdb (objectdb)', a Variable dropdown set to 'HardyHardware', a Key dropdown set to 'Key Defined in the Type', and a checked 'Execute in Design Mode' checkbox.

Because we're actually going to store the data for all products in our Development Database, we've added a "Store in Database" step.

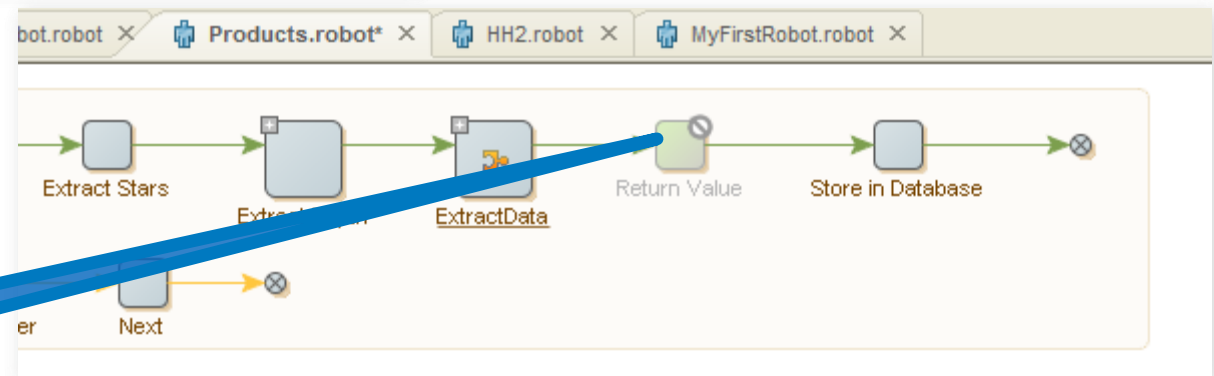
Notice, we've also disabled the Return Value step because it will not be used when we actually run the Robot.

Disabling Unnecessary Steps

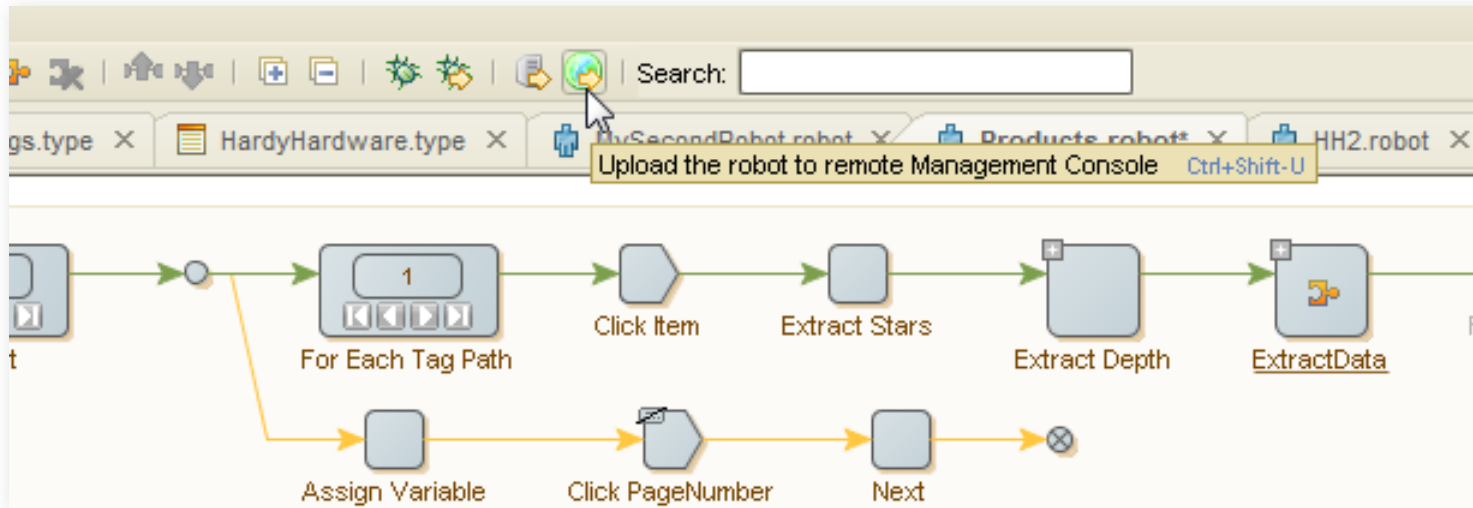
- ◆ To disable a step, simply right mouse-click on it and select "Disable Step" from the context menu. To re-enable it, right mouse-click and select Enable step. It's that easy!



Step disabled



Uploading Robot to the Management Console



Think of uploading a Robot as publishing it...that is making it available for use.

You may Upload to a Local or to a Remote Management Console. In our example for this training class, it's simply "localhost" (our local machine).

The screenshot shows a dialog box titled 'DS Upload Robot to Remote Management Console'. The dialog contains the following fields and options:

- A message box: 'This will publish the robot and the types used to the Management Console. Enter the server details.'
- A 'URL:' field with the text 'http://localhost:50080/'.
- A 'User Name:' field.
- A 'Password:' field.
- A checkbox labeled 'Include Path in Robot Name (reduces usability, check help before using):' which is currently unchecked.
- 'Upload' and 'Cancel' buttons at the bottom right.



Demo & Lab

Advanced Repeat/Next Loops