🔄 Convert HAR to JMeter Test Plan (.jmx)

Converting a **HAR (HTTP Archive)** file into a **JMeter test script** is a fast and effective way to replicate complex browser-based user flows. While JMeter doesn't natively support HAR imports, **BlazeMeter’s HAR to JMX Converter** offers a seamless solution.

**🧰 Prerequisites**

| **Requirement** | **Details** |
| --- | --- |
| **HAR File** | Exported from Chrome, Firefox, Edge, etc., via browser DevTools |
| **Internet Access** | Required to use BlazeMeter's online converter |
| **Apache JMeter** | Needed to open, refine, and execute the .jmx script |

**✅ Step 1: Generate the HAR File**

**🔍 In Your Web Browser:**

1. **Open DevTools**:
   * Right-click > “Inspect” or press F12 / Cmd + Option + I
2. **Go to the Network tab**
3. **Clear Existing Logs**
4. **Perform the user actions** you want to record (e.g., login, form fill, navigation)
5. **Save the HAR file**:
   * **Chrome/Edge**: Right-click in the network area > *“Save all as HAR with content”*
   * **Firefox**: Right-click > *“Save All As HAR”*

**✅ Step 2: Convert HAR to JMeter (.jmx) Using BlazeMeter**

**🌐 Open BlazeMeter’s Converter:**

🔗 <https://www.blazemeter.com/har-to-jmx>

**📁 Upload Your HAR File:**

* Click *"Choose File"* or *"Upload HAR File"*
* Select the file saved in Step 1

**⚙️ Configure Conversion Options *(Recommended)*:**

| **Option** | **Recommendation** |
| --- | --- |
| **Retrieve All Embedded Resources** | ❌ Uncheck — better to manage this in JMeter via HTTP Request Defaults |
| **Disable Caching** | ✅ Keep checked for accurate performance testing |
| **Simulate Browser Headers/Cookies** | ✅ Keep checked to generate realistic request flows |
| **Add Think Time** | Optional — adds pacing between requests for realism |

**⬇️ Convert and Download:**

* Click *"Convert"* or *"Generate JMX"*
* Download the generated .jmx file

**✅ Step 3: Refine the JMeter Script**

The generated .jmx serves as a **starting point**, not a final load-ready script.

**🧭 Open in JMeter and Review Structure:**

* **Thread Group**
* **HTTP Cookie Manager**
* **HTTP Header Manager**
* **HTTP Request Samplers** (one per browser call)

**🔄 Add Dynamic Correlation (Very Important)**

HAR-based scripts often include **hardcoded dynamic values** (e.g., CSRF tokens, session IDs, auth tokens) that must be correlated.

🔧 Use these JMeter Post-Processors as needed:

* **Regular Expression Extractor**
* **JSON Extractor**
* **XPath Extractor**

➡️ Then, **parameterize requests** by replacing hardcoded values with ${variable} extracted in prior requests.

**🧱 Configure HTTP Request Defaults:**

* Centralize protocol (http or https), server name, and port
* If you *disabled embedded resources* during conversion, now enable them here if needed

**📊 Add Listeners and Assertions:**

| **Component** | **Purpose** |
| --- | --- |
| **View Results Tree** | Debug individual requests and responses |
| **Summary Report** | Analyze aggregate results like throughput, errors, latencies |
| **Assertions** | Validate correctness and SLA conformance (e.g., status = 200) |

**✅ Final Sanity Check:**

Run the script in **GUI mode with 1 user, 1 loop**:

bash

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Thread Group:

- Number of Threads (users): 1

- Loop Count: 1

Review:

* **All samplers return HTTP 200 or expected responses**
* **Dynamic variables are correctly extracted and passed**
* **No authentication/session errors occur**

**🧠 Key Considerations**

| **Topic** | **Guidance** |
| --- | --- |
| **Correlation** | Mandatory for dynamic apps — prevents auth/session failures |
| **Embedded Resources** | Manage in JMeter, not in converter, for better control |
| **Think Time** | Useful for simulating real-world user behavior in functional tests |
| **Assertions** | Ensure requests return correct data and performance thresholds |
| **Reusability** | Modularize by using Test Fragments or reusable config elements |

**📌 Summary Table**

| **Action** | **Tool / Step** |
| --- | --- |
| Generate HAR | Browser DevTools > Network > Save as HAR |
| Convert HAR to JMX | [BlazeMeter Converter](https://www.blazemeter.com/har-to-jmx) |
| Open and Edit JMX | Apache JMeter GUI |
| Add Correlation and Parameters | Regex, JSON, XPath Extractors |
| Add Assertions and Listeners | View Results Tree, Summary Report, Assertions |
| Test in Debug Mode | 1 Thread, 1 Loop, GUI mode |
| Run Full Load Test | Non-GUI mode with parameterized users |